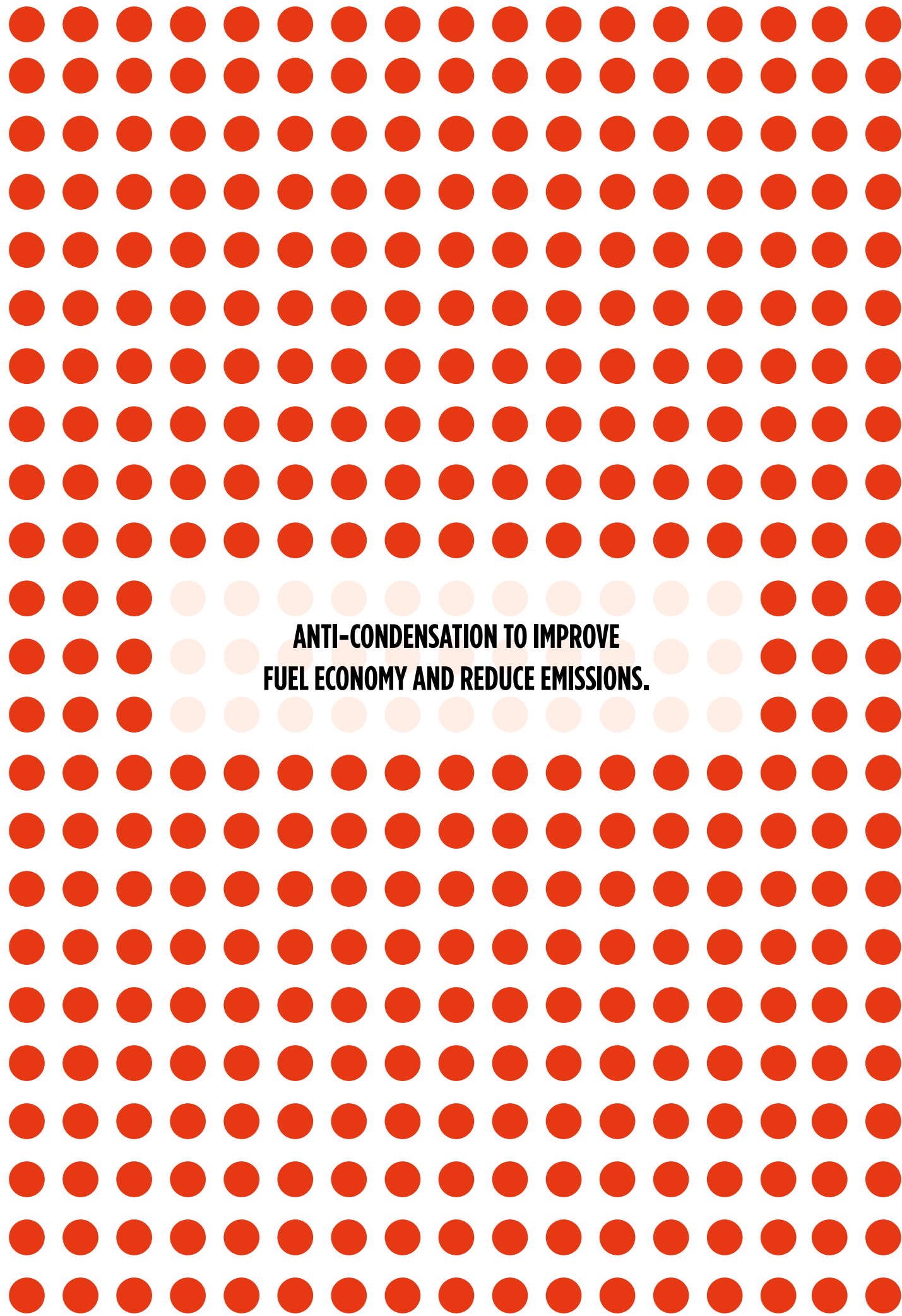
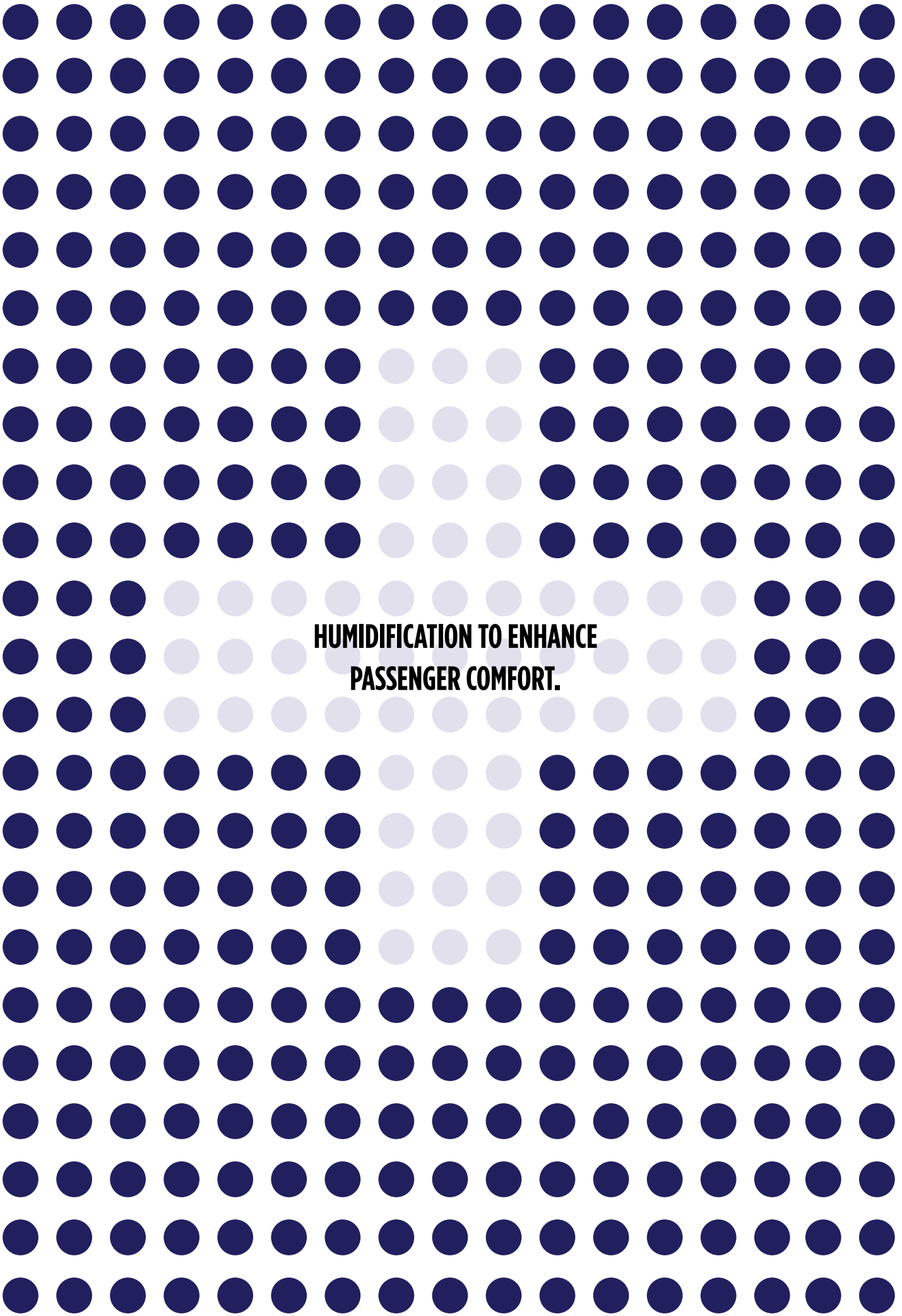


# ANNUAL REPORT

## 2021





# PRODUCTS FOR A LITTLE MORE SUSTAINABLE AND FAR MORE PLEASURABLE AIR TRAVEL

– ACTIVE HUMIDITY CONTROL IN AIRCRAFT IS ALWAYS MORE SUSTAINABLE

CTT is a technology and market leader of systems for active humidity control in aircraft. CTT dominates the market segment for humidifiers for large passenger aircraft. CTT is a pioneer when it comes to systems that actively tackle the root cause of condensation in aircraft. CTT’s customers include most of the world’s biggest airlines. CTT had a turnover of MSEK 151 and employed 76 people in 2021.

## CTT SOLVES THE MOISTURE PARADOX

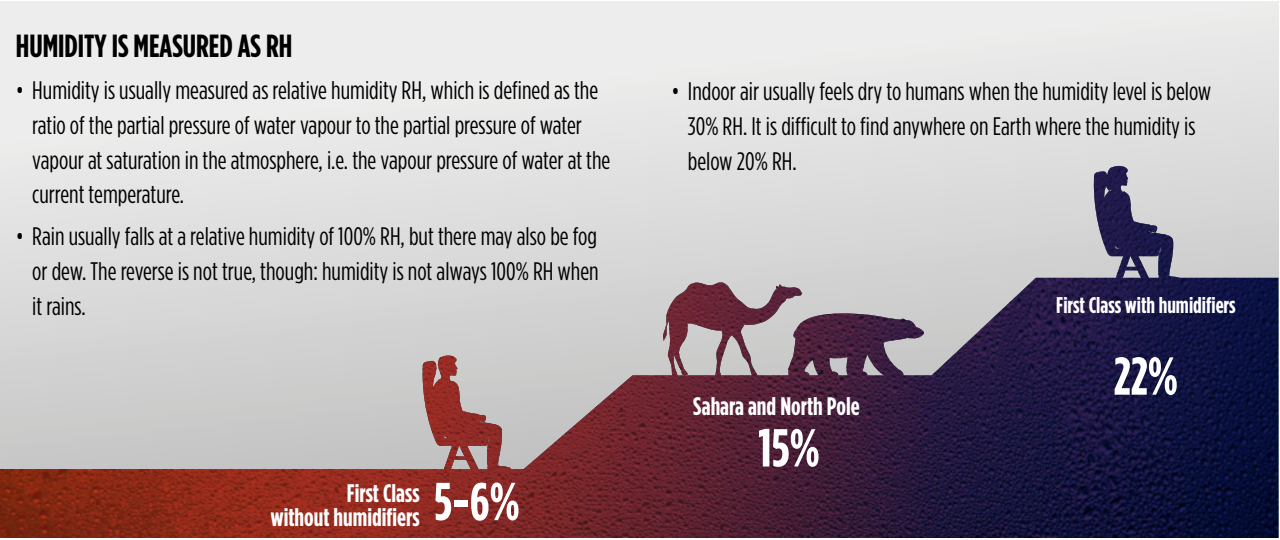
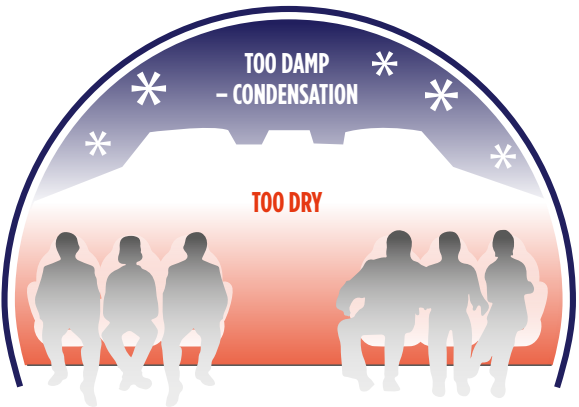
The aircraft humidity paradox: The air on board an aircraft is drier than anywhere else on earth – and yet the fuselage is wet

**The dry problem:** The dry air on board impairs the well-being of passengers and crew; particularly in first and Business class and in the cockpit, where the air is particularly dry and risks causing dehydration that has an adverse impact on the immune system.

**The wet problem:** Condensation means that the average passenger aircraft is carrying 200–300 kg of water. This heavier weight results in higher fuel consumption, which in turn drives up costs and greenhouse gas emissions.

The problems with wetness and dryness can only be tackled by addressing their root causes. Passive systems do not achieve this.

CTT has active humidity control products that increase the moisture content in the air in the cabin and lower it in the fuselage, resulting in a more comfortable climate on board the aircraft and a more sustainable flight with a lower carbon footprint.



## VISION

CTT’s vision is for the aviation industry to use CTT products to regulate humidity aboard aircraft in order to provide a better climate in the aircraft and on the ground.

## BUSINESS CONCEPT

CTT’s business concept involves the development, manufacture and supply of products that increase humidity to enhance well-being on board and reduce condensation for better reliability and reduced environmental impact.

## TWO PRODUCT GROUPS FOR ACTIVE HUMIDITY CONTROL

PRODUCT GROUPS	HUMIDIFIER ONBOARD ✚	ANTI-CONDENSATION .....
Product benefits	<b>KEEPS HUMIDITY AT A COMFORTABLE LEVEL</b> Raises humidity to a level that the body can cope with, reducing the risk of dehydration, fatigue and viral infections.  Higher humidity also leads to better sleep, increased well-being and less jet lag, and keeps the immune system intact without the impact of dehydration.	<b>KEEPS CONDENSATION AT BAY</b> Reduces condensation and eliminates accumulated condensation in the aircraft, reducing the weight and hence the fuel consumption and carbon footprint.  It makes flying a little more sustainable. An aircraft without condensation problems is always lighter, which means it needs less fuel. In turn, this leads to lower maintenance costs on account of fewer electrical failures, less of a risk of corrosion and longer insulation life.
Driving forces in the wake of the pandemic	<b>HEALTH AND WELL-BEING</b> Increased emphasis on air quality and the cabin climate focuses attention on the impact of dry air and how it weakens the immune system.	<b>MORE SUSTAINABLE FLYING AND CARBON FOOTPRINT</b> More stringent demands from stakeholders to reduce the carbon footprint of aviation. Emergency funding for airlines requires green investments in many cases.
Trends	<b>THE EXPERIENCE PARADOX</b> Airlines are constantly improving their Business class. The dry air in the cabin defeats the object of gourmet dining, exclusive wines and interiors designed to maximise the experience.  Increasing humidity normalises our senses such as taste and causes less stress on the body. This enhances the experience of money invested.	<b>THE LOW COST EFFECT</b> Aircraft are equipped with passive humidity control such as drainage channels. Increasing seat capacity and meeting the target of maximising occupancy, as well as less and less time on the ground between flights, create condensation problems that standard passive systems are no longer able to cope with. This makes aircraft heavier and increases their environmental impact.
Availability	<b>LEADING OEM SUPPLIER</b> Supplier of all humidifiers for modern new long-range aircraft: Boeing 787, Airbus A350, Boeing 777X and Irkut MC-21.  Can be retrofitted to all modern long-range aircraft	<b>RETROFITTING MUST DRIVE OEM</b> Available for retrofitting on leading Airbus and Boeing models. Certification for the Boeing 737MAX is in progress.
Customers	<b>HIGHLY DIVERSIFIED CUSTOMER BASE – LARGE POPULATION DRIVING THE MARKET</b> <ul style="list-style-type: none"><li>CTT has a large installed base of humidifiers in operation at more than 50 airlines. The company’s popular options when purchasing leading long-range aircraft are generating more and more airline customers who are gaining experience of the products.</li><li>This is extending awareness of the benefits of active humidity control, which creates more business opportunities such as retrofitting in existing aircraft.</li></ul>	<b>SEVERAL LEADING AIRLINES IN NORTHERN EUROPE AND RUSSIA</b> <ul style="list-style-type: none"><li>Customers in Northern Europe and Russia.</li><li>More than 50 airlines with dehumidifiers in operation on around 1,000 Boeing 787s</li></ul>



CONTENTS

DESCRIPTION OF OPERATIONS

The year in brief	2
CEO's statement	4
Strategy	6
<i>Debriefing on the strategic agenda</i>	12
Products	14
<i>Humidifiers</i>	16
<i>Dehumidifiers</i>	24
Sustainability report	30

FINANCIAL STATEMENTS

Directors' report	41
<i>CFO's statement</i>	41
<i>Operations &amp; other</i>	42
<i>Definitions of key figures</i>	43
<i>Income statement</i>	44
<i>Balance sheet</i>	46
<i>Change in equity</i>	49
<i>Cash flow analysis</i>	50
<i>Five-year summary of key figures</i>	51
<i>Relevant follow up on key figures</i>	52
<i>Risks and risk management</i>	54
<i>The share</i>	59
<i>Corporate governance report</i>	62
– <i>Senior executives</i>	68
– <i>Board of Directors</i>	70
Notes to the financial statements	72
Audit report	86
Glossary	90
Shareholder information	91
History	92

FINANCIAL CALENDAR

Interim report, Jan–Mar	29 April 2022
Interim report, Apr–Jun	22 July 2022
Interim Report, Jul–Sep	28 October 2022
Year-end report 2022	7 February 2023

FOR FURTHER INFORMATION, PLEASE CONTACT

Markus Berg, CFO, on tel. 46 (0)155 20 59 05  
or by email: markus.berg@ctt.se  
For more information, see: www.ctt.se

ANNUAL GENERAL MEETING

The Annual General Meeting will take place at 5pm on Wednesday, 4 May 2022 at the company's premises at Brukslagarvägen 5, Nyköping.

Shareholders who wish to participate in the meeting in person or by postal vote must:

- be entered in the share register maintained by Euroclear Sweden AB by 26 April 2022 at the latest
- notify CTT of their participation by 28 April 2022, whether participating in person or by casting their postal vote according to the instructions in the invitation to attend

For further information, please see <https://www.ctt.se/investors/corporate-governance/annual-general--meeting/>

CTT Systems AB Co. reg. no. 556430-7741

This report is a translation of the original report published in Swedish. In the event of any deviations between the two reports, the Swedish version prevails.

THE YEAR  
IN BRIEF

- Net sales fell by **25%** to **MSEK 151** (201)  
– a decline of **19%** in comparable currencies
- Operating profit (EBIT) decrease to **MSEK 27** (38)
- Operating margin (EBIT margin) amounted to **18%** (19)
- Profit for the year amounted to **MSEK 14** (31)
- Earnings per share amounted to **SEK 1.13** (2.48)
- Cash flow from operating activities increased to **MSEK 30** (-11)
- The Board of Directors proposes a dividend of **SEK 0.79** per share (1.74)

SEK **0.79** /SHARE  
DIVIDENDS  
(proposed)

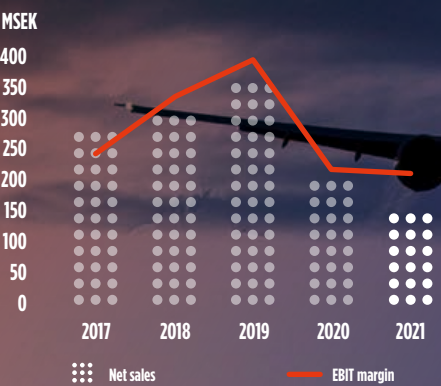
**18%** OPERATING MARGIN  
(EBIT margin)



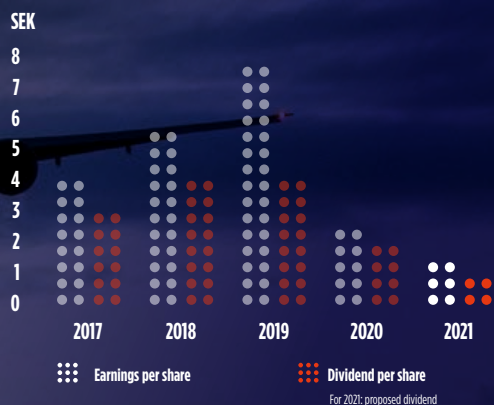
“WE HAVE A NUMBER OF SPECIFIC NEW GROWTH PROJECTS THAT HAVE BEEN REINFORCED IN THE WAKE OF THE PANDEMIC.”

– Torbjörn Johansson, CEO

NET SALES AND EBIT MARGIN



EARNINGS AND DIVIDEND PER SHARE



KEY FIGURES

	2017	2018	2019	2020	2021
Net sales	273	315	355	201	151
Operating profit (EBIT)	58	90	120	38	27
Operating margin (EBIT margin)	21%	29%	34%	19%	18%
Earnings per share	3.79	5.56	7.39	2.48	1.13
Dividend per share	2.75	4.05	4.05	1.74	0.79 <sup>1)</sup>

1) Refers to proposed dividend



# CEO'S STATEMENT

- Air traffic is recovering quickly now that travel restrictions have been lifted
- Sustainability and health have become increasingly relevant
- The importance of removing condensation from aircraft has never been greater
- The importance of increasing cabin humidity has never been more apparent

## Market conditions improved in 2021

Market conditions in the aviation industry improved in 2021, resulting in a shift in emphasis from survival to normalisation of operations. The trend is clear: passenger demand is returning quickly now that travel restrictions have been lifted. This means that airlines are raising their planning horizons and reviewing their renewal of aircraft fleets and cabin interiors.

For CTT, this means the market is gradually improving and is a sign that we are past the worst of the pandemic. Despite a more than 50% decline in turnover, CTT has maintained sufficient financial strength to continue to focus on innovations and investments that broaden its offering, expand its market and improve customer value. The COVID crisis has highlighted the strength of our business model, strategy and market position.

## Aftermarket on track to reach pre-pandemic level this year

Aftermarket is an important part of our business model. It generates recurring revenues throughout the service life of the aircraft and is dependent on the size of the population (installed base) and the utilisation rate of the products. CTT currently has good diversification of risk, with products at more than 50 airlines, with a good geographical spread over around 1,500 aircraft in total. That said, CTT is heavily dependent on individual aircraft models, mainly the Boeing 787 and Airbus A350. The advantage is that the population is in modern aircraft models that will form

the backbone of global long-distance services for the next 10 to 15 years.

The aftermarket is predictable under normal circumstances and was growing at a rate of around 20% per year before the pandemic. After halving in 2020, aftermarket revenues in 2021 increased by 37% to a level that was 67% of the level in 2019, pre-pandemic (MSEK 99 vs. MSEK 147). The company's population has quickly returned to service, and at the time of writing is even larger than before the pandemic. However, the utilisation rate in terms of flight hours is lower, resulting in lower revenues. When the revenue level will be able to reach the same level as in 2019 is dependent on the rate at which long-distance services are normalised. As things stand at present, there are strong indications of a significant increase in summer and the second six months of 2022 (driven primarily by increased transatlantic traffic). Looking further ahead, the rate of increase in the size of the population is what is driving aftermarket growth. This is due to the number of new OEM, Retrofit and Private Jet installations.

## OEMs lag behind but recover during the year

OEMs are a key part of our growth strategy and have been the driving force behind the rapid increase in population up to 2019. A significantly lower aircraft production rate and poorer visibility have altered the short-term outlook. The OEM market is expected to become more predictable again in 2022. Overall, however, OEM recovery is still lagging behind.

**Humidifiers:** If we look a few years into the future, things are looking bright. CTT has optional products on popular aircraft models that are still at the beginning of their programme life. This means that the good long-term growth prospects remain unchanged. CTT is the sole supplier of humidifiers when airlines come to replace old long-range aircraft with new ones. CTT also has the option of increasing product content on the Boeing 787, for example, if we can convince customers that that model needs to have the same cabin comfort as the A350 and Boeing 777X.

**Dehumidifiers:** CTT's goal has always been to make dehumidifiers an option when purchasing new aircraft. This is a long shot, but it is more logical than it used to be. However, success requires airline customers to demand that factory-fitting of these in their new aircraft. Getting products into existing programmes always presents a challenge, but there are windows available because they are constantly evolving and changing. However, entirely new aircraft models – such as if Boeing were to develop a replacement for the Boeing 757 – present the major opportunity. The long-term goal remains; for dehumidifiers to form part of the aircraft's air system, and for CTT to supply them.

## Retrofit heading for a renaissance

A number of factors benefit CTT when it comes to selling directly to airlines for retrofitting to existing aircraft fleets:

**Dehumidifiers:** Airlines are focusing increasingly on reducing their carbon footprint. This means that

more and more airlines are looking for investments to reduce their carbon footprint. For CTT, an investment with a sustainability profile has advantages as companies have different payback requirements and such decisions are made high up in the organisation. CTT is the only supplier of a system that actively tackles condensation. With oil prices at a seven-year high and increasingly stringent sustainability targets, I have never seen better conditions for our dehumidifier system in my 25 years as CEO of CTT.

**Humidifiers:** There has been increased emphasis on health and hygiene in public environments, particularly aboard aircraft, in the wake of the pandemic. This has led to greater interest in air quality on board and how the cabin climate can be improved in order to enhance well-being. The impact of dry air on the immune systems of passengers and crew has been highlighted in this regard. We have an attractive offering, where the cost of installing the humidifier system is just around one percent of the total budget for upgrading a Business Class. The market potential exceeds BNSEK 1, based on a target market of around 1,500 aircraft in total.

## Private Jet takes important steps towards larger target market

CTT has strengthened its Private Jet offering, boosting its growth prospects thanks to a partnership with Airbus Corporate Jets and by entering the significantly bigger market for large Business Jets.

**VIP:** CTT has a partnership with Airbus Corporate Jets (ACJ) in order to increase its share of the segment for small VIP aircraft. The market for VIP aircraft stands at around 10–20 per year, with some cyclical variation. CTT has had a VIP aircraft turnover of MSEK 15–30 over the past decade. CTT has a high market share for large VIP aircraft, but a lower share for the smallest models. This is why CTT has optimised a kit system with STC together with ACJ, which sells it together with the ACJ320 aircraft. This aims to provide enhanced opportunities for a larger share of the segment, with an estimated annual market potential of around MSEK 10–15.

**Business jet:** CTT is seeing significant market opportunities in the large Business jet segment. This is a new segment for CTT. There are currently no humidifier systems on the latest Bombardier and Gulfstream models, for example. Airbus has made the most progress by specifying humidifiers as an option for the ACJ TwoTwenty model in order to achieve a comfort climate. The market potential in the segment stands at around MSEK 200 per year. To achieve a high market share, CTT must have products that are optional

or supported by the manufacturers, such as Airbus Corporate Jets for the ACJ TwoTwenty model and Bombardier for the Global 7500.

## Sustainability is key to the customer offering and a guiding principle in our business

As a small company, CTT has a unique opportunity to make a relatively big difference through our products. Both dehumidifiers and humidifiers add value for airlines, crew and passengers, as well as for the environment, by reducing the carbon footprint.

**Sustainability problem with wetness:** Flying with accumulated condensation in the fuselage is not sustainable. Condensation problems lead to higher fuel consumption and unnecessary greenhouse gas emissions, as well as reduced insulation life and higher failure rates in electronics. For CTT, being a pioneer and raising awareness of the condensation problem and highlighting the benefits of our active dehumidifier system is an important part of our sustainability work.

**Sustainability problem with dryness:** This is true of dry air as well – raising awareness of how humidifiers create a climate that reduces health risks and enhances the experience. Our humidifiers are already making a big difference for pilots and crew in their working environment. If we add health aspects and the impact of dry air on the immune system, the step to passengers should not be too far away.

Besides the impact of our products, CTT is committed to becoming a better company by making sustainability an integral part of everything we do. At a high level, it affects how we conduct our operations and who we do business with. Our sustainability initiative includes areas defined in the UN's global goals in Agenda 2030. This already forms part of how we manage issues and projects relating to gender equality, ethics and moral standards.

## Geopolitical conflicts put a damper on recovery euphoria

Looking ahead always involves a balance between threats and opportunities. Although the pandemic is not yet over, there are strong indications that travel restrictions will gradually ease in 2022. One emerging threat is the Russian invasion of Ukraine, which will impact on aviation and the aviation industry. The development of the geopolitical crisis is negative in the short term and is creating uncertainty, the magnitude of the lasting damage being difficult to assess. A protracted conflict forcing oil prices up and closing air-space over Russia will put something of a damper on the post-pandemic recovery euphoria in the aviation industry. There is also a risk of supply disruptions or

price increases for aluminium, steel and titanium. This is having a certain impact on CTT. In 2021, the Russian and Ukrainian markets accounted for around 4 per cent of the company's total net sales. We have stopped all deliveries to Russian customers with immediate effect and are complying with the export sanctions imposed. It is worth noting that the Russian and Ukrainian markets account for a very small part of our installed base (aftermarket revenues <MSEK 1).

## CTT well positioned for next era of value creation

After 25 years as CEO of CTT, it is time for me to retire. I have many things to be grateful for and a few to be proud of, but above all I will miss my colleagues and would like to highlight their efforts. Together, we have coped with the development and production of the last four Airbus and Boeing widebody programmes. That is something that few major corporations can boast of. Besides my colleagues, I would also like to thank the company's loyal shareholders, some of whom have been with us throughout my entire tenure as CEO. It is with some sadness but great confidence that I hand over to Henrik Höjer on 1 April.

Today, CTT is a company that is well equipped to face up to future challenges and make the most of opportunities. CTT is a world leader when it comes to active humidity control in aircraft. We have more than 50 airline customers worldwide, which gives us a good geographical diversification of risk and places us in a good position for additional sales. Our greatest asset when it comes to meeting demand is the company's skilled staff, strong partners and talented subcontractors. We have carried on working with priority development projects during the challenges presented by the pandemic and demonstrated a good delivery capability despite major supply disruptions around the world. This shows that CTT is well equipped and positioned for profitable growth for a long time to come. To ensure an orderly transition in leadership, I will remain as a resource to the CEO and Board for a six-month period.

To sum up, there is much to suggest that CTT is entering a new era of long-term value creation for the benefit of shareholders, people who fly and our planet's climate. The fact that our products can help to make air travel a little more sustainable is a strong motivator for everyone working at the company, and a good reason to own shares in CTT. Looking forward to seeing you at the AGMs in the future!

Nyköping, March 2022  
Torbjörn Johansson, CEO



# VISION, BUSINESS CONCEPT AND STRATEGY

CTT's vision, business concept and strategy give the company and its employees a mission to be the world's leading manufacturer of humidity control equipment that improves the climate aboard aircraft and reduces their climate impact, creating sustainable value for customers, shareholders, employees and society.

## VISION

CTT's vision is for the aviation industry to use CTT products to regulate humidity aboard aircraft in order to provide a better climate in the aircraft and on the ground.

## STRATEGY

The company's strategy aims to create competitive, profitable and sustainable growth by consolidating and developing its strong niche market position in the field of humidification and anti-condensation of aircraft.

## BUSINESS CONCEPT

The company's business concept is to develop, manufacture and supply products that actively regulate humidity – elevated levels in the cabin to enhance comfort on board, and reduced levels in the fuselage to reduce condensation – so as to improve reliability and reduce environmental impact.

## BUSINESS MODEL WITH SIGNIFICANT AFTERMARKET

The aviation industry is characterised by long product life cycles where the aftermarket is an important element in the business model. CTT has products that are designed to handle the aircraft life cycle, which extends to around 20 years. Continuous use of these products generates a significant aftermarket.

Our business model is based partly on revenues from product sales for line-fit and Retrofit-installation; and partly on revenues from a significant aftermarket busi-

ness. Airlines must continue to use the products and select CTT consumables and spare parts if we are to reach the full revenue potential over the lifetime of the

aircraft. CTT has a strategic marketing partnership with Collins Aerospace for new sales. In the aftermarket CTT uses distributors, mainly Satair (Airbus) and Boeing.

## BUSINESS MODEL WITH CONDITIONS FOR SUSTAINABLE SHAREHOLDER VALUE

### OPERATIONS

- Strong relationships with aircraft manufacturers and airlines
- Excellence in delivery capability, high quality and innovation

### SUSTAINED PROFIT GROWTH

- Repeat business
- Increasing aftermarket
- Market barriers
- Niche dominance

### SHAREHOLDER VALUE

- Operating cash flow
- Profit

The business model's built-in advantages, with large OEM programmes, long product life cycles and a significant aftermarket, create conditions for sustained growth in shareholder value through strong cash flow and a good profit margin. CTT must use a strong strategic position with aircraft manufacturers to exert

market influence in defining and setting the long-term agenda for active humidity control in aircraft, which will increase the opportunities for consolidating the company's niche dominance for a long time to come.

Sustained profit growth will be achieved by constantly increasing the number of products in

operation. Therefore, key drivers for shareholder value are: the number of products in operation, continued use throughout the service life of the products and CTT remaining the dominant supplier in the aftermarket.



# STRATEGY FOR PROFITABLE GROWTH

The company’s strategy aims to create competitive, profitable and sustainable growth by consolidating and developing its strong niche market position in the field of humidification and anti-condensation of aircraft.

CTT is a pioneer in dehumidifier systems and the sole supplier of humidifiers to Airbus and Boeing, the two dominant market players.

The basic element of the strategy is to consolidate our position as the leading supplier among aircraft manufacturers. To achieve this, product quality, delivery and reliability have to meet the high standards defined by aircraft manufacturers. A good customer experience, high performance and good

reliability of the products also help to consolidate this position among airlines, as does the company’s proactive efforts to maintain its position as a leader in technology.

Available optional products for installation at aircraft factories achieves a platform that effectively provides scalability in sales and enables a large installed base of products to be maintained, creating barriers to entry for new start-ups and tackles competition.

The industry is conservative, and airlines often reward original equipment suppliers in the aftermarket. CTT has the advantage of being the supplier in various model programmes from the beginning. Another key element of the strategy is the distribution of aftermarket products to airlines via the aircraft manufacturers’ distribution companies.

## STRATEGIC AGENDA

A follow up on the Strategic Agenda is provided in the Annual Report each year. The company’s strategic agenda for the next few years is based on four cornerstones:

- To consolidate the company’s leading OEM position in humidity control with additional successful products in the range for aircraft manufacturers,
- To work on airlines methodically so as to extend the customer base to more airlines and more model programmes and create demand pressure on manufacturers,
- To ensure quality and delivery capability and
- To improve performance and function through innovation.

## AIRCRAFT MANUFACTURERS – OEM PROGRAMMES

The company’s products have to be included in the range for direct assembly during aircraft production (OEM) – this will create the conditions for growth. This is a scalable channel, and a prerequisite for robust and sustainable growth. Maturity and acceptance between different segments and models drive market penetration. Successful model platforms such as the Boeing 787 reinforce the company’s goodwill and drive additional sales of cockpit humidifiers on other aircraft models, for example.

## AIRLINE SALES

Most OEM products are optional and have to be actively selected by airlines. Marketing to airlines is absolutely crucial to retrofit business, as is increasing awareness of the company’s optional products for newly manufactured aircraft. Owning the customer relationship is a key element in our strategy.

## QUALITY AND DELIVERY CAPABILITY

If we are to maintain CTT’s dominant market position, it is crucial that we guarantee and safeguard the quality and delivery capability of CTT’s products, including the supply of key strategic components. In some cases, CTT can therefore take over the supply of strategic input goods and elements of the manufacturing process or extend its cooperation with subcontractors.

## INNOVATION CAPACITY

CTT must go on developing and adapting its products to new aircraft types and projects. Functionality and performance have to be improved in the longer term. This may involve reducing weight by choosing different materials or products requiring less space. Other areas include integration of technology in order to reach out to new markets. Investments in research and development are ongoing, with emphasis on new product generations, aftermarket products and increased system responsibility.





# SUCCESSFUL LAUNCH OF A HUMID- IFICATION SYSTEM, OPTIMISED, TOGETHER WITH AIRBUS TO IMPROVE MOISTURE DISTRIBUTION ABOARD ACJ320 AIRCRAFT, DEMONSTRATING CTT'S LEADING UNDERSTANDING OF ITS CUSTOMERS, APPLICATION EX- PERTISE AND ENGINEERING SKILLS

**CTT has worked together with Airbus Corporate Jets (ACJ) during the year to complete the development and launch of a humidifier system optimised for the ACJ320 family that improves the distribution of humidity throughout the passenger cabin via an ingenious pipe system based on just two humidifiers.**

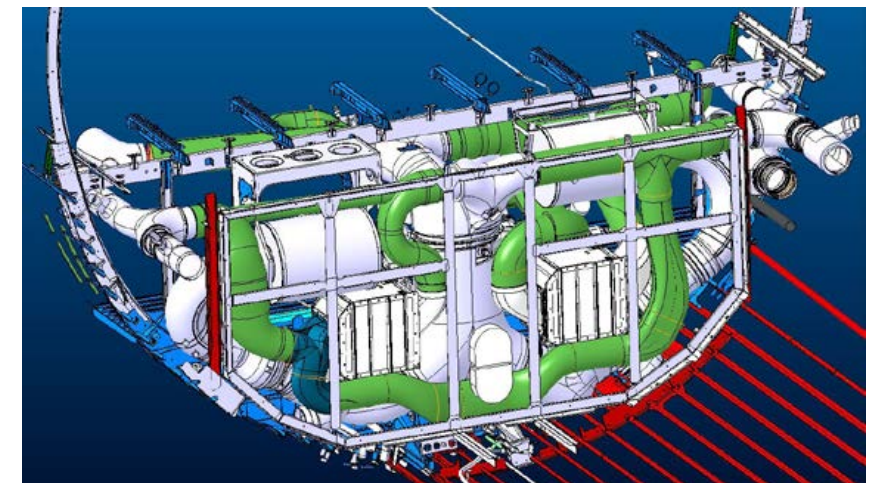
ACJ would like increased humidity as part of the comfort climate on board its ACJ320 aircraft. They find that dry air detracts from the experience, especially on long-haul flights. ACJ required CTT to improve the system so as to achieve even moisture distribution to the entire passenger cabin so that it could fully recommend installation of CTT's humidification system in ACJ320 aircraft to its customers. CTT's original system humidified just one side of the cabin, i.e. the air in one of the supply ducts. The air was then mixed in the cabin. This meant that passengers might feel a certain imbalance in terms of cabin humidity.

It would have been easiest to install four humidifiers in order to meet the ACJ's requirements for even moisture distribution; one on the left in the front cabin, and one on the right. The same applies to the rear cabin. However, there is not enough space for four humidifiers. This was why CTT was forced to use an ingenious pipe system to mix the air output by two humidifiers and feed it into four supply air pipes with the same humidity. The airflows in the pipe system were analysed using advanced CFD calculations, and a full-scale mockup was then built at the CTT laboratory in order to verify the calculations. This project, which

was completed in a very short time, demonstrates the strength of CTT's development department. Different ideas could be analysed quickly using advanced calculation software and verified in rig tests. ACJ's engineers have been impressed at how CTT was able to develop an advanced system in a short period of time that met the stringent requirements in terms of pressure drop and moisture symmetry. After the system's operation was verified, this complex pipe system was ordered from CTT's UK subcontractor BWT. For BWT, manufacturing these complex pipes with double air ducts also presented a challenge. Overall,



CFD (Computer Fluid Dynamics) analysis has been verified in CTT's system testing lab using a 1:1 scale model.



New duct design to support even moisture levels in all four zones. The system is also optimised in order to reduce installation time.

CTT has strengthened its market position as a leader in humidifier systems and paved the way for higher penetration of the ACJ320 family.

The joint project with ACJ is also commercially innovative thanks to a new business model. To date, end customers have purchased an empty A320 aircraft from Airbus, which then delivered it for completion of the cabin interior by third party companies selected by the end customer. CTT's customer is these third party companies that handled the integration and installation with unique STC. For CTT, this means unique projects every time. What is new this time is that

ACJ sells and delivers humidifier systems as kits with ready-made STC, which simplifies installation. The first enhanced ACJ320 system will be delivered this spring, and we expect to deliver a number of additional systems in 2022.



# FOLLOW UP ON THE 2021 STRATEGIC AGENDA

The pandemic has disrupted predictability, visibility and feasibility, affecting most of our strategic goals for 2021.

## Strategic goals / priorities for 2021 – OEM

**B777X:** CTT has done most of the development work and started series production. However, 2021 will be a year on hold pending certification and initial deliveries

**MC-21:** CTT must comply with escalating series deliveries of cockpit humidifiers and offer good delivery reliability

**ACJ320:** First order and delivery in 2021

### New OEM opportunities:

**CR929:** The procurement of air systems should be completed in 2021. The aim is to include active humidity control in the aircraft specification and for CTT to be the supplier selected

**Pre-OEM:** Bombardier Global 7500: The aim is to achieve system delivery to the completion centre in the first quarter of 2021, and for at least one aircraft to be airborne by the second quarter of 2021

**ACJ TwoTwenty:** Selected as a supplier of humidifier systems for the Airbus ACJ TwoTwenty Business jet

## Debriefing 2021

- ☐ Boeing has delayed certification and series deliveries of the 777X until 2023
- ☐ MC-21 was certified in Russia at the end of 2021, series production postponed to 2022
- ☒ In December 2021, CTT received an order for two Enhanced Inflight Humidification (IFH) systems from PMV Engineering in partnership with Airbus Corporate Jets (ACJ)
- ☐ Decision postponed to the future
- ☒ Objective achieved. The end customer is very pleased with the system
- ☐ Decision on humidifier supplier postponed until 2022

## Strategic objectives for 2022

**B777X:** CTT must be ready for normal series production by the end of 2022.

**MC-21:** CTT must be ready to start series deliveries of cockpit humidifiers if sanctions against Russia are lifted

**ACJ320:** CTT must work with Airbus to market the system in order to achieve maximum penetration on new ACJ320 aircraft

### New OEM opportunities:

**CR929:** The schedule for the aircraft programme is considered to be uncertain due to current sanctions against Russia

**Pre-OEM:** CTT must work to ensure that Bombardier offers the system in conjunction with the sale of the Global 7500 aircraft

**ACJ TwoTwenty:** To be selected as a supplier of humidifier systems for the Airbus ACJ TwoTwenty Business jet

**B787:** Persuade Boeing to introduce cabin humidification as an option on newly produced aircraft

**Freighters A350 & B777X:** Work to ensure that cockpit and crewrest humidifiers are offered as an option on these platforms

## Strategic goals / priorities for 2021 – Airline sales

### Humidifier systems:

**OEM options on Airbus A350 / Boeing 777X** We have to canvass all airlines that have not locked in equipment definition aboard their new aircraft

**Humidifier Onboard Business Class:** Systematic canvassing of leading airlines. Dry air and health risks are attracting more attention

### Dehumidifier systems:

**A320:** The aim is to be awarded the first contract motivated by sustainability arguments. This is a new sales tool, attractive as it offers communicative and strategic value for airlines

**B737MAX:** CTT is aiming to start test flights with the MAX at SunExpress

## Debriefing 2021

- ☒ CTT has actively canvassed the market in 2021. The pandemic has made this work more difficult, but nevertheless we have managed to win new customers
- ☐ CTT has been actively canvassing the market in 2021, but the pandemic has made this work more difficult
- ☐ Interest in sustainability combined with high fuel prices has placed CTT in a better position to win this business
- ☐ Postponed to 2022 due to the pandemic

## Strategic objectives for 2022

### Humidifier systems:

–

**Humidifier Onboard Business Class:** Continued systematic canvassing of leading airlines in order to establish the product and thus make an impact on the market

### Dehumidifier systems:

**A320:** The aim is to be awarded the first contract motivated by sustainability arguments

**B737MAX:** CTT is aiming to install and certify the system at SunExpress

## Strategic goals / priorities for 2021 – Quality and delivery capability

Investment in the continued development and improvement of dehumidifier products for Narrowbody and Business Jet aircraft

## Debriefing 2021

- ☐ The project has made progress in 2021, but has not yet been completed due to other priorities within the development department

## Strategic objectives for 2022

Complete development and improvement of dehumidification products for Narrowbody and Business Jet aircraft

## Strategic goals / priorities for 2021 – Innovation capacity

Innovation and product development with a view to increasing the value of our humidifiers – partnership with Camfil

Partnership with Munters in order to develop a new pad material

## Debriefing 2021

- ☒ The development project is largely completed, with good results
- ☐ The project has been started, but not prioritised during the pandemic

## Strategic objectives for 2022

The next step is to market the product to OEM and Private Jet

Working together with Munters to develop an improved pad material

# STRATEGIC AGENDA 2022

# CTT SOLVES THE MOISTURE PARADOX – A PROBLEM FOR HUMANS AND THE ENVIRONMENT

It is a known fact in the aviation industry that aircraft have two humidity problems: the air in the cabin is too dry for people on board, and the aircraft is humid due to condensation. This is a paradox.

Historically, the aviation industry has only applied passive methods in order to mitigate the problems. But flying carrying unnecessary extra weight, leading to excessive fuel consumption and unnecessary greenhouse gas emissions, is inadequate and outmoded. Moreover, needing to expose passengers and crew to a climate that causes fatigue and has an adverse impact on our well-being is unsatisfactory. CTT is a pioneer, actively addressing the root causes and solving the moisture paradox.

## MOISTURE PROBLEMS IN AIRCRAFT – A BRIEF DESCRIPTION

When an aircraft reaches high altitude, the humidity in the cabin gradually drops so that passengers and flight crew start to become dehydrated, with adverse effects on health and well-being. At the same time, condensation forms as the cabin air cools towards the outer shell of the aircraft. The weight increases as the condensation – in the form of ice and water – accumulates in the aircraft, degrading environmental performance in terms of increased fuel consumption, higher operating costs and increased carbon dioxide emissions. CTT is a market leading supplier of equipment that significantly increases the humidity of cabin air and actively tackles the effects of condensation in the fuselage.

## ONBOARD CLIMATE – A BRIEF DESCRIPTION

Technical system solutions are required to deal with the extreme differences in the atmosphere at cruising altitude and the preferred climate inside the cabin, which should ideally be at the same level as on the ground in terms of fresh air, temperature and air pressure. The outside temperature is below -40 °C, and

the outside pressure is around a quarter of the normal pressure. Humidity is virtually zero at high altitude.

**Air pressure:** Air pressure at cruising altitude is around 25% of regular atmospheric pressure. In the cabin, the air pressure must be at least 75% or equivalent to a perceived altitude of 2400 m. The pressure selected is a compromise between adequate passenger comfort and the weight of the aircraft. Modern aircraft containing more composite have allowed higher pressures, giving a perceived altitude of around 1800 m.

**Air treatment:** The air on board must be fresh, with sufficient oxygen content. Some of the air is recirculated so as to achieve the most energy-efficient system possible, because there is a huge temperature difference between indoor and outdoor air. The recirculated air passes through filters and is mixed with the heated outdoor air. All modern passenger aircraft are equipped with highly efficient HEPA filters. The air in the cabin is changed completely at two to three-minute intervals aboard an Airbus. It is important for the ventilation to have as few draughts as possible.

**Temperature control in zones:** Each aircraft is divided into climate zones. Each zone has its own supply and exhaust air and temperature control.

**Ambient humidity:** There is no humidity in air at cruising altitude, so the air in the cabin quickly becomes dry. The people on board are the only source of increased humidity in the aircraft cabin. The air and climate system is divided into zones, so the driest

sections are the least occupied ones. In practice, the air is driest in the zones where passengers are prepared to pay for the best possible experience.

## HUMIDITY – A BRIEF DESCRIPTION

- Humidity is usually measured as relative humidity RH, which is defined as the ratio of the partial pressure of water vapour to the partial pressure of water vapour at saturation in the atmosphere, i.e. the vapour pressure of water at the current temperature. In simple terms, relative humidity is the ratio, expressed as a %, of the amount of moisture in the atmosphere to the amount that the air can hold at a given temperature.

- 100% relative humidity means that the air is completely saturated with water and cannot hold any more water vapour. This means that the additional water vapour added to the air condenses into liquid or accumulates in the air as mist. It can be said that the chances of rain are higher if the relative humidity is high. Rain usually falls at a relative humidity of 100% RH, but there may also be fog or dew. The reverse is not true, though: humidity is not always 100% RH when it rains.

- Indoor air usually feels dry to humans when the humidity level is below 30% RH. The humidity level indoors can be down to 20% RH when it is cold outside. But below that level is rare, and it is difficult to find anywhere on Earth where the humidity is below 20% RH. This means that our bodies are not used to extremely dry air, or have not adapted to working in extremely dry air.



## THE DRY PROBLEM – HUMANS IN FOCUS

### Problems with dry cabin air

A comfortable indoor climate is reliant on more than just temperature. Humidity plays an important part too. Humidity between 40 and 60% RH is best. Levels around 20–25 RH are normal indoors in winter when the weather is cold. This is quite dry, certainly, but manageable. There is a significant increase in the discomfort caused by the dry air if the humidity drops further. This manifests itself in how we feel, although it can be hard to pinpoint exactly what is wrong. It affects well-being, taste, smell and the ability to relax and recover. People have problems sleeping, and they are at greater risk of colds. The effects of extremely low humidity levels – below 10% RH – are more apparent, with dehydrated mucous membranes, skin and eyes.

This has an adverse impact on our immune systems, making us more susceptible to viral infections, for example.

### Extremely dry air on board

When we travel aboard aircraft, the humidity in the cabin gradually drops and reaches a level of 5 to 15% RH after about three hours. After six hours, the dry air has noticeable adverse effects that linger and contribute to jet lag. The lowest humidity is in the cockpit and staff rest areas, where it can be down around zero. The humidity is often around 5% RH in first class, where passenger numbers are low, and 5 to 10% RH in business class on long flights. So the air on board aircraft is drier than anywhere else on Earth.

### Fresh air brought in at high altitude contains no moisture

The air on board aircraft becomes extremely dry because the fresh air brought in from outside at cruising altitude is virtually devoid of moisture. The humidity supplied naturally essentially comes from the passengers on board. The air circulates in the cabin in sections, so the need for humidification is greatest in sections with few passengers. This also means that the air is driest in the premium classes where passengers are spread out, but where people expect greater comfort, and in staff areas where dry air is a health and safety issue.



## THE WET PROBLEM – CLIMATE IN FOCUS

### Problems with condensation

If an aircraft is heavier, this adversely affects fuel consumption, operating costs and carbon dioxide emissions, and hence the environment. Air circulating on the inside next to the shell of the fuselage, which is covered by cabin equipment, forms condensation that freezes when the airframe temperature reaches around -35°C. The amount of condensation that forms during a flight is largely determined by the number of passengers on board and the climate zone in which the aircraft is flying. The ice turns into water during the approach and on the ground.

### Remains in isolation

When the plane lands, most of this condensation drains out through drainage channels: this is known as passive anti-condensation. However, some condensation remains in the fuselage, mainly in the insulation. This water dries out if the aircraft is on the ground long enough, but this rarely happens. Instead, more and more water accumulates in the fuselage.

### Condensation creates problems

Condensation can increase the weight of the average passenger plane by up to 200–300 kg. Water can also

cause corrosion, failure of electronic components and systems and unwanted malfunctions. Condensation also destroys insulation so that it needs to be replaced more often.

Calculations show that if aircraft weight could be reduced by 200–300 kg, this could cut carbon dioxide emissions by between 65 and 100 tonnes per year. Although the aviation industry accounts for a small % of global greenhouse gas emissions, this problem is increasingly accentuated by the world's growing demand for more sustainable air transport.



# WORLD LEADING SUPPLIER OF HUMIDIFIERS

CTT is a world leader in active humidity control in aircraft. CTT has the most efficient, energy-efficient and reliable humidifier systems on the market, raising humidity to a level that reduces the risk of dehydration, fatigue, viral infections and the jet lag that usually results from long flights.



**Principle:** Humid air is blown into the cabin (blue arrows), providing a comfortable humidity level for passengers in the cabin. Dry air (red arrows) from dehumidifiers prevents problems with condensation.



**System:** Humidification for Business class in the Boeing 777. The humidifier is installed in the supply air ducts for the compartments to be humidified, and the water is taken from the aircraft's regular water system.

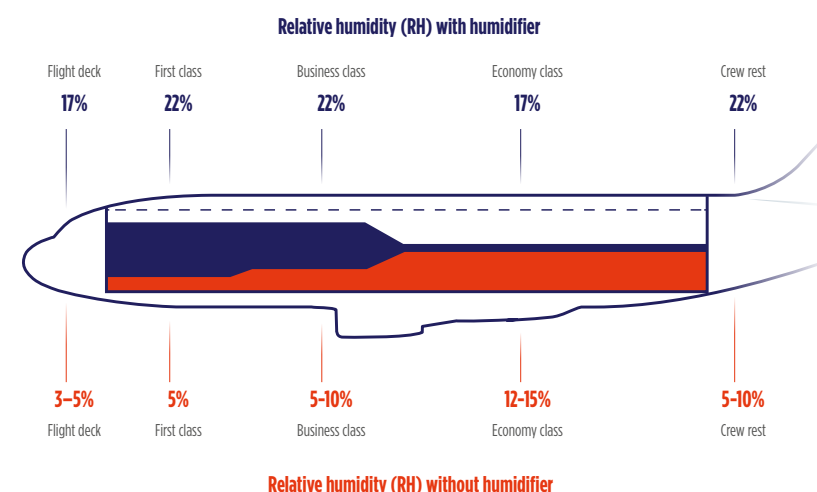
## Humidifiers

CTT humidifiers ensure – in an energy-efficient way – that the humidity remains at levels that humans are used to and that are required for the body to function normally (around 20–25% RH). Humidifiers are either installed by aircraft manufacturers as OEM equipment during the production of new aircraft or fitted by airlines to aircraft already delivered as additional equipment, which is known as retrofitting. Installation then takes place during maintenance or one of the regular upgrades of the cabin interior that airlines make to their aircraft fleets. Different versions are available for different aircraft types, with adaptation for the cockpit, crew rest areas and the passenger cabin.

## Significant aftermarket

The humidifier's humidity pad needs to be replaced, most commonly after 4,000 hours or around once a year, in order to maintain performance over time.

This means that CTT has a significant and growing aftermarket driven by the number of humidifiers supplied to airlines.



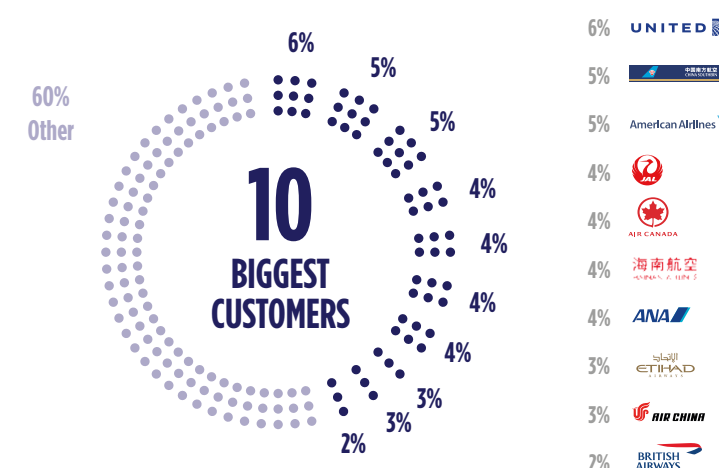
# A SOLE SUPPLIER WITH MORE THAN 50 AIRLINE CUSTOMERS

CTT's largest market is currently the market for humidifiers for commercial aircraft. Some of the world's largest airlines are among CTT's 50+ customers. CTT is the sole supplier to Boeing and Airbus for line-fit installation in their latest long-range aircraft programs. Sales are also targeted for Business jets and VIP aircraft (see pages 20–21 for more information on Business jets and VIP aircraft).

Successful OEM programmes mean that the company's products are well diversified among over 50 different airlines, many of them the largest and most well-known airlines in the world. The company's ten largest customers account for around 40% of the population. CTT humidifiers are installed on modern aircraft models, and most of the population is at the start of its estimated 15 to 20-year life cycle.

## Chances of more business increase with the number of customers and the size of the population

With CTT humidifiers as options when purchasing leading long-range aircraft, more and more airline customers are gaining experience of the products. This is extending awareness of the benefits of active humidity control, which creates more business opportunities such as retrofitting in existing aircraft. It is also common for airlines that have selected humidifiers for the A380 or Boeing 787, for example, to continue to select the same equipment for new models. For instance, China Southern began fitting its A380s with humidifiers in the crew rest area (which was the only option available on the A380). When specifying the Boeing 787, they select to mirror their choice on the A380 and equip the cockpit accordingly. When it came to the A350, a choice was made once again not just to mirror its predecessor, the Boeing 787, but also to extend to the next level possible – and add the passenger cabin. Air China, Air France, ANA, China Eastern Airlines, Emirates, Etihad and Turkish Airlines are all mirroring their previous selection of humidifier options. This market dynamic will drive the humidifier market strongly if it is sustained and extended to the passenger cabin.



## Sole supplier to Boeing and Airbus

CTT has been selected as the sole supplier of humidifiers for the four latest long-range Airbus and Boeing models – the Airbus A380, the Boeing 787, the Airbus A350 and the Boeing 777X – as well as the Russian Irkut MC-21. This provides CTT with opportunities for good growth and chances to influence the industry's long-term requirements specification for aircraft humidity control. Such OEM sales are strategically important. When ordering new aircraft, airlines normally define the standard that is to apply to their entire fleet of modern long-range aircraft.

## Competition

CTT is in a strong position as the sole supplier for the latest four long-range commercial aircraft programs from Airbus and Boeing, and also given its dominant position in the VIP market. There are lower barriers to entry for competitors in the VIP and Retrofit segments, although OEM suppliers have a special position when it comes to retrofitting in commercial aircraft. Our main competitor is Liebherr Aviation when it comes to humidifiers, but its main market focus is in the Business jet segment. There is also competition in a broader sense from completely different cabin products and innovations that affect the on-board experience, such as passenger WiFi. These products all compete for airlines' budgets for purchases and timeframes for retrofit projects.

## STRONG TRENDS DRIVING THE MARKET

The new Airbus and Boeing models for long-haul flights offer major advantages in terms of operational flexibility and much lower fuel consumption. Higher environmental requirements will accelerate the phasing out of older aircraft. This benefits CTT, which is the sole supplier of humidifiers for the latest models. For CTT, growth is largely about increasing the penetration rate for active humidity control in the overall long-distance aircraft fleet. It is still low, and there is high potential for growth.

### MORE AND MORE PEOPLE ARE EXPERIENCING THE BENEFITS OF HUMIDIFICATION

Every month, new Airbus A350 and Boeing 787 aircraft are delivered with our humidifiers on board. CTT has humidifiers installed on around 1,100 long-range Airbus and Boeing aircraft. CTT has more than 50 airlines as customers. Boeing 787 cockpit penetration is around 85%. CTT often meets pilots and crew who testify to the benefits. The airlines are aware of this, and at the same time they can state that CTT offers good performance with excellent reliability. This is evidenced by the fact that airlines continue to mirror their configurations by selecting humidifiers for new models as well.

### MORE AND MORE PLANES ARE FLYING FURTHER AND FURTHER

Flight routes and behaviour have altered radically over the last decade, in that more direct connections are being offered rather than feeding traffic into and out of major airport hubs as used to be the case. There are more and more direct routes between locations on different continents, resulting in a shorter total travelling time, but a longer uninterrupted time in the air. This is resulting in an increased demand for humidifiers, and thus a larger market for CTT.

### NEW AIRCRAFT MODELS ARE DRIVING AND SETTING THE STANDARD FOR CABIN CLIMATE

Aircraft manufacturers are continuing to introduce improvements in new aircraft models that enhance on-board comfort. This means increased cabin pressure, for example, so that the perceived altitude corresponds to the pressure at around 1,800 metres above sea level, compared with 2,400 metres above sea level as perceived aboard older aircraft. Better temperature control is also offered in several zones, and there is less noise and vibration. The next step in efforts to improve the cabin climate is to increase humidity, which is offered as an option on the two latest models: the Airbus A350 and the Boeing 777X. The fact that the two leading aircraft manufacturers are including humidification as part of the cabin climate package is driving the market for CTT.

### AIRLINES ARE INVESTING IN BUSINESS CLASS

As airlines invest in better, more comfortable Business class and flight routes become longer, they are on the hunt for products that improve the chances of passengers experiencing greater comfort and well-being. With business travellers in mind, the aim is to create a travel experience that meets stringent demands in terms of flexibility, tasty, healthy food and the opportunity to work and rest. Airlines are trying to differentiate the experience by more effectively influencing and engaging our senses such as smell and taste. More and more airlines are realising that dry cabin air is a negative factor leading to deterioration in smell, taste and rest. The aviation industry has begun focusing more closely on air quality issues in the wake of the pandemic. In this context, more and more people are perceiving the importance of higher humidity in order to prevent the immune system being weakened. This means that more people are seeing an increased need for significantly higher humidity, which is driving the market for CTT.

## DIVERSIFIED CUSTOMER BASE AND STRONG MARKET POSITION ARE DRIVING GROWTH

The most established market is for cockpit humidifiers. The crew rest area has a large installed base, but conditions for different models differ slightly in this regard. There is a new and emerging market for cabin humidification.



### Positive market trend

Cockpit humidifiers are CTT's most established product. Our market plan is based on taking advantage of the success with the Boeing 787, with more than 50 airline customers. More and more airlines are requesting similar equipment on new aircraft. Many airlines have mirrored the selection they have made for the Boeing 787 when buying the Airbus A350. New models such as the A350 and Boeing 777X also give customers the option of selecting humidifiers for the passenger cabin. CTT currently has a large population, with good operational data in respect of reliability and performance. This reduces the need to equip the passenger cabin with humidifiers as well. CTT is seeing a positive market trend where the aim is for positive experiences and consistent perceptions to guide airlines when they select humidifiers for their various aircraft.

### Market being extended to more aircraft types

The market is being extended to include new aircraft models, and being broadened by making options available to passengers as well. Market potential is driven by the aircraft production rate. The production rate for 2022 is expected to remain low at the start of the year and then increase towards the end of the year. Boeing is expected to complete its certification of the 777X in 2023, which will lead to an increase in the 777X production rate. UAC/Irkut is planning to ramp up production and deliver the first MC-21 in 2022 unless current sanctions lead to supply chain issues. CTT's sales are also driven by penetration (read: how many select our options). The aim is to achieve the same humidifier penetration level in crew areas on the Airbus A350 and Boeing 777X as on the Boeing 787. Moreover, the market has to be extended to include the passenger cabin.

### OEM success to drive retrofit market for cabin air humidification

The aim is for airlines that fit out their new A350s/777Xs with humidifiers in Business and First class to also retrofit humidifiers in their existing aircraft.

### Milestone in growth schedule as airlines begin long-haul flights with humidifiers in Business class

Only two airlines have humidification in Business class at present. Their aircraft types have been used mainly for medium-haul flights to date. In 2022, as intercontinental operations are resumed, the A350 model will start to be phased in on long-haul routes. This means that for the first time, Business class passengers will experience the benefits of a healthier cabin climate after a long flight.



# PRIVATE JET: VIP DOMINANCE, WITH TARGET SET ON BIG BUSINESS JETS

Private Jet is divided into VIP aircraft, which are redesigned commercial passenger aircraft, and Business jets, which are designed for a small number of passengers.

## CTT has a strong market position in the VIP segment

CTT has a very strong position in the VIP segment, which is reworked and converted passenger aircraft (from Airbus and Boeing). Being able to demonstrate the benefits of the technology to aircraft manufacturers and airlines has been of great value to CTT. Preventing competitors from taking that route into commercial aircraft models and manufacturers is also of strategic importance. The main competitor for humidifiers is Liebherr Aerospace, which has an offer for VIP. However, CTT has dominated the VIP segment for the last decade, especially for the very largest models (widebody aircraft).

VIP aircraft are purchased without complete interiors (green aircraft) and delivered for completion according to the end customer's wishes at special completion centres. End customers are often government/royal families, VIP charter companies or ultra-high-net-worth individuals. CTT develops the humidification system adapted to the customer's interior and requirements. This is done together with the interior design company, which is CTT's customer and certifies the system. Airbus and Boeing have supplied around 450 VIP aircraft in total. The delivery rate in recent years has stood at just over ten VIP aircraft per year. CTT has

historically seen net sales from VIP projects ranging between MUSD 1.5 and MUSD 5 per year.

## Partnership with Airbus Corporate Jets to achieve higher narrowbody VIP penetration

In 2019, CTT launched a partnership with Airbus Corporate Jets (ACJ) to optimize the humidification system for the ACJ320 family for higher efficiency and performance. Airbus introduced the system in 2021 and is marketing the system as part of its comfort climate. The first system was sold in 2021.



The illustration shows an Airbus ACJ320neo.

## CTT is broadening its offering by addressing larger Business jets offering great market potential

Historically, CTT has had no market presence in the Business jet segment. Liebherr Aviation is the leading supplier of air humidification systems for Business jets. The biggest companies in the Business jet market in terms of number of aircraft supplied are Cessna (Textron), Bombardier, Gulfstream (General Dynamics) and Falcon (Dassault).

The Business jet market is changing rapidly, with new models that are larger than before, with better range and higher speed (large-cabin, long-range). Market leaders Bombardier, Falcon and Gulfstream have brand new model programmes. Bombardier is enjoying great market success with its new Global 7500. Gulfstream has a number of new models (G500/G600) in the largest Business jet segment, and is testing the G700 (with deliveries scheduled from 2022), which is a competitor to the Global 7500. Dassault is expected to deliver its latest Falcon 6X model in 2022 and has begun development of a brand new model, the Falcon 10X (first delivery in 2025). Moreover, Airbus launched its first Business jet – the Airbus ACJ TwoTwenty – in October 2020. These brand new aircraft models are a competitive alternative to VIP aircraft with lower purchase and operating costs, as well as greater flexibility to select smaller airports.

## Demand for humidifier systems is increasing with range, and performance requirements with cabin size

Larger aircraft and longer range are expected to increase demand for efficient humidifier systems that can maintain humidity levels above 20%. The challenge is to achieve efficient systems that maintain good performance without causing condensation problems. The Business jet market differs from the VIP market in that manufacturers supply turnkey aircraft in most

cases. Only a small number of these aircraft pass via independent integrators, known as completion centres. Liebherr is the market leader, with a strong position among most manufacturers. However, Bombardier and Gulfstream have not selected Liebherr for their biggest models. This creates an opportunity for CTT. There is a significant opportunity for growth if CTT succeeds in the larger Business jet segment, where the total market potential amounts to around MUSD 25 per year.



The Boeing BBJ787 is a good example where a successful VIP project creates business opportunities in passenger aircraft. CTT has designed and engineered a humidifier system for the passenger cabin aboard the Boeing BBJ787. Getting an STC (supplemental type certificate, a certificate of airworthiness) for retrofitting on the Boeing 787 is quite complicated partly

because of Boeing's approach to IP (initial parts), and partly because the aircraft has so much composite. CTT now has an advantage with a certified and working system; both in respect of Boeing in OEM discussions in order to offer the system in the catalogue, and for retrofitting in the existing aircraft fleet.





## CASE: NEW POST PANDEMIC DRIVERS AND OPPORTUNITIES

# FOCUS ON HEALTH: HUMIDITY TOO LOW FOR THE IMMUNE SYSTEM<sup>1)</sup>

### The immune system is weakened by dry air

The immune system is adversely affected by dry cabin air. The human immune system is adapted to conditions on Earth. When humidity drops to extremely low levels, the mucous membranes, etc. dry out enormously, which weakens the immune system.

Dry cabin air gradually dries out the mucous membranes during long-haul flights, increasing human susceptibility to bacteria and viruses. The mucous membranes form part of our first line of defence, as they contain antibodies that physically trap pathogens for transport and breakdown. It can be

concluded that a weakened immune system increases the risk of infection not only during the flight, but also – and perhaps more importantly – on arrival at the destination.

### The air on board is cleaned effectively but is far too dry

Onboard a modern passenger aircraft, the air in the cabin is completely renewed at two to three-minute intervals. For the air that is recirculated, HEPA (High Efficiency Particulate Air) filters are available that capture 99.97% of all microbes, such as viruses and bacteria, in order to ensure high air quality. The air

aboard an aircraft is forced from the roof down to the floor. This significantly limits the spread of airborne droplets as the air on board immediately forces the droplets down to the floor. Therefore, the air does not circulate around the cabin.

Distancing is difficult when flying. Distancing is easier in the premium classes. But these have a different problem – dry air. This means that Business class passengers benefit from distancing during the flight itself, but arrive at their destination with their immune systems affected by the dry air.

<sup>1)</sup> [www.ctt.se/downloads/white-papers/](http://www.ctt.se/downloads/white-papers/)

## CASE: NEW POST PANDEMIC DRIVERS AND OPPORTUNITIES

# FOCUS ON AIR QUALITY: GAS FILTRATION IN HUMIDIFIERS

Aircraft have effective particulate filters for recirculated air. However, there are no filters for gases such as VOCs. CTT's partnership with Camfil, a world leader in filters, is focusing on filtering out ozone and volatile organic compounds (VOCs). Air at high altitude contains a higher concentration of ozone. Camfil is developing a special filter consisting of activated carbon with coconut shell. Filter functionality in humidifiers enhances customer benefits and the value of the product.

### All modern aircraft are equipped with ozone converters

The Earth's ozone layer protects us from harmful UV rays, yet ozone molecules themselves are particularly toxic when inhaled. Aircraft typically travel at altitudes between 29,000 and 42,000 feet, where ozone is highly concentrated. The concentration varies depending on the Earth's hemisphere, latitude and season. Passengers would be affected by ozone if there were no converter on board.

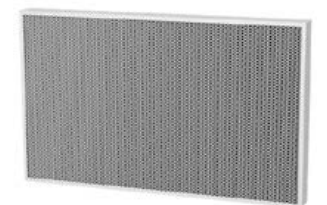
All modern aircraft are equipped with ozone converters. Intake of fresh air at high altitude passes through the converter, which leads to significantly lower concentrations of ozone.

### An ozone filter in humidifiers complements and further reduces levels

The lower the ozone levels, the better – particularly for pilots and crew who spend many hours in the air. This means that there is an interest in the industry in solutions that further reduce cockpit levels, for example. There is no desire to install more heavy equipment in aircraft that needs servicing. CTT can resolve the issue with minimal weight increase and no additional servicing as it is integrated and synchronised with the humidifier service.

### VOC filter removes kerosene odours and exhaust fumes on the ground

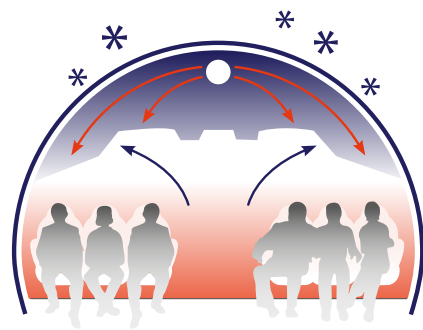
Aircraft have no air filtration on the ground. This means that the smell of kerosene or exhaust fumes, for example, sometimes enters the cabin. Such harmful vapours could be eliminated by the filter in CTT's humidifiers. Even if the humidifiers are not switched on, the air passes through them even on the ground and the air is therefore cleaned to remove volatile organic compounds such as kerosene.





# REDUCES FUEL CONSUMPTION AND ENVIRONMENTAL IMPACT

CTT is a pioneer, the only company to offer products that reduce condensation aboard aircraft. Aircraft are equipped with passive systems to remove condensation, but in many cases moisture still remains and accumulates over time. CTT's active system prevents condensation, reducing fuel consumption, CO<sub>2</sub> emissions and the environmental impact of aviation.



**Principle:** CTT products blow dry air into the Crown Area (red arrows), which reduces condensation against the cold outer shell and drying insulation mats and areas containing moisture-sensitive electrical systems via directional pipe systems.



**System:** Zonal Drying™ for the Airbus A320. The dehumidifier is situated under the cabin floor at the front of the aircraft. A pipe system distributes the dry air to areas affected by condensation.

## Condensation creates problems

Condensation occurs on all aircraft. Condensation and ice increase the weight of the aircraft, resulting in increased fuel consumption, higher operating costs and unnecessary carbon emissions. The problems are greatest in countries with periods where the climate is cold and wet. Calculations show that in these cases, condensation

can increase the weight of an aircraft by up to 300 kg.

CTT is the only supplier to provide anti-condensation systems with a control unit and pipe system to prevent condensation and dry out any condensation occurring. The systems in an aircraft normally consist of one or two dehumidifier units that blow dry air into the roof of the fuselage, known as the Crown Area.

## Good aftermarket opportunities

Dehumidifiers require repairs and filter changes after around 12–18 months for continued good function and performance. This provides CTT with good aftermarket opportunities.

# NARROWBODY IS THE TARGET MARKET – OEM A PREREQUISITE FOR GROWTH

Narrowbody aircraft where condensation problems are more extensive form the target market for dehumidifiers, because the volume is smaller in the space above the inner roof, known as the Crown Area, and the air is more stagnant.

## Our products as OEM options are a prerequisite for sustainable growth

Being a supplier to aircraft manufacturers creates conditions for steady demand and extends the market, as well as increasing the chances of retrofit sales. Airbus and Boeing dominate the narrowbody segment. Our dehumidifier products are not available in manufacturers' options catalogues for narrowbody aircraft at present.

## Target market

CTT will be focusing its activities on winning new customers in northern Europe, where the climate often leads to major problems with condensation.

## Dehumidifiers on widebody models

The dehumidifier widebody market is mainly driven by humidification system sales. Dehumidifiers are available in the Airbus A350 catalogue range as standalone or mandatory parts of the cabin air humidification system, depending on the configuration. The anti-condensation system was also standard on the Boeing 787 until the end of 2019. Around 2,000 dehumidifiers have been supplied for to around 1,000 Boeing 787s in total, which will generate aftermarket revenues in the form of filters and repairs for many years to come.

## Competitors

All aircraft have condensation. Historically, aircraft are only equipped with passive systems that discharge condensation when the aircraft is on the ground. Doing nothing at all is our biggest competitor.

CTT needs to encourage more airlines to invest in active humidity control in order to convince manufacturers of the benefits of the product.

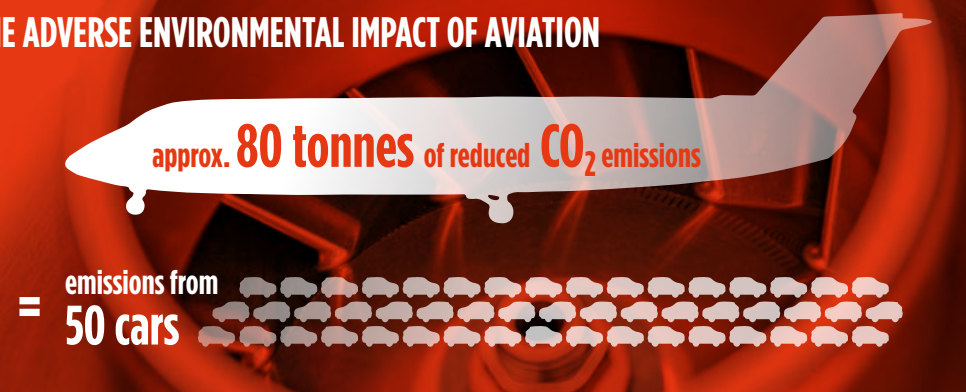


## MAJOR AIRLINE CUSTOMER

**Jet2.com** is CTT's biggest customer when it comes to anti-condensation. They have anti-condensation systems across the entire fleet, currently around 90 Boeings. The company has placed an order for 51 A321s for delivery from 2023.

## REDUCING THE ADVERSE ENVIRONMENTAL IMPACT OF AVIATION

A narrowbody aircraft (e.g. the Airbus A320) with the CTT anti-condensation system installed reduces CO<sub>2</sub> emissions by up to 65–100 tonnes per year. The effect is even greater on a widebody aircraft.





# ENVIRONMENTAL CONSIDERATIONS INCREASE DEMANDS TO **REDUCE CO<sub>2</sub>** – HIGH LOAD FACTOR INCREASES NEED

The industry is actively working to increase productivity by adding more passengers, which is increasing condensation problems. At the same time, airlines are facing increasing demands – not least from their customers – to reduce their environmental impact, which is driving demand for anti-condensation. There are a number of long-term megatrends in the narrowbody segment that are increasing condensation, suggesting that demand for dehumidifiers will grow in the next few years.



## INCREASED SEAT CAPACITY AND HIGH LOAD FACTOR

Airlines are actively working to increase the productivity of their fleets, driven in part by the growth of low-cost air travel. Ultimately, they are aiming to get more passengers into each aircraft. This is being done by increasing load factor by means of attractive prices, and also by placing more seats on each level. The problem of condensation increases with more passengers on board.

Aircraft are also spending more time in the air, which means they have less time to dry out on the ground and more time gathering condensation in the air.

## INCREASED DEMAND FOR MORE SUSTAINABLE AIR TRAVEL – EMISSIONS MUST BE REDUCED

One of the most important measures is to reduce aircraft weight, where lots of small measures can have a major impact. Excess weight from condensation is an area offering good sustainability potential for the increasing number of airlines that are looking to enhance their environmental image. With a penetration rate of just a few per cent in current operational fleets, there is major growth potential for CTT products. Active anti-condensation reduces fuel consumption by 0.4–0.6% by reducing aircraft weight by 200–300 kg. This affects the environmental impact by reducing emissions at a level of around 65–100 tonnes of CO<sub>2</sub> per year.

## MORE ELECTRONICS ON BOARD INCREASE SENSITIVITY TO MOISTURE

The trend in society towards more connected devices – among passengers, crew and the aircraft's own systems – is driving the development of more sensitive electronics on board aircraft. Electronics are sensitive to moisture, which makes actively tackling condensation a more interesting prospect for airlines.

**“CTT HELPS MAKE FLYING BETTER – A LITTLE MORE SUSTAINABLE AND FAR MORE PLEASURABLE”**



# QUALITY THE CORNERSTONE OF OUR PRODUCTION STRATEGY

Quality considerations define our production strategy, providing plants with even clearer roles. Our Nyköping plant carries out final assembly and testing, while the Nybro plant focuses on serial production of certain aluminium and stainless steel components and assembles volume products.

C  
⋮

## CUSTOMER SATISFACTION

CTT's primary focus is to meet or exceed its customers' expectations

T  
⋮

## TECHNICAL EXCELLENCE

Products and systems must be designed, produced and maintained so that they meet or surpass specified requirements

T  
⋮

## TOTAL QUALITY

CTT's key factors to ensure robust and long-term growth are:

- Compliance with all applicable laws, regulations and customer requirements – with continuous improvement of the management system
- Genuinely committed and motivated employees
- Sustainable relationships with suppliers and partners

### Own production

CTT performs final assembly and testing of all its systems and products at the Nyköping plant so as to guarantee delivery quality and compliance and maintain a close presence to the development department. This is particularly important for low-volume products, for testing or at the start of an OEM programme. The PAD product group (humidity pads), which is delivered directly from Nybro by specifically qualified personnel for aircraft release, is an exception to this.

The Nybro plant is a pure production facility that CTT is developing to handle more advanced manufacturing processes. Sheet metal parts and moisture pads are manufactured at this plant. A new advanced fibre laser combination machine has been installed over the last year, a combined fibre laser and punching machine which enhances quality, reliability and productivity. All CTT operations hold quality accreditation to the aviation industry's own standards.

### Selected subcontractors

CTT works with selected subcontractors for technically complex product parts and components for which the aviation industry has defined special requirements,

such as fans, valves, control units and special air pipes and hoses. Particular specifications and drawings are devised for products of this kind. Long-term contracts form the basis for this type of cooperation.

### Quality and reliability

The aviation industry involves a high level of control and regulation. It is also capital-intensive, making delays and downtime costly. As a consequence, therefore, most parts and systems are built to last the lifetime of the aircraft. All processes at the company are defined in the company's own quality system, and regular checks are performed in order to ensure that the processes are being followed and that new processes are developed when necessary.

The quality system meets the requirements defined by public authorities for manufacturing and repairing parts for the aviation industry. CTT is certified according to ISO9001 and the AS9100 standard applicable in the aviation industry. CTT works in partnership with design organisations approved by aviation authorities, such as Lufthansa Technik, in order to certify aircraft retrofit systems.

### Development

CTT conducts two types of development work. One aims to develop products to fit specific aircraft models. When major aircraft manufacturers develop new models, as Boeing is currently doing with the 777X, it means that CTT also carries out extensive work that includes developing technology and processes, with multiple qualification rounds involving the aircraft manufacturer and public authorities. The second type of development takes place at an earlier stage, before specific contracts are signed. This development involves devising new concepts and ideas for future products, as well as patenting the progress made. One such example is a partnership entered into by CTT and air filter manufacturer Camfil in 2020 in order to integrate ozone and VOC filtration into cockpit, crew rest area and cabin humidifiers. This development will be put into operation by the first customer in 2022.

# SUSTAINABLE DEVELOPMENT AND RESPONSIBLE ENTERPRISE

CTT has a value-based approach to sustainability and strives to integrate sustainable thinking in everything it does, in both the short and the long term. Sustainability is an important driving force for CTT’s product development and its efforts to minimise the environmental impact of its operations. Conducting business ethically in all regards alongside offering attractive, responsible workplaces are other essential elements of CTT’s sustainability initiatives. Creating a sustainable, value-creating business is based on integrating the entire chain into sustainability efforts, from supplier to customer.



CTT’s vision is for the aviation industry to use CTT products to regulate humidity aboard aircraft in order to provide a better climate in the aircraft and on the ground. In 2021, our dehumidifiers reduced airline CO2 emissions by the equivalent of 53,000 cars (37,000), higher than in the previous year when flight hours increased again in the wake of the COVID-19 pandemic. At the same time, CTT humidifiers created an improved working environment for around 15% (14) of the world’s pilots of widebody aircraft by increasing humidity. To achieve this vision, we conduct responsible enterprise based on our business concept, strategic agenda and sustainability policy. The framework for CTT’s sustainability work is based on the Sustainable Development Goals of Agenda 2030, stakeholder and significance analyses carried out and dialogue with our stakeholders, who influence and are influenced by our operations to varying degrees.

**Sustainability policy forms the starting point for sustainability efforts**  
CTT is constantly working to reinforced sustainability in its operations. We are steering towards increased sustainability on the basis of our sustainability policy,

which describes the fact that the company has to work to integrate social, economic and environmental sustainability throughout everything it does. This means that CTT has to operate in a financially sustainable manner that ensures its survival and evolution over time. The company must respect human rights and promote good working conditions throughout the value chain. CTT must also work actively to reduce its environmental impact and combat corruption.

The CEO and the management team bear operational responsibility for conducting ongoing sustainability work. A review and evaluation of the previous year’s performance is carried out at the start of each year, and a review of the sustainability goals and risks related to each focus area is then conducted on the basis of the outcomes and stakeholder and significance analyses. Specific activities are then defined, with responsibilities and key figures for the coming year. A mid-year review of ongoing activities is carried out at the management strategy meeting after the summer.

At the end of the year, the outcomes of the year’s goals and activities are compiled and form a basis for the review at the start of the next year, and the circle is closed.

**Certifications and licences form part of CTT’s sustainability efforts**  
CTT has a number of certifications, licences and customer approvals which mainly govern the operation of the business, but which also form an important part of the company’s sustainability efforts; by ensuring that working methods and practices relating to a number of different sustainability issues are in place, for example. CTT has a number of different licences/approvals:

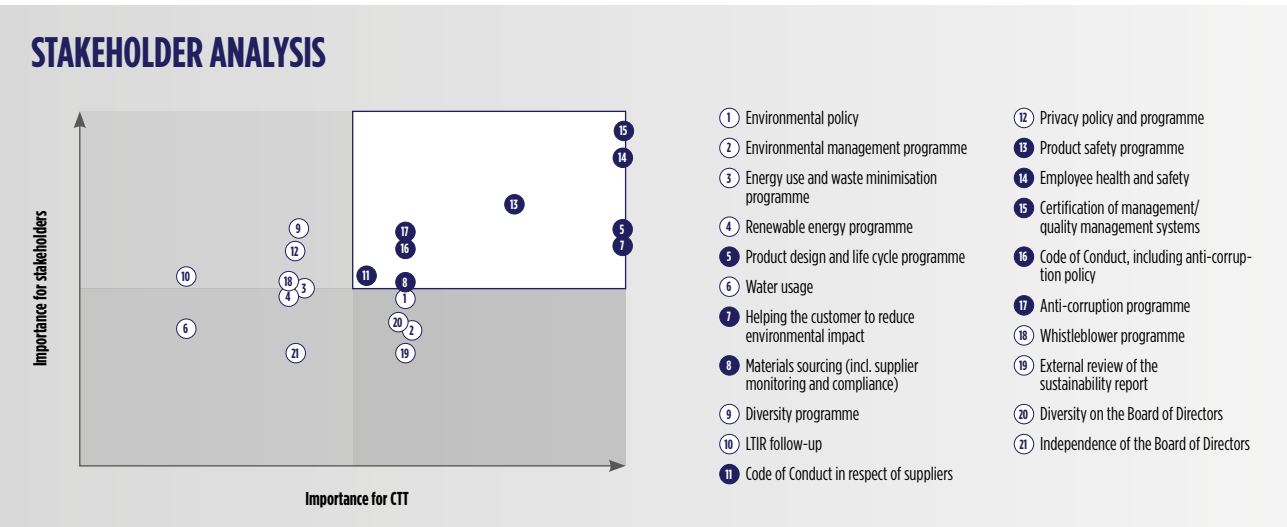
- AS9100D certification, the aviation industry’s quality standard that includes ISO9001:2015
- Six different administrative approvals under the Swedish Transport Agency, including:
  - Production Organisation Approval (POA)
  - Three Maintenance Organisation Approvals (MOA) covering the EU, the US and Canada which are generally accepted globally. As the UK has left the EU, CTT will probably also need additional certification of its repair operations with a single licence under CAA UK, as the UK intends to stop accepting EASA licences in 2022.
  - Known originator, air freight (Swedish Transport Agency)
- Customer approvals (e.g. from Boeing)

**Stakeholder and significance analysis**  
The stakeholder and significance analyses conducted by CTT are an important part of the annual management review, where activities related to sustainability work for the coming year are decided upon. CTT’s primary stakeholders are employees, owners/investors, the community, customers, suppliers and regulatory counterparties. Customers also include airlines, which

are sometimes indirect customers, and end-users, which are the passengers and crew aboard aircraft.

CTT’s stakeholder analysis is based on a number of issues related to the company’s three main areas: Environmental responsibility, Responsible employer and Business ethics and human rights. These issues are used to assess the impact of a specific issue on CTT’s ability to create value for its primary stakeholders and

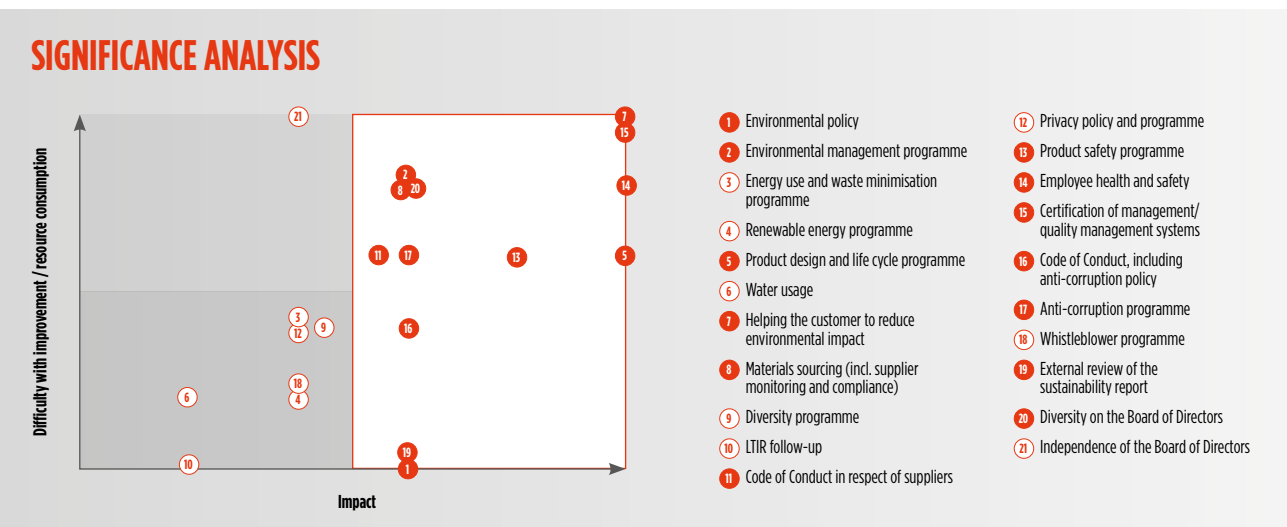
the impact of a specific issue on CTT’s ability to go on evolving as a company profitable in the long term. An illustration of the company’s stakeholder analysis is presented below, the white area marking the issues that are of major importance to both CTT and its stakeholders, making these priority issues.



CTT’s significance analysis compares the positive impact a specific issue is deemed to be capable of having with CTT’s ability to positively influence that issue.

An illustration of the company’s significance analysis is presented below. The significance analysis is one of the tools used to decide on activities for the coming year,

the balance of impact versus opportunity to influence forming the basis for value-based decisions on which activities to prioritise.



**About the sustainability report**  
This is CTT’s fourth sustainability report in accordance with the requirements set out in the Annual Accounts

Act, Chapter 6, Section 11. See page 7 for a description of CTT’s business model. See also the risk section starting on page 54 for risks related to sustainability.

The sustainability report has been reviewed and approved by the company’s auditors. See the Auditor’s opinion on page 33 for more information.



# THREE AREAS THAT CAPTURE CTT’s KEY SUSTAINABILITY ISSUES

UN Agenda 2030 and related Sustainable Development Goals have provided guidance in efforts to identify the most relevant sustainability issues for CTT to deal with, monitor and report. CTT has selected to group these under three areas: Environmental responsibility, Responsible employer and Business ethics and human rights.

## SUSTAINABILITY AT CTT

### ENVIRONMENTAL RESPONSIBILITY

As far as CTT is concerned, it is important to go on identifying and implementing activities that reduce the environmental impact of our operations, but also to regularly check our suppliers’ environmental work and environmental certification. A third area of importance to CTT is how the company can influence its customers, airlines, to reduce their environmental impact. Offering anti-condensation systems that reduce condensation in aircraft means that CTT is indirectly contributing to airlines’ ability to reduce its emissions by offering CTT’s weight-reducing and hence fuel-saving anti-condensation/anti-condensation

products. These products helped to reduce global CO<sub>2</sub> emissions by 85,000 tonnes in 2021, equivalent to around 53,000 cars. Examples of activities for reducing the company’s own environmental impact include the introduction of a renewable energy programme to ensure that all the electricity and heating we buy comes from fossil-free sources, and the installation of solar panels at our production plant in Nybro. When renovating and altering company premises, the company strives to reduce energy consumption on the basis of earlier energy mapping. CTT also has an action programme

aimed at a sustainable travel policy, increasing the % of environmentally classified company cars and providing electric car charging at each work site. To help customers to reduce their environmental impact, CTT is developing an improved anti-condensation system and has highlighted how consumables can be recycled in order to achieve greater sustainability throughout the product life cycle.



The solar panels at CTT Bribo were commissioned at the end of 2021 and are expected to produce around 200,000 kWh per year.

### RESPONSIBLE EMPLOYER

As an employer, CTT is responsible for providing equal, safe and healthy workplaces where staff enjoy their work and feel that there are good opportunities for personal development and career paths. CTT is committed to working proactively on gender equality, diversity and equal opportunities. This is why the company is planning to update its sustainability policy in 2022. At the same time, CTT’s various regulatory and customer requirements involve specific security clearances and checks of personnel records. CTT’s responsibilities include ensuring that training initiatives are in line with both skills needs and employees’ individual career and skills development

plans. A well-established occupational health service means that employees receive regular health checks, and fitness allowances and company-sponsored exercise activities are offered in order to promote movement and exercise. CTT is working actively to reduce work-related injuries and maintains statistics on accidents and incidents, all accidents and serious incidents being reported to the Swedish Work Environment Authority and the Social Insurance Agency. CTT is a member of the Association of Swedish Engineering Industries and the Confederation of Swedish Enterprise and is therefore affiliated to collective agreements. It goes without saying as far as CTT is concerned that

employees have the right to join a trade union, and the company maintains good cooperation with its trade union counterparts. It is also important to ensure good financial conditions for employees in the form of the profit-sharing foundation, which gives all employees an equal share of the company’s profits in relation to hours worked. CTT also strives to maintain the highest possible % of permanent positions, offering regular and flexible working hours during the day.



### BUSINESS ETHICS AND HUMAN RIGHTS

CTT’s operations must be characterised by high business ethics, and the company must uphold good business practice in all relationships. Backhanders, bribery and other forms of corruption are not accepted under any circumstances. CTT has developed and implemented a new Code of Conduct in 2020 which clearly sets out the company’s guidelines for combating all forms of corruption. This policy has been communicated internally in 2021, and in 2022 it will be followed up with suppliers. The company has also introduced and

provided training for a whistleblowing function that is open to internal and external parties. The Code of Conduct and the whistleblower function can both be found on the company’s website at [www.ctt.se](http://www.ctt.se). CTT also follows and operates in compliance with the codes of conduct defined by our main customers, Airbus and Boeing, as requirements for supplier partnerships. These include anti-corruption measures and human rights. CTT is working constantly with external counterparties to ensure that contracts are formulated

in a manner that minimises the risk of bribery and other forms of corruption. The company has also conducted a control and risk assessment regarding the use of conflict minerals. The outcome of this was that no evidence of the presence of conflict minerals was found in either the company’s components or its finished products.



## AUDITOR’S OPINION ON THE STATUTORY SUSTAINABILITY REPORT<sup>1)</sup>

To the Annual General Meeting of CTT Systems AB (publ), co. reg. no. 556430-7741

### Mission and responsibilities

The Board of Directors is responsible for the 2021 sustainability report on pages 30–39, and for ensuring that it is prepared in accordance with the Annual Accounts Act.

### Focus and scope of the audit

Our audit was conducted in accordance with FAR recommendation RevR 12 Auditor’s opinion on the statutory sustainability report. This means that our audit of the sustainability report has a different focus and a significantly smaller scope than the focus and scope of an audit conducted in accordance with International Standards on Auditing and generally accepted auditing standards in Sweden. We believe that this audit provides us with a reasonable basis for our opinion.

### Opinion

A sustainability report has been prepared.

Stockholm, 30 March 2022

Grant Thornton Sweden AB

Camilla Nilsson  
*Authorised Public Accountant*

<sup>1)</sup> This report is a translation of the original report published in Swedish. In the event of any deviations between the two reports, the Swedish version prevails.



# FOLLOW UP ON KEY ACTIVITIES AND FIGURES FOR 2021

## ENVIRONMENTAL RESPONSIBILITY

Activity / Key figures	Results, 2021 (2020)	Comment
CO <sub>2</sub> savings from anti-condensation systems delivered	85,000 tonnes (60,000)	Equivalent to emissions from 53,000 passenger cars in a year
Developing an improved dehumidifier system	Ongoing	Postponed due to the pandemic and the prioritisation of private jet projects
% of environmentally classified company cars	67% (56%)	Electric or plug-in hybrid cars
Installing solar panels for Nybro production	Implemented	
Inspection of coating suppliers in respect of certification and compliance with laws and regulations	Implemented	
Introducing renewable energy programmes	Partially implemented	Only renewable energy is used for electricity and heating
Improving current sustainability policy, including environmental policy	Partially implemented	ESG reporting to Nasdaq updated and improved. Further improvements in 2021 AR. New policy in 2022

### Key figures and activities, 2022

CO <sub>2</sub> savings from anti-condensation systems delivered
Developing an improved dehumidifier system with at least 5% improved energy efficiency
% of environmentally classified company cars
Electricity produced from solar panels, kWh
Continued inspection of chemical suppliers in respect of certification and compliance with laws and regulations
Streamlining of water consumption and heat recovery
Improving current sustainability policy, including environment and diversity
Humidified Flight deck, % and hours
Fewer discarded products



## RESPONSIBLE EMPLOYER

Activity / Key figures	Results, 2021 (2020)	Comment
Job security – % of permanent staff	100% (100%)	
Fair pay – % of employees above the minimum wage	100% (100%)	
Fair pensions – % of employees with occupational pensions	100% (100%)	
Compliance with collective agreements – Number of observed deviations from collective agreements	0 (0)	
Equal opportunities workplace – % of staff satisfied or very satisfied on gender equality issues in employee survey	97% (99%)	Equivalent to two people who are dissatisfied
Equal opportunities workplace – % of women in the company	30% (26%)	
Employee health in health survey – % of staff satisfied or very satisfied in respect of the “self-assessed health” question	Not compiled (73%)	The survey will be conducted from the fourth quarter of 2021 to the first quarter of 2022. The results will not be ready until April/May 2022, after the publication of the annual report
Exercise and movement – % of employees using their fitness allowance	51% (49%)	The pandemic has probably had an adverse impact. Training allowance increased from SEK 3,000 to SEK 4,000 in 2022
Regular working hours – % of employees working only during the day	100% (100%)	
Carrying out a joint health activity for each work site	Implemented	
Implementing e-learning tools for all employees	Implemented	
Creating a diversity programme	Not implemented	Reprioritised to policy update

### Key figures and activities, 2022

% of permanent staff
% of employees above the minimum wage
% of employees with occupational pension
Number of observed deviations from collective agreements
% of staff satisfied or very satisfied on gender equality issues in employee survey
Proportion of women in the company
% of staff satisfied or very satisfied in respect of the “self-assessed health” question
% of employees using their fitness allowance
% of employees working only during the day
Carrying out at least one joint health activity for each work site
Continued development of e-learning tools for all employees
% of employees with strain injuries



## BUSINESS ETHICS AND HUMAN RIGHTS

Activity / Key figures	Results, 2021 (2020)	Comment
Communicating/providing training on ethics and anti-corruption policies both internally and for suppliers	Implemented internally Supplier ongoing	
Supplementing the existing whistleblower function with a whistleblower programme that includes training, for example	Implemented	E-learning training implemented

### Key figures and activities, 2022

Completion of communication/training on ethics and anti-corruption policy for suppliers
Implementation of sanctions policy and code of conduct for customers



# SUSTAINABILITY PRIORITIES 2022



# OUR STAFF ARE THE KEY TO OUR SUCCESS

The skills, experience and commitment of our employees are key to CTT’s ability to achieve its vision. Together, we are building a company that is characterised throughout by high business ethics, extensive competence and – not least – a healthy working environment where everyone has equal opportunities. Together, we are creating a sustainable organisation.

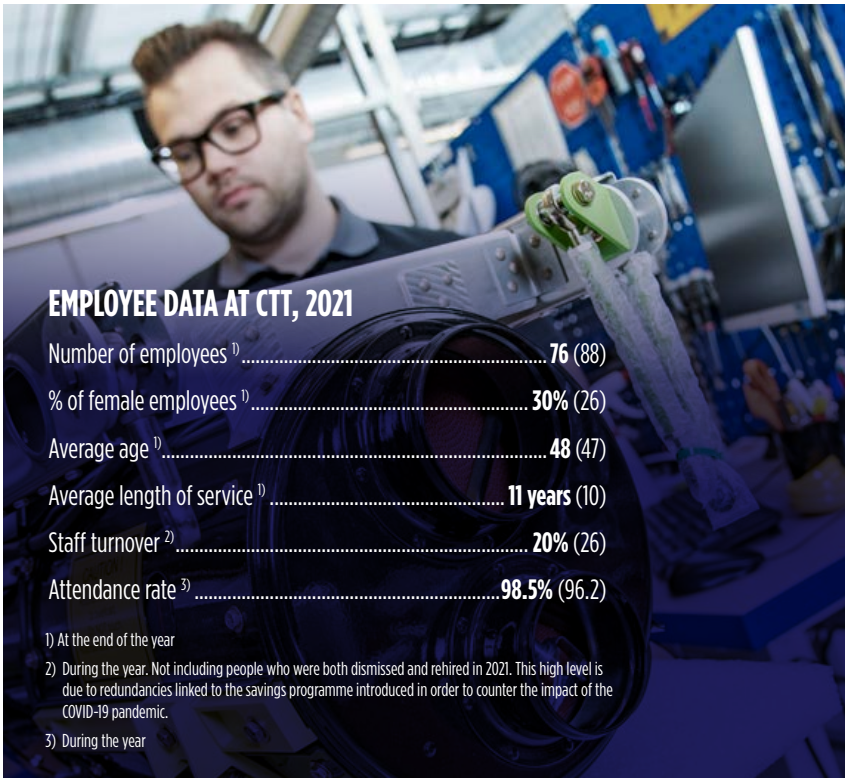
CTT does its best to be an attractive employer and wants both current and potential employees to feel that we offer good opportunities for an interesting future. The aviation industry is generally characterised by a high degree of accuracy and well-developed procedures in order to meet the requirements and expectations of customers and authorities. Always offering staff opportunities to develop and extend their skills is therefore business-critical and a key element in HR work. This work has had an impact and have contributed to many of CTT’s employees

staying with the company for a long time: 79% of CTT’s employees have been employed for more than five years and 53% for more than ten years. This also means that CTT only needs to hire contractors in exceptional cases. We have had to adjust staffing levels in 2020 and 2021 on account of the pandemic after many years of continuous growth and recruitment, and short-time working on a fair-wage basis without government funding has been implemented for our remaining staff. It is pleasing to note that we have started to reinstate staff by the end of 2021 so that we can grow again.

**An attractive overall package**  
CTT offers collective agreements, competitive salaries and reduced working hours which give all staff additional time off over Christmas and New Year, for instance, as well as a number of working days between two holidays. Fitness allowances and occupational health services with voluntary health checks are offered in order to promote good health. The company also strives to make it easier for employees to combine work and parenthood.  
Annual deposits have been made to a profit-sharing foundation since 2016.

CTT also encourages an inclusive climate with good cohesion. The organisation is relatively flat and staff maintain close relationships with the CEO, who is often involved in day-to-day work. Development opportunities are good in terms of work content and opportunities to apply for new roles. The long lead times in the industry also mean that work can be planned so that excessive workloads can normally be avoided.

**An inclusive workplace where employees enjoy their work**  
CTT works actively to create an equal opportunities workplace characterised by teamwork, a sense of community, well-being and mutual respect for one another. CTT conducts regular employee surveys in order to monitor employees’ perception of the workplace with a view to supporting the continuous development of the working environment. The employee survey conducted in 2021 showed that 93% (95) of staff were satisfied or very satisfied with the sense of community and well-being at the company.  
The HR department received no cases related to victimisation, harassment or discrimination in 2021.



**EMPLOYEE DATA AT CTT, 2021**

Number of employees <sup>1)</sup>	76 (88)
% of female employees <sup>1)</sup>	30% (26)
Average age <sup>1)</sup>	48 (47)
Average length of service <sup>1)</sup>	11 years (10)
Staff turnover <sup>2)</sup>	20% (26)
Attendance rate <sup>3)</sup>	98.5% (96.2)

1) At the end of the year  
2) During the year. Not including people who were both dismissed and rehired in 2021. This high level is due to redundancies linked to the savings programme introduced in order to counter the impact of the COVID-19 pandemic.  
3) During the year



- INCLUDES ALL EMPLOYEES, EACH EMPLOYEE RECEIVING AN EQUAL SHARE IN RELATION TO THE HOURS WORKED.
- EACH EMPLOYEE WITH A FULL SHARE OWNS AROUND 1,800 SHARES IN CTT VIA THE FUND.
- AS AT 31 DECEMBER 2021, THE PROFIT-SHARING FUND WAS THE 19TH BIGGEST SHAREHOLDER IN CTT ACCORDING TO THE SHARE REGISTER.
- MORE THAN SEK 16,600 PER ELIGIBLE EMPLOYEE WAS ALLOCATED FOR 2021.

# THE STAFF PROFIT-SHARING FOUNDATION

**Allocation for the profit-sharing foundation**  
CTT has had an independent profit-sharing foundation in place since 2015 that gives all employees a share in CTT’s financial success. The purpose of this foundation is to create a clearer link between the collective performance of employees, their remuneration and the company’s results and, in the long term, to reinforce employee engagement through share ownership. Each CTT employee who has worked full-time since the start owns the equivalent of around 1,800 shares in CTT through the profit-sharing foundation. In total, the profit-sharing foundation – which has been in place for six years – owned around 1.1% of CTT’s share capital at the end of the year.  
75% of the company’s profit before tax is allocated to the foundation each year, up to a maximum of 22.5% of the declared dividend. The allocation per person cannot exceed two months’ salary, calculated as the average salary at the company. The funds are invested in CTT shares, which are acquired on the market following the Annual General Meeting each year.

All employees, regardless of their salary and position, are allocated equal shares in relation to their annual working hours, as long as they have been employed for at least three months and have not left in the year in which they started. Payments to employees may be made no earlier than five years after the financial year on which the allocation to the foundation is based. Employees themselves decide whether the funds are to be paid out or remain in the foundation.  
A value of more than SEK 16,600 per eligible employee was set aside in 2021. The foundation acquired a total of 14,811 shares in CTT in 2021. 2021 was the first year in which selling shares was an option, and a few people took advantage of this. Net, the profit-sharing foundation owned 135,545 shares as at 31 December 2021.





**“YOU FEEL COMFORT-  
ABLE LEARNING  
NEW THINGS HERE  
AS THERE’S ALWAYS  
SOMEONE ON HAND  
TO ASK”**



**“INTEGRATING INTO  
THE COMPANY WAS  
PRETTY EASY”**

**LINDA OTTOSSON,**  
fitter at CTT in Nybro

The pandemic caused major difficulties for the airline industry, and parts of CTT’s operations ran at reduced capacity for about a year. But now the Nybro plant, where fitter Linda Ottosson is one of the workers who was rehired in 2021, is bustling with activity again.

**“It’s great to be back! I love it here with my colleagues. There’s a lovely atmosphere, and we all do our bit to help out,”** says Linda Ottosson.

She can now switch between lots of different tasks at the plant thanks to on-the-job skills development and her own studies. She can assemble pads, build humidifier housings and operate the punching machine, for instance.

**“It benefits me because I avoid monotonous work, and it benefits my employer because it gives me flexibility.”**

Linda Ottosson had worked in healthcare for a number of years before joining CTT in 2018.

**“I had a really good feeling about CTT right from the start. When you work in healthcare, you often feel like you’re not good enough because there’s no time to get everything done. But here you get plenty of time to do a really good job that you feel happy with when you leave for the day,”** says Linda Ottosson.

She points out that enormous focus on accuracy and quality permeate the entire workplace. Everything produced has to measure up down to the tiniest detail and follow the instructions to the letter. That is why it takes time to learn the craft. Especially when it comes to building humidifier housings, where each fitter works independently for a long time.

But experienced colleagues are on hand if anyone needs help. Much of the company’s training takes the form of skills transfer between employees.

**“You feel comfortable learning new things here as there’s always someone on hand to ask. And the same applies if you want to broaden your skills and learn a new part of the process or use a new type of machine. There are some great opportunities for this,”** says Linda Ottosson.

She says that fitters at CTT have to be open-minded and willing to learn. There is no need to know everything from day one as you will have plenty of opportunities to learn. But that said, it is important to share the company’s values in respect of compliance, accuracy and quality.

**LOÏC GOUESLARD,**  
systems engineer at CTT in Nyköping

CTT is constantly prepared to develop its product offerings in response to technological advances and new requirements from customers and regulatory authorities. And at the heart of all this activity is CTT’s development department. Loïc Goueslard works as a systems engineer there, specialising in electronic systems.

**“Our department is a very flat organisation where everyone works on several different projects. You can be a project manager for one, work on product design for another, and assist with troubleshooting for a third,”** says Loïc Goueslard.

He moved to Sweden from France in 2019 as his wife is Swedish, and he joined CTT shortly after that. He reckons it is striking how well working entirely through the medium of English works at the company, even though Loïc Goueslard is doing his best to learn Swedish.

**“I find CTT to be a company that cares a lot about its staff, and there’s a good team spirit here. My colleagues are very nice and helpful, integrating into the company was easy,”** says Loïc Goueslard.

One of his fields involves enhancing the company’s knowledge of electronics and software, particularly in respect of controllers for humidifiers and dehumidifiers, where the company sees advantages in having the expertise to do more of the design and assembly work itself if needed.

**“It’s vital for CTT to deliver very safe and high quality products. Our products have to keep pace with safety requirements – that’s an important area of development. For example, requirements with regard to the electrical voltages that aircraft equipment should withstand have increased over time,”** says Loïc Goueslard.

In his view, the challenges are the best part of the job. Having to use your creativity and problem-solving skills to figure out how something should be designed, or what a fault is really caused by.

**“Our products must always have a very good and robust design. And we need to be able to think creatively as different aircraft types have different requirements, environments and spaces where our equipment can fit,”** says Loïc Goueslard.



# CFO's STATEMENT

Like 2020, 2021 was marked by the COVID-19 pandemic, with the aviation industry being one of the most affected. This is clearly noticeable in CTT's income statement comparing 2021 with our peak year of 2019, but also compared with 2020 where results in the first quarter were not affected by the pandemic. COVID-19 is the single largest factor affecting sales, earnings and cash flow, although other factors have also had an effect, such as large fluctuations in foreign exchange markets.

Since I started as CFO on 1 July 2021, it has been an eventful first six months. I am impressed that CTT, despite revenues being 57% lower than our peak year of 2019, is still a profitable company in a strong financial position. Much of this is due to the fact that CTT is basically a well-run company with a strong business model where the aftermarket played an important role in our recovery during the second half of 2021, along with the cost savings programme that came into full effect during the year.

Revenue has now grown for three consecutive quarters, in line with forecasts submitted to the market. It is also a strength to deliver in line with what CTT has communicated and what the market expected of us. All indications are that 2021 was a year of historically low revenues, the lowest since 2013. I am now

looking forward to impressive growth in the future. For this, the company already has both the capacity and the capability, so we have good leverage to return to pre-pandemic margin levels. Next year, growth trends look good for Retrofit, Private jet and Aftermarket, while growth within OEM will take another year (see the graph below).

Cash flow returned to more normal levels towards the end of the year, after being affected by aspects including inventory build-up and major investments in 2020. Cash and cash equivalents were MSEK 49 at the end of the year, which enables CTT in 2022 to repay parts of the bank loans taken out during the pandemic and thereby improve net financial items in the future.

2021 was also an eventful year in the foreign exchange markets. CTT has an unusually one-sided currency exposure because practically all sales take place in USD. The company has selected not to use USD forward hedging. On the other hand, purchases and bank loans in USD are actively sought. For CTT's operating profit, a 10% higher USD exchange rate on average in 2021 would have had a positive effect on earnings of approximately MSEK 10.

I am also responsible for sustainability and IT. CTT has a value-based approach to sustainability, which



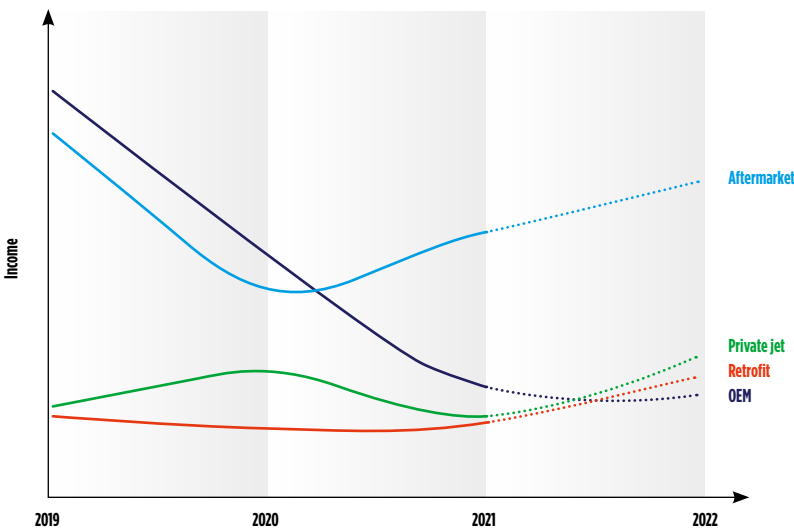
Markus Berg, CFO

means that the company selects the activities that have the greatest impact based on the effort when prioritising what to implement. What is particularly noteworthy is that in 2021 CTT commissioned solar panels with an annual capacity of 200,000 kWh, so CTT is involved in contributing to a sustainable energy platform in Sweden at a time when this is really needed. An increased focus on sustainability is a positive thing for CTT, as the company's products contribute to lower CO<sub>2</sub> emissions and better air quality.

In society, there has been a focus on cyber security during the past year, which has also been the case at CTT. The company has, among other things, changed its IT supplier, completed training and improved our IT policy during the year, all with the aim of preventing attacks on CTT's IT environment. Going forward, the company will continue to improve and develop our IT platform, not only in terms of security but also to improve collaboration and support for our business.

Finally, I would like to take this opportunity to thank the outgoing CEO, Torbjörn Johansson, for a good induction and the handover of a company with strong finances and good future prospects for sustainable economic growth.

## TRENDS PER PRODUCT AREA



# FINANCIAL STATEMENTS

Directors' report	41
· CFO's statement	41
· Operations & other	42
· Definitions of key figures	43
· Income statement	44
· Balance sheet	46
· Change in equity	49
· Cash flow analysis	50
· Five-year summary of key figures	51
· Relevant follow up on key figures	52
· Risks and risk management	54
· The share	59
· Corporate governance report	62
· – Senior executives	68
· – Board of Directors	70
Notes to the financial statements	72
Audit report	86
Glossary	90
Shareholder information	91
History	92



# OPERATIONS & OTHER

**General information about operations**

CTT Systems AB (publ.) (“CTT”) is a market-leading developer and manufacturer of systems for the active control of humidity in aircraft. There are two main problems with humidity in an aircraft: excessive dryness in the cabin where passengers and crew are located, and the accumulation of moisture in the fuselage due to condensation. CTT humidifiers increase the humidity in the cabin for an improved environment for the people on board. At the same time, the company's anti-condensation systems counteract condensation, resulting in lighter aircraft, lower fuel consumption and therefore less environmental impact. Our operations can be briefly described as follows:

- CTT has two product areas – anti-condensation systems and humidifier systems
- As a supplier, CTT is the sole supplier of humidifier systems for the manufacturers Airbus and Boeing's modern long-range aircraft models
- CTT benefits from the fact that the aviation industry tends to have high barriers to entry with strong regulation. In addition, the industry has long lead times and long product life cycles that are ultimately governed by the long model programmes of aircraft manufacturers
- CTT's aftermarket sales are an important part of the business, of great value if CTT receives their full value throughout the product life cycle
- CTT is based in Nyköping, was listed on Nasdaq Stockholm's Small Cap list in 1999 and has been on the Nasdaq Stockholm Mid Cap list since 2021

**Significant events during the year and after its end**

- 08/02/2021: CTT Systems AB announces that the company CEO, Torbjörn Johansson, has informed the Board of Directors that he intends to retire on 1 April 2022
- 07/04/2021: CTT Systems AB announces the appointment of Markus Berg as new CFO to take office on 1 July 2021. Markus will succeed Daniel Ekstrand, who on his own initiative has decided to leave CTT to transfer to his own business

- 05/05/2021: CTT Systems AB announces an order to retrofit its anti-condensation systems on 10 Boeing 737 aircraft for an existing airline customer that already has the system installed in its entire fleet of Boeing 737 aircraft.
- 10/06/2021: CTT Systems AB announces that the Board of CTT has appointed Henrik Höjer as new CEO to succeed Torbjörn Johansson when he retires on 1 April 2022. Henrik Höjer is currently business area manager at the Swiss company RUAG Simulation & Training
- 10/12/2021: CTT Systems AB announces an order from Pobeda Airlines for its anti-condensation systems for 20 Boeing 737 aircraft
- 14/12/2021: CTT Systems AB announces an order for an IFH-VIP humidification system for a Boeing BBJMAX8 from AMAC Aerospace
- 15/12/2021: CTT Systems AB announces an order for two ACJ-Enhanced humidification systems from PMV in collaboration with Airbus Corporate Jets
- 17/12/2021: CTT Systems AB announces order for an IFH-VIP humidification system for an Airbus ACJ350 from AMAC Aerospace
- 23/02/2022: CTT Systems AB stops all deliveries to Russia in accordance with current sanctions. This mainly affects the Pobeda order announced on 10 December 2021.

**Research and Development**

In 2021, CTT has continued to run a number of parallel development projects. Capitalised intangible assets for the year amounted to MSEK 8.4 (20.5) and consisted of development work primarily linked to the New Zonal Dryer and Boeing 777X projects.

CTT's other OEM platforms (A350, Boeing 787, A380 and MC21) along with the Private Jet business generate continuous engineering work and will do so throughout the life cycle of the products, although to an increasingly lesser extent for OEMs as time goes on. This expenditure has not been deemed to qualify as expenses that can be recognised as an asset. Expenses for testing and development expensed during the financial year amounted to MSEK 3.8 (1.1). The increase compared to the previous year is mainly connected

with the development of humidification systems for Airbus Corporate Jets (ACJ). Also see Note 9 "Capitalised expenses for development work".

**Employees**

CTT has many employees with key expertise in areas strategically important to the company. The company employed a total of 76 people as of 31 December 2021, of which 23 were women. There is an even age distribution, ranging approximately from 27 to 65. Attendance is high and totalled 98.5% during the year. For further information on employees, see the sustainability report that begins on page 30.

**Sustainability**

CTT develops, certifies, manufactures and markets products that actively regulate the humidity in aircraft, reducing the impact of the aviation industry on both people and the environment. In 2017, CTT adopted a sustainability policy which establishes the strategic direction of CTT's sustainability work on an overall level. Based on this and the 17 Global Goals of Agenda 2030, the company works continuously on developing its sustainability work. For further information on CTT's sustainability work, see the sustainability report that begins on page 30.

CTT has no activities requiring a permit under the Swedish Environmental Code and its environmental impact is minor.

**Remuneration to senior executives**

The objective of CTT's remuneration policy for senior executives is to offer compensation that aims to attract, motivate and retain qualified expertise at CTT. Remuneration to the CEO and other senior executives shall be market-based and consist of a fixed basic salary, variable remuneration, a pension and in some cases other benefits. For more information, see the corporate governance report starting on page 62.

**Transactions with related parties**

Transactions with related parties are described in Note 29.

**Approval of financial statements**

The financial statements were approved for issuance by the Board on 30 March 2022.

# DEFINITIONS OF KEY FIGURES

**Return on equity**

Profit for the year as % of average equity.

*Return on equity is a measurement that the Company considers important for an investor who wants to be able to compare their investment with alternative investments.*

**Return on total capital**

Profit after net financial items with a reversal of financial expenses, as % of average total assets.

*Return on total capital is a measurement that the company considers important for an investor who wants to see how efficiently the use of total capital in the company is used and what return it produces.*

**Return on capital employed**

Profits after depreciation plus finance income as % of average capital employed. The capital employed is defined as the total assets less non-interest-bearing liabilities including deferred taxes.

*Return on capital employed is a measure that the Company considers important for investors who want to understand earnings generation in relation to capital employed.*

**Equity per share**

Equity in relation to the number of shares on the balance sheet date.

*The Company regards the key financial figure equity per share as relevant to investors since it describes the amount of capital (equity) belonging to the shareholders of the Company.*

**Income per employee**

Operating income divided by the number of employees (annualised average of full-time equivalents).

*The Company regards income per employee as a relevant measure for investors who want to understand how effectively the Company is using its human capital.*

**Cash flow per share**

Operating cash flow divided by the average number of shares.

*The Company regards cash flow per share as relevant to investors since it describes the amount of cash flow directly attributable to the shareholders of the Company.*

**Quick ratio**

Current assets excluding inventories but including granted unutilised overdraft facilities, divided by current liabilities.

*The Company regards the quick ratio (cash liquidity) as important for creditors who want to understand the Company's short-term ability to pay.*

**Earnings per share**

Financial measure (key figure) according to IFRS

*Profit for the year divided by the average number of shares.*

**Interest coverage ratio**

Profit after net financial items with reversal of financial expenses divided by finance costs.

*The interest coverage ratio is a key figure that shows how much the result can decrease without risking interest payments. The Company regards the key financial figures as relevant to investors who want to assess the Company's financial resilience.*

**Operating profit (EBIT)**

Operating profit before financial items and taxes.

*The Company considers that the key financial figure operating profit (EBIT) is relevant to investors who want to understand the Company's financial results without the influence of how the business operations are financed.*

**Operating margin**

Operating profit (EBIT) as % of net sales.

*The Company regards the operating margin as a relevant key figure for investors who want to understand the extent of the revenue left over to cover interest, tax and profit.*

**Debt-equity ratio**

Interest-bearing liabilities divided by equity.

*The debt-equity ratio shows the relationship between the borrowings (total debt) and equity and thus the leverage effect of the borrowings. The Company regards this key financial figure as relevant to investors' assessment of the financial strength of the Company.*

**Equity ratio**

Equity as % of the total assets.

*The equity ratio is a measure that the Company considers important for creditors/lenders who want to understand the Company's long-term ability to pay.*

**Profit margin**

Profit after financial items as % of net sales.

*The Company regards the profit margin as relevant to investors because it shows the amount of revenue remaining when all costs excluding tax are covered, and thus compares the profit with the scope of the Company's activities.*



# INCOME STATEMENT

(MSEK)	Note	01/01/2021 – 31/12/2021	01/01/2020 – 31/12/2020
<b>Operating income</b>			
Net sales	3	151.2	200.8
Change in stocks of work in progress and stocks of finished goods		1.9	4.3
Own work capitalised		3.0	5.9
Other operating income	3	20.1	22.2
<b>Total operating income</b>		<b>176.2</b>	<b>233.1</b>
<b>Operating expenses</b>			
Raw materials and consumables		-37.7	-61.8
Other external costs	4	-35.6	-40.5
Employee costs	5	-61.5	-68.1
Depreciation of property, plant and equipment and intangible assets		-11.3	-6.8
Other operating expenses	4	-3.3	-17.5
<b>Total operating expenses</b>		<b>-149.4</b>	<b>-194.8</b>
<b>Operating profit (EBIT)</b>		<b>26.8</b>	<b>38.4</b>
<b>Profit from financial items</b>			
Other interest income and similar items		-	2.4
Interest expenses and similar items		-8.9	-1.2
<b>Net financial items</b>		<b>-8.9</b>	<b>1.2</b>
<b>Profit before tax</b>		<b>17.9</b>	<b>39.6</b>
Tax	6	-3.7	-8.5
<b>Profit for the year</b>	7	<b>14.2</b>	<b>31.1</b>
Other comprehensive income		-	-
<b>Comprehensive income for the year</b>		<b>14.2</b>	<b>31.1</b>
Earnings per share, SEK	8	1.13	2.48

Like 2020, 2021 was marked by the COVID-19 pandemic, with the aviation industry being one of the hardest hit. This is clearly noticeable in CTT's income statement comparing 2021 with our peak year of 2019, but also compared with 2020 where results in the first quarter were not affected by the pandemic. COVID-19 is the single largest factor affecting sales and earnings, although other factors have also had an effect, such as large fluctuations in foreign exchange markets. In 2021, we have seen a clear recovery in the aftermarket, but this has been offset by continued low production and delivery rates in the OEM segment, mainly for the Boeing 787. In addition, VIP revenues have decreased

compared to 2020, but this is mainly due to cyclical variations in demand.

## Sales and operating profit

For the full year 2021, net sales decreased by 25% to MSEK 151 (201: 200). The OEM segment dropped by 70% from MSEK 83 to MSEK 25 in 2021, of which the first quarter of 2021 was MSEK 29 down on the first quarter of 2020. Private jet turnover decreased from MSEK 32 to MSEK 10, a fall of 70%. This has been offset by a strong recovery in the aftermarket, which increased from MSEK 72 to MSEK 99 in 2021. Operating profit in 2021 amounted to MSEK 27, compared with MSEK 38 in

2020. Despite the lower turnover, the operating margin was 18% – only 1% lower than in 2020 – both thanks to a greater aftermarket share and the cost savings programme that was implemented.

## Currency and other items

During the year, the USD declined against SEK by about 9%, from USD/SEK 9.39 to 8.58 (average exchange rate over the year). This had a negative effect on operating profits in 2021 of approximately MSEK 9. However, the exchange rate has varied greatly during the year and the closing rate in 2021 was 9.11, compared with 8.26 in 2020. The higher closing rate meant that our loans

in USD were valued higher and led to negative net financial items at the end of the year.

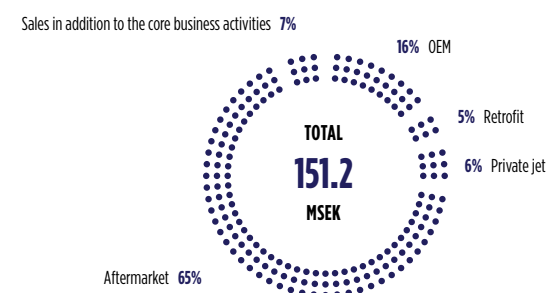
Items affecting comparability from the OEM segment have affected other operating income and cash flow positively by MSEK 9 and amortisation negatively by MSEK 4. The net effect on operating profit amounted to MSEK +5.

## Developments in costs

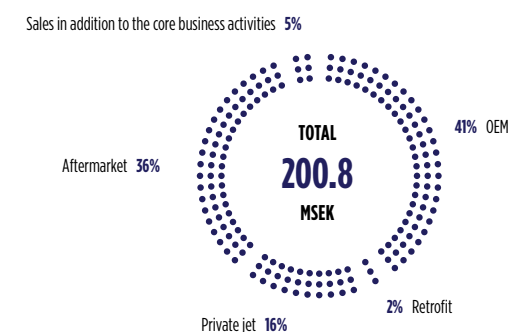
As a result of the COVID-19 pandemic's negative effect on sales, the company initiated a cost savings programme in 2020, which had an effect in lower costs of approximately MSEK 20 in 2021. The programme had the greatest effect on staff costs through reductions in terms of both employee and working hours. CTT

has not received any government grants/support for short-term work.

BREAKDOWN OF NET SALES 2021



BREAKDOWN OF NET SALES 2020



## FIVE-YEAR SUMMARY OF THE INCOME STATEMENT

INCOME STATEMENT (MSEK)	2021	2020	2019	2018	2017
Operating income	176.2	233.1	376.5	336.1	277.6
Operating expenses excluding depreciation	-138.1	-187.9	-250.1	-239.7	-212.0
Depreciation	-11.3	-6.8	-6.7	-6.1	-7.7
<b>Operating profit (EBIT)</b>	<b>26.8</b>	<b>38.4</b>	<b>119.6</b>	<b>90.2</b>	<b>57.9</b>
Finance income	-	2.4	0.2	0.5	4.2
Financial expenses	-8.9	-1.2	-1.8	-1.2	-1.2
<b>Profit before tax</b>	<b>17.9</b>	<b>39.6</b>	<b>118.0</b>	<b>89.5</b>	<b>60.9</b>
Tax	-3.7	-8.5	-25.4	-19.8	-13.5
<b>Profit for the year</b>	<b>14.2</b>	<b>31.1</b>	<b>92.6</b>	<b>69.7</b>	<b>47.4</b>



# BALANCE SHEET

(MSEK)	Note	31/12/2021	31/12/2020
<b>ASSETS</b>			
<b>Property, plant and equipment</b>			
<i>Intangible assets</i>			
Capitalised expenses for development work	9	75.1	72.0
Licences	10	-	-
Other intangible assets	11	0.8	1.1
		<b>75.9</b>	<b>73.0</b>
<i>Property, plant and equipment</i>			
Land and buildings	12	25.7	26.4
Machinery and other technical facilities	13	15.6	17.7
Equipment, tools and installations	14	6.7	9.6
		<b>48.1</b>	<b>53.6</b>
<i>Financial assets</i>			
Shares in group companies	15	0.0	0.0
Other long-term receivables		1.9	1.9
		<b>1.9</b>	<b>1.9</b>
<b>Total fixed assets</b>		<b>125.8</b>	<b>128.5</b>
<b>Current assets</b>			
<i>Inventories</i>	16		
Raw materials and consumables		52.5	49.3
Semi-finished products		13.2	13.6
Work in progress		5.6	3.3
Finished goods		29.1	35.0
		<b>100.4</b>	<b>101.2</b>
<i>Short-term receivables</i>			
Accounts receivable	17, 18	38.7	38.8
Earned but not invoiced income	3	3.8	8.3
Tax receivables		4.8	1.8
Other receivables	19	2.0	3.1
Prepayments and accrued income	20	3.7	4.2
		<b>53.1</b>	<b>56.2</b>
<i>Cash at bank and in hand</i>	18, 21, 22, 23	<b>49.3</b>	<b>21.6</b>
<b>Total current assets</b>		<b>202.8</b>	<b>179.0</b>
<b>TOTAL ASSETS</b>		<b>328.5</b>	<b>307.5</b>

## CONT. BALANCE SHEET

(MSEK)	Note	31/12/2021	31/12/2020
<b>EQUITY AND LIABILITIES</b>			
<b>Equity <sup>1)</sup></b>	24		
<i>Restricted equity</i>			
Share capital		12.5	12.5
Restricted reserves		74.0	69.8
		<b>86.5</b>	<b>82.3</b>
<i>Unrestricted equity</i>			
Balanced results		112.2	107.1
Profit for the year		14.2	31.1
		<b>126.4</b>	<b>138.2</b>
<b>Total equity</b>		<b>212.9</b>	<b>220.5</b>
<b>Provisions</b>			
Provisions for warranty commitments	25	3.8	6.1
<b>Total provisions</b>		<b>3.8</b>	<b>6.1</b>
<b>Long-term liabilities</b>			
Liabilities to credit institutions, interest-bearing	18, 21, 26, 27	70.8	35.7
<b>Total long-term liabilities</b>		<b>70.8</b>	<b>35.7</b>
<b>Current liabilities</b>			
Overdraft facility	21, 22	-	-
Liabilities to credit institutions, interest-bearing	18, 21, 26, 27	1.4	1.2
Advance payment from customers	3	4.4	1.7
Invoiced but not earned income	3	-	0.1
Accounts payable	18, 26	15.4	16.9
Other liabilities	18, 26	7.8	9.0
Accrued expenses and prepaid income	28	12.1	16.3
<b>Total short-term liabilities</b>		<b>41.1</b>	<b>45.2</b>
<b>TOTAL EQUITY AND LIABILITIES</b>		<b>328.5</b>	<b>307.5</b>

<sup>1)</sup> For more information, see the Change in equity section.



CHANGE IN EQUITY

Despite the negative effect of the COVID-19 pandemic on the aviation industry and thus CTT, CTT's financial position remains strong, with net liabilities of only MSEK 23 (15), a high equity ratio of 65% (72) and cash and cash equivalents of MSEK 49 (22) and additionally credit/loan facilities of MSEK 52. The largest changes affecting the balance sheet during the year were an increase in cash (see analysis of cash flow for further information), a decrease in accounts receivable due to lower sales, raising of a new loan, dividends and investments in intangible assets.

Inventories

The inventory build-up in 2020 was a result of CTT producing to build up inventory related to Boeing's production shutdown in the second quarter, a decision

to increase back-up stock to ensure supply capability during the COVID-19 pandemic and a delay in component deliveries during the sharp reduction in volumes that occurred. In 2021, the company was able to reduce inventory somewhat, but it remains at a relatively high level, mainly because production has been so low for OEM customers.

Investments

The increase in fixed assets is mainly attributable to investments in development projects. In 2021, CTT has continued to run a number of parallel development projects. Capitalised intangible assets for the year amounted to MSEK 8.4 (20.5) and consisted of development work primarily linked to the New Zonal Dryer and Boeing 777X projects.

This year's investments in property, plant and equipment have been kept at a low level, MSEK 0.2 (13.2), for cost savings purposes.

Financial position

CTT's overall financial position is strong, with its equity ratio being 65% (72) as of 31 December 2021 and cash, including non-utilised financing, amounting to MSEK 102 (104). Net liabilities as of 31 December 2021 amounted to MSEK 23 (15), and equity to MSEK 213 (221). The company estimates that existing loans can be partially repaid in 2022, as the cash situation is good and future prospects are deemed to be ever improving. Together, this means that the Board's assessment is that the company is in a strong financial position that will be maintained in the coming year.

(MSEK)	Restricted equity					Unrestricted equity				
	Restricted reserves					Balanced results				
	Share capital	Reserve fund	Fund for development expenditure	Total	Total	Share premium reserve	Balanced results	Total	Profit for the year	Total Total equity
Equity 31/12/2019	12.5	6.5	42.8	49.3	61.8	28.9	56.9	85.7	92.6	178.4 240.2
Dividend to shareholders	-	-	-	-	-	-	-50.7	-50.7	-	-50.7 -50.7
Provision for development expenditure fund	-	-	20.5	20.5	20.5	-	-20.5	-20.5	-	-20.5 -
Profit distribution	-	-	-	-	-	-	92.6	92.6	-92.6	- -
Profit for the year	-	-	-	-	-	-	-	-	31.1	31.1 31.1
Equity 31/12/2020	12.5	6.5	63.3	69.8	82.3	28.9	78.2	107.1	31.1	138.2 220.5
Dividend to shareholders	-	-	-	-	-	-	-21.8	-21.8	-	-21.8 -21.8
Provision for development expenditure fund	-	-	4.2	4.2	4.2	-	-4.2	-4.2	-	-4.2 -
Profit distribution	-	-	-	-	-	-	31.1	31.1	-31.1	- -
Profit for the year	-	-	-	-	-	-	-	-	14.2	14.2 14.2
Equity 31/12/2021	12.5	6.5	67.5	74.0	86.5	28.9	83.4	112.2	14.2	126.4 212.9

BALANCE SHEET, FIVE-YEAR OVERVIEW

BALANCE SHEET (MSEK)	31/12/2021	31/12/2020	31/12/2019	31/12/2018	31/12/2017
Assets					
Intangible assets	75.9	73.0	54.5	43.1	25.8
Property, plant and equipment	48.1	53.6	45.2	40.7	39.5
Financial assets	1.9	1.9	1.9	1.9	5.4
Other current assets	153.4	157.4	151.3	164.9	127.5
Cash at bank and in hand	49.3	21.6	110.0	68.5	63.7
Total assets	328.5	307.5	362.8	319.0	261.8
Equity and liabilities					
Equity	212.9	220.5	240.2	198.3	163.1
Provisions, warranty commitments	3.8	6.1	8.4	6.9	6.8
Non-current liabilities, interest-bearing	70.8	35.7	32.5	31.3	21.4
Current liabilities, interest-bearing	1.4	1.2	-	-	7.5
Current liabilities, non-interest-bearing	39.7	44.0	81.8	82.5	63.0
Total equity and liabilities	328.5	307.5	362.8	319.0	261.8

BOARD PROPOSAL FOR PROFIT DISTRIBUTION

	SEK
Profits available:	
Balanced profits	83,354,720
Share premium reserve	28,856,978
Profit for the year	14,165,286
Total	126,376,984
Dividend to shareholders of SEK 0.79 per share (12,529,443 shares)	9,898,260
Profit/loss carried forward	116,478,724
Total	126,376,984

In 2021, CTT paid a dividend of MSEK 21.801 (50.744) to its shareholders. This corresponds to a dividend of SEK 1.74 per share (4.05).

For 2022, the Board proposes a dividend of MSEK 9.898 (SEK 0.79 per share). As CTT's dividend must be approved by the Annual General Meeting, no liabilities in this respect are reported in the company's 2021 financial statements. There is not expected to be an effect on income tax for CTT as a result of this transaction.



CASH FLOW ANALYSIS

(MSEK)	Note	01/01/2021 –31/12/2021	01/01/2020 –31/12/2020
<b>Operating activities</b>			
Operating profit (EBIT) <sup>1)</sup>		26.8	38.4
<b>Adjustment for items not included in cash flow</b>			
Depreciation and amortisation <sup>1)</sup>		11.3	6.8
Other		-2.4	-9.1
Financial receipts		-	0.0
Financial payments		-1.2	-1.1
Income tax paid		-6.8	-34.6
<b>Cash flow from operating activities before changes in working capital</b>		<b>27.7</b>	<b>0.5</b>
<b>Cash flow from changes in working capital</b>			
Change in inventories		0.9	-27.9
Change in operating receivables		6.2	23.5
Change in operating liabilities		-4.4	-6.9
<b>Cash flow from changes in working capital</b>		<b>2.6</b>	<b>-11.2</b>
<b>Operating cash flow</b>		<b>30.3</b>	<b>-10.8</b>
<b>Investment activities</b>			
Acquisition of intangible assets	9	-8.4	-20.5
Acquisition of property, plant and equipment	12, 13, 14	-0.2	-13.2
Sale of property, plant and equipment		0.1	0.1
<b>Cash flow from investment activities</b>		<b>-8.6</b>	<b>-33.6</b>
<b>Financing activities</b>			
Proceeds from borrowings	27	29.7	9.8
Repayments of borrowings		-1.3	-0.3
Dividends paid		-21.8	-50.7
<b>Cash flow from financing activities</b>		<b>6.6</b>	<b>-41.2</b>
<b>Cash flow for the year</b>		<b>28.4</b>	<b>-85.6</b>
Cash and cash equivalents at the start of the year	18, 23	21.6	110.0
Exchange rate difference in cash and cash equivalents		-0.7	-2.7
<b>Cash and cash equivalents at the end of the year</b>	18, 23	<b>49.3</b>	<b>21.6</b>

1) Exceptional items from the OEM segment have affected other operating income and cash flow positively in 2021 by MSEK 9.1 and amortisation negatively by MSEK 4.3.  
The net effect on operating profit amounted to MSEK +4.8.

**Results, 2021**  
Cash flow before changes in working capital increased to MSEK 28 (0) for the full year 2021. Cash flow from operating activities increased to MSEK 30 (-11) Adjusted for items affecting comparability of MSEK 9, cash flow from operating activities amounted to MSEK 21.

Cash and cash equivalents at the end of the period increased to MSEK 49 from MSEK 22 at the beginning of the year. Overall, a strong cash flow with working capital under good control.  
The large difference in cash flow compared with the previous year is mainly due to the fact that cash

flow in 2020 was affected by greater tax payments, a large inventory build-up and greater activity in investment operations.  
Cash flow for the year was also affected by a dividend of MSEK 22 (51). CTT has not received any government grants/support for short-term work.

FIVE-YEAR SUMMARY OF KEY FIGURES

KEY FIGURES	2021	2020	2019	2018	2017
<b>Sales &amp; Profits</b>					
Net sales, MSEK	151	201	355	315	273
Operating profit (EBIT), MSEK	27	38	120	90	58
Operating margin, %	18	19	34	29	21
Profit margin, %	12	20	33	28	22
Profit for the year, MSEK	14	31	93	70	47
Return on capital employed, %	10	14	48	43	31
Return on equity, %	7	13	42	39	31
Return on total capital, %	6	12	35	31	25
<b>Share data</b>					
Earnings per share, SEK	1.13	2.48	7.39	5.56	3.79
Equity per share, SEK	16.99	17.60	19.17	15.83	13.01
Operating cash flow per share, SEK	2.42	-0.86	8.67	4.88	7.14
Dividend per share, SEK <sup>1)</sup>	0.79	1.74	4.05	4.05	2.75
Number of shares on the balance sheet date	12,529,443	12,529,443	12,529,443	12,529,443	12,529,443
Average number of shares during the period	12,529,443	12,529,443	12,529,443	12,529,443	12,529,443
Market price on the balance sheet date, SEK	216.5	152.2	176.8	123.2	167.0
<b>Cash flow &amp; Financial position</b>					
Cash flow from operating activities, MSEK	30	-11	109	61	90
Quick ratio, %	305	218	259	212	205
Interest coverage ratio, times	14	35	64	77	52
Debt-equity ratio, times	0.3	0.2	0.1	0.2	0.2
Equity ratio, %	65	72	66	62	62
<b>Personnel &amp; Investments</b>					
Number of employees, average for the year	76	93	108	98	94
Income per employee, MSEK	2.3	2.5	3.5	3.4	3.0
Salaries, MSEK	41.5	47.1	56.4	52.7	47.6
Investments, MSEK	8.6	33.8	22.7	24.6	14.6

1) 2021 refers to proposed dividend



# RELEVANT FOLLOW UP ON KEY FIGURES

MSEK	2021	2020	2019
<b>Operating margin</b>			
Operating profit (EBIT)	26.8	38.4	119.6
/ Net sales	151.2	200.8	354.9
= <b>Operating margin</b>	<b>18%</b>	<b>19%</b>	<b>34%</b>
<b>Profit margin</b>			
Profit before tax	17.9	39.6	118.0
/ Net sales	151.2	200.8	354.9
= <b>Profit margin</b>	<b>12%</b>	<b>20%</b>	<b>33%</b>
<b>Return on capital employed</b>			
Operating profit (EBIT)	26.8	38.4	119.6
+ Financial income)	0.0	0.0	0.2
/ Average capital employed			
Average total capital (total assets)	318.0	335.2	340.9
<i>Total capital at the beginning of the year</i>	<i>307.5</i>	<i>362.8</i>	<i>319.0</i>
<i>Total capital at the end of the year</i>	<i>328.5</i>	<i>307.5</i>	<i>362.8</i>
– Average non-interest-bearing liabilities including deferred taxes	-44.9	-70.1	-89.8
<i>Non-interest-bearing liabilities including deferred taxes, beginning of the year</i>	<i>-50.1</i>	<i>-90.2</i>	<i>-89.4</i>
<i>Non-interest-bearing liabilities including deferred taxes, end of year</i>	<i>-39.7</i>	<i>-50.1</i>	<i>-90.2</i>
Total average capital employed	273.1	265.0	251.1
= <b>Return on capital employed</b>	<b>10%</b>	<b>14%</b>	<b>48%</b>
<b>Return on equity</b>			
Profit for the year	14.2	31.1	92.6
/ Average equity	216.7	230.3	219.2
<i>Equity at the beginning of the year</i>	<i>220.5</i>	<i>240.2</i>	<i>198.3</i>
<i>Equity at the end of the year</i>	<i>212.9</i>	<i>220.5</i>	<i>240.2</i>
= <b>Return on equity</b>	<b>7%</b>	<b>13%</b>	<b>42%</b>
<b>Return on total capital</b>			
(Profit before tax	17.9	39.6	118.0
- Financial expenses)	-1.4	-1.2	-1.5
/ Average total capital (for the calculation, see "Return on capital employed")	318.0	335.2	340.9
= <b>Return on total capital</b>	<b>6%</b>	<b>12%</b>	<b>35%</b>

## CONT. RELEVANT DEBRIEFINGS ON KEY FIGURES

MSEK	2021	2020	2019
<b>Quick ratio</b>			
(Current assets, i.e. other current assets plus cash & bank deposits	202.8	179.0	261.3
- Inventories	100.4	101.2	73.4
+ Granted unutilised overdraft facility)	22.8	20.7	23.5
/ Current liabilities	41.1	45.2	81.8
= <b>Quick ratio</b>	<b>305%</b>	<b>218%</b>	<b>259%</b>
<b>Interest coverage ratio</b>			
(Profit before tax	17.9	39.6	118.0
- Financial expenses)	-1.4	-1.2	-1.5
/ Financial expenses	-1.4	-1.2	-1.5
= <b>Interest coverage ratio, times</b>	<b>14</b>	<b>35</b>	<b>79</b>
<b>Debt-equity ratio</b>			
Interest-bearing liabilities, i.e. total interest-bearing items on balance sheet's debt side	72.1	36.9	32.5
/ Equity	212.9	220.5	240.2
= <b>Debt-equity ratio, times</b>	<b>0.3</b>	<b>0.2</b>	<b>0.1</b>
<b>Income per employee</b>			
Operating income	176.2	233.1	376.5
/ Number of employees	76	93	108
= <b>Income per employee</b>	<b>2.3</b>	<b>2.5</b>	<b>3.5</b>

# RISKS AND RISK MANAGEMENT

CTT has a strong market position, but there are risks in both the short and long term that could change business operating conditions.

CTT's activities mainly involve the development, production, sale and supply of humidity control products and systems to customers in the aviation industry. Significant risk areas include changes in the business environment as well as market conditions, financial and operational risks. With its strict niche focus, CTT has a one-sided dependency with a number of risks of a binary nature, the consequences of which allow little or no scope for compensation in other areas.

The overall responsibility for CTT's risk management rests with the Board, which determines the strategic direction and delegates responsibility for operational and financial risks to the CEO. Identified significant risks are then managed on an ongoing basis at all levels of the organisation and in the strategic planning process. Control processes in the form of policies, guidelines, instructions and procedures regulate the management of these risks. (see the corporate governance report for more information)

## STRATEGIC RISKS

Strategic risks mainly relate to market demand, which is affected by, among other things, economic development, OEM programmes and competition, along with prices.

### Economic trends

Airlines have for a long time benefited from deregulation and globalisation and in recent years from historically low interest rates. The industry is essentially cyclical with swings between overcapacity and cuts.

Demand for aviation declines in the event of crises such as terrorist attacks and epidemics (e.g. the current COVID-19 pandemic). During previous epidemics such as SARS/H1N1, there was a significant negative impact on the aviation industry but this was limited in time to about 6-12 months. A scenario with an extensive trade war and protectionism coupled with a protracted and extensive pandemic such as the ongoing COVID-19 would have a negative effect on the trend-sensitive aviation industry.

Reduced demand for air travel, as we are now seeing in the ongoing COVID-19 pandemic, is having a negative impact on the outlook for CTT's products through fewer potential projects to upgrade and improve airline passenger experience, as well as delays to (or even cancellations of) new aircraft. If aircraft are grounded due to a lack of demand, this means fewer flight hours, which has a negative effect on aftermarket sales.

**Mitigation:** The planning horizon is relatively long in the aviation industry, especially in the production of new aircraft, enabling CTT to adapt its operations and organisation to lower demand. CTT has products for aircraft models with virtually all the world's airlines as customers, which provides a good diversification of risk. Aircraft manufacturers mitigate normal changes in aircraft demand, which evens out the effect on production.

CTT has the majority of its installed base of products on the most modern and economical aircraft. This mainly applies to the company's humidifiers. In times when airlines adapt capacity to declining demand, this is done primarily by grounding the older elements of the aircraft fleet. Aftermarket activity is through manufacturers' distribution companies. This means that credit management of airlines is handled by them.

CTT's anti-condensation products also reduce airlines' operating costs, which is particularly relevant with high fuel costs.

### OEM

Aircraft delivery and production rates are normally determined based on long-term, forward-looking planning. Airbus and Boeing normally use orders to cover deliveries for many years to come. A cyclical decline in order intake has a negative effect on delivery rates for a number of years to come. Normally, this is a matter of airlines postponing their planned deliveries. If there is not a global decline, manufacturers usually find other airlines to take these aircraft instead. In a larger global downturn, this leads to cancellations.

Another significant OEM risk for CTT is that a large part of our deliveries are for a single model programme, primarily the Boeing 787. CTT is therefore dependent on sales and production of this type of aircraft remaining at a high level. However, production and delivery disruptions may occur – this happened in 2021 and will continue in 2022 as well.

**Mitigation:** CTT is an established OEM supplier for the newest and most competitive aircraft models from both Boeing and Airbus. Both have model programmes at the beginning of their delivery cycles. The order books are quite full, which means that a comprehensive and global change in demand is required to lead to a greater impact on the production rate, similar to the one we are now seeing as a result of the COVID-19 pandemic. Normally, however, it takes time before lower demand is reflected in lower production, which we have now seen in 2021 and will continue to see in 2022.

CTT is working to expand its sales directly to airlines and to several OEM programs. CTT also has a growing business consisting of consumables for installed systems, which provides increased stability and reduces the impact of fluctuations in new sales.

### Competition

Condensation is currently managed in most cases using the aircraft's built-in passive drainage solutions. If the market for actively combating condensation problems grows, there is a risk of competition.

There is a risk that competitors will produce copies of aftermarket products. This threat will increase as the size of the market increases.

Increased competition may lead to lower revenues and affect the opportunity to raise prices.

**Mitigation:** In terms of humidifiers, CTT has a strong position in the market as the only supplier for the latest long-range aircraft and has the advantage of many years of experience of products in operation.

As an OEM supplier, CTT has an additional advantage because airlines often select OEM suppliers when selecting aftermarket products. Being an OEM supplier is strategically important to counter new companies and future competition.

The company's aftermarket products are constantly evolving, most recently with filters for VOC and ozone reduction, which increases value and makes it more difficult to copy.

### Consolidation and industrial context

CTT is a small player in the aviation industry, where the trend among subcontractors is towards consolidation. Consolidation is mainly driven by economies of scale in sales (primarily OEM) and systems development, as well as digital integration.

With relatively fewer resources, it is more difficult for CTT to compete for attention.

**Mitigation:** CTT has a strict focus, which is a strength, and with the strategic cooperation with and ownership connection to Collins Aerospace, it has an industrial foundation that provides legitimacy.

### Regulatory requirements

The aviation industry is strictly regulated. If CTT fails to live up to its regulatory requirements, it will have serious effects on its ability to deliver products and win new business.

**Mitigation:** CTT is certified in accordance with AS9100D, with ISO9001:2015 being included and is therefore regularly inspected. CTT has many years of experience of these inspections. The company also has the opportunity to remedy any deficiencies after the inspections. To certify its systems for the retrofitting of aircraft in operation, CTT collaborates with various organisations with development approval, such as Lufthansa Technik.



Long cycles and contract commitments	
Through its long contracts with OEMs, CTT has pre-set prices for longer periods. This means that profit margins are negatively affected if costs increase at a faster rate than CTT's prices.	<b>Mitigation:</b> CTT aims to transfer corresponding risks to its subcontractors, both in terms of contract duration and price. CTT has a greater impact on prices of aftermarket products, which over time will account for an increasing share of the profit margin.
Climate and environment	
The climate impact of aviation, primarily in the form of greenhouse gas emissions, is both a threat and an opportunity for CTT. There are great demands on the industry to reduce its climate footprint and many are working to reduce emissions.	<b>Mitigation:</b> CTT's anti-condensation systems reduce the weight of the aircraft and thus fuel consumption and greenhouse gas emissions. CTT emphasises the environmental benefits of its products. At the same time, CTT focuses actively on sustainability, and this is reported annually in the company's sustainability report, published in the CTT Annual Report.

OPERATIONAL RISKS

Operational risks are related to customer relationships with a focus on customer satisfaction and ensuring continuous use throughout the product life, delivery capacity and human capital.

Customer relations	
CTT is the sole supplier of products in a new market. Our customers are a large number of airlines all over the world who either buy the products when ordering new aircraft or who have the products retrofitted to an existing aircraft fleet.  The challenge for CTT lies mainly in driving market development and in creating awareness and insight about problems and solutions to condensation issues.	<b>Mitigation:</b> CTT reduces its risks through developing good relationships with airlines, OEMs and other suppliers. Collaborations with OEMs and our strategic market partner Collins Aerospace are of particular importance.  CTT conducts methodical work to achieve more successful OEM programmes, widen its customer base and get airlines to harmonise their aircraft fleet with active humidity control.
Uncertain revenues throughout the product lifecycle	
CTT's products have a long service life, but are not critical to the operation of aircraft. If the airlines do not value or experience the benefits of the systems, they can be switched off. This mainly applies to humidifiers with higher operating costs.  Another risk is that an aircraft may often have more than one operator during its lifetime. In the event of a change of operator, there is a risk that the new airline will select not to use the products. There is also a risk of aftermarket competition.	<b>Mitigation:</b> CTT monitors owners and operators to ensure that they are aware of the benefits of CTT systems and that they are satisfied with their performance. This is to ensure that the operator uses all humidity control products installed in an aircraft fleet and that they select CTT for aftermarket services.

Product risks	
If CTT's products do not deliver satisfactory performance, it may have consequences in reduced demand or a reduced installed base. Potential functional interference with other systems of the aircraft in the event of a fault would have a negative impact. In addition to operational interference, faults affecting passengers can have a significant effect on relationships and trust. Certain faults that are considered serious may require airlines to shut down the system in question until the faults has been corrected. But even in cases where there are faults that can be managed on an ongoing basis, there is a breakdown in trust that CTT has to address. Experience has shown that minor faults and teething problems that are managed correctly can be made into an advantage. An accident as a result of CTT's products would be a serious threat to the entire business.	<b>Mitigation:</b> The goal is to have good customer relationships and capture any deficiencies in performance or reliability. CTT has the advantage of being a small niche company. This means that CTT can be relatively quick in prioritising and remedying deficiencies. In some cases, a minor fault can be made into a positive customer experience that strengthens the relationship and builds trust for future business. CTT's risk management includes liability insurance. In addition, active work on quality, which is briefly described under Regulatory requirements above, is an important part of the proactive risk management process.
Warranty commitments	
CTT normally has a warranty of three to four years.	<b>Mitigation:</b> CTT makes ongoing provisions into a warranty reserve. Should the warranty reserve not be sufficient, a negative impact may result in a negative effect on earnings.
Delivery capacity	
CTT is locked into long-term agreements with OEMs, for which CTT is dependent on its subcontractors' ability to meet their requirements in terms of volume, quality and schedule. Keeping the supply chain intact is crucial. For some parts, CTT relies on a single supplier. An inability to deliver would create serious disruptions to CTT's delivery capacity.	<b>Mitigation:</b> CTT seeks to link its agreements with OEMs with corresponding agreements with subcontractors. CTT regularly identifies and monitors major and critical suppliers. In cases where risk has been deemed to increase, CTT can increase direct contact with the supplier, and also increase its own back-up stock to cover any future operational disruptions with the supplier.
Human capital	
The company's success rests on its ability to attract, develop and retain skilled employees, especially since CTT operates in small towns outside the metropolitan regions. It is also easier to maintain quality in production with experienced employees.  The social conditions of our employees, such as good working conditions, health and safety, are the basis of being a responsible employer.	<b>Mitigation:</b> CTT aims to be seen as an attractive employer with a good working environment and competitive remuneration. Through the profit-sharing foundation, employees share in financial profits.  CTT works to retain employees over time, including through creating a good sense of community within the company and striving for continuous individual development. A sign that this work is succeeding is the result of the company's employee survey, where 93% were satisfied or very satisfied with the sense of community and well-being at the company. The corresponding figure for personal development satisfaction was 93%. Staff turnover has been low for some time. Also see priority activities on pages 34-35.

Business ethics and human rights		
A major risk in terms of human rights is that companies in the subcontracting chain do not observe human rights.  For CTT, the risk of corruption mainly consists of a broad customer base of airlines that are located throughout the world and the use of partners to be in contact with customers.		<b>Mitigation:</b> The aviation industry is mainly located in countries that are compliant with human rights to a very large extent, and this is particularly true of CTT's supply chain. Therefore, this is seen as a limited risk for CTT.
		To minimise the risk of corruption at the sales stage, CTT has a clear anti-corruption policy included in the company's Code of Conduct, has prepared very clear agreements with partners regarding anti-corruption and ensured that any commissions are at such a level that there is no room for corruption or bribery. On many occasions, CTT also relies on its strategic partner Collins Aerospace, which is very strict regarding anti-corruption. At the supplier level, the risk is seen as being lower as CTT consistently has well-established long-term partnerships with its suppliers.
Disruptions to the IT environment		
Like other companies, CTT is dependent on a well-functioning IT environment. Even though the general IT infrastructure and systems are being developed and becoming more stable, the risks of hacking or another kind of sabotage to the IT environment are constantly increasing. Sudden and prolonged downtime in our IT environment would have clear effects on our delivery capacity.		<b>Mitigation:</b> CTT has a clear structure in its IT work, with a strong focus on operational reliability and protection against intrusion. We work continuously to improve both operational reliability and protection against intrusion through improvements to the IT infrastructure and systems as well as internal and external training.

FINANCIAL RISKS

Financial risks mainly relate to how CTT is affected by currency and interest rate fluctuations, credit risks and other events in the financial markets.

Large dependence on the dollar		
In the short term, the greatest risk for CTT is related to currency. In the aviation industry, all transactions take place in USD, while CTT has a large share of its costs in SEK, which results in a large dependence on the dollar. A weakening in USD compared to SEK has a negative effect on earnings.		<b>Mitigation:</b> CTT has a very large USD/SEK dependence. Despite this, CTT has selected not to engage in classic currency hedging as the company's futures, in order to have a real impact based on the situation in which CTT finds itself, would need to extend at least 3-5 years into the future. Instead, CTT has selected to take out its bank loans in USD while the company constantly strives to buy as many input materials in USD as possible. In addition, CTT strives to be transparent and present clear information on impact the USD/SEK exchange rate is having on the company.
Credit risk		
The company's credit risks are mainly linked to accounts receivable. Each sales area has different types of customers associated with different types of credit risk. Retrofit and VIP sales are deemed to have a higher credit risk than other areas as the probability of insolvency is higher among these customer groups, which consist of airlines and completion centres. Within OEM and aftermarket, where the customers are mainly Airbus and Boeing, or their distribution companies, the risk is instead mainly linked to extended payment periods on the part of the customer, which would give a one-off effect in the form of extra liquidity requirements.		<b>Mitigation:</b> CTT has close contact with prospective customers prior to delivery and so can make a credit assessment. For the Retrofit and VIP sales areas, CTT takes out credit risk insurance where possible, while updating and assessing the creditworthiness of customers on an ongoing basis. Within aftermarket and OEM, sales are almost exclusively to Airbus, Boeing or their distribution companies. Here, the risk of insolvency is deemed to be significantly lower. In the event of Airbus or Boeing extending their payment periods to their suppliers, CTT has secured additional credit facilities.

THE SHARE

Listing

CTT shares were listed in 1997 and are currently traded on the Nasdaq Stockholm Mid Cap list. CTT sees trading on other platforms as being limited.

The Nasdaq Stockholm listing means, among other things, that CTT complies with the marketplace's rules on share information. The company thus publishes financial reports and other stock market information and otherwise follows the rules and practices applicable to stock market companies.

Analysis

CTT engages ABG Sundal Collier, which monitors the company and regularly conducts analyses of CTT shares. To see ABG Sundal Collier's information about and analysis of CTT, go to <http://www.introduce.se/foretag/ctt-systems>.

Price performance and market capitalisation

In 2021, the CTT share increased by 42.2% to SEK 216.50. The total return for the year was 43.4%. The highest closing price during the year, SEK 253, was quoted on 23 November and the lowest, SEK 137, on 11 February. On 31 December 2021, market capitalisation amounted to MSEK 2,713.

Share capital

On 31 December 2021, CTT share capital amounted to SEK 12,529,443 divided into 12,529,443 shares, each share with a quota value of SEK 1. All shares have equal rights to the company's assets and earnings. Each share entitles the holder to one vote at the Annual General Meeting. At the Annual General Meeting, each person entitled to vote may vote on behalf of the full number of owned and/or represented shares without restriction of voting rights.

Ownership structure

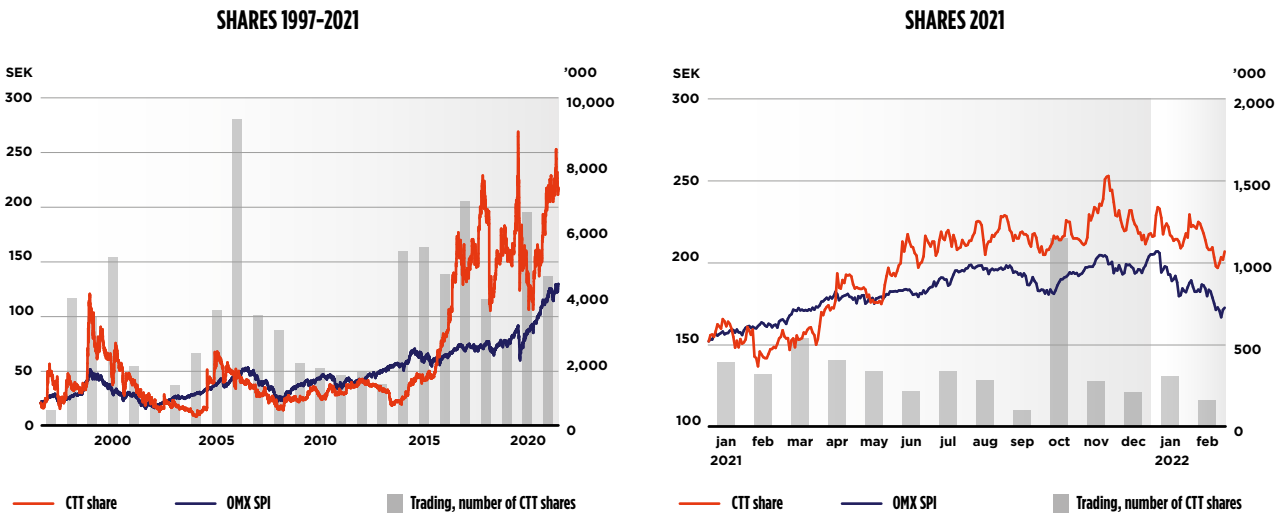
The number of shareholders decreased during 2021 and amounted to 3,491 (3,916) at the end of 2021. The largest owner was Tomas Torlöf (via the wholly owned company Trulscom Förvaltning AB) with a holding of 13.4% (13.4), followed by Collins Aerospace, Inc. with 9.0% (9.0). The ten largest owners held 60.1% (58.0) of the shares. 65.9% (72.3) of the share capital is owned by Swedish owners and 34.1% (27.7) by foreign owners. Swedish ownership is dominated by institutions and companies, with 45.5% (49.9) of the total share capital.

Profit-sharing foundation

Since 2015, CTT has had an independent profit-sharing foundation for its employees. The purpose of this foundation is to create a clearer link between the collective performance of employees, their remuneration and the company's results and, in the long term, to reinforce employee engagement through share ownership. As of 31 December 2021, the profit-sharing foundation's holding in CTT amounted to 135,545 shares (131,624), which is 1.1% (1.1) of the total number of shares in the company. At the turn of the year, the foundation was CTT's 19th largest owner.

Dividend and dividend policy

The Board of Directors proposes that the Annual General Meeting determine a dividend amounting to SEK 0.79 (1.74) per share, corresponding to MSEK 9.9 (21.8). The proposed record date for the dividend is 06/05/2022 and the payment date 11/05/2022. The company's dividend policy is to distribute at least 70% (70) of net profits to shareholders in the form of a dividend, given an equity ratio of 40% (40).





Special agreements

In connection with a partnership agreement with B/E Aerospace (now Collins Aerospace), a shareholder agreement was signed in the autumn of 2014 between the main owners Trulscom Förvaltning AB and B/E Aerospace Inc. with regard to the parties' shareholding in the company. The Board is not aware of any other shareholder agreements or other agreements between shareholders in the company.

The company's customer agreement relating OEM can be terminated in the event of a change of ownership which means that control of the company is transferred (known as “change of control”).

Information policy

The Board of CTT has formulated an information policy that takes into account the rules issued by the stock exchange in the listing agreement. In addition to the

Chairman of the Board and the CEO, the CFO is also authorised to comment on the company's reports and officially-disclosed transactions.

The company distributes all its reports, including year-end reports and press releases, via Modular Finance AB. The company's website, www.ctt.se, is simultaneously updated with the same information. It also contains annual reports, interim reports and other information to download.

THE 20 LARGEST SHAREHOLDERS, 31/12/2021

#	Owner	Number of shares	% of capital and votes
1	Tomas Torlöf (Trulscom Förvaltning AB)	1,678,336	13.4%
2	Collins Aerospace, Inc.	1,133,154	9.0%
3	SEB Fonder	1,124,188	9.0%
4	ODIN Fonder	1,000,000	8.0%
5	Catron Design AB	544,724	4.3%
6	Nya Jorame Holding AB	540,000	4.3%
7	If Skadeförsäkring AB	511,200	4.1%
8	Allianz Global Investors	407,675	3.3%
9	Danske Invest (Lux)	330,000	2.6%
10	Christer Torlöf	258,671	2.1%
11	Lannebo Fonder	249,382	2.0%
12	Nordnet Pensionsförsäkring	246,972	2.0%
13	Avanza Pension	216,443	1.7%
14	Tredje AP-fonden	215,000	1.7%
15	Stiftelsen Riksbankens Jubileumsfond	179,961	1.4%
16	eQ Asset Management Oy	169,527	1.4%
17	Bellevue Asset Management	155,463	1.2%
18	Christer Nordström	146,508	1.2%
19	CTT Systems AB profit-sharing foundation	135,545	1.1%
20	Andra AP-fonden	134,590	1.1%
Total		9,377,339	74.8%
Other shareholders		3,152,104	25.2%
Total number of shares		12,529,443	100.0%
Total number of shareholders		3,491	

NUMBER OF SHARES/SHAREHOLDERS

Size categories	Number of owners	Number of shares	% of shares
1-1,000	3,122	510,075	4.1%
1,001-10,000	303	875,505	7.0%
10,001-50,000	37	838,335	6.7%
50,001-100,000	8	566,256	4.5%
100,001-	21	9,486,395	75.7%
Anonymous ownership <sup>1)</sup>	n/a	252,877	2.0%
Total	3,491	12,529,443	100.0%

1) Anonymous ownership refers to foreign custodial banks where underlying ownership is not visible.

DISTRIBUTION OF OWNERSHIP PER COUNTRY

Country	Number of shares	% of capital and votes	Number of known owners	Proportion of known owners
Sweden	8,261,303	65.9%	3,357	96.2%
USA	1,230,146	9.8%	10	0.3%
Norway	1,002,275	8.0%	15	0.4%
Germany	511,996	4.1%	12	0.3%
Luxembourg	350,755	2.8%	3	0.1%
Other	920,091	7.3%	94	2.7%
Anonymous ownership <sup>1)</sup>	252,877	2.0%	n/a	n/a
Total	12,529,443	100.0%	3,491	100.0%

1) Anonymous ownership refers to foreign custodial banks where underlying ownership is not visible.

DISTRIBUTION OF OWNERSHIP BY CATEGORY

Owner category	Number of shares	% of capital and votes	Number of known owners	Proportion of known owners
Swedish private individuals	2,551,296	20.4%	3,272	93.7%
Swedish institutional owners	2,808,617	22.4%	23	0.7%
Foreign institutional owners	2,546,633	20.3%	20	0.6%
Other shareholders	4,370,020	34.9%	176	5.0%
Anonymous ownership <sup>1)</sup>	252,877	2.0%	n/a	n/a
Total	12,529,443	100.0%	3,491	100.0%

1) Anonymous ownership refers to foreign custodial banks where underlying ownership is not visible.

SHARE CAPITAL DEVELOPMENT

Year	Transaction	Change in number of shares	Total number of shares	Increase in share capital, SEK	Total share capital, SEK	Quota value SEK
1991/92	Rights issue	2,670	2,670	267,000	267,000	100
1994/95	Rights issue	2,670	5,340	267,000	534,000	100
1995/96	Rights issue	594	5,934	59,400	593,400	100
1996/97	Rights issue	5,934	11,868	593,400	1,186,800	100
1997/98	Rights issue	11,868	23,736	1,186,800	2,373,600	100
1997/98	Split 100:1	2,349,864	2,373,600	-	2,373,600	1
1997/98	Rights issue	690,000	3,063,600	690,000	3,063,600	1
1998/99	Rights issue	1,021,200	4,084,800	1,021,200	4,084,800	1
2000/01	Rights issue	1,021,200	5,106,000	1,021,200	5,106,000	1
2003/04	Rights issue	1,276,500	6,382,500	1,276,500	6,382,500	1
2004/05	Rights issue	2,127,500	8,510,000	2,127,500	8,510,000	1
2005/06	Rights issue	28,929	8,538,929	28,929	8,538,929	1
2006/07	Rights issue	230,001	8,768,930	230,001	8,768,930	1
2007	Rights issue	269,999	9,038,929	269,999	9,038,929	1
2007	Rights issue	1,807,785	10,846,714	1,807,785	10,846,714	1
2009	Rights issue	544,724	11,391,438	544,724	11,391,438	1
2014	Rights issue	1,138,005	12,529,443	1,138,005	12,529,443	1

Shareholder data source: Monitor from Modular Finance AB. Data compiled and processed from sources including Euroclear, Morningstar and the Swedish Financial Supervisory Authority (Finansinspektionen).

# CTT CORPORATE GOVERNANCE REPORT

This corporate governance report has been prepared in accordance with the Swedish Annual Accounts Act and the Swedish Code of Corporate Governance. Any deviations from the Swedish Code of Corporate Governance are set out in the text below. Governance is via the Annual General Meeting, the Board and the CEO. The company's auditors, who are appointed by the Annual General Meeting, review the accounts and the Board's and the CEO's management of the company. CTT has a nomination committee and an audit committee. The entire Board carries out the duties of the remuneration committee. More information on how CTT is managed is available on the company's website. **A**

This report contains summary information on a number of important corporate governance issues. However, not all questions about corporate governance can be answered in a summary, which is why this report should be read together with the annual report, where more detailed information is available. **A B**

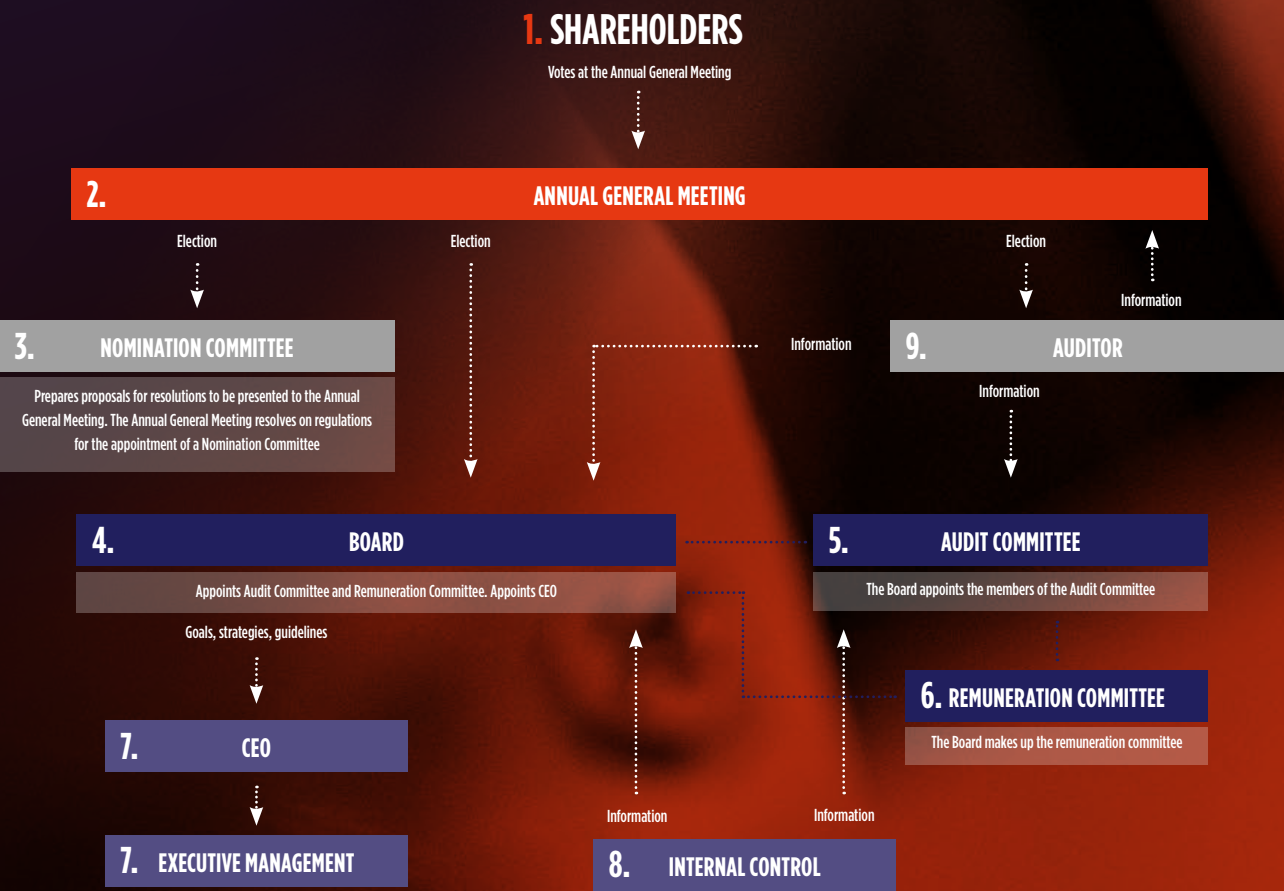
**A SEE WWW.CTT.SE FOR MORE INFORMATION**

There you will find, among other things:

- Annual reports
- Articles of association, latest edition adopted 6 May 2020
- Minutes of meetings
- Corporate governance reports
- Owner information
- Presentation of the Board
- Presentation of the CEO and senior executives
- Information policy

**B THE ANNUAL REPORT CONTAINS MORE INFORMATION ABOUT:**

- The shares
- The owners
- The Board
- CEO and senior executives
- Variable remuneration, including allocation to profit-sharing foundation, and remuneration to senior executives (note 5)



## 1. SHAREHOLDERS

On 31 December 2021, the company had 3,491 shareholders. The ten largest owners had a total holding corresponding to 60.1% of the share capital. **A B**

As of 31 December 2021, Trulskom Förvaltning AB was the company's largest single shareholder with a shareholding of 1,678,336 shares, corresponding to 13.4% of all shares. The company's articles of association do not contain any restrictions as to how many votes each shareholder can cast at an annual general meeting

## 2. ANNUAL GENERAL MEETING

The Annual General Meeting is the company's highest decision-making body. The Board of Directors and auditors are elected at the Annual General Meeting. There, remuneration for the Board and auditor is also determined, as well as decisions on the company's income statement and balance sheet. The Annual General Meeting is prepared and conducted in such a way to create the conditions for the shareholders to exercise their rights in an active and well-informed manner.

### Annual General Meeting, 5 May 2021

The Annual General Meeting was held on 5 May 2021 in accordance with Sections 20 and 22 of the Act (2020:198) on temporary exemptions to facilitate the conduct of general and association meetings, meaning that participation in the Annual General Meeting could only take place by postal vote. The AGM resolved, in accordance with the Nomination Committee's proposal, to re-elect Annika Dalsvall, Steven Buesing, Per Fyrenius, Björn Lenander, Anna Höjer and Tomas Torlöf as ordinary Board members. The AGM also resolved to re-elect Tomas Torlöf as Chairman of the Board. **A B**

The AGM further resolved:

- To approve the income statement and balance sheet for the financial year 2020 and to allocate the profits for the year in accordance with the Board's proposal.
- To grant the members of the Board and the CEO discharge from liability for the financial year 2020.
- That fees of SEK 320,000 per year for the chairman and SEK 140,000 per year per Board member should be paid. Fees of SEK 30,000 per year per member

and SEK 55,000 per year to the chairman should be paid for committee work on the audit committee. The auditor's fees should continue to be paid according to the approved hours submitted.

- That the current procedure for the Nomination Committee should not be changed.
- To approve the Board's proposal for guidelines for remuneration to senior executives, which in summary consists of a fixed salary, any variable remuneration, other benefits and a pension.
- Grant Thornton Sweden AB was re-elected as registered auditing company. **A**

## 3. NOMINATION COMMITTEE

A Nomination Committee has been appointed with the task of preparing proposals for the election of Board members and auditors and their remuneration prior to the forthcoming Annual General Meeting. The Nomination Committee consists of four members. The Nomination Committee is a body appointed by the Annual General Meeting with the task of preparing the AGM's resolutions on election and fee issues and, where applicable, procedural issues for the next Nomination Committee. The members of the Nomination Committee shall, regardless of how they are appointed, safeguard the interests of all shareholders and not disclose what has occurred in the Nomination Committee's work in an unauthorised manner.

### NOMINATION COMMITTEE FOR THE 2022 ANNUAL GENERAL MEETING

Members <sup>1)</sup>	Appointed by	Independent <sup>3)</sup>	Proportion of votes as of 31 Dec 2021, %
<b>Chair <sup>2)</sup></b>			
Tomas Torlöf	Trulskom Förvaltning AB	Yes/No	13.4%
<b>Members</b>			
Steven Buesing	Collins Aerospace, Inc.	Yes/Yes	9.0%
Patrik Jönsson	SEB fonder	Yes/Yes	9.0%
Jonathan Schönback	ODIN fonder	Yes/Yes	8.0%
<b>39.4%</b>			

1) The Swedish Code of Corporate Governance states, among other things, that Board members may be members of the nomination committee, but shall not constitute a majority of the nomination committee members. CTT's Nomination Committee consists of four members, two of whom were Board members in 2021.

2) The Nomination Committee appointed Tomas Torlöf as Chairman of the Nomination Committee, which deviates from the rules in the Swedish Code of Corporate Governance as he is also the Chairman of the Board. The Nomination Committee's reasoning behind this is that Tomas Torlöf is the company's largest shareholder in terms of votes and is well suited to lead the Nomination Committee's work in an effective manner to achieve the best results for all the company's shareholders.

3) Independent in relation to the company and executive management/to the largest shareholder



In addition to an inaugural meeting, the Nomination Committee shall hold four further meetings. In addition, the Nomination Committee shall gather information about the Board's work through individual interviews with all Board members.

In its evaluation process, the Nomination Committee shall give special consideration to the need for versatility and breadth in terms of industry knowledge, industrial experience and expertise in responsibility for results, strategic development, sustainability work and international conditions. The Nomination Committee considers rule 4.1 in the Swedish Code of Corporate Governance (the "Code") as a diversity policy. The CTT Nomination Committee strives to prioritise greater diversity on the Board over time. The company's shareholders have been informed that proposals for Board members can be submitted via e-mail. No such proposals have been received.

Evaluations show that the current members of the Board have the required competence and experience and that it has good knowledge and understanding of the company's operations. The Board has solid experience from the aviation industry, strategical work and business development as well as the recruitment of executives to small and medium-sized companies. The

majority of the Board members hold senior positions with (i) responsibility for results and (ii) work in an international context and (iii) have experience with sustainability work as an integral part of the business process. All in all, the Nomination Committee is able to state that the Board members have the necessary commitment and that the work of the Board has functioned well. The Nomination Committee considers that the Board is not in need of renewal. More information can be found in the Nomination Committee's explanatory statement, which is available for download in Swedish ("Valberedningens motiverade yttrande") at [www.ctt.se](http://www.ctt.se). For information about the Board members, see the Board section in the company's annual report.

4. THE BOARD AND ITS WORK IN 2021

The Board is ultimately responsible for how the company is organised and for the management of the company's affairs. Reporting from company management on the business and its economic and financial status is provided regularly at Board meetings, through reports to the Board and where necessary. The CEO and the Chairman of the Board conduct continuous dialogue about the business. The Board also monitors how internal control is working.

The division of work between the Board, the Chairman of the Board and the CEO is clarified in written instructions to the CEO, CEO instructions, and the Board's rules of procedure, which the Board adopts annually at the statutory Board meeting immediately after the Annual General Meeting. The aim of these documents is to ensure the development of the company and to meet the Board's need for information and control of operating activities.

Following the election at the Annual General Meeting, the Board consisted of six members. The company's CEO and CFO attend Board meetings as rapporteurs. Below is a presentation of the work of the Board in 2021.

The Board has made an internal evaluation of the work of the CEO and the Board: Evaluation of the Board's work in 2021 has taken place through interviews with individual Board members under the auspices of the Nomination Committee during November 2021 and follow-up discussion and reporting, as well as a dedicated meeting in February 2022. The Chairman of the Board made an oral presentation of the results of the evaluation to the Nomination Committee. Evaluation of the CEO for 2021 took place at a dedicated meeting in February 2022.

COMPOSITION OF THE BOARD

Board members <sup>1)</sup>	Nationality	Elected in	Born	Board fees <sup>2)</sup>	Committee fees <sup>3)</sup>	Independent <sup>3)</sup>	Attendance <sup>4)</sup>	
							Board meetings <sup>5)</sup>	Audit Committee
Chair								
Tomas Torlöf	Swedish	2013	1967	320,000		yes/no	9/9	
Members								
Annika Dalsvall	Swedish	2013	1958	140,000	55,000	yes/yes	9/9	5/5
Per Fyrenius	Swedish	2018	1965	140,000		yes/yes	9/9	
Björn Lenander	Swedish	2018	1961	140,000	30,000	yes/yes	7/9	5/5
Steven Buesing	American	2018	1974	140,000		yes/yes	9/9	
Anna Höjer	Swedish	2020	1968	140,000	30,000	yes/yes	9/9	4/5

1) Qualifications and other commitments are shown on pages 70-71  
2) Fees refer to payments during the financial year, which are decided by the Annual General Meeting  
3) Independent in relation to the company and executive management/to the largest shareholder  
4) Attendance refers to meetings during the period in 2021 when the member was elected to the Board/committee  
5) As the Board also constitutes a remuneration committee, no separate figures are presented for the remuneration committee's meetings.

5. AUDIT COMMITTEE

The Audit Committee examines the most significant accounting policies applied in the company in terms of financial reporting as well as significant changes to the reporting principles. The tasks of the audit committee also include reviewing reports on internal controls and the processes for financial reporting. The Audit Committee reports to the Board after each meeting. All audit committee meetings are minuted and these minutes are available to all Board members and to the auditors.

The auditors attend the Audit Committee's meetings on a number of occasions during the year. CTT's CFO and Chief Accountant participate in the committee's meetings as rapporteurs. The auditors report annually on their review of internal controls at an audit committee meeting. The auditors' reports in 2021 have not prompted any specific action from the Audit Committee or the Board. The company's interim report for the third quarter of 2021 has been reviewed by the company's auditors.

6. REMUNERATION COMMITTEE

At CTT, the Board appoints a remuneration committee, as the company employs a relatively small number of people and is of limited complexity. The preparation and procedures currently applied to remuneration are appropriate and the Board as a whole is involved. The committee evaluates the ongoing and completed programmes for variable remuneration applicable to company management during the year and also mon-

itors and evaluates the application of the "Guidelines for remuneration to senior executives" for 2021, which were adopted at the Annual General Meeting.

Issues of remuneration and other terms of employment pertaining to the CEO are prepared by the Chairman of the Board, who also represents the Remuneration Committee in remuneration negotiations. Decisions on these issues are made by the Board as a whole. Remuneration and other terms of employment for other senior executives are negotiated and agreed with the CEO.

Guidelines for remuneration to senior executives

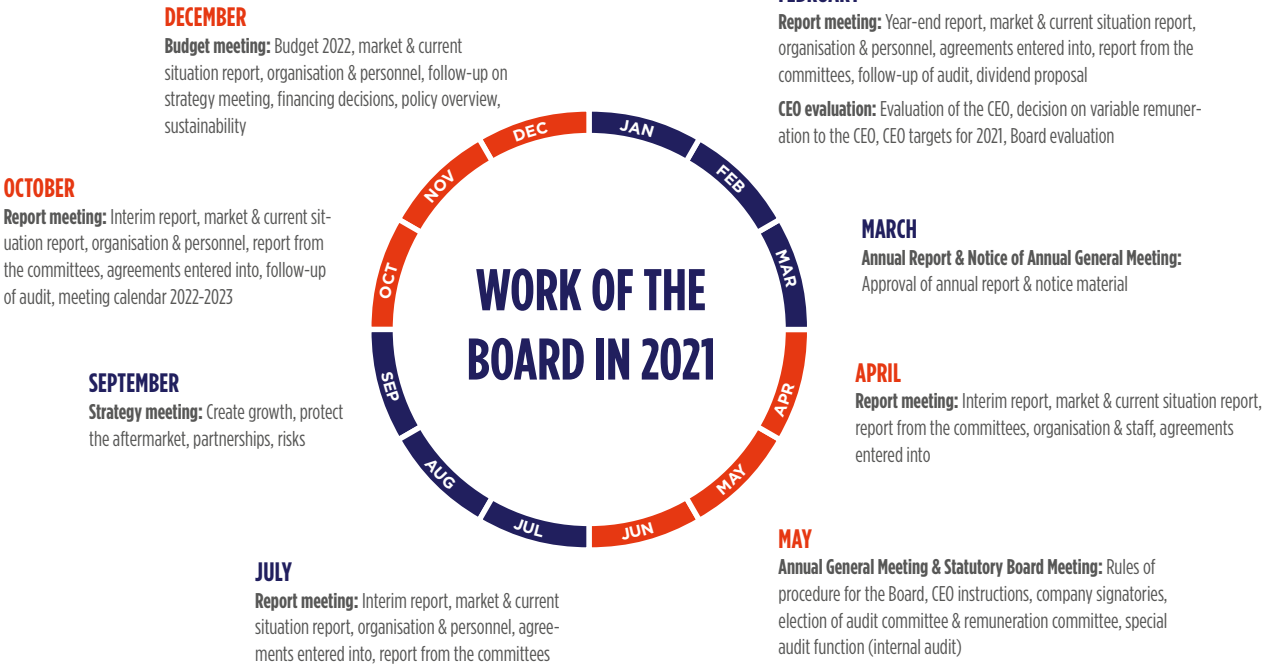
The objective of CTT's remuneration policy for senior executives is to offer compensation that aims to attract, motivate and retain qualified expertise at CTT.

Remuneration to the CEO and other senior executives shall be market-based and consist of a fixed basic salary, variable remuneration, a pension and in some cases other benefits. The CEO's remuneration is set by the Chairman of the Board and subsequently approved by the Board. Senior executives means the CEO and other members of the management team. In 2021, a new cash-based programme for long-term goal-oriented variable remuneration was established for the Deputy CEO and Head of Sales. Apart from this, the guidelines are unchanged compared with the previous year.

The total annual cost of variable remuneration (including provision for the profit-sharing foundation) at the

company, excluding the cost of variable remuneration to the CEO, and any outcomes of long-term target-driven variable remuneration (as set out below), amounts to a maximum of 10% of profits before tax, subject to the proviso that it may not exceed 30% of the dividend to the company's shareholders approved by the Annual General Meeting or 25% of total basic salary for all employees of the company. For the CEO, variable performance-based remuneration is paid in accordance with pre-set targets, to a maximum of six months' pay. For every other senior executive, variable remuneration can amount to a maximum of two months' pay per year. Payment of the variable remuneration intended for key persons and the CEO is conditional on this being invested in CTT shares which are to be retained for an agreed period. In addition, the Deputy CEO and the Head of Sales and Marketing may receive variable performance-based remuneration when certain long-term targets are met. This extra salary is not pensionable but can be exchanged for pension.

The total cost of the entire variable remuneration programme for the financial year is reserved in the financial statements and paid out after the Annual General Meeting has approved the profits and balance sheet and appropriation of the company's profit.



VARIABLE REMUNERATION 2021 <sup>3</sup>

Type of compensation/Recipient	Cost ceiling 2021 (MSEK)	Share of profit (%) <sup>1)</sup>	Reserved amount (MSEK)	Share of profit (%) <sup>1)</sup>
Variable remuneration/Senior executives (excluding CEO)	0.5	2.5%	0.5	2.5%
Variable remuneration/CEO	0.5	2.5%	0.3	1.5%
Long-term target-driven variable remuneration/Deputy CEO & Sales Manager <sup>2)</sup>	2.8	13.8%	0.0	0.0%
Profit-sharing foundation/all employees	1.5	7.5%	1.5	7.5%
		26.3%		11.5%

1) Share of profit before tax and before provision for variable remuneration.  
2) During the period 2021-2024, the costs may amount to a maximum 12 months' pay for those covered by the programme.

7. CEO AND EXECUTIVE MANAGEMENT

The CEO leads and ensures that the business is conducted in accordance with the Swedish Companies Act, other laws and regulations, applicable rules for listed companies, the Articles of Association and in accordance with targets and strategies established by the Board.

The CEO and CFO, in consultation with the Chairman of the Board, prepare the necessary information and documentation for Board meetings, present the matters and justify their proposals on decisions.

In 2021, CTT's management included the CEO, Deputy CEO, CFO, Head of Sales, Head of Development, Head of Quality and Personnel, Head of Production and the Head of the CTT-Bribo Division. <sup>8</sup>

9. AUDITOR

At the Annual General Meeting on 5 May 2021, the meeting resolved in accordance with the Nomination Committee's proposal that Grant Thornton Sweden AB be elected as the company's auditing company, with Camilla Nilsson as the principal auditor for a period of one year. The company's auditors participate in a number of the audit committee's meetings each year, as well as in two Board meetings, and then make their observations about the company's internal procedures and control systems. The members of the Audit Committee and the Board then have the opportunity to ask questions.

The audit results are reported to shareholders in the form of an auditor's report which constitutes a recommendation to the shareholders prior to resolutions at the Annual General Meeting on approval of the company's income statement and balance sheet, disposition of the company's profits and discharge of liability for Board members and the CEO. The work of the auditors includes monitoring of com-

pliance with the Articles of Association, the Companies Act and the Annual Accounts Act, issues concerning the valuation of items in the balance sheet, monitoring of significant accounting processes and governance and financial control.

10. OTHER

Risk analysis

CTT's operations are affected by a number of risks affecting on CTT's earnings and financial position. When assessing the future development of CTT, it is important to assess opportunities for earnings growth weighed against these risks. The risk factors that are most important for the future development of CTT are described in the directors' report in the annual report under the heading Risks. The policy of CTT's management is to take into account the influence of these risks on decisions made. CTT works very closely with the company's auditors in order to identify risks at an early stage. The auditors conduct an annual review of the

internal risk mitigation procedures, and report on this both in writing and orally to the Board.

Articles of Association

The Articles of Association set out, among other things, the company's activities, the number of directors and auditors, how the general meeting is to be convened, what business is to be covered at the annual general meeting and where the meeting is to be held. <sup>A</sup>

Information and communication

The company's information to shareholders and other stakeholders is provided via the annual report, year-end report and interim reports, press releases and the company's website, www.ctt.se.

The website also contains financial reports and press releases for recent years, as well as information on corporate governance. Internal information and external communication are governed at an overarching level in the information policy established by the Board. <sup>A</sup>

CTT's external accounting materials and Investor Relations (IR) must be seen to be open, reliable, easily-available and efficient. Quality is a key word, but the publication of information must also be cost-efficient. The information must meet market and customary requirements. The distribution of press releases, interim reports and year-end reports, along with other regulated external public communications, published in accordance with Nasdaq Stockholm's regulations for issuers and the EU Market Abuse Regulation, takes place through Modular Finance AB. Through them, information reaches the stock exchange, the Financial Supervisory Authority, the media, banks, rating agencies, major shareholders and major customers and suppliers quickly and simultaneously.

8. INTERNAL CONTROLS:

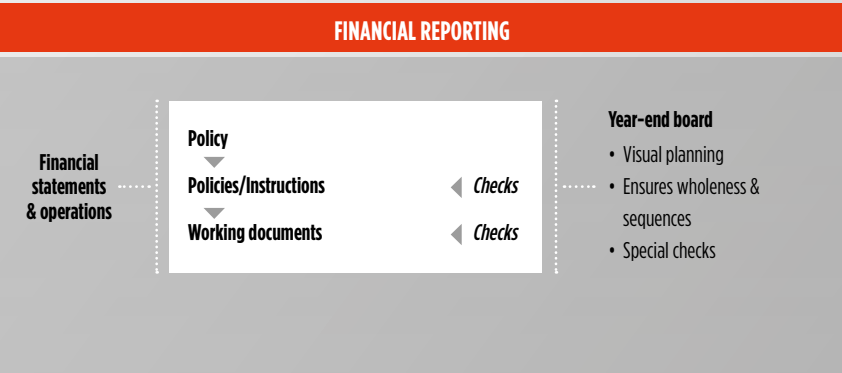
The purpose of internal control is to provide reasonable assurance regarding the reliability of financial reporting and to ensure that it is prepared in accordance with generally accepted accounting principles, applicable laws and regulations and other requirements for listed companies, and that the business as a whole meets the requirements of external parties such as regulators, customers and other stakeholders. The Board of CTT has overall responsibility for the effect of internal control at the company. The CEO is responsible for ensuring that

there are processes and an organisation to ensure internal control and the quality of financial reporting to the Board and the market. There are illustrations below of internal control at CTT in terms of financial reporting, the business as a whole and how the company obtains information to ensure compliance with laws and regulations.

Special audit function

CTT does not have its own special audit function (internal audit) because CTT is relatively small and has a

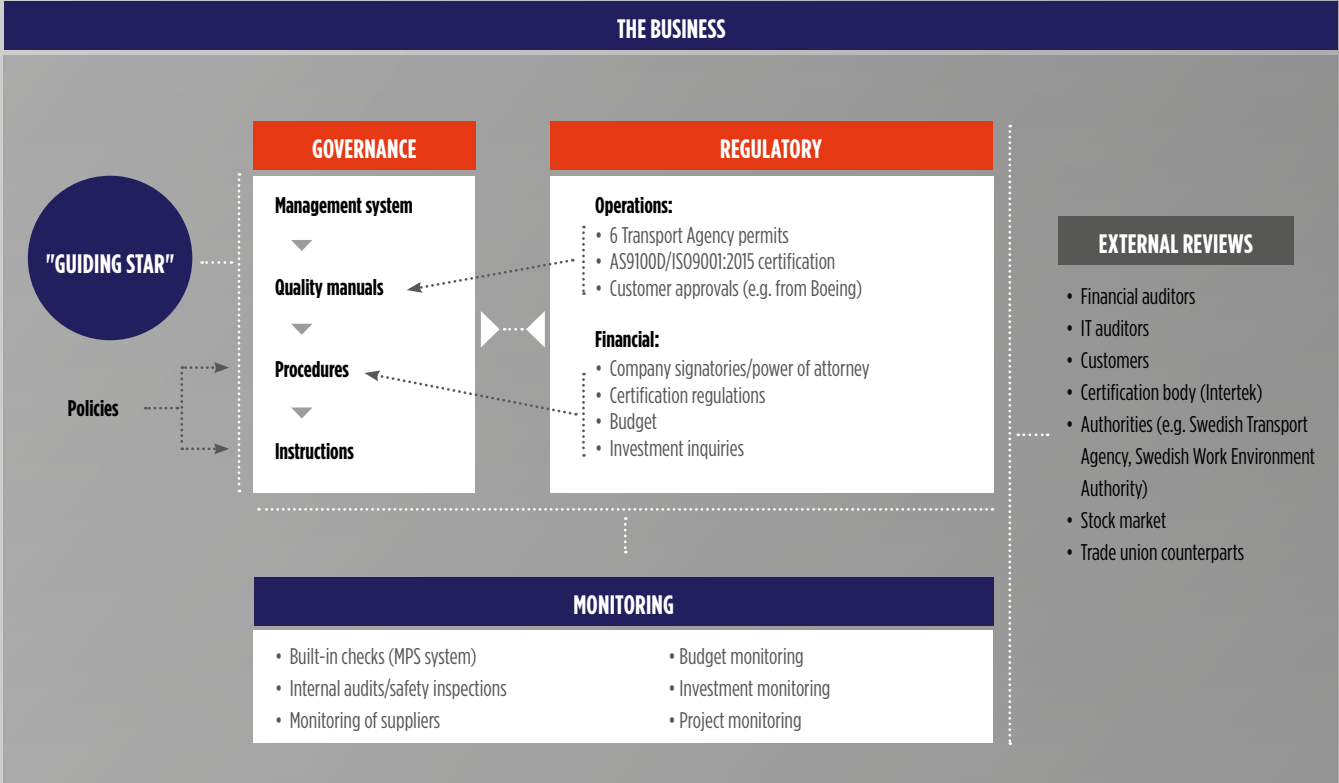
simple legal and operational structure and well-established management and internal control systems. The Audit Committee monitors the company's assessment of internal control, including through contact with the company's auditors. Furthermore, there have been no shortcomings in internal control in the past that would justify a change and the appointment of an internal audit. In light of the above, the Board has selected not to have a special internal audit.



Financial reporting is based on governing policies that are broken down into procedures/instructions and then into concrete working documents, where the latter two also contain automatic and/or manual controls to continuously ensure correct management and results. A year-end board is used to collect all the steps and to ensure that the steps are carried out in the correct sequence and that ongoing checks are carried out.



To ensure compliance with applicable laws and regulations, information is regularly gathered from a number of different parties, each with expertise in their respective fields.



Internal control of business operations is based on governing and regulatory elements. The governing elements consist of the management system which is broken down into quality manuals, procedures, instructions and policies. The regulatory elements consist partly of external permits/approval, and partly of internal rules and guidelines determined by the Board. To ensure compliance with these elements, there are a number of monitoring internal activities and follow-ups. In addition, a number of independent external parties carry out regular reviews of the business and the various aspects of the management system.



# SENIOR EXECUTIVES



**TORBJÖRN JOHANSSON**

CEO, born 1958.

**Education:** Master of Science in Mechanical Engineering, Linköping University. Student engineering training at SAAB Aviation Division 1982-1983.

**Previous experience:** Development engineer at JAS39 Gripen, SAAB 1983-1988. Development engineer/manager at EPI GmbH (now Telair), Bavaria, Germany 1988-1991. Technical Manager, Elektrometall GmbH, Bavaria, Germany 1991-1996. Technical Manager, CTT Systems AB 1996-1997. CEO of CTT Systems AB from 1997.

**Number of shares in CTT:** 43,058

**MARKUS BERG**

CFO, born 1980.

**Education:** Master of Business Administration, Master's degree in International Economics, Södertörn University, 2004.

**Previous experience:** Business Controller, SSAB Grovplåt 2004-2007, Controller Manager, SSAB Grovplåt 2007-2010, Chief Controller, SSAB Produktion EMEA 2010-2011, Head of Strategy, SSAB Oxelösund 2011-2014, Chief Controller, Telia Fiber Business 2014-2016, Head of Finance, Teracom AB 2016-2021. CFO of CTT Systems AB from July 2021.

**Number of shares in CTT:** 1,500

**OLA HÄGGFELDT**

Sales Director, born 1969

**Education:** Master of Science in Engineering, Royal Institute of Technology, 1994. Emerson EmPowerment leadership programme 2000-2001.

**Previous experience:** Scania (Development Engineer) 1994-1995, Freudenberg (KAM Automotive) 1995-1997, Siemens Components (KAM Automotive) 1997-2000, Emerson Network Power (Director Nordic, GM M. East & N. Africa, MD Europe) 2000-2009, Delta Electronics (OEM Director) 2009-2010, NorthStar (Director EMEA, VP OEM, VP SEA & China) 2010-2020, Sales Director at CTT Systems AB from 2020.

**Number of shares in CTT:** 3,729

**STEFAN HAMMAR**

Production Director, born 1959.

**Education:** High school, mechanical engineering 1983.

**Previous experience:** Design, Studsvik Energiteknik AB 1984-1990. Unit manager, design, manufacturing, electricity and electronics, Studsvik Nuclear AB 1990-2001. Head of Design, Studsvik Nuclear AB 2001-2005. Head of design and laboratory, Studsvik Nuclear AB 2005. Head of production at CTT Systems AB from 2006.

**Number of shares in CTT:** 2,279

**PETER LANDQUIST**

VP Senior Advisor Sales, born 1958.

**Education:** Industrial-technological programme, high school 1976.

**Previous experience:** Production and design, AB Nyge Aero 1986-1993. Head of Design, CTT Systems AB 1993-1998. Technical Manager 1998-2004. Technical Sales 2004-2006. Head of Aftermarket 2006-2011. Head of sales, marketing and aftermarket 2011-2014. Head of Sales and Marketing from 2015. VP Senior Advisor Sales at CTT Systems AB from 2020.

**Number of shares in CTT:** 7,196

**TORLEIF NILSSON**

Director of Engineering, born 1960.

**Education:** High school, mechanical engineering 1980.

**Previous experience:** Calculation engineer, durability at JAS39 Gripen, Saab AB, 1982-1998. Appointed Chief Engineer in Aircraft Systems Durability in 1990. Section Head, System Strength in the Weapons Integration & Structural Engineering department, Saab Aerosystems 1999-2007. Development Manager at CTT Systems AB from 2007.

**Number of shares in CTT:** 3,320

**TONY ROSENDAL**

Head of CTT-Bribo Division, born 1967.

**Education:** Mechanical Engineering programme, high school 1987.

**Previous experience:** Planning, purchasing and production manager, Ogo AB 1988-2000. Production Manager, Mönsterås Metall AB 2000-2008. CEO, Bribo Mekaniska AB 2008-2016. Head of CTT-Bribo division at CTT Systems AB from 2017.

**Number of shares in CTT:** 14,390

**MARIA WESTER**

Director of Quality & HR, born 1966.

**Education:** Electronics and telecoms programme, high school. University degree in business administration from Örebro University. Studies in quality technology at MDH. Diploma in personnel administration.

**Previous experience:** Project management/sales, Trade Motion 1988-1989, technical/financial assistant Burndy AB/FCI 1990-1995. Quality and human resources manager at Framatome Connectors Sweden AB 1995-1999. Head of Quality at CTT Systems AB 1999-2005. Head of Quality and Human Resources from 2005.

**Number of shares in CTT:** 5,328



BOARD OF DIRECTORS



	TOMAS TORLÖF	PER FYRENIUS	ANNIKA DALSVALL		ANNA HÖJER	STEVEN BUESING	BJÖRN LENANDER
Role and year of birth	Chairman, born 1967.	Board member, born 1965.	Board member, born 1958.		Board member, born 1968.	Board member, born 1974.	Board member, born 1961.
Qualifications	Master of Science in Mechanical Engineering, Royal Institute of Technology.	Master of Science in Mechanical Engineering, Royal Institute of Technology.	MSc in Economics, Uppsala University.		Master of Science in Engineering, Luleå University of Technology.	Masters of Business Administration from the University of Iowa and Certified Public Accountant (CPA).	Master of Science in Engineering, Royal Institute of Technology.
Nationality/elected	Swedish/2013	Swedish/2018	Swedish/2013		Swedish/2020	American/2018	Swedish/2018
Other roles	Board member of Trulscor Förvaltning AB, Trulscor Aktiefond, Pelago Venture Partners AB, M2J Holding AB. Board member since 2013. Chairman of the Board since 2014.	Vice President Corporate Development, Toyota Material Handling Europe AB. Board member of Toyota Material Handling Logistics Solutions AB. Board member of CTT since 2018.	Head of Contracts, Scandinavian Airlines System. Board member of CTT since 2013.		CEO, Transdev Sweden. Board member of CTT since 2020.	VP & Controller at Collins Aerospace. Board member since 2018.	CEO, Latour Industries AB. Chairman of the Board at Arifco Group AB, Densiq AB, LSAB Group AB, MS Group AB, Latour Future Solutions AB. Board member at CTEK AB, Caljan A/S, VEGA Srl, Vimec Srl. Board member since 2018.
Work experience and other information	More than 25 years of experience in starting and developing technology companies as an active owner. Shareholder in CTT since 1995. Second largest owner 2001-2014. Largest owner since 2014.	Member of the European management team for Toyota Material Handling with responsibilities including strategy. Former CEO of the Group's Swedish marketing company and before that active in the then ITT Flygt. Many years of operational experience in areas including sales and aftermarket.	Many years of experience from the aviation industry in procurement and negotiation.		Former CEO of Swedish Bombardier. Extensive experience of the aerospace and train industries with management positions within SAAB and Bombardier.	Former Vice President and CFO of the Interior Division at Collins Aerospace. Prior to that, Vice President and CFO of the Avionics Division and Head of Investor Relations at Rockwell Collins. Wide knowledge of the aviation industry and financial management.	CEO of Latour Industries AB. More than 25 years of experience in leading positions in international industry.
Attendance <sup>1)</sup>							
Board meetings	9/9	9/9	9/9		9/9	9/9	7/9
Audit committee meetings			5/5		4/5		5/5
Independent in relation to							
The company and executive management	yes	yes	yes		yes	yes	yes
Major owners	no	yes	yes		yes	yes	yes
Remuneration and holdings <sup>2)</sup>							
Board fees	320,000	140,000	140,000		140,000	140,000	140,000
Committee fees			55,000		30,000		30,000
Number of shares in CTT	Owns 1,678,336 shares in CTT through Trulscor Förvaltning.	Owns 1,090 shares in CTT.	Owns 250 shares in CTT.		Owns 1,737 shares in CTT with related parties.	Owns 400 shares in CTT.	Owns 500 shares in CTT with related parties.

1) Attendance refers to meetings during the period in 2021 when the member was elected to the Board/committee  
2) Fees refer to fees paid during the financial year, which were decided at the 2020 and 2021 Annual General Meetings



AUDITOR  
Camilla Nilsson  
Authorised Public Accountant, Grant Thornton Sweden AB. Auditor of the company since 2018.



# NOTES ON THE FINANCIAL STATEMENTS

For the financial year 2021  
All amounts in MSEK unless otherwise stated

	page
<b>NOTE 1</b> General information	<b>73</b>
<b>NOTE 2</b> Accounting and valuation policies	<b>73</b>
<b>NOTE 3</b> Net sales and other operating income	<b>76</b>
<b>NOTE 4</b> Other external costs and other operating expenses	<b>77</b>
<b>NOTE 5</b> Personnel	<b>77</b>
<b>NOTE 6</b> Tax	<b>79</b>
<b>NOTE 7</b> Profit for the year	<b>79</b>
<b>NOTE 8</b> Earnings per share	<b>79</b>
<b>NOTE 9</b> Capitalised expenses for development work	<b>79</b>
<b>NOTE 10</b> Licences	<b>80</b>
<b>NOTE 11</b> Other intangible assets	<b>80</b>
<b>NOTE 12</b> Land and buildings	<b>80</b>
<b>NOTE 13</b> Machinery and other technical facilities	<b>80</b>
<b>NOTE 14</b> Equipment, tools and installations	<b>80</b>
<b>NOTE 15</b> Shares in group companies	<b>81</b>
<b>NOTE 16</b> Inventories	<b>81</b>
<b>NOTE 17</b> Accounts receivable	<b>81</b>
<b>NOTE 18</b> Financial assets and liabilities	<b>81</b>
<b>NOTE 19</b> Other receivables	<b>81</b>
<b>NOTE 20</b> Prepayments and accrued income	<b>81</b>
<b>NOTE 21</b> Pledged collateral and contingent liabilities	<b>82</b>
<b>NOTE 22</b> Overdraft facility	<b>82</b>
<b>NOTE 23</b> Cash and cash equivalents	<b>82</b>
<b>NOTE 24</b> Equity	<b>82</b>
<b>NOTE 25</b> Provisions	<b>82</b>
<b>NOTE 26</b> Maturity of financial liabilities	<b>83</b>
<b>NOTE 27</b> Reconciliation of liabilities arising from financing activities	<b>84</b>
<b>NOTE 28</b> Accrued expenses and prepaid income	<b>84</b>
<b>NOTE 29</b> Transactions with related parties	<b>84</b>
<b>NOTE 30</b> Asset management and financial risk management	<b>84</b>
<b>NOTE 31</b> Events after the balance sheet date	<b>85</b>
<b>NOTE 32</b> Proposals for profit distribution	<b>85</b>

## NOTE 1 GENERAL INFORMATION

CTT Systems AB (publ.), co. reg. no. 556430-7741, was formed in 1991 and is based in Nyköping, Sweden. CTT is a Mid Cap company listed on Nasdaq Stockholm since March 1999. CTT's main activities involve the development, manufacture and sale of equipment that actively regulates humidity in aircraft.

This annual report was approved for issuance by the Board on 30 March 2022. The company's income statement and balance sheet will be subject to approval at the Annual General Meeting on 4 May 2022.

### The impact of the COVID-19 pandemic on CTT

The COVID-19 pandemic that affected the world during the first quarter of 2020 continued to have a major impact on earnings and cash flow in 2021. Air traffic has gradually increased during the year, which has led to a recovery in the aftermarket. But for OEM products, this recovery will take longer and also have a negative impact on 2022. The aviation industry still faces challenges in 2022, as the pandemic is not over and new COVID-19 variants may appear, but the company's assessment is that airlines and the aviation industry will continue to recover as demand for air travel returns. CTT therefore has a good opportunity to increase sales.

Read more under each note for a description of how different aspects of CTT's financial results and assessments/valuations were affected by the COVID-19 pandemic. Notes with COVID-19 comments:

- Note 3 Net sales and other operating income
- Note 5 Personnel
- Note 9 Capitalised expenses for development work
- Note 13 Machinery and other technical facilities
- Note 14 Equipment, tools and installations
- Note 16 Inventories
- Note 17 Accounts receivable
- Note 25 Provisions
- Note 30 Asset management and financial risk management
- Note 31 Events after the balance sheet date

## NOTE 2 ACCOUNTING AND VALUATION POLICIES

### Compliance with applied regulations and the going-concern principle

The company's annual report has been prepared in accordance with the Swedish Annual Accounts Act (AAA) and in accordance with IFRS, with the exceptions and additions specified in the Swedish Financial Reporting Board's recommendation RFR 2 "Accounting for legal entities". RFR 2 requires the company to apply all EU endorsed standards and pronouncements of the IASB and IFRIC in its annual accounts as far as possible within the framework of the AAA and taking into account the relationship between accounting and taxation. The financial statements have been prepared on the condition that the company conducts operations on a going concern basis.

CTT Systems AB does not prepare consolidated financial statements because the subsidiary CTT Systems Inc. in the USA is dormant and of minor significance, with the result that no consolidated financial statements need to be prepared in accordance with Chapter 7:3 a of the AAA.

### Standards, changes to and interpretations of accounting principles

#### New and updated standards, changes and interpretations applied from 2021

Certain changes that came into force on 1 January 2021 and which have therefore begun to be applied this year have not had any significant impact on the company's earnings and position.

*Standards, changes and interpretations concerning existing standards which have not yet entered into force and which have not been applied prematurely by the company*

As of the date of approval of these financial statements, certain new standards, changes to and interpretations of existing standards that have not yet entered into force on the balance sheet date have been published by the IASB. These have not been applied prematurely by the company.

The Board of Directors and CEO assume that all relevant statements will be included in the company's accounting principles when they enter into force. New standards, changes and clarifications that have not been applied are not expected to have a significant impact on the company's financial reports.

### Background for compiling the report

Assets and liabilities have been valued at historical acquisition values unless otherwise stated below. Receivables and liabilities in foreign currency have been converted using the exchange rate on the balance sheet date.

Preparing reports in accordance with IFRS requires management to make assessments and estimates and to make assumptions that affect the application of the accounting principles and the reported amounts in the income statements and balance sheets.

### Important estimates and assessments for accounting purposes

The items in the income statements and balance sheets that are significantly affected by management assessments are income from profit recognition agreements (included in net sales, see Note 3), inventories (Note 16), warranty commitments (Note 25) and intangible (Note 9-11) and tangible fixed assets (note 12-14) where depreciation plans are based on assessments of service life. See more information on accounting principles regarding the above items below.

### Revenue recognition

#### Revenue recognition at a certain time

In the case of the company's new sales and spare parts sales of products, it is not the company's job to install the products, as this is taken care of by the customers. Revenues

from new sales and spare parts sales are reported when CTT's role has been performed and control of the product has been transferred to the customer, which is upon delivery of the product. Revenue is reported as the amount CTT expects to be entitled to in exchange for the transfer of promised goods to a customer, where the transaction price is stated in the agreement with the customer. CTT has no variable remuneration in its agreements with customers.

The transaction price is due for payment in accordance with the agreement with the customer. CTT's payment terms to customers vary between 30 and 90 days.

For sales of systems for private jets and other profit recognition projects, revenue is recognised over time, see below.

Revenue recognition over time

When selling systems for private jets and other profit recognition projects, the development, manufacture and adaptation of the systems last for a longer period of time. In principle, the systems are sold exclusively at a fixed price and the company reports revenue on these assignments as the work is carried out, i.e. when the company's commitments have been fulfilled. When calculating earned profit, the degree of completion has been calculated as incurred expenses as of the balance sheet date in relation to total estimated expenses for completion of the assignment.

Reported revenues and associated contract receivables for profit recognition agreements reflect the best estimate of the outcome and the degree of completion of commitments for each agreement. This includes an assessment of the profit in ongoing customer agreements. With regard to more complicated assignments, there is significant uncertainty when assessing the costs for completion and profitability, which is also taken into account in revenue recognition.

The transaction price is due for payment in accordance with the agreement with the customer. CTT's payment terms to customers vary between 30 and 90 days.

Receivables, liabilities and cash and cash equivalents in foreign currency

Monetary assets and liabilities in foreign currency have been converted using the exchange rate on the balance sheet date. Non-monetary assets and liabilities are converted using the exchange rate at the time of acquisition. The company mainly makes its purchases in SEK, with a small element in USD and European currencies, while products are mainly sold in USD, with a small element in SEK and EUR.

Inventories

Inventories are valued according to the lowest value principle, i.e. the lower of acquisition value and net sales value. The acquisition value includes all expenses attributable to the manufacturing process, along with the appropriate share of associated manufacturing costs, based on normal capacity. The acquisition value is calculated according to the first-in-first-out principle. The net sales value is the estimated price for which the product can be sold according to normal business conditions, less any applicable sales costs that can be directly attributed to the sales transaction.

For each balance sheet date, a calculation is made of the net sales value of the inventory, taking into account the most reliable information available. Future sales values may be affected by future technology and other market-driven changes that may reduce future sales prices.

Segment reporting

The internal reporting by the Board is at the aggregate level of the company. For revenue distribution and other segment information, see Note 3.

Receivables

Receivables are assessed on an individual basis and included as the expected amount to be paid.

Property, plant and equipment

Self-generated intangible assets consist of capitalised expenses for development work. For these, depreciation normally takes place over 5 years from when the asset is taken into use. Ongoing development regarding the capitalisation of capitalised development costs for the Boeing 777X and New Zonal Dryer projects has not yet been completed, and therefore depreciation has not started. Planned depreciation for the Boeing 777X is production-dependent for a maximum of 10 years. For the New Zonal Dryer project, the presumed depreciation is 10 years. Licences represent licences purchased for development work and have been depreciated based on production rates. The licence was fully depreciated in 2020 and scrapped in 2021.

Property, plant and equipment are initially reported at acquisition value or manufacturing costs, including expenses to get the asset on site and in a condition to be used in accordance with the intentions of the investment. The acquisition value includes the purchase price and other directly attributable expenses such as expenses for delivery, handling, installation, assembly, legal fees and consultancy services. The acquisition value of self-manufactured property, plant and equipment also includes indirect manufacturing costs. Short-term inventories and inventories of lesser value are expensed on an ongoing basis.

On each balance sheet date, a review is made of current assessments of service lives of depreciable assets. The uncertainty in these assessments is due to technological obsolescence that may change the use of the assets.

Tangible and intangible fixed assets are depreciated systematically based on their estimated useful life. The following depreciation periods have been applied.

Intangible assets	2021	2020
Capitalised expenses for development work	5-10 years	5-10 years
Licences	Production dependent	
Other intangible assets	5-10 years	5-10 years

Licences are written off based on deliveries, known as production-dependent depreciation.

Property, plant and equipment	2021	2020
Buildings	10-100 years	10-100 years
Facilities on the ground	20-40 years	20-40 years
Machinery and other technical facilities	3-10 years	3-10 years
Equipment, tools and installations	3-10 years	3-10 years
– Including Improvement fees on leased property	5 years	5 years
– Including Computer equipment	3-5 years	3-5 years

Research and Development

Expenses for development, where the results are used to produce new or improved products, are reported as an asset in the company's balance sheet. This also presupposes that the product is expected to be technically and commercially viable and that CTT has sufficient resources to complete development and then use or sell the intangible asset.

The carrying amount includes all directly attributable expenditure to create, produce and prepare the asset for use in the manner intended by management, such as expenditures for materials and services and payment to employees. Other development expenses are reported in the income statement as development costs when they arise.

In the company's balance sheet, capitalised expenses for development work are reported at acquisition value less accumulated depreciation and any write-downs as intangible fixed assets.

Depreciation starts on the month in which the asset is completed and taken into use. The company recognises provisions for the development fund within restricted equity with the same amount capitalised during the year as an intangible asset relating to its own capitalised development work.

Impairment

The reported values of the company's fixed assets are checked annually to determine whether there are indications of impairment. Reported value is tested at least once a year or more frequently if an indication of a decline in value has been identified. Each impairment test calculates the recoverable value of the asset. Recoverable value refers to the higher of an asset's net sales value and value in use. Impairment of assets occurs when the carrying amount exceeds the recoverable amount.

To assess the need for impairment, the recoverable amount for each asset or cash-generating unit is calculated based on expected future cash flows using an appropriate interest rate to be able to discount the cash flow. There are uncertainties in assumptions about future cash flow and the determination of an appropriate discount rate.

Leasing

The company applies the exemption in RFR 2 and reports the leasing fees as an expense on a straight-line basis over the leasing period. Right of use and lease liabilities are not reported in the balance sheet. Leasing agreements mainly consist of leased premises, computers and cars.

Provisions

Provisions for product warranties, loss-making contracts or other claims are recognised when the company has a legal or informal obligation as a result of a past event and it is probable that an outflow of financial resources will be required and the amounts can be reliably estimated. The timing or amount of this outflow may still be uncertain.

Provisions are valued at the estimated amount required to settle the existing liability, based on the most reliable information available on the balance sheet date.

Warranty commitments

The company normally provides a 36-48 month warranty on its products. Provisions for future warranty commitments are calculated on sales for the period. The size of the provision is calculated as 3% of the sales price of OEM systems for new platforms, 1% of spare parts and repairs, 0% of consumables and a certain aspect of sales in addition to the core business, and 2% of all other sales. The size of this provision is based on the historical amount of warranty costs.

Borrowing costs

Borrowing costs that are directly attributable to ongoing investments in qualifying assets are capitalised in the balance sheet. No loans directly related to investment projects were taken out and therefore no capitalisation has taken place, either in 2021 or in 2020.

Remuneration to employees

Pensions

Post-employment pension benefits are paid through ongoing payments to external parties, who thereby assume the obligations towards the employees. CTT has both defined-contribution and defined-benefit pension plans. The company's obligations in terms of contributions to both defined-contribution and defined-benefit pension plans are recognised as an expense in the income statement as the right to the pension is earned through service.

• Defined-contribution pension plans

Fixed contribution (defined-contribution) pension plans are classified plans where the size of the employee's pension depends on the contributions (premiums) that the company pays to the plan and the return on capital earned by the contributions.

• Defined-benefit pension plans

A defined-benefit pension plan means that an employee is guaranteed a pension corresponding to a certain % of salary. The pension plan in accordance ITP2 is secured through insurance with Alecta and is therefore reported as a defined contribution plan. CTT does not have access to such information allowing it to report this plan as a defined benefit plan.

Compensation in the event of termination

A cost for employee termination benefits is recognised if the company is obliged to terminate an employee's employment before the standard date.

Short-term benefits

Short-term benefits to employees are calculated without discounting and are reported as an expense in the period when the related services are received. A provision is reported for the expected cost of variable remuneration where CTT has an obligation to make such payments as a result of services received from employees.

Share-based compensation

CTT has no outstanding options or ongoing option programs enabling employees to acquire shares in the company below fair value.

Financial assets and liabilities

Financial instruments recognised in the balance sheet on the asset side include cash and cash equivalents, accounts receivable and other receivables (financial assets).

The liability side mainly consists accounts payable and loan liabilities (financial liabilities). A financial asset or liability is recognised in the balance sheet when the company becomes party to the contractual terms of the instrument. Accounts receivable arise when goods have been delivered and the risk has passed to the customer. Debt is recognised when the counterparty has delivered and there is a contractual obligation to pay, even if the invoice has not yet been received.

A financial asset is removed from the balance sheet when the rights in the agreement are realised, expire or the company loses control of them. The same applies to parts of financial assets. A financial liability is removed from the balance sheet when the obligation in the agreement is fulfilled or otherwise ceases to exist. The same applies to parts of financial liabilities. The company has only one category of financial assets and liabilities, which is accrued acquisition value. Items that fall into this category are as follows:

• Accounts receivable

Accounts receivable are financial assets that are not derivatives with fixed or determinable payments and that are not listed in an active market. Assets in this category are valued at accrued acquisition value. Accrued acquisition value is determined on the basis of the effective interest rate calculated at the time of acquisition. Accounts receivable are reported at the amount that is expected to be received, i.e. after deductions for expected credit losses.

• Other receivables

• Cash and cash equivalents

Cash and cash equivalents, corresponding to the balance sheet item Cash at bank and in hand, consist of cash, cash equivalents and short-term bank deposits. The short-term deposits can easily be converted into known amounts of cash and the risk of changes in value is insignificant.

• Other financial liabilities

CTT's loan liabilities and accounts payable belong to this category.



Taxes

Income taxes consist of current tax and deferred tax. Income taxes are recognised in profit or loss or, if an underlying transaction is recognised directly in equity, the related tax effect is also recognised in equity.

Current tax is tax to be paid or received for the current year, applying the tax rates that have been decided or in practice decided on the balance sheet date. This also includes the adjustment of current tax attributable to previous periods.

Deferred tax is calculated using the balance sheet method, based on temporary differences between the carrying amounts and the taxable values of assets and liabilities. Deferred tax is calculated by applying the tax rates that have been decided or in practice decided on the balance sheet date.

Deferred tax assets in respect of deductible temporary differences and tax loss carry-forwards are recognised only to the extent that it is probable that they will be recovered.

3 NET SALES AND OTHER OPERATING INCOME

NET SALES

CTT has selected to divide net sales between the product areas System Sales, Spare Parts and Maintenance and Other Sales of Goods. Sales are divided further within each product area, see below.

Breakdown of net sales by product area	2021	2020
<b>System Sales</b>		
OEM	24.7	83.2
Retrofit	7.6	4.7
Private jet	9.7	32.0
	<b>42.0</b>	<b>119.9</b>
<b>Spare parts and maintenance</b>		
Aftermarket	98.6	72.0
	<b>98.6</b>	<b>72.0</b>
<b>Other sales of goods</b>		
Sales in addition to the core business activities	10.7	8.9
	<b>10.7</b>	<b>8.9</b>
<b>Total</b>	<b>151.2</b>	<b>200.8</b>
<b>Geographical breakdown of net sales</b>	<b>2021</b>	<b>2020</b>
Sweden	11.4	11.9
USA	48.2	87.4
Denmark	53.5	44.0
Rest of the world	38.2	57.5
<b>Total</b>	<b>151.2</b>	<b>200.8</b>

In 2021, 73% (75) of CTT's total sales revenue was attributable to three customers: Boeing, CTT's customer for the A350 programme and our largest distributor to airlines, which accounted for 29% (39), 9% (14) and 36% (22), of the company's sales revenue respectively. It should be noted that these revenues are mainly attributable to deliveries to the 787 programme, and that our end customers at distributor level are a large number of airlines. The remaining proportion of sales revenue was distributed between customers who each accounted for less than 10% of the company's sales revenue.

The balance sheet item "Advance payment from customers" refers to four contract customers and is expected to be reported as revenue in 2022.

Of the 2021 opening value of the balance sheet item "Earned but not invoiced income", MSEK 8.3, 97% was invoiced in 2021. Of the 2021 opening value of the balance sheet item "Invoiced but not earned income", MSEK 0.1, 100% was invoiced in 2021.

**Impact of COVID-19 on CTT:**

Net sales decreased by 25% between 2020 and 2021. This decrease is mainly due to the effects of the COVID-19 pandemic on the aviation industry through reduced travel. The decrease was greatest at the beginning of the year, mainly since Q1 2020 was not affected by the pandemic. OEM is the area that has been most negatively affected. There, sales decreased by 70% to MSEK 25 (83). However, the aftermarket has begun to recover and sales have increased by 37% to MSEK 99 (72). The aviation industry still faces challenges in 2022, as the pandemic is not over and new COVID-19 variants may appear, but the company's assessment is that airlines and the aviation industry will continue to recover as demand for air travel returns. CTT therefore has a good opportunity to increase sales.

OTHER OPERATING INCOME

Other operating income	2021	2020
Exchange rate gains	10.8	17.6
Items affecting comparability <sup>1)</sup>	9.1	-
One-off adjustment of compensation <sup>2)</sup>	-	3.9
Other	0.2	0.6
<b>Total</b>	<b>20.1</b>	<b>22.2</b>

1) Items affecting comparability from the OEM segment, which had a positive effect on other operating income of MSEK 9.1.  
2) One-off adjustment of compensation for goods sold during previous periods.

4 OTHER EXTERNAL COSTS AND OTHER OPERATING EXPENSES

OTHER EXTERNAL COSTS

Audit costs

The item Other external costs includes fees to the auditor, see the specification below.

Fees to auditor (SEK thousand)	2021	2020
<b>Grant Thornton Sweden AB</b>		
Audit work	807	820
Auditing activities in addition to auditing work	171	197
Tax advice	69	38
<b>Total</b>	<b>1,047</b>	<b>1,055</b>

Audit means the statutory audit of the annual accounts and financial statements and of the management of the Board of Directors and the CEO, as well as audits and other reviews carried out in accordance with an agreement or contract. This includes tasks to be carried out by the company's auditor along with advice or other assistance resulting from observations made during such an audit or the performance of such other tasks. Tax advice refers to services relating to taxation.

Operational leasing costs

The figure for Other external costs includes leasing fees of MSEK 6.2 (6.7), of which rental costs for leased premises amount to MSEK 4.3 (4.3). Total remaining leasing fees amount to MSEK 19.6 (24.3), of which rental costs for leased premises amount to MSEK 17.0 (20.5). These are due for payment as below:

Leasing fees	2021	2020
<b>Maturity period:</b>		
Within 1 year	5.0	5.2
Later than 1 year but within 5 years	14.6	16.4
Later than 5 years	-	2.7
<b>Total</b>	<b>19.6</b>	<b>24.3</b>

OTHER OPERATING EXPENSES

Other operating expenses	2021	2020
Exchange rate losses	3.3	17.5
<b>Total</b>	<b>3.3</b>	<b>17.5</b>

5 PERSONNEL

	2021	2020
<b>Average number of employees</b>		
Women	20	26
Men	56	67
<b>Total</b>	<b>76</b>	<b>93</b>
<b>Board</b>		
Women	2	2
Men	4	4
<b>Total</b>	<b>6</b>	<b>6</b>
<b>Executive management and CEO</b>		
Women	1	1
Men	8	8
<b>Total</b>	<b>9</b>	<b>9</b>

Personnel costs (SEK thousand)	2021	2020
<b>Salaries and other remuneration</b>		
Salaries, fees and benefits	40,319	44,272
Pension costs	5,514	4,946
Allocation for the profit-sharing foundation	1,219	2,780
<b>Total salaries and other remuneration</b>	<b>47,053</b>	<b>51,998</b>
<b>Social expenses</b>		
Social expenses (including special payroll tax) on salaries, fees, benefits and pension costs	14,098	14,484
Special payroll tax on allocation to profit-sharing foundation	296	674
<b>Total social expenses</b>	<b>14,393</b>	<b>15,159</b>
Other personnel costs	93	921
<b>Total personnel costs</b>	<b>61,539</b>	<b>68,077</b>

Salaries and other remuneration 2021 (SEK thousand)

	Board fees	Audit committee fee	Other remuneration to the Board	Basic salary	Variable remuneration	Benefits	Pensions	Allocation for the profit-sharing foundation	Total
<b>Chairman of the Board:</b>									
Tomas Torlöf	320	-	-	-	-	-	-	-	320
<b>Other Board members:</b>									
Steven Buesing	140	-	-	-	-	-	-	-	140
Annika Dalsvall	140	55	-	-	-	-	-	-	195
Per Fyrenius	140	-	-	-	-	-	-	-	140
Anna Höjer	140	30	-	-	-	-	-	-	170
Björn Lenander	140	30	-	-	-	-	-	-	170
<b>Employees:</b>									
CEO	-	-	-	2,142	231	129	664	17	3,182
Other senior executives	-	-	-	7,452	384	408	2,235	116	10,596
Other employees	-	-	-	28,311	-	127	2,615	1,086	32,140
<b>Total</b>	<b>1,020</b>	<b>115</b>	<b>-</b>	<b>37,905</b>	<b>615</b>	<b>664</b>	<b>5,514</b>	<b>1,219</b>	<b>47,053</b>

Salaries and other remuneration 2020 (SEK thousand)

	Board fees	Audit committee fee	Other remuneration to the Board	Basic salary	Variable remuneration	Benefits	Pensions	Allocation for the profit-sharing foundation	Total
<b>Chairman of the Board:</b>									
Tomas Torlöf	320	-	-	-	-	-	-	-	320
<b>Other Board members:</b>									
Steven Buesing	140	-	-	-	-	-	-	-	140
Annika Dalsvall	140	55	-	-	-	-	-	-	195
Per Fyrenius	140	-	-	-	-	-	-	-	140
Anna Höjer	105	23	-	-	-	-	-	-	128
Björn Lenander	140	30	-	-	-	-	-	-	170
Mats Lundin	70	8	-	-	-	-	-	-	78
<b>Employees:</b>									
CEO	-	-	-	1,884	510	129	551	30	3,105
Other senior executives	-	-	-	6,007	851	350	1,803	222	9,233
Other employees	-	-	-	33,277	-	93	2,592	2,527	38,490
<b>Total</b>	<b>1,055</b>	<b>115</b>	<b>-</b>	<b>41,168</b>	<b>1,361</b>	<b>573</b>	<b>4,946</b>	<b>2,780</b>	<b>51,998</b>

Fees and remuneration to Board members

Remuneration is paid to the chairman and members of the Board in accordance with the decision of the Annual General Meeting. Fees are also paid for audit committee work.

Salary and other remuneration to the CEO

Remuneration to the CEO consists of basic a salary, variable remuneration, benefits, pension insurance and a provision for the profit-sharing foundation. The CEO's salary is set by the chairman of the Board after negotiations with the CEO and is subsequently approved by the Board.

Salaries and remuneration to other senior executives in the company

Other senior executives consist of the company's executive management team, which as of 31 December 2021 consisted of eight people (8).

Agreement on future pensions

The CEO and CTT both have the right to invoke a pension for the CEO at the age of 65. The pension is defined contribution and in addition to paid pension premiums, there are no additional pension obligations. The pension for other senior executives is defined contribution and follows the ITP plans, or alternatively includes provisions on a par with ITP. In

addition to paid pension premiums, there are no additional pension obligations. CTT has taken out pension insurance for each person and CTT's obligation is limited to payment of the agreed premium during the period of employment.

Termination and severance pay

The CEO has an agreement allowing for severance pay if the executive leaves their position at the company's request. Severance pay, including termination pay, amounts to two years' salary. Contractual terms apply to other senior executives.

Variable remuneration and allocation to the profit-sharing foundation

Variable remuneration is maximised and related to the operating profit and in some cases sales achieved. Provisions for the profit-sharing foundation are made in accordance with uniform rules where all employees, including the CEO, are treated equally. The amount allocated to the profit-sharing foundation may change in connection with the company's Annual General Meeting. The total amount for variable remuneration has been reserved in the financial statements and is paid out after the Annual General Meeting. For aspects of variable remuneration where the condition for the remuneration is that CTT shares shall be acquired, the receiving party shall make the share acquisitions during the period immediately following the Annual General Meeting. There are no other specific agreements

on variable remuneration in addition to salary, bonus schemes, profit-sharing plans, retirement age or future pension for the CEO or other senior executives. See the table below for amount limits linked to bonus programmes and the profit-sharing foundation. See the corporate governance report for further information.

Variable remuneration and allocation to the profit-sharing foundation	CEO	Other senior executives	All employees
Maximum cost of the company's profit before tax (%)	2.5	2.5	7.5
<i>(however, a maximum of a total of 30% of the decided dividend)</i>			
Maximum compensation at individual level (proportion of annual salary)	6/12	2/12	2/12
<i>(for the profit-sharing foundation, the average monthly salary of all employees applies as a ceiling)</i>			

Impact of COVID-19 on CTT:

In 2020, CTT implemented a cost-cutting programme, reducing the number of employees and shortening staff working hours to respond to the reduced demand resulting from the COVID-19 pandemic. 2021 has continued to be affected by COVID-19, partly through a reduction in the number of employees and partly through shortened staff working hours in the first half of the year.

NOTE 6 TAX

	2021	2020
<b>Tax for the year</b>		
Current tax	-3.7	-8.5
<b>Total</b>	<b>-3.7</b>	<b>-8.5</b>
<b>Reconciliation of effective tax</b>		
Profit before tax	17.9	39.6
Tax expense 20.6% (21.4)	-3.7	-8.5
<b>Tax effect of tax adjustments:</b>		
Other tax adjustments	0.0	0.0
<b>Total</b>	<b>-3.7</b>	<b>-8.5</b>

NOTE 7 PROFIT FOR THE YEAR

	2021	2020
<b>Profit for the year has been affected by the following currency differences:</b>		
Exchange rate difference on receivables and liabilities of an operating nature	7.5	0.1
Exchange rate difference on receivables and liabilities of a financial nature	-7.5	2.4
<b>Total</b>	<b>0.0</b>	<b>2.5</b>

NOTE 8 EARNINGS PER SHARE

Earnings per share have been calculated as the profit for the year divided by the average number of shares outstanding during the period. The average number of shares was 12,529,443 (12,529,443). As there are no outstanding warrants, no dilution has been calculated.

NOTE 9 CAPITALISED EXPENSES FOR DEVELOPMENT WORK

	31/12/2021	31/12/2020
<b>Initial acquisition values</b>		
Capitalised expenditure for the year	8.4	20.5
Write-downs <sup>1)</sup>	-4.3	-
<b>Closing accumulated acquisition values</b>	<b>104.4</b>	<b>100.2</b>
<b>Initial depreciations</b>		
This year's depreciations	-1.0	-1.1
<b>Closing accumulated depreciation</b>	<b>-29.3</b>	<b>-28.3</b>
<b>Closing planned residual value <sup>2)</sup></b>		
	<b>75.1</b>	<b>72.0</b>

1) Items affecting comparability from the OEM segment that have affected write-downs negatively by MSEK 4.3.

2) Residual value specified per development project:

Boeing 777X <sup>3)</sup>	47.7	46.0
New Zonal Dryer <sup>4)</sup>	15.6	1.5
Other	11.8	24.4
<b>Total</b>	<b>75.1</b>	<b>72.0</b>

3) Depreciation has not started because ongoing development has not yet been completed. The planned depreciation period is production-dependent for a maximum of 10 years.

4) Depreciation has not started because ongoing development has not yet been completed. The estimated depreciation period is 10 years.

Capitalised assets for the year of MSEK 8.4 (20.5) consisted of development work primarily linked to the New Zonal Dryer and Boeing 777X projects. Of the accumulated acquisition values, MSEK 63.3 (66.8) relates to ongoing development projects. In addition to the capitalised expenses, MSEK 3.8 (1.1) of expenses for testing and development have also been expensed on an ongoing basis.

Impact of COVID-19 on CTT:

CTT has taken COVID-19 into account in its impairment testing of intangible assets. In some cases, COVID-19 has caused expected future cash flows to be deferred, but as the present value is still significantly higher than the value of the underlying intangible asset, COVID-19 is not expected to have a significant impact on the company's valuation of intangible assets.



## NOTE 10 LICENCES

	31/12/2021	31/12/2020
<b>Initial acquisition values</b>	<b>9.9</b>	<b>9.9</b>
Disposals	-9.9	-
<b>Closing accumulated acquisition values</b>	<b>-</b>	<b>9.9</b>
<b>Initial depreciations</b>	<b>-9.9</b>	<b>-9.3</b>
This year's depreciations	-	-0.6
Disposals	9.9	-
<b>Closing accumulated depreciation</b>	<b>-</b>	<b>-9.9</b>
<b>Closing planned residual value</b>	<b>-</b>	<b>-</b>

In the autumn of 2013, a license agreement was entered into with Nord Micro regarding the development of control units for larger Cair systems. License costs amount to MSEK 10.0. The agreement entailed an obligation to purchase a certain number of units within a 5-year period and depreciation takes place upon each delivery of a unit, known as the production-dependent depreciation method. In 2018, the licence agreement expired and the debt to Nord Micro was repaid in full. The licence was fully depreciated in 2020 and scrapped in 2021.

## NOTE 11 OTHER INTANGIBLE ASSETS

	31/12/2021	31/12/2020
<b>Initial acquisition values</b>	<b>4.9</b>	<b>4.9</b>
<b>Closing accumulated acquisition values</b>	<b>4.9</b>	<b>4.9</b>
<b>Initial depreciations</b>	<b>-3.8</b>	<b>-3.5</b>
This year's depreciations	-0.3	-0.3
<b>Closing accumulated depreciation</b>	<b>-4.1</b>	<b>-3.8</b>
<b>Closing planned residual value</b>	<b>0.8</b>	<b>1.1</b>

## NOTE 12 LAND AND BUILDINGS

	31/12/2021	31/12/2020
<b>Initial acquisition values</b>	<b>30.8</b>	<b>30.7</b>
Purchases	-	0.1
<b>Closing accumulated acquisition values</b>	<b>30.8</b>	<b>30.8</b>
<b>Initial depreciations</b>	<b>-4.4</b>	<b>-3.8</b>
This year's depreciations	-0.6	-0.6
<b>Closing accumulated depreciation</b>	<b>-5.0</b>	<b>-4.4</b>
<b>Closing planned residual value</b>	<b>25.7</b>	<b>26.4</b>
Of which land	0.4	0.4
Of which land facilities	1.1	1.1

## NOTE 13 MACHINERY AND OTHER TECHNICAL FACILITIES

	31/12/2021	31/12/2020
<b>Initial acquisition values</b>	<b>19.4</b>	<b>9.7</b>
Purchases	0.1	9.7
Sales/scrapped	-	0.0
<b>Closing accumulated acquisition values</b>	<b>19.5</b>	<b>19.4</b>
<b>Initial depreciations</b>	<b>-1.7</b>	<b>-0.9</b>
This year's depreciations	-2.1	-0.9
Sales/scrapped	-	0.0
<b>Closing accumulated depreciation</b>	<b>-3.8</b>	<b>-1.7</b>
<b>Closing planned residual value</b>	<b>15.6</b>	<b>17.7</b>

### Impact of COVID-19 on CTT:

An assessment has been made of whether COVID-19 has had an effect on the company's machinery and other technical facilities. Based on this assessment, COVID-19 is not expected to have any impact on the value of this item.

## NOTE 14 EQUIPMENT, TOOLS AND INSTALLATIONS

	31/12/2021	31/12/2020
<b>Initial acquisition values</b>	<b>48.9</b>	<b>45.6</b>
Purchases	0.2	3.4
Sales/scrapped	-	-0.1
<b>Closing accumulated acquisition values</b>	<b>49.0</b>	<b>48.9</b>
<b>Initial depreciations</b>	<b>-39.3</b>	<b>-36.1</b>
This year's depreciations	-3.1	-3.3
Sales/scrapped	-	0.1
<b>Closing accumulated depreciation</b>	<b>-42.3</b>	<b>-39.3</b>
<b>Closing planned residual value</b>	<b>6.7</b>	<b>9.6</b>

### Impact of COVID-19 on CTT:

An assessment has been made of whether COVID-19 has had an effect on the company's equipment, tools and installations. Based on this assessment, COVID-19 is not expected to have any impact on the value of this item.

## NOTE 15 SHARES IN GROUP COMPANIES

The shares below refer to holdings in the dormant subsidiary CTT Systems Inc., USA.

	31/12/2021	31/12/2020
<b>Initial acquisition value</b>	<b>0.0</b>	<b>0.0</b>
<b>Closing book value</b>	<b>0.0</b>	<b>0.0</b>

## NOTE 16 INVENTORIES

Of the total value of inventories of MSEK 100 (101) as of 31 December 2021, MSEK 1.1 (1.1) has been reserved for obsolescence. The cost of obsolescence for the year amounted to MSEK 0.0 (-0.0).

### Impact of COVID-19 on CTT:

The effect of COVID-19 has been taken into account in the assessment of inventory obsolescence. Due to the fact that CTT has products that do not age in the short or medium term, combined with long customer contracts, especially within OEM, it is considered that inventory values have not been negatively affected by the downturn in the aerospace industry caused by COVID-19.

## NOTE 17 ACCOUNTS RECEIVABLE

Accounts receivable entirely consist of outstanding receivables for goods delivered to customers. The company has assessed the credit quality of its receivables based on the customer's creditworthiness. Based on this assessment, provisions for doubtful accounts receivable as of 31 December 2021 amounted to MSEK 0.4 (0.1). Customer losses during the year amounted to MSEK 0.3 (0.1).

	31/12/2021	31/12/2020
<b>Age analysis of non-impaired accounts receivable</b>		
Not due	23.6	22.2
Less than 3 months	8.4	15.9
3-6 months	-	0.2
7-12 months	2.0	0.1
Over 12 months	4.7	0.4
<b>Total</b>	<b>38.7</b>	<b>38.8</b>

### Impact of COVID-19 on CTT:

In exceptional cases, customers have requested extended credit periods on their trade payables to CTT. In some cases, CTT has granted this. COVID-19 is not expected to have a significant impact on the company's valuation of accounts receivable in 2022.

## NOTE 18 FINANCIAL ASSETS AND LIABILITIES

The company's financial assets and liabilities that are included in the accrued acquisition value category are presented below.

	31/12/2021 Reported value	31/12/2020 Reported value
<b>Financial assets</b>		
<b>Accounts receivable</b>		
Accounts receivable	38.7	38.8
<b>The maximum credit risk amounts to the carrying amount</b>	<b>38.7</b>	<b>38.8</b>
<b>Cash and cash equivalents</b>		
Cash and cash equivalents in SEK	38.2	18.4
Cash and cash equivalents in USD	11.1	3.2
<b>Total</b>	<b>49.3</b>	<b>21.6</b>

	31/12/2021 Reported value	31/12/2020 Reported value
<b>Financial liabilities</b>		
<b>Other financial liabilities</b>		
Accounts payable	15.4	16.9
Liabilities to credit institutions in USD	72.1	36.9
Other current financial liabilities	1.3	0.3
<b>Total</b>	<b>88.9</b>	<b>54.2</b>

## NOTE 19 OTHER RECEIVABLES

	31/12/2021	31/12/2020
VAT receivables	1.8	1.9
Other	0.2	1.1
<b>Total</b>	<b>2.0</b>	<b>3.1</b>

## NOTE 20 PREPAYMENTS AND ACCRUED INCOME

	31/12/2021	31/12/2020
Prepaid rents	1.1	1.1
Prepaid insurance costs	0.3	0.3
Prepaid maintenance and licence fees	1.0	1.3
Other	1.3	1.5
<b>Total</b>	<b>3.7</b>	<b>4.2</b>

## NOTE 21 PLEDGED COLLATERAL AND CONTINGENT LIABILITIES

Property and corporate mortgages have been pledged as security for the company's debts to credit institutions, including overdraft facilities granted. There are no contingent liabilities to external parties.

	31/12/2021	31/12/2020
<b>Collateral pledged</b>		
Property mortgages	12.0	12.0
Corporate mortgages	94.5	64.5
<b>Contingent liabilities</b>	None	None

## NOTE 22 OVERDRAFT FACILITY

	31/12/2021	31/12/2020
Granted credit (not used)	22.8	20.7

The company's overdraft facility consists of credit granted of USD 2,500,000 which, recalculated at the exchange rate on the balance sheet date, amounts to SEK 22,775,000.

## NOTE 23 CASH AND CASH EQUIVALENTS

The cash and cash equivalents item in the cash flow analysis corresponds to the balance sheet item Cash at bank and in hand in the balance sheet.

## NOTE 24 EQUITY

Equity consists of restricted equity and unrestricted equity. The restricted equity consists of share capital, reserve fund and fund for development expenditure. Unrestricted equity consists of profits for the year and balanced results. The item balanced results includes, in addition to balanced results, a share premium reserve.

### Restricted equity

Restricted equity may not be used for dividends.

#### – Share capital

CTT share capital amounts to SEK 12,529,443 divided into 12,529,443 shares, each share with a quota value of SEK 1. All shares have equal rights to the company's assets and earnings. Each share gives entitlement to one vote.

#### – Reserve fund

The purpose of the reserve fund has been to save part of the net profit to be used later to cover any losses.

#### – Fund for development expenditure

The amount capitalised for self-generated development expenses will be transferred from unrestricted equity to a fund for development expenses in restricted equity. The fund reduce as the capitalised expenses are written off or written down.

### Unrestricted equity

Unrestricted equity, together with the profit for the year and retained earnings, also involves a share premium fund. Unrestricted equity is available for dividends to shareholders.

#### – Premium fund

The share premium fund arises when a new issue of shares is subscribed for at a premium. When the determined price of the new shares in a new issue is higher than the nominal value of the existing shares, the excess is added to the share premium fund. Up until 2020, the share premium fund was an unrestricted fund, which means that the provisions CTT has made for new issues have been unrestricted and included in unrestricted equity. From 2021, the Swedish Companies Act has been updated so that the share premium fund can either be unrestricted or restricted, or alternatively distributed between them. The remaining part, which corresponds to the nominal value, is added to the share capital item (in restricted equity).

#### – Balanced results

Balanced results consist of the previous year's retained earnings.

Changes in equity are shown in the Change in equity table.

## NOTE 25 PROVISIONS

Provisions for warranty commitments	31/12/2021	31/12/2020
<b>Opening provision</b>	<b>6.1</b>	<b>8.4</b>
Amounts claimed	-3.3	-4.6
Provision for the year	1.0	2.3
<b>Closing provision</b>	<b>3.8</b>	<b>6.1</b>

The provision for warranty commitments is expected to be utilised during the coming four-year period. Over a longer period of time, in step with increased sales and an increased number of systems under warranty, the size of the outgoing provision will increase.

#### Impact of COVID-19 on CTT:

The negative impact of Covid-19 on air traffic, and by extension on CTT's turnover, has resulted in lower provisions during the year, reducing the closing provisions compared to the previous year. The assessment is, however, that the quality of the company's products remains high and that the levels of both the warranty reserve and the warranty provision are thus correct.

## NOTE 26 MATURITY OF FINANCIAL LIABILITIES

As of 31 December 2021 and 2020, respectively, the company's financial liabilities have agreed maturities (including interest payments where applicable) which can be summarised as below.

Financial liabilities as of 31/12/2021 Due for payment as follows:	Within 1 year	1-2 years	2-3 years	3-4 years	4-5 years	Later than 5 years	Total
<b>Interest-bearing financial liabilities including interest rates</b>							
<i>Interest-bearing financial liabilities</i>							
Interest-bearing liabilities to credit institutions	1.4	6.5	32.8	31.5	-	-	72.1
<b>Total</b>	<b>1.4</b>	<b>6.5</b>	<b>32.8</b>	<b>31.5</b>	<b>-</b>	<b>-</b>	<b>72.1</b>
<i>Interest on financial liabilities</i>							
Interest rates	1.1	1.1	0.5	0.1	-	-	2.9
<b>Total</b>	<b>1.1</b>	<b>1.1</b>	<b>0.5</b>	<b>0.1</b>	<b>-</b>	<b>-</b>	<b>2.9</b>
<b>Total interest-bearing financial liabilities including interest rates</b>	<b>2.5</b>	<b>7.6</b>	<b>33.3</b>	<b>31.7</b>	<b>-</b>	<b>-</b>	<b>75.1</b>
<b>Non-interest-bearing financial liabilities</b>							
Accounts payable	15.4	-	-	-	-	-	15.4
Other liabilities, part of	1.3	-	-	-	-	-	1.3
<b>Total non-interest-bearing financial liabilities</b>	<b>16.7</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>16.7</b>
<b>Total financial liabilities</b>	<b>19.2</b>	<b>7.6</b>	<b>33.3</b>	<b>31.7</b>	<b>-</b>	<b>-</b>	<b>91.8</b>

Financial liabilities as of 31/12/2020 Due for payment as follows:	Within 1 year	1-2 years	2-3 years	3-4 years	4-5 years	Later than 5 years	Total
<b>Interest-bearing financial liabilities including interest rates</b>							
<i>Interest-bearing financial liabilities</i>							
Interest-bearing liabilities to credit institutions	1.2	29.8	5.9	-	-	-	36.9
<b>Total</b>	<b>1.2</b>	<b>29.8</b>	<b>5.9</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>36.9</b>
<i>Interest on financial liabilities</i>							
Interest rates	0.7	0.3	0.1	-	-	-	1.1
<b>Total</b>	<b>0.7</b>	<b>0.3</b>	<b>0.1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.1</b>
<b>Total interest-bearing financial liabilities including interest rates</b>	<b>1.9</b>	<b>30.1</b>	<b>6.0</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>38.0</b>
<b>Non-interest-bearing financial liabilities</b>							
Accounts payable	16.9	-	-	-	-	-	16.9
Other liabilities, part of	0.3	-	-	-	-	-	0.3
<b>Total non-interest-bearing financial liabilities</b>	<b>17.3</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>17.3</b>
<b>Total financial liabilities</b>	<b>19.2</b>	<b>30.1</b>	<b>6.0</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>55.2</b>

Liabilities to credit institutions have variable interest rates and quarterly interest charges. Reported amounts correspond to fair value. For loans in foreign currency, the exchange rate on the balance sheet date has been used.



NOTE 27 RECONCILIATION OF LIABILITIES ARISING FROM FINANCING ACTIVITIES

	31/12/ 2020	Cash flows		Exchange rate differences	Changes not affecting cash flow	31/12/ 2021
		New loans	Amorti- sation			
Liabilities to credit institutions	36.9	29.7	-1.3	6.8		72.1
<b>Total liabilities arising from financing activities</b>	<b>36.9</b>	<b>29.7</b>	<b>-1.3</b>	<b>6.8</b>		<b>72.1</b>

NOTE 28 ACCRUED EXPENSES AND PREPAID INCOME

	31/12/2021	31/12/2020
Accrued salaries	2.3	5.2
Holiday pay liabilities	5.2	5.5
Accrued social security charges	1.6	1.7
Accrued special payroll tax	1.3	1.2
Accrued commissions and royalties	0.1	0.3
Invoiced maintenance agreements	0.1	0.1
Other	1.5	2.3
<b>Total</b>	<b>12.1</b>	<b>16.3</b>

NOTE 29 TRANSACTIONS WITH RELATED PARTIES

During the financial year, purchases of MSEK 0.0 (0.1) relating to production materials were made from StegoPlast AB. As of 31/12/2021, there were no debts to related parties (as in the previous year).

To the extent that transactions and agreements for services with related parties are entered into, these are always entered into and performed under market conditions.

NOTE 30 ASSET MANAGEMENT AND FINANCIAL RISK MANAGEMENT

The overall objective of the Company's financial function with respect to asset management is to ensure the Company's ability to continue as a going concern, to provide cost-effective financing of its operations and to provide secure cash management with a market return on invested funds. The overall goal of financial risk management is to mitigate the risks of a negative impact on the company's earnings. It is logical that financial investments with a low risk profile must be made. With larger risk exposure, for example for exchange rate differences, hedging can be applied. As the company has no outstanding forward hedges as of 31 December 2021, forward contracts regarding future cash flows have not been forecast.

The company's assessed risk exposure and accompanying risk management are described below.

Market risks

Currency risks

The company's operations are conducted mainly in Sweden but are exposed to currency fluctuations through international sales. Purchases are mainly made in SEK, although some purchases, mainly of production materials, are made in USD. Products are sold almost exclusively in USD with only a small proportion of sales in SEK and EUR. The company's liabilities to credit institutions in USD amounted to MUSD 7.9 as of the balance sheet date. The overdraft facility in USD was not utilised. A higher USD exchange rate by +10% on the balance sheet date would have had a negative impact on earnings after net financial items of approx. USD -800,000. Also see the Directors' Report, under the heading Financial risks. For the impact on operating profit, see Note 7.

Interest rate risks

The company's interest rate risks refer, where applicable, to the value of holdings of interest-bearing securities and the company's financing with credit institutions. The company's financing with credit institutions is currently at a variable interest rate. Holdings of interest-bearing securities must always refer to high-liquidity securities which can be sold quickly. The company's liabilities to credit institutions are in USD and amounted to MUSD 7.9 as of the balance sheet date. An interest rate one % point higher would mean increased annual interest expenses of approx. USD 80,000.

Price risks

The company's financial instruments as of 31 December 2021 do not vary due to changes in market prices. The company's stock of raw materials and consumables, as well as finished goods, is not exposed to any significant price risk. The sanctions against Russia are not having a significant effect on CTT's raw materials prices.

Credit risks

The company's credit risks are mainly linked to accounts receivable. Due to the close contacts that the company has with prospective customers prior to delivery, a well-founded credit assessment can be made before delivery, which also continues with ongoing monitoring of current customer relationships. The Retrofit and Private jet sales areas are judged to have a higher credit risk than other areas. In these areas, CTT takes out credit risk insurance where possible. A dominant part of accounts receivable in addition to Retrofit and Private jet is with Boeing, CTT's customer for the A350 program and our largest distributor to the airlines, with all of whom CTT has far-reaching and close relationships.

Financing risks

The company's financing is based on strong long-term ownership and a good relationship with the company's bank. On the balance sheet date, there was secured bank financing totalling MSEK 125 (119), of which MSEK 72 (37) was utilised. The change from the previous year consists partly of the raising of a new loan and partly of an increase as a result of a weaker SEK against USD at the end of the year, as bank financing is in USD. A covenant is in place with the company's bank specifying the management of intellectual property rights, a minimum equity ratio of 30%, the assumption of new financial liabilities, the provision of collateral and the obligation to provide information. In addition, for the majority of the unutilised part of the bank financing, there is a covenant in place which also specifies an operating margin of at least 10% over the last four quarters. CTT complied with the covenants by a good margin at the end of the year.

Impact of COVID-19 on CTT:

In 2021, CTT's ability to obtain external financing was not affected by the impact of the COVID-19 pandemic.

NOTE 31 EVENTS AFTER THE BALANCE SHEET DATE

CTT has stopped all deliveries to Russia. In 2021, Russia's share of net sales was 4%, mainly from the Retrofit area. CTT has no employees or suppliers in Russia, Belarus or Ukraine.

Impact of COVID-19 on CTT:

2022 The COVID-19 pandemic will continue to affect CTT. In particular, the company's OEM revenues will also be negatively affected by low production rates in 2022, mainly for the Boeing 787.

NOTE 32 PROPOSALS FOR PROFIT DISTRIBUTION

Board proposal for profit distribution	SEK
Profits available:	
Balanced profits	83,354,720
Share premium reserve	28,856,978
Profit for the year	14,165,286
<b>Total</b>	<b>126,376,984</b>
Dividend to shareholders of SEK 0.79 per share (12,529,443 shares)	9,898,260
Profit/loss carried forward	116,478,724
<b>Total</b>	<b>126,376,984</b>

In 2021, CTT paid a dividend of MSEK 21.801 (50.744) to its shareholders. This corresponds to a dividend of SEK 1.74 per share (4.05).

For 2022, the Board proposes a dividend of MSEK 9.898 (SEK 0.79 per share). As CTT's dividend must be approved by the Annual General Meeting, no liabilities in this respect are reported in the company's 2021 financial statements. There is not expected to be an effect on income tax for CTT as a result of this transaction.

The Board of Directors considers that the proposed amount of the dividend to shareholders is justified in view of the demands placed on the company by the nature, scope and risks of its activities in terms of the size of its equity capital and also in view of its consolidation needs, liquidity and position in general. Our financial position will remain strong after the proposed dividend and is deemed to be fully sufficient for the company to be able to fulfil its obligations in both the short and long term, and have the opportunity to make any necessary investments.

The Board and CEO declare that the annual accounts have been prepared in accordance with the international accounting standards referred to in Regulation (EC)

No 1606/2002 of the European Parliament and of the Council of 19 July 2002 on the application of international accounting standards and on generally accepted accounting principles and give a true and fair view of the company's position and results.

The Directors' Report gives a true and fair overview of the company's business, position and performance and describes the principal risks and uncertainties that the company faces. As stated below, the Annual Report has been approved for issuance by the Board on 30 March 2022. The company's income statements and balance sheets will be subject to approval at the Annual General Meeting on 4 May 2022.

Nyköping, 30 March 2022

**Tomas Torlöf**  
Chairman of the Board

**Steven Buesing**  
Board member

**Annika Dalsvall**  
Board member

**Per Fyrenius**  
Board member

**Anna Höjer**  
Board member

**Björn Lenander**  
Board member

**Torbjörn Johansson**  
CEO

Our audit report was submitted on 30 March 2022  
Grant Thornton Sweden AB

**Camilla Nilsson**  
Authorised Public Accountant

# AUDIT REPORT<sup>1)</sup>

To the Annual General Meeting of CTT Systems AB (publ),  
Co. reg. no. 556430-7741

## Report on the Annual Report

### Opinion

We have performed an audit of the Annual Report of CTT Systems AB (publ.) for 2021, with the exception of the corporate governance report on pages 62-71. The company's Annual Report is included on pages 40-85 in this document.

In our opinion, the Annual Report has been prepared in accordance with the Annual Accounts Act and gives a true and fair view of the financial position of CTT Systems AB (publ.) as of 31 December 2021 and of these financial results and cash flow for the year in accordance with the Annual Accounts Act. Our opinions do not include the corporate governance report on pages 62-71. The directors' report is consistent with the other parts of the Annual Report.

We therefore recommend that the Annual General Meeting approve the income statement and balance sheet.

Our opinions in this report on the financial statements are consistent with those contained in the supplementary report submitted to the Company's Audit Committee in accordance with Article 11 of the Auditor Regulation (537/2014/EU).

### Grounds for our opinions

We performed the audit in accordance with International Standards on Auditing (ISA) and generally accepted auditing standards in Sweden. Our responsibility in accordance with these standards is described in more detail in the section "Auditor's responsibility". We are independent in relation to the company in accordance with good auditing practice in Sweden and have otherwise fulfilled our professional ethical responsibility in accordance with these requirements. This includes that, based on our best knowledge and belief, no prohibited services referred to in Article 5 (1) of the Auditor Regulation (537/2014/EU) have been provided to the audited company.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### Particularly significant areas

Areas of particular importance to the audit were the areas that, in our professional assessment, were the most important for the audit of the Annual Report for the relevant period.

These areas were addressed in the context of the audit of, and in our position on, the Annual Report as a whole, but we are not making separate statements about these areas.

### Revenue recognition of deliveries of goods

Revenues from new sales and spare parts sales of products are reported when the performance commitment has been fulfilled and control of the product has been transferred to the customer at a certain time, which is upon delivery of the product. Revenues for these deliveries of goods account for the majority of the revenues in the company and we therefore assessed that the revenue recognition for deliveries of goods is a particularly significant area for our audit.

For further information and description of this area, see Note 3 and accounting and valuation policies in Note 2 in the annual report.

### How this area was addressed in the audit

As part of our audit regarding the revenue recognition of deliveries of goods, we have implemented a number of audit measures. Our audit actions included, but were not limited to, the following:

- Review, evaluation and testing of internal monitoring to ensure that revenue recognition of deliveries of goods takes place in a timely manner and using the correct amounts.
- Data analyses regarding the completeness of reported deliveries as well as cut-off review and analytical review measures.
- Review of the valuation of the company's accounts receivable for reported income as of the balance sheet date.
- Audit of information provided in the Annual Report and that this is in all material respects in accordance with the requirements of the Annual Accounts Act and IFRS.

### Information outside of the Annual Report

This document also contains information outside of the Annual Report. This can be found on pages 1-39 and 90-93. The remuneration report for the financial year 2021, which will be issued after the date of this auditor's report, also constitutes other information. The Board of Directors and the CEO are responsible for this other information.

Our statement regarding the Annual Report does not encompass this information and we have no opinions confirming this other information.

In connection with our audit of the Annual Report, it is our responsibility to read the information identified above and consider whether the information is materially

incompatible with the Annual Report. In this review, we also take into account the knowledge otherwise acquired during the audit and assess whether the information generally appears to contain significant inaccuracies. If we, based on the work that has been performed regarding this information, conclude that the other information contains material errors, we are obliged to report this. We have nothing to report in that regard.

### Responsibilities of the Board and CEO

The Board of Directors and the CEO are responsible for the preparation of the Annual Report and for presenting a true and fair picture in accordance with the Annual Accounts Act. The Board of Directors and the CEO are also responsible for internal controls that they deem necessary to prepare an annual report that does not contain any material errors, whether these are due to irregularities or mistakes.

In preparing the Annual Report, the Board of Directors and the CEO are responsible for assessing the company's ability to continue operations. They disclose, where applicable, conditions that may affect the ability to continue operations and to apply the going-concern assumption. However, the going-concern assumption does not apply if the Board and CEO intend to liquidate the company, cease operations or have no realistic alternative to doing any of these.

The Board's audit committee must, without affecting the Board's responsibilities and tasks in general, monitor the company's financial reporting.

### Auditor's responsibility

Our goals are to achieve a reasonable degree of assurance about whether the financial statements as a whole do not contain any material inaccuracies, whether due to irregularities or mistakes, and to produce an audit report that includes our opinions. Reasonable assurance is a high degree of assurance, but is no guarantee that an audit performed in accordance with ISA and good auditing practice in Sweden will always detect material errors if they exist. Errors can occur due to irregularities or mistakes and are considered significant if they individually or together can reasonably be expected to influence the financial decisions that users make on the basis of the Annual Report.

As part of an audit according to ISA, we use professional judgement and have an attitude of professional scepticism throughout the audit. In addition:

- we identify and assess the risks of significant errors in the Annual Report, whether due to irregularities or errors, we design and perform audit procedures based on these risks, among other things, and obtain audit evidence that is sufficient and appropriate to form the basis of our opinions. The risk of not detecting a material error due to irregularities is greater than that of a material error due to error, as irregularities may include collusion, forgery, intentional omissions, incorrect information or breach of internal controls.

- we gain an understanding of the aspects of the company's internal controls that are important for our audit in order to design audit measures that are appropriate in the circumstances, but not to comment on the effectiveness of internal controls.

- we evaluate the appropriateness of the accounting principles used and the reasonableness of the Board's and the CEO's estimates in the accounts and related information.

- we reach a conclusion about the appropriateness of the Board of Directors and the CEO using the going-concern assumption in the preparation of the annual report. We also reach a conclusion, based on the audit evidence obtained, as to whether there is any material uncertainty regarding such events or conditions that could lead to significant doubts about the company's ability to continue operations. If we conclude that there is significant uncertainty, we must draw attention in the audit report to information in the annual report on the significant uncertainty factor or, if such information is insufficient, modify the statement on the Annual Report. Our conclusions are based on the audit evidence obtained up to the date of the audit report. However, future events or conditions may mean that a company is no longer able to continue operations.

- we evaluate the overall presentation, structure and content of the Annual Report, including the information, and whether the Annual Report reflects the underlying transactions and events in a way that gives a true and fair picture.

We must inform the Board of, among other things, the planned scope and focus of the audit and the time of it. We also have to give information about significant observations during the audit, including any significant deficiencies in internal controls that we have identified.

We must also provide the Board with a statement that we have complied with relevant professional ethics requirements regarding independence, and address all relationships and other circumstances that may reasonably affect our independence, as well as, where applicable, measures taken to eliminate these effects or counter-measures that have been taken.

Of the areas that are communicated to the Board, we determine which of these areas have been the most significant for the audit of the Annual Report, including the most important assessed risks of material misstatement, and which therefore constitute the areas that are particularly important for the audit. We describe these areas in the auditor's report unless laws or other regulations prevent disclosure of these matters.

1) This report is a translation of the original report published in Swedish. In the event of any deviations between the two reports, the Swedish version prevails.



Report on other requirements in accordance with legislation and other statutes

AUDITOR'S REVIEW OF MANAGEMENT AND PROPOSAL FOR THE APPROPRIATION OF THE COMPANY'S PROFIT OR LOSS

Opinion

In addition to our audit of the Annual Report, we also performed an audit of the administration of the Board of Directors' and the CEO of CTT Systems AB (publ.) for 2021 and of the proposed appropriations of the company's profit or loss.

We recommend that the Annual General Meeting dispose of the profits in accordance with the proposal in the administration report and grant the members of the Board and the CEO discharge from liability for the financial year.

Grounds for our opinions

We performed the audit in accordance with generally accepted auditing standards in Sweden. Our responsibility in accordance with this is described in more detail in the section "Auditor's responsibility". We are independent in relation to CTT Systems AB in accordance with good auditing practice in Sweden and have otherwise fulfilled our professional ethical responsibility in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of the Board and CEO

The Board of Directors is responsible for the proposed disposition of the company's profit or loss. When proposing a dividend, this includes an assessment of whether the dividend is justifiable in terms of the requirements that the company's type of business, scope and risks place on the size of the company's equity, consolidation needs, liquidity and position in general.

The Board is responsible for the organisation of the company and the management of the company's affairs. This includes, among other things, continuously assessing the company's financial situation and ensuring that the company's organisation is designed so that the accounting, asset management and the company's financial affairs are otherwise monitored in a reassuring manner. The CEO is responsible for day-to-day management in accordance with the Board's guidelines and instructions and, among other things, taking the necessary measures for the company's accounting to be carried out legally and for asset management to be conducted in a reassuring manner.

Auditor's responsibility

Our goal regarding the audit of the administration, and thus our statement on discharge from liability, is to obtain audit evidence in order to be able to assess with a reasonable degree of certainty whether any Board member or the CEO in any significant respect:

- has taken any action or has committed any negligence which may give rise to liability for damages against the company, or
- in any other way has acted in violation of the Swedish Companies Act, the Annual Accounts Act or the Articles of Association.

Our goal regarding the audit of the proposal for disposition of the company's profit or loss, and thus our statement on this, is to assess with a reasonable degree of certainty whether the proposal is compatible with the Swedish Companies Act.

Reasonable certainty is a high degree of certainty, but no guarantee that an audit performed in accordance with good auditing practice in Sweden will always detect measures or omissions that may give rise to liability for damages against the company, or that a proposal for disposition of the company's profit or loss is incompatible with the Swedish Companies Act.

As part of an audit according to accepted audit practices in Sweden, we use professional judgement and have an attitude of professional scepticism throughout the audit. The review of the administration and the proposal for disposition of the company's profit or loss are mainly based on the audit of the accounts. The additional audit measures that are performed are based on our professional assessment, based on risk and materiality. This means that we focus the audit on measures, areas and conditions that are significant to the business and where deviations and violations would have particular significance for the company's situation. We review and examine decisions made, the basis for decisions, measures taken and other circumstances that are relevant to our statement of discharge. As a basis for our statement on the Board's proposal for dispositions regarding the company's profit or loss, we have examined the Board's reasoned opinion and a selection of the documentation behind this in order to assess whether the proposal is compatible with the Swedish Companies Act.

AUDITOR'S REVIEW OF THE ESEF REPORT

Opinion on the ESEF report

In addition to our audit of the annual report, we have also verified that the Board of Directors and the CEO have prepared the annual report in a format that permits uniform electronic reporting (ESEF reporting) in accordance with Chapter 16, Section 4 a of the Securities Market Act (2007:538) for CTT Systems AB (publ) for the year 2021. Our review and opinion relate only to the statutory requirement.

In our view, the ESEF report has been prepared in a format that essentially allows for uniform electronic reporting.

Grounds for our opinion

We conducted our review in accordance with the FAR Recommendation RevR 18 Review of the Single Electronic Reporting Format (ESEF) for Annual and Consolidated Financial Statements of Companies with Securities Listed on Regulated Markets in the EU. Our responsibility in accordance with this recommendation is described in more detail in the section "Auditor's responsibility". We are independent in relation to CTT Systems AB (publ) in accordance with good auditing practice in Sweden and have otherwise fulfilled our professional ethical responsibility in accordance with these requirements.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of the Board and CEO

The Board of Directors and the CEO are responsible for ensuring that the ESEF report has been prepared in accordance with Chapter 16, Section 4 a of the Securities Market Act (2007:538), and that such internal control as the Board of Directors and the Managing Director determines is necessary to enable the preparation of the ESEF report that is free of material misstatement, whether due to fraud or error, is maintained.

Auditor's responsibility

Our responsibility is to express a conclusion on whether, based on our review, the ESEF report is prepared, in all material respects, in a format that complies with the requirements of Chapter 16, Section 4 a of the Securities Market Act (2007:538). RevR 18 requires us to plan and perform our review to obtain reasonable assurance about whether the ESEF report is prepared in a format that complies with these requirements. Reasonable assurance is a high degree of assurance, but is no guarantee that an review performed in accordance with RevR 18 and good auditing practice in Sweden will always detect material errors if they exist. Errors can occur due to irregularities or mistakes and are considered significant if they individually or together can reasonably be expected to influence the financial decisions that users make on the basis of the ESEF report. Our audit firm applies ISQC 1 (International Standard on Quality Control) and thus has a comprehensive quality control system which includes documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

The review includes obtaining evidence, through a variety of procedures, that the ESEF report has been prepared in a form that permits consistent electronic reporting of the Annual Report and financial statements. The auditor selects the actions to be taken, including the assessment of risks of material misstatement, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Board's and the CEO's preparation of the evidence in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control. The review also includes an evaluation of the appropriateness and reasonableness of accounting policies used and the reasonableness of accounting estimates made by the Board of Directors and the CEO.

The review procedures mainly include a technical validation of the ESEF report, i.e. whether the file containing the ESEF report complies with the technical specification set out in the commission's delegated regulation (EU) 2019/815 and a reconciliation of the ESEF report with the audited Annual Report.

THE AUDITOR'S REVIEW OF THE CORPORATE GOVERNANCE REPORT

The Board of Directors is responsible for the corporate governance report on pages 62-71, and for ensuring that it is prepared in accordance with the Annual Accounts Act.

Our audit was conducted in accordance with FAR's recommendation RevR 16 The auditor's examination of the corporate governance statement. This means that our audit of the corporate governance report has a different focus and a significantly smaller scope than the focus and scope of an audit conducted in accordance with International Standards on Auditing and generally accepted auditing standards in Sweden.

We believe that this audit provides us with a reasonable basis for our opinions.

A corporate governance report has been prepared. Information in accordance with Chapter 6 Section 6, second paragraph, items 2–6 of the Annual Accounts Act and Chapter 7 Section 31, second paragraph, of the same Act is compatible with the other parts of the Annual Report and is in accordance with the Annual Accounts Act.

Grant Thornton Sweden AB was appointed auditor to CTT Systems AB (publ.) by the Annual General Meeting on 5 May 2021 and has been the company's auditor since before 1994.

Stockholm, 30 March 2022

Grant Thornton Sweden AB

Camilla Nilsson  
Authorised Public Accountant

# GLOSSARY

ACJ	Airbus Corporate Jet
ATP	Acceptance Test Procedure
BBJ	Boeing Business jet, originally based on the Boeing 737 but now also on other models
BFE	Buyer Furnished Equipment. Optional equipment provided by the customer/airline for assembly during aircraft manufacture
Business class	Cabin section for business travellers
Business jet	Jet aircraft configured for business travellers
CAGR	Compact Aggregated Growth Rate, the average annual growth over a given period expressed as a %
C check	The annual maintenance of an aircraft
Checking time	About a week at intervals of about 12-18 months
Completion Center	"Aircraft workshop" – modifies, custom furnishes VIP aircraft
Crew rest areas/bunks	Crew rest areas, very small area with beds
CRJ	Canadair Regional Jet
D check	Thorough inspection, maintenance and repair of fuselage, systems and (structural check) components. Performed at four to eight year intervals depending on aircraft type. Checking time about one month
EASA	European Aviation Safety Agency
EB	Engineering Bulletin
FAA	Federal Aviation Administration, the American aviation agency
Flag carrier	National airline, e.g. SAS (Sweden) or Lufthansa (Germany)
Flight deck	Cockpit, the pilots' workplace
Hub	Larger airport with feeder traffic to/from smaller airports
IP	Initial Provisioning, spare parts deliveries to customers (airlines) for e.g. Boeing 787 prior to delivery of the aircraft
IR	Investor relations
Launch Customer	First customer of a new aircraft system
Long haul flights	Long-distance flights
Narrow body	Aeroplane with a narrow fuselage, only one aisle (e.g. Boeing 737)
OEM	Original Equipment Manufacturer. When systems are developed specifically for one aircraft manufacturer and then resold by the aircraft manufacturer
Pad	Interchangeable moisture pad of fibre-glass structure with specially designed air ducts for CTT humidifiers
Pax	Passengers
Pax density	Passenger density, utilisation % of seats available on the plane
Private jet	Collective name for VIP and Business jet
Regional Jet	Jet-powered passenger planes that take between 30 and 100 passengers on shorter distances
Retrofit	Installation of equipment in aircraft after they have been delivered from the manufacturer (Boeing and Airbus) to the airline
SFE	Supplier Furnished Equipment. Optional equipment provided by the manufacturer for assembly during aircraft manufacture
Short haul	Short-distance flights
STC	Supplement Type Certificate – a certificate certifying that a system is approved by an aviation authority (EASA, FAA)
TC	Type certificate showing the approved basic configuration of an aircraft
Test rig	Test set-up for tests of humidifiers or Zonal Dryer in a laboratory environment
Wide body	Aircraft with a wide fuselage, two aisles (e.g. A350, A380 and Boeing 787)
VIP	Private Jet or Corporate Jet aircraft with exclusive interior

# SHAREHOLDER INFORMATION

## Annual General Meeting

The Annual General Meeting will take place at 5pm on Wednesday, 4 May 2022 at the company's premises at Brukslagarvägen 5, Nyköping.

Shareholders who wish to participate in the meeting in person or by postal vote must:

- be entered in the share register maintained by Euroclear Sweden AB by 26 April 2022 at the latest
- notify CTT of their participation by 28 April 2022, whether participating in person or by casting their postal vote according to the instructions in the invitation to attend

For further information, please see <https://www.ctt.se/investors/corporate-governance/annual-general-meeting/>

## Nomination Committee

The task of the Nomination Committee is to prepare the election of the Chairman and other members of the Board, the election of the auditor, the election of the Chairman of the Annual General Meeting, fee issues and related issues. Prior to the 2022 Annual General Meeting, the Nomination Committee consisted of Patrik Jönsson (SEB Investment Management), Steven Buesing (Collins Aerospace, Inc.), Jonathan Schönbäck (ODIN fonder) and Tomas Torlöf (Trulscor Förförvaltning AB) as chairman.

## Dividends

Friday 6 May 2022 is proposed as the record date for dividends. If the Annual General Meeting resolves in accordance with the proposal, a dividend is expected to be sent out through Euroclear Sweden AB on Wednesday May 11, 2022.

## Shareholder information

For further information, please contact Markus Berg, CFO, telephone +46 (0)155-20 59 05 or via e-mail: [markus.berg@ctt.se](mailto:markus.berg@ctt.se)

For more information, see: **[www.ctt.se](https://www.ctt.se)**

## Shareholders requiring a printed annual report

Shareholders requiring a printed annual report next year should apply for one by sending an email to [ctt@strd.se](mailto:ctt@strd.se) or calling +46 (0)8-779 96 00. If you want a printed copy of this annual report, notify us by sending an email to [info@ctt.se](mailto:info@ctt.se).

This report is a translation of the original report published in Swedish. In the event of any deviations between the two reports, the Swedish version prevails.

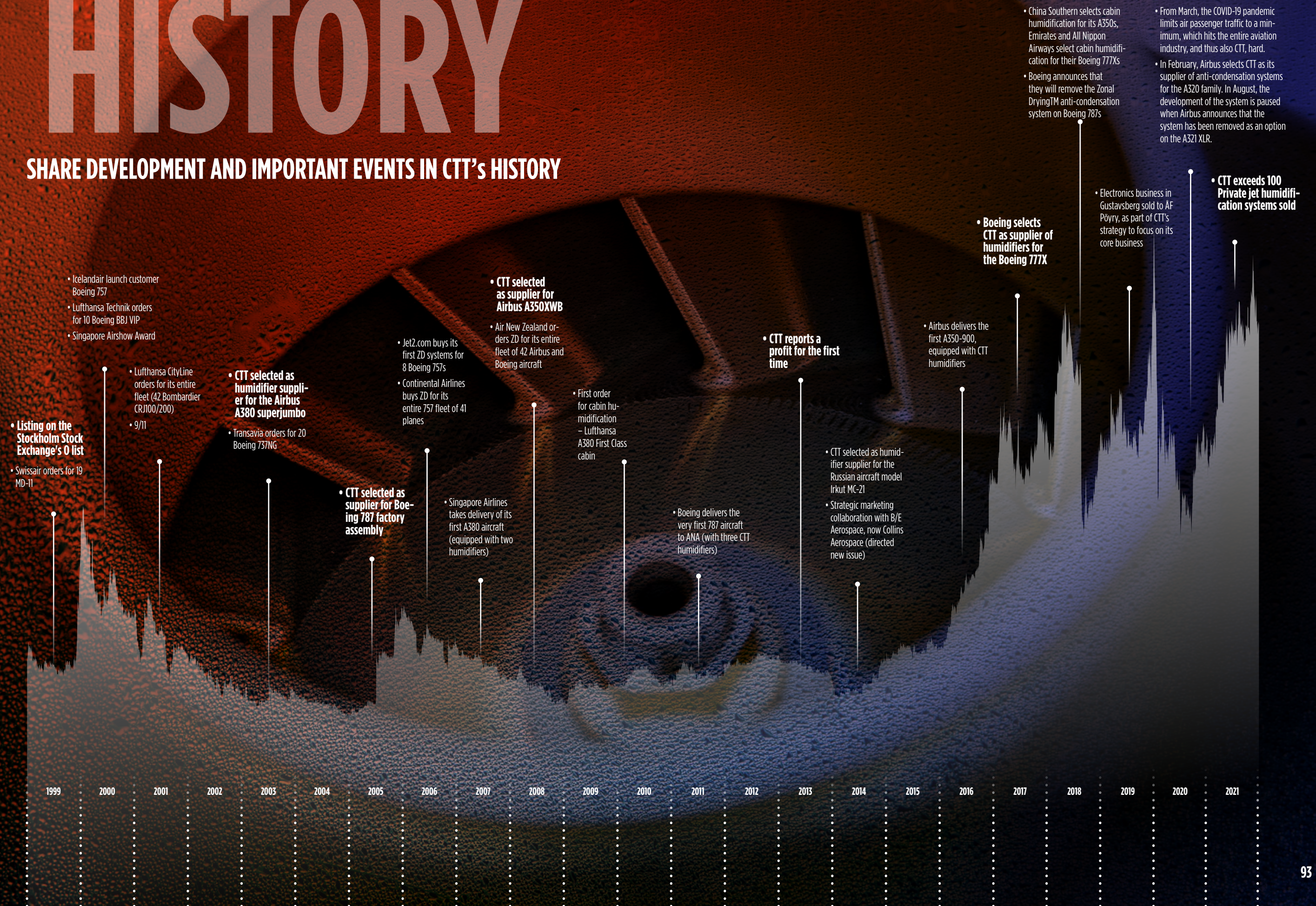
## FINANCIAL CALENDAR

Interim report, Jan–Mar	29 April 2022
Interim report, Apr–Jun	22 July 2022
Interim Report, Jul–Sep	28 October 2022
Year-end report 2022	7 February 2023



# HISTORY

## SHARE DEVELOPMENT AND IMPORTANT EVENTS IN CTT's HISTORY







**CTT Systems AB**

Brukslagarvägen 5, Box 1042, SE-611 29 NYKÖPING, SWEDEN

Co. reg. no. 556430-7741

+46 (0) 155 20 59 00

[info@ctt.se](mailto:info@ctt.se)