

Obducat launch the SINDRE[®] Integra NIL tool

OBDUCAT AB (publ) subsidiary Obducat Technologies AB, a leading supplier of lithography solutions based on NIL (nanoimprint lithography), now launches the new tool platform Sindre[®] Integra. The tool includes the newly developed unit for inline resist coating of the IPS[®] (Intermediate Polymer Stamp) enabling the use of a much wider selection of IPS carrier films as well as IPS resist materials.

The Sindre Integra tool platform is targeted towards the application areas such as optics and photonics, Bio- and medical devices as well as for processes related to fabrication of e.g., GaN-on-Si substrates.

Obducat has been focusing the development activities on the industrialization of the NIL technology and with the launch of the Sindre Integra range, the company take further steps towards enabling an even more flexible tool platform suitable for high volume manufacturing on substrates sizes up to 300mm. The integration of key process steps into one tool unit enables superior yield levels.

Benefits of the Sindre[®] Integra tool platform

The Sindre Integra product line is configured with the latest technology developments such as:

- Inline IPS[®] resist coating
- Inline anti-stick treatment of the IPS®
- Ultra-high UV-light intensity

The integration of the newly developed inline resist coating of the IPS[®], allows for a much wider selection of carrier film material as well as the IPS resist material. The customer will have the possibility to tailor their process by matching carrier materials and resist materials to get the best possible interaction with the anti-stick coating process and finally with the substrate- or resist material. Furthermore, the customer can also optimize the selection of the IPS materials to maximize the number of times the IPS can be used – the tool software allows the customer to choose the number of times the IPS should be used for imprinting of final substrates. The throughput supports up to 60 substrates per hour to be imprinted.

The inline anti-stick coating of the IPS involves a process in which a very thin layer of anti-stick molecules is applied on the surface of the IPS resist layer, which ensures a pattern resolution at the nanometer level while at the same time achieving the desired anti-stick properties of the IPS resist surface. The IPS is handled automatically in an R-2-R (Roll-to-Roll) system.

The ultra-high UV light intensity offered in the tool, is required to enable high throughput as some of the new substrate resist available on the market, need a very high exposure dose. The combined functionality in the tool system of a high exposure dose and the ability to do full area imprint at the same time, translates into a higher cost efficiency and the capability to produce large volumes.

In the Sindre Integra both the lithography step related to the manufacturing of the IPS as well as the substrate imprint is integrated into one and the same tool which reduce footprint requirement and increase the overall cost efficiency of the system. The customer does not have to rely on Obducat to provide prefabricated IPS stamps, which is the case for competing solutions on the market. Furthermore, the customer can develop their own process and the materials used in the process however, if the customer so desires, Obducat can provide a tailored process solution adapted to various application areas.



The Sindre Integra tool platform is targeted towards the application areas such as optics and photonics, Bio- and medical devices as well as for processes related to fabrication of e.g. GaN-on-Si substrates. The applications are expected to see strong growth in the years to come and with this tool platform we expect to be able to secure a strong market position.

Obducat at ISLC and Semicon Europe

Obducat will exhibit at ISLC in Potsdam on October 11-13. In addition, Obducat will be exhibiting at Semicon Europe, being held in Munich on November 16-19.

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About Obducat AB (publ)

Obducat AB (publ) is an innovative developer and supplier of technologies, products and processes used for the production and replication of advanced micro and nano structures. Obducat's products and services serve the demands of companies within the LED, OLED, semiconductor, displays, biomedical and MEMS industries. Obducat's technologies include nano imprint technology, coating technology and wet processing technology. Obducat has offices in Sweden, Germany and China and the headquarter is located in Lund, Sweden. Obducat is a public company. Obducat's shares are traded on the Swedish NGM Main Regulated Equity exchange. Read more at <u>www.obducat.com</u>.