

## Press Release For Immediate Distribution

## SinterCast Launches Third Generation Process Control Technology for Compacted Graphite Iron



System 3000: Fully automated for high volume series production



Mini-System 3000: Product Development and niche volume production

[Stockholm, 15 December 2009] – Building on more than 100 years of accumulated experience, SinterCast has developed a suite of new technologies that combine to form the Company's third generation process control technology for the reliable series production of Compacted Graphite Iron (CGI). Branded as the System 3000, the technology advances include upgraded internal hardware components, a new operating system, new process control software, and extended measurement capability of core thermal analysis sampling technology. The System 3000 maintains SinterCast's established modular hardware format to provide installation flexibility for any foundry layout and process flow, and is configurable for foundries that produce CGI from pressurised pouring furnaces or by ladle pouring.

The new hardware platform is based on state-of-the-art industrial computers with solid state hard drives to ensure operational robustness. The System 3000 also includes enhanced power disturbance filtering to protect against electrical brown-outs and power spikes that are becoming increasingly common in many remote foundry locations. Operators interact with the system via a 19 inch touch screen display that is programmed in the local language and configured according to the preferences of each foundry. The System 3000 also provides comprehensive hardware diagnostics and troubleshooting functions simply by connecting a laptop computer to one of the customer access serial ports.

The System 3000 is launched with the latest version of the SinterCast process control software, PCS 6.0, operating on a rugged XP embedded platform. The version PCS 6.0 software is the sixty-first software release issued by SinterCast since the introduction of the System 2000 process control system that has been successfully operating in foundries around the world since 1999. This frequency of software development – approximately one new release every two months over the past decade – underlines ongoing development intensity within SinterCast. The PCS 6.0 software provides improved operator friendliness and expanded access for customer engineers to independently configure the metallurgical software parameters and to perform maintenance. The results from each thermal analysis measurement are stored by the System 3000 and are available for automatic transfer to the foundry quality control IT system for real-time logging of series production data and traceability.

Following extensive field testing, SinterCast has also released a new version of its Sampling Cup as a part of the System 3000 technology package. Referred to as SP-05, the new Sampling Cup is based on an improved reactive coating that enhances the resolution of the patented Wall Reaction<sup>TM</sup> and simultaneously counteracts the influence of deleterious tramp elements that are becoming increasingly common in the raw material stream, particularly for foundries in the developing world. As a result of the enhanced Wall Reaction<sup>TM</sup>, the SP-05 technology also extends the analysis capability toward higher Carbon Equivalent levels. Together, these improvements reinforce SinterCast's ability to consistently control CGI series production within a narrow range at the low end of the ISO 16112 Standard 0-20% CGI nodularity specification, where casting defects are minimised and thermal conductivity and machinability are optimised. All of SinterCast's new field activities since late-2008 have been conducted with the SP-05 Sampling Cup, and future System 3000 foundry installations will be commissioned with the SP-05 technology. Existing customers have the option to upgrade to the SP-05 sampling technology at any time.

In parallel with the System 3000 launch, SinterCast is also launching the new Mini-System 3000. The Mini-System 3000 uses the same sampling technology and software as the fully automated System 3000, but is based on a simplified hardware platform that has been specifically designed for CGI product development, prototyping and niche volume production. The Mini-System 3000 does not include an integrated wirefeeder, as most product development activities are based on a ladle size of less than 500 kg. Where appropriate, the foundry can source a separate wirefeeder and manually input the magnesium and inoculant wire addition results provided on the operator display screen. All product calibrations developed using the Mini-System 3000 can be directly transferred to the fully automated System 3000 for series production.

"SinterCast's third generation technology incorporates foundry production experience gained from the initial System 1000 process control system launched in 1996, the System 2000 launched in 1999, and an intensive R&D campaign conducted over the past 14 months" **said Mr Steve Wallace, Operations Director**. "The new System 3000 platform has successfully undergone extensive full load simulation testing, corresponding to the continuous production of more than three million cylinder blocks under typical foundry production conditions. We look forward to supporting the future CGI needs of the foundry and automotive industries with this new platform."

"Despite customer Quality Feedback ratings of more than 96% in 2008 and 2009, we strategically decided to turn the economic downturn into an opportunity by focussing our engineering resources on a comprehensive review of our deliverable technology" **said Dr. Steve Dawson, President & CEO**. "The resulting suite of System 3000 technologies provides a new base for our further development, ensuring that we continue to satisfy the needs of our foundry customers for flexibility, robustness, accuracy and independence."

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SinterCast is the world's leading supplier of process control technology for the reliable high volume production of Compacted Graphite Iron (CGI). With at least 75% higher tensile strength, 45% higher stiffness and approximately double the fatigue strength of conventional grey cast iron and aluminium, CGI allows engine designers to improve performance, fuel economy and durability while reducing engine weight, noise and emissions. SinterCast produces a variety of CGI components ranging from 2 kg to 17 tonnes, all using the same proven process control technology. The end-users of SinterCast-CGI components include Aston Martin, Audi, Caterpillar, Chrysler, DAF Trucks, Ford, Ford-Otosan, General Electric Transportation Systems, General Motors, Hyundai, Navistar, Jaguar, Kia, Land Rover, MAN, MAN Diesel, Porsche, PSA Peugeot-Citroën, Renault, Rolls-Royce Power Engineering, Toyota, Volkswagen, Volvo and Waukesha Engine. The SinterCast share is quoted on the Small Cap segment of the Nordic Exchange, Stockholm (Stockholmsbörsen: SINT).