# SinterCast

#### **Table of Contents**

- 2 SinterCast in Brief
- 3 CEO Message
- 4 CGI Business Model & Five Waves Status Report
- 5 Market Development
- 8 SinterCast History
- 9 Technical Offering
- 14 SinterCast and the Environment
- 17 The SinterCast Management
- 18 The SinterCast Board
- 19 Director's Report
- 23 Corporate Governance Report
- 28 Board of Directors' Report on Internal Control
- 29 Income Statement & Statement of Comprehensive Income

- 30 Cashflow Statement
- 31 Balance Sheet Group
- 32 Statement of Changes in Equity Group
- 33 Balance Sheet Parent Company
- 34 Statement of Changes in Equity Parent Company
- 35 Accounting Policies
- 41 Notes
- 53 Signatures
- 54 Audit Report
- 57 Historical Summary Group
- 58 SinterCast Share
- 60 Important Dates & SinterCast Offices

Notes: This document is an unofficial translation of the official Swedish Annual Report

The Director's Report, pages 19-28, includes the Corporate Governance Report, pages 23-28.

Pages 18 and 29-52 conform to IFRS (International Financial Reporting Standards)

#### Highlights

- · Record series production, revenue and operating result
- Series production increases 19% to reach 2.5 million Engine Equivalents
- Start of production of in-line diesel engines for passenger vehicles
- Series production in each of The Five Waves first presented in 2002
- · Five consecutive years for SinterCast-CGI engines to receive a Wards 10 Best Engine award
- · Tracking Technologies secures three new orders: two for Ladle Tracker; one for Cast Tracker
- Current status: 52 installations in 14 countries, supported in 11 languages

**SinterCast** supplies process control technology and solutions for the reliable high volume production of Compacted Graphite Iron (CGI). The SinterCast technology measures and controls the iron before it is cast into moulds, reducing scrap, conserving energy, and ensuring cost-effective series production. The primary application of CGI is in diesel and petrol engine cylinder blocks used in passenger vehicles, and cylinder blocks and heads used in commercial vehicle and industrial power applications. The SinterCast technology is also used for the production of a variety of other CGI components, including exhaust manifolds, turbocharger housings, bedplates and industrial components.

**SinterCast** provides process control technology, know-how and technical support for the reliable high volume production of Compacted Graphite Iron. SinterCast will continue to promote CGI within the foundry and end-user communities to increase the overall market opportunity for CGI and to define the forefront of CGI development, production and application. SinterCast will also develop and promote novel technologies beyond the core CGI market, including tracking and traceability solutions and other precision measurement products that bring enhanced control and profitability to the foundry industry. These focused activities will provide long-term benefits for foundries, end-users, shareholders, and society.

**Compacted Graphite Iron** is a form of cast iron that provides at least 75% higher tensile strength, 45% higher stiffness and approximately double the fatigue strength of conventional grey cast iron and aluminium. In engine applications, the use of CGI enables the production of smaller, more efficient, more performant, and more durable engines with reduced fuel consumption, lower emissions and less noise.

**Tracking Technologies:** With our background in precision measurement in the demanding foundry environment, SinterCast has expanded its technical offering to include a suite of traceability solutions that enable foundries to track ladles, moulds, castings and even the performance of individual operators. These technologies provide the ability to measure every step of the foundry process, and to use these measurements to determine and implement corrective actions that resolve the root cause of defects and process bottlenecks. The Tracking Technologies, including SinterCast Ladle Tracker<sup>®</sup>, SinterCast Cast Tracker<sup>™</sup>, and SinterCast Operator Tracker<sup>™</sup>, can be applied to grey iron, ductile iron, and CGI foundries, and to other metallurgical facilities such as steel mills and heat treating plants.





Dr Steve Dawson, President & CEO

#### **CEO Message**

For a company that specialises in measurement, 2018 was a landmark year for SinterCast, achieving record performance in virtually all of the parameters that we measure.

From the foundation of a 19% increase in series production, our revenue surpassed our previous record by 16%; our operating result was 11% higher; and, our earnings per share were 21% higher. The increase in series production also drove higher Sampling Cup demand, setting new a record of 197,900 Sampling Cups shipped; 17% above our previous best. Ultimately, the progress of 2018 led to our highest dividend proposal, with a total proposal of SEK 5.00 per share. Pending approval of the proposal at the AGM on 23 May, we will have returned SEK 155 million to our shareholders since we first started to provide a dividend in 2010.

One of the highlights of 2018 was the fourth quarter start of production of the Cummins 6.7 litre turbodiesel used in Ram Super Duty pick up applications. The Cummins engine marks our first production of an in-line diesel engine for passenger vehicles, delivering the last wave of the *Five Wave* market development scenario that we first introduced in 2002. With a potential volume of approximately 300,000 Engine Equivalents per year, the Ram production boosted our production above the three million Engine Equivalent milestone in February 2019 and forms the basis of our target for double-digit growth again in 2019.

Looking forward, we see growth opportunities in every sector. The Cummins production secures near-term growth in the passenger vehicle sector and simultaneously reinforces the need for diesel engines, particularly in large vehicles such as SUVs and pick ups, where the SinterCast-CGI engines are used. While diesel engine take rates in Europe decreased from approximately 44% to approximately 36% in 2018, the decline was due to reduced sales of small diesel cars, where

SinterCast-CGI isn't used. In contrast to the small car trend, each of the SinterCast-CGI passenger vehicle V-diesel engines maintained stable or increasing production during 2018 and, in the US, sales of diesel engines increased as new diesel engine options were introduced in the market. For commercial vehicles, the ongoing demand for more performance and lower CO<sub>2</sub> emissions from smaller engine packages continues to provide new CGI series production opportunities, and we continue to regard commercial vehicles as our best long term growth opportunity. The need for CGI in the next generations of heavy duty engines was reinforced by Scania's decision to invest in a new purpose-built CGI foundry in Sweden. The decision was followed by an order for a SinterCast installation on 29 January 2019. With commissioning planned for mid-2020, and with the potential for SEK 20 million of incremental annual revenue within three-to-five years after the installation, the Scania installation provides a strong base for our continued growth in the commercial vehicle sector, and to our continued goal for double-digit growth. We are also optimistic for growth in the industrial power sector, where more stringent emissions standards in the off-road sector continues to provide new SinterCast-CGI product development opportunities. Product development activities are ongoing and we maintain the ambition for industrial power and automotive non-block and head production to continue to contribute approximately 10% of the total volume, even as the core passenger vehicle and commercial vehicle production continues to grow.

The positive outlook for series production is complemented by our equally positive outlook for new installations. While the 2018 installation revenue of SEK 4.6 million was below our historical average of approximately SEK 7.0 million, the final result was partly due to the delay of two Ladle Tracker installations that were ordered during 2018, but not installed before year-end. Today, these Tracker installations, together with the China Shipbuilding Industry Corporation Mini-System 3000 installation announced during the first quarter of 2019, provide a strong start to our 2019 installation campaign. The positive installation outlook also extends to 2020 where the Scania new foundry installation provides a SEK 5 million head start to our 2020 installation campaign. With the current order book, and the new opportunities generated by our Tracking Technologies, we look forward to the opportunity for aboveaverage installation years in 2019 and 2020.

With the momentum of a strong year behind us, and the excitement of breaking the three million Engine Equivalent milestone in February, we are motivated to meet the opportunities in front of us. We look forward to continuing to work with our foundry and OEM partners to develop and launch new CGI products. We look forward to the opportunity to showcase our Tracking Technologies and to launch the fourth generation of our CGI process control technology at the GIFA World Foundry Trade Fair in Germany in June. And, we look forward to establishing new installations and new production records that enable us to continue to reward the longstanding support of our shareholders.

Dr Steve Dawson
President & CEO

#### **CGI Business Model**

SinterCast sells or leases the System 3000 hardware, leases the process control software, sells the sampling consumables, and charges a running Production Fee for each tonne of CGI castings produced using the SinterCast technology. Revenue is also derived from spare parts, customer service, field trials and sales of test pieces. The individual components of the CGI business model are described as follows:



System 3000

- System 3000 Hardware Platform: The System 3000 can be configured to suit the layout and process flow of any foundry. Typical sales prices are €400,000-600,000 for the full System 3000 or System 3000 *Plus*, and €75,000-125,000 for the Mini-System 3000, depending on the configuration and installation requirements. For leased systems, the typical lease period is seven years, but the duration can vary.
- Process Control Software: The software applies the metallurgical know-how and provides the operating logic for the System 3000 hardware. SinterCast charges an Annual Software Licence Fee and retains ownership of the software.
- Sampling Consumables: The consumables consist of the Sampling Cup and the Thermocouple Pair. One Sampling Cup is consumed with each measurement. The Thermocouple Pair is re-used for up to 250 measurements. One SinterCast measurement is required for each production ladle.
- **Production Fee:** A running fee is levied for each tonne of shipped castings, based on the as-cast (pre-machined) weight. There are 20 Engine Equivalents (50 kg each) per tonne.
- **Technical Support:** SinterCast provides engineering service for product development, trials, new installations and calibrations, metallurgical consultancy, and ongoing customer service.



Sampling Cups

The total running fees (sampling consumables, software licence and Production Fee) depend on the ladle size and the casting yield. For typical cylinder block production, the current running fees provide a revenue of approximately €40-50 per tonne of castings, equivalently, €2.00-2.50 for each 50 kg Engine Equivalent. The SinterCast business model is highly scalable, allowing profitability to rise as the installed base grows and as more products enter series production.

#### Five Waves Status Report

Introduced in 2002, the *Five Waves* strategy continues to provide the basis for how the company views the overall market development. The production status for each of the *Five Waves*, based on the annualised year-end production rate of 2.6 million Engine Equivalents, and 2018 vehicle sales, is summarised in the following table:

Wave 1 V-Diesel Passenger Vehicle Engines in Europe	Annualised year-end production: 325,000 Engine Equivalents (16,250 tonnes) Series production for: Audi, Ford, Jaguar, Land Rover, Maserati, Porsche and Volkswagen SinterCast-CGI Components: Cylinder blocks ranging from 2.7 to 4.4 litres Overview: Increased production in 2018, despite overall reduction in diesel penetration
Wave 2 Commercial Vehicle Engines Worldwide	Annualised year-end production: 1,050,000 Engine Equivalents (52,500 tonnes) Series production for: DAF, Ford-Otosan, Hyundai, Jiangling Motors, MAN, Navistar and Scania SinterCast-CGI Components: Cylinder blocks and cylinder heads ranging from 3.9 to 16.4 litres Overview: 40% increase in 2018 with near-term and long-term global growth opportunities
Wave 3 In-Line Passenger Vehicle Diesel Engines	Current status: Start of high volume series production for Cummins and Ram in 4Q18 SinterCast-CGI Components: Cummins 6.7 litre for Ram Super Duty pick ups Overview: Long-term potential depends on performance demands, downsizing and emissions legislation
Wave 4 V-Diesel Passenger Vehicle Engines Beyond Europe	Annualised year-end production: 700,000 Engine Equivalents (35,000 tonnes) Series production for: Ford, Kia, Nissan and Ram SinterCast-CGI Components: Cylinder blocks ranging from 2.7 to 6.7 litres Overview: Stable volume in 2018. Continued growth opportunity as North American pick ups provide diesel options
Wave 5 Passenger Vehicle Petrol Engines Worldwide	Annualised year-end production: 240,000 Engine Equivalents (12,000 tonnes) Series production for: Ford and Lincoln SinterCast-CGI Components: Cylinder blocks ranging from 2.7 to 3.0 litres Overview: Stable production in 2018 with growth potential for additional engines and vehicle applications including hybrids

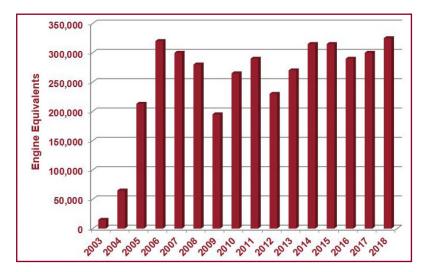
#### Other Growth Opportunities

Automotive - Other than Passenger Vehicle Cylinder Blocks	Annualised year-end production: 110,000 Engine Equivalents (5,500 tonnes)  Series production for: Various OEMs and Tier I suppliers including BorgWarner and Honeywell  SinterCast-CGI Components: Exhaust manifolds, turbocharger housings and bedplates  Overview: 75% growth due to exhaust component ramp-up at customer foundry in China
Industrial Power	Annualised year-end production: 140,000 Engine Equivalents (7,000 tonnes)  Series Production for: Allen Diesels, Cameron Compression, Caterpillar, Cummins, Deutz, Doosan, Federal Mogul, General Electric, Jenbacher, MAN, MTU and Waukesha  SinterCast-CGI components: Agricultural, marine, locomotive, off-road and stationary power applications  Overview: 20% growth in 2018 with opportunities for new installations and new CGI programmes.



#### Market Development

SinterCast continues to view the overall market development according to the Five Waves strategy that was first introduced in 2002. The Five Waves are presented in terms of the main types of engines found in the automotive sector, and the types of vehicles that the engines are used in. For each type of product, SinterCast presents the production volume in terms of Engine Equivalents, where each Engine Equivalent is defined to weigh 50 kg. Accordingly, there are 20 Engine Equivalents per tonne of castings. The SinterCast series production revenue is approximately €2.00-2.50 per Engine Equivalent.

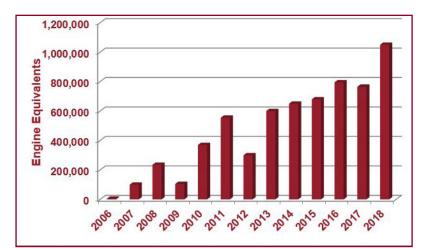


# Wave 1: V-Diesel Passenger Vehicle Engines in Europe

The First Wave started in 1999, when the Audi 3.3 litre V8 became the world's first series production engine with a CGI cylinder block. This niche production was followed by the start of high volume V6 diesel production for Audi and Ford in 2003. Over the last 15 years, CGI has effectively become the standard material for passenger vehicle V-diesel cylinder blocks.

The production data shown in the graph are based on the annualised fourth quarter production. Despite the concern over reduced diesel take rates in Europe, year-on-year production in the *First Wave* increased by 5% in 4Q17, and by a further 8% in 4Q18. The *First Wave* provided annualised

volume of 325,000 Engine Equivalents in the fourth quarter, corresponding to approximately 13% of the total production. While diesel engine take-rates declined for small vehicles in 2018, the *First Wave* is for larger V-type engines used in the popular SUV segment and in luxury sedans. Diesel engines remained popular in these segments during 2018. As the majority of the vehicle application for the VM Motori 3.0 litre V6 diesel is in North America, all of the VM Motori volume is allocated to the *Fourth Wave*. Likewise, Range Rover diesel sales in North America are included in the *First Wave*.



# Wave 2: Commercial Vehicle Engines Worldwide

Commercial vehicle production began in 2006 and, with the exception of the economic downturns in North America in 2009 and in Europe in 2012, the volume has grown almost linearly. Commercial vehicle volume grew strongly in 2018, primarily due to increased demand from DAF and Scania, resulting in approximately 35% year-on-year growth in the fourth quarter. Commercial vehicle production currently accounts for 40% of the total volume and SinterCast continues to view commercial vehicles as the largest long-term growth opportunity. The outlook for commercial vehicle sales in Europe and North America remains positive, providing growth

opportunities derived from the ramp-up of existing programmes and from new programmes coming on-stream. The installation commitment at the new Scania foundry, announced on 29 January 2019, secures continued growth in the commercial vehicle sector. With installation scheduled during 2020, the planned ramp-up of series production is expected to provide SEK 20 million of incremental revenue per year within three-to-five years. With more than 20 SinterCast-CGI engine components in production, the successful CGI benchmarks provide strong references for CGI while offering considerable growth potential in a sector that continuously demands downsizing, performance and fuel efficiency.



Announced at the North American International Auto Show on 12 January 2019, the Ram Super Duty pick up became the first passenger vehicle with an in-line CGI diesel engine.

# Wave 3: In-line Passenger Vehicle Diesel Engines

Series production in the Third Wave began during the fourth quarter of 2018. The application of the Cummins 6.7 litre turbodiesel - based on a SinterCast-CGI cylinder block - in the Ram Super Duty pick up was formally announced at the North American International Auto Show in Detroit on 12 January 2019. With planned volume of approximately 300,000 Engine Equivalents per year, the Third Wave has the potential to provide 10% growth in 2019, and to boost the current series production to the three million Engine Equivalent milestone. Beyond the Ram application, the outlook for the Third Wave remains uncertain due to the increased scrutiny on diesel emissions. Most in-line diesel engines are less than two litres in displacement and are used in small passenger vehicles. In these smaller, lower priced vehicles, the on-cost for advanced emissions treatment systems will be more difficult to absorb, potentially reducing

the market penetration. Most industry analysts forecast a significant decline in small passenger vehicle diesels, as the diesel powertrain cost becomes incompatible with the pricing required for small vehicles. This concern does not apply to in-line diesel engines for medium-duty and heavy-duty commercial vehicles, where the larger engines have significantly higher loading, and where there is no credible alternative to the diesel engine in the foreseeable future.

#### Wave 4: V-Diesel Passenger Vehicle Engines Beyond Europe

The Fourth Wave remained stable in 2018, accounting for approximately 25% of the total production. Led by the 6.7 litre V8 engine in Ford Super Duty applications – the largest SinterCast-CGI production programme – the Fourth Wave provides opportunity for continued growth as the full-size and mid-size pick up trucks for Ford, General Motors and Ram have all committed to diesel engine options as part of their strategies to meet corporate average fuel economy requirements. The full-size pick up trucks from Ford, GM and RM, respectively, have been the top-three best-selling vehicles in the United States for more than five years. While the full-size and mid-size pick ups are expected to contribute to the Fourth Wave the main contribution will continue to come from the Ford 6.7 litre V8 diesel sold in Super Duty pick up applications, where more than 80% of all sales are based on the SinterCast-CGI diesel engine.



Lincoln has announced a plug-in hybrid powertrain based on the SinterCast-CGI 3.0 litre V6 petrol engine, providing 450 horsepower and more than 800 Nm of torque in the Aviator SUV.

# Wave 5: Passenger Vehicle Petrol Engines Worldwide

Production in the *Fifth Wave* remained constant in 2018 at 240,000 Engine Equivalents, with 2.7 litre and 3.0 litre variants of the Ford V6 petrol engine in high-volume production. The 2.7 litre V6 is currently available in Ford and Lincoln vehicles while the 3.0 litre version of the engine is exclusively available in Lincoln vehicles. The 2.7 litre V6 received a coveted Wards 10 Best Engines award at the 2018 North American International Auto Show (NAIAS). At the 2019 NAIAS, Lincoln announced a plug-in hybrid powertrain offering, initially for the Aviator SUV. The plug-in hybrid will be based on the SinterCast-CGI 3.0 litre V6 petrol engine. With 400 horsepower

and 542 Nm of torque in the base engine, the hybrid will provide 450 horsepower and 813 Nm of torque. As the demand for increased performance and improved fuel economy continues to grow, it is expected that the *Fifth Wave* will provide further growth opportunities for SinterCast.



Exhaust manifold and turbocharger housing production for passenger vehicles increased by more than 70% in 2018.

#### Other Growth Opportunities

Beyond the *Five Waves* related to the core cylinder block and head applications, SinterCast also supports the production of passenger vehicle exhaust components and bedplates, and large castings for the industrial power industry. After more than 100% growth in 2017, the combined production in the 'other' category grew by 35% in 2018 to account for approximately 10% of the total production. The long-stated ambition remains for automotive components other than cylinder blocks and heads, plus industrial power components, to contribute approximately 10% of the total volume, even as the core automotive waves continue to grow. SinterCast-CGI product development is ongoing and the demands for weight reduction, increased specific power, and emissions in off-road applications will continue to provide growth opportunities.

#### Alternative Engine Technologies

Several new powertrain technologies have been introduced over the last decade. These include battery electric vehicles, plugin hybrids, conventional hybrids, 48-Volt mild hybrids, and potentially, fuel cells. These technologies have received considerable attention, but the penetration rates remain low. In 2018, plug-in electric vehicles (battery electric and plug-in hybrid) accounted for 2.1% of all new vehicle sales in Europe and 1.2% in the United States. The 2018 penetration in China – the world's largest electric vehicle market – was 3.8%. It is clear that vehicle electrification will grow, but it is important to differentiate between battery electric vehicles and hybrids. Plug-in hybrid, conventional hybrid and 48-Volt mild hybrid vehicles all require internal combustion engines. Most analysts forecast that the majority of all vehicles produced in 2040 will still have internal combustions engines. Indeed, as the market grows, some analysts suggest that more internal combustion engines will be built in 2030 than in 2020. Many industry insiders believe that the prevailing electric technology will be 48-Volt hybrids. In comparison to aluminium, the use of CGI in 48-Volt applications can enable smaller engine packages with similar weight, lower cost, and life cycle energy and CO<sub>2</sub> benefits, providing a future growth opportunity for SinterCast. For the foreseeable future, SinterCast does not regard fuel cells as a competitive threat and does not currently see any credible alternative to diesel engines for heavy-duty road hauling and industrial power applications.



During 2018, a Mini-System 3000 was installed at the Kimura Foundry in Japan for CGI product development and niche volume production, marking the fourth installation in Japan and the 22nd installation in Asia.

#### New Product Development

Following the introduction of the SinterCast Tracking Technologies in 2016 and 2017, the foundry industry started to embrace the technology in 2018. During 2018, the first Cast Tracker installation was installed at the Scania foundry in Sweden and two further orders were received for the Ladle Tracker technology. The SinterCast Ladle Tracker® measures the time and location of every ladle as it moves through the foundry. RFID tags or optical 2D matrix plates are affixed to each ladle and RFID readers or optical cameras are located at key locations in the foundry to ensure that every ladle successfully passes every step. The Ladle Tracker technology enables foundry managers to identify bottlenecks and quantitatively measure ladle fallout, allowing corrective actions to be implemented. The addition of the Cast Tracker™ technology provides complete traceability of the foundry process, linking the coremaking and moulding history to the liquid metal history. This traceability includes the date and time of core production (inception), shelf storage time, pouring (birth) and shake out. Results from microstructure evaluation, visual inspection, and NDT can also be automatically compiled into the database. SinterCast also conducted development of other novel concepts during 2018 - both within and beyond the scope of thermal analysis and ladle tracking. SinterCast will continue to investigate, develop and launch new technologies that reinforce the SinterCast brand as a technology leader in the cast metals industry.

#### SinterCast History gines for passenge diesel in Ford F-150 for CGI and ductile Start of production Wards 10 Best Enof inline diesel enproduction of 2.8 Record Sampling gine award for SinterCast-CGI Cup shipments: 197,900 million Engine Equivalents in April and June Tracker orders iron foundries Record series Scania; Ladle installation at Cast Tracker vehicles Series production above two million consecutive years SEK 100 million Ford announces SinterCast-CGI industrial power 2018 diesel in F-150 lents for three approaches Ramp-up of Cumulative milestone dividend pick up Engine Equivalents Series production for eight consecu-2017 above two million F-150 and F-250 Record revenue; Awards for Ford 30% increase in SinterCast-CGI operating result announced in pick ups with tive quarters New Ladle technology installation First Ladle Tracker™ Tracker<sup>TM</sup> launched Series production engines CGI petrol engine Third consecutive Mexico Engine award for Ram EcoDiesel First CGI aviation Lincoln vehicles \* surpasses two in six Ford and Wards 10 Best engine begins million Engine 2016 FAA approval One millionth Equivalents process year-on-year growth 2015 First bespoke CGI agricultural engine consecutive Wards in operating result CGI petrol engine \* Record revenue; First high volume production; 16% 10 Best for Ram start of production in . Record series 40% increase begins sales diesel engine Record annualised launched CGI petrol engine series production First high volume **Engine Award for** ments in full-size pick ups for Ram litre Ram pick up Ford and Nissan Second Engine commit-Wards 10 Best production for VM Motori 3.0 begins series \* 2014 Ford F-150 engine 2013 revenue established established in China \* Record installation begins for US light First System 3000 First high-volume agreed with Tupy announced, with (SEK 9.0 million) New companies duty pick up and SUV applications Plus installation Diesel ramp-up petrol engine Series Production Daeshin foundries Foa Koki in Japan, Mid-City Foundry and PurePOWER and Korea Fechnologies in Record six new in Korea, FAW Wuxi in China, Active product Saltillo grows to 1.55 million Engine Daedong and development installations: Equivalents 2013 \* 2012 the USA 2011 (\*) Motori launch new Precision in China engine on sale in Series production New installations Navistar and VM vehicle with CGI-SinterCast-CGI First passenger North America surpasses one million Engine Ford begins series at FAW and Land Rover, production of first vehicle engine in Equivalent Germany adopts Process Control system: System third generation Dashiang milestone process control CGI passenger North America engines the SinterCast Development and launch of Luitpoldhütte technology foundry in 2010 3000 tion established in \* Local representaseries production China and India High volume components series production increases by 50% positive cashflow of exhaust SinterCast-CGI vehicle engines in China begins First full-year Year-on-year \* commercial 2008 Eight new launched result 2007 production of MAN and Ford-Otosan New installations Precision foundry Doosan Infracore **(\*** Hyundai 3.0 Litre V8 engine blocks Successful prevehicle engines Europe 3.6 litre V6 and Ford of Start of series in China and at Dashiang commercial for first SinterCast at Ashland Casting Agreement signed New installations V6 diesel engine Ford's Cleveland in Korea Hyundai 3.0 litre Solutions and at foundry Successful preproduction of System 2000 installation in Casting Plant \* 2006 China 2005 \* volume machining ships established 2000 installations Strategic partner-Worrall, Hyundai, for design, rapid foundry automaand Tupy-Mauá Motor Castings at Grainger & New System tion and high 2002-2004 prototyping, mitment: Ford-PSA volume production Ford-PSA 2.7 litre First high-volume V6 diesel engine production com- Machining solu-✓ ISO 9001:2000 tions for high Start of high-\* 2000-2003 Certification volume CGI production: 2.7 litre V6 references in the car, truck and industrial \* First production power sectors suppliers, foundries and control system: System high-volume machining motive industry, tooling solutions with the auto- Intensified sales and generation process marketing activities research institutes Development and launch of second Development of 1999 € 1997-1998 2000 First commercial installation of System 1000: ISO 9001 certification \* Cifunsa, Mexico foundries and automotive for motorcycles, cars and Motorsport programmes Stockholmsbörsen O-list Introduction to Swedish Dual marketing toward first industrial product: Initial experience in Stock Exchange, 1996 Development of \* System 1000 26 April 1993 1992-1995 Fundamental research First technical demon-OEMs trucks on the solidification \* behaviour of CGI 1984-1991 SinterCast AB strations First patent \* founded 1983

# **Surrent Status**

- 25 fully automated process control systems, 23 mini-systems & four tracking systems installed in 14 countries and supported in 11 languages
- Successful references for Ladle Tracker and Cast Tracker technologies
- Series production for passenger vehicle, commercial vehicle and industrial power applications

for Ford 2.7 litre V6 petrol engine

Wards 10 Best production at

Caterpillar

Sampling Cup

produced

Record installation third consecutive

lents in October

and commercial current V-diesel

vehicle focus

India successfully

DCM foundry

First-ever Sinter-Cast-CGI trial in concluded at the

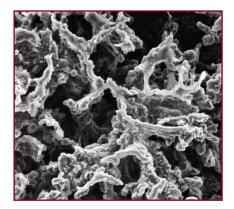
Engine Equiva-

of 1.8 million

performance for

More than 75 components in series production, from 2.7 kg to 9 tonnes >

#### **Technical Offering**



#### Compacted Graphite Iron – Material Benefits

- At least 75% stronger and 45% stiffer than conventional grey iron and aluminium alloys.
- Double the fatigue strength of grey iron and five times the fatigue strength of aluminium at elevated temperatures.
- New engine designs engineers can reduce size and weight while increasing performance.
- Existing designs CGI can eliminate premature failure and allow increased operating loads.
- Ideally suited for casting components that have simultaneous thermal and mechanical loading, such as cylinder blocks and heads, exhaust manifolds and turbocharger housings.
- Used in passenger vehicle, commercial vehicle, and industrial power engines including agricultural, marine, locomotive, off-road and stationary power applications.



#### **CGI** Engine Benefits

- 10-20% lighter than grey iron engines, 10-20% increased power per litre, 75-100% improved durability, and 5-10% reduced operating noise.
- 10-20% shorter than aluminium engines. Reduced length means that all of the components that span the length of the engine are shorter and lighter. The net result is that fully assembled CGI engines can be same weight, or even lighter than, aluminium engines.

These benefits contribute to the ongoing trend toward downsizing in passenger vehicle and commercial vehicle engines – more power and improved fuel economy from small and lighter engine packages. Compared to aluminium, CGI is stronger, consumes less energy and generates less  ${\rm CO_2}$  during production, is more recyclable, and less expensive.



#### The SinterCast Process

- The SinterCast process is based on the measurement and feedforward correction of each ladle as it moves through the foundry.
- The process begins with an accurate analysis of the liquid iron conducted in the patented Sampling Cup.
- Based on the analysis, additional amounts of magnesium and inoculant are automatically added to each ladle to optimise the composition of the iron prior to casting.
- The average corrective addition of magnesium is approximately 35 grams per tonne.
- The two-step measure-and-correct control strategy eliminates variation and ensures cost-effective CGI production.



#### SinterCast Tracking Technologies

- SinterCast has expanded its technical offering to include a suite of traceability solutions that enable foundries to track ladles, moulds, castings and even the performance of individual operators.
- These technologies provide the ability to measure every step of the foundry process, and to use these measurements to determine and implement corrective actions that resolve the root cause of defects and process bottlenecks.
- The Tracking Technologies include SinterCast Ladle Tracker<sup>®</sup>, SinterCast Cast Tracker<sup>™</sup>, and SinterCast Operator Tracker<sup>™</sup>.
- Tracking Technologies can be applied to grey iron, ductile iron, and CGI foundries, and to other metallurgical facilities such as steel mills and heat-treating facilities.

# SinterCast Process Control - Mini-System 3000

The Mini-System 3000 is a purpose-built thermal analysis system for product development, prototyping and niche volume production. 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. The Mini-System 3000 does not include an integrated wirefeeder. The foundry can source a separate wirefeeder and manually input the magnesium and inoculant wire addition results provided on the operator display screen. As with the fully automated System 3000, all analysis results and thermal analysis process parameters are available to foundry supervisors and engineers.

All product calibrations developed using the Mini-System 3000 can be directly transferred to the fully automated System 3000 to provide continuity as products evolve to series production.

#### Mini-System 3000 Specifications

Components	Operator Control Module (OCM)		
	Sampling Mechanism		
	SAM Lighthouse		
	Operator Box		
Foot-print	1,400 x 550 mm		
Max Height	1,630 mm		
Weight	190 kg		
Power Supply	110–120V, 50–60Hz, 2kW max. 220–240V, 50–60Hz, 2kW max. Single Phase. To be specified on order		



SinterCast Mini-System 3000



SinterCast Immersion Sampling

#### SinterCast Sampling Cup

The patented SinterCast Sampling Cup is fabricated from stamped and drawn steel sheet. In comparison to conventional thermal analysis sand cups, the design of the thin-wall immersion sampler ensures a constant sample volume, prevents oxidation of the iron during pour-in filling, provides a more uniform solidification profile and yields a more accurate measurement of undercooling because of the elimination of chill-solidification. The thermal analysis is obtained from two high-accuracy thermocouples that are contained within a protective tube in the Sampling Cup and reused up to 250 times. These design advantages ensure

consistency and are a key element of successful CGI production: the stable CGI window is so small that it is essential that all measured differences in the thermal analysis can be attributed to changes in the solidification behaviour of the iron rather than to variation in the sampling conditions. The walls of the Sampling Cup are coated with a reactive coating that consumes active magnesium in order to simulate the fading of magnesium in the ladle. This patented Mg-fade simulation allows SinterCast customers to safely target the low end of the 0-20% Nodularity window in order to minimise the risk of porosity defects and to optimise material properties and machinability, while safely avoiding flake graphite formation. SinterCast has successfully used steel Sampling Cups and re-useable thermocouples since 1999.

# SinterCast Process Control - System 3000

The fully automated System 3000 provides a flexible, robust and accurate hardware and software platform that enables SinterCast's customers to independently control CGI series production and product development. The System 3000 is comprised of individual hardware modules that can be configured to suit the layout, process flow and production volume of any foundry, both for ladle production and pouring furnaces. The basic configuration consists of one Sampling Module (SAM), one Operator Control Module (OCM), a Power Supply and a network-linked Wirefeeder for automated addition of magnesium and inoculant prior to casting. This configuration provides sampling capacity for approximately 15 ladles per hour. Additional Sampling Modules can be added to increase the throughput. The System also incorporates automatic feedback control of the base treatment process.



Fully Automated System 3000 with two Sampling Modules

#### The System 3000 features include:

- Accuracy: Proven, high resolution SinterCast thermal analysis.
- Process Control: Automatic cored wire correction of magnesium and inoculation for each ladle.
- **Automation:** Automatic base treatment by wire, based on automated input of ladle weight, temperature and historical SinterCast analysis results from previous ladles.
- **User-Friendliness:** Display of magnesium, inoculant and carbon equivalent results as histogram run-charts with all information in the local language.
- **Process Database:** Collection of melting and pouring data into a single database, including all System 3000 thermal analysis results and process data for advanced traceability.
- Consistency: Re-useable thermocouples used for up to 250 measurements to provide accuracy and traceability.
- *Efficiency Benchmarking:* Production results compiled every month and delivered to each customer with analysis and process improvement recommendations from SinterCast engineers.
- *Independent Control:* Supervisor-level access to process parameters, directly at the Supervisor's desktop computer. Full access to all process parameters.
- Robust: Rugged Windows<sup>®</sup> embedded operating system and proven hardware in the foundry environment.
- Remote Support: VPN access by SinterCast for technical support and maintenance.
- Flexible: Pallet mounted (pictured above), individually floor-mounted, or wall-mounted to suit any foundry layout.
- *Image Analysis:* Microstructure analysis according to the SinterCast rating technique adopted by the international ISO 16112 standard for CGI. The image analysis macro is available for use in Image Pro Plus image analysis software.

#### System 3000 Specifications

Components	Sampling Module (SAM) Operator Control Module (OCM) Complete Wirefeeder Power Supply Module
Foot-print	1,200 x 800 mm, on pallet
Max Height	1,960 mm
Weight	392 kg (pallet mounted items) 290 kg (Complete Wirefeeder)
System 3000 Power Supply	110–120V, 50–60Hz, 2kW max 220–240V, 50–60Hz, 2kW max Single Phase To be specified on order
Wirefeeder Power Supply	380–415V, 3 kW max, Three Phase Dry oiled compressed air 5–10 bar
Sampling Rate	1 sample every 4 minutes



Automatic Wirefeeder, including Wirefeeder Head, Control Cabinet, Operator Box and Signal Lamp Assembly

# SinterCast Tracking Technologies

Increasing demands for process efficiency, product traceability and foundry profitability require the ability to measure every step of the foundry process, and to use these measurements to determine and implement corrective actions that resolve the root of the problem. In support of this demand, SinterCast® has developed a suite of tracking technologies that provide new insight for foundry supervisors and managers. These precision measurement and control technologies include SinterCast Ladle Tracker®, SinterCast Cast Tracker™ and SinterCast Operator Tracker™. These technologies can be applied to grey iron, ductile iron and CGI foundries, and also to other metallurgical facilities such as steel mills.

# SinterCast Ladle Tracker®- "Every Ladle, Every Minute"

The Ladle Tracker technology provides a unique solution to correctly identify, trace, and document the movement of ladles throughout the foundry process. Ladle Tracker is comprised of individual hardware modules that can be custom configured to suit the layout, process flow, and production volume of any foundry. The system can also interface with and receive inputs from peripheral devices for temperature measurement, weight, chemistry and wirefeeding data to ensure that every ladle receives all critical treatments and completes all process steps within pre-set time limits.



Together, the Ladle Tracker and Cast Tracker technologies link the core and mould history to the liquid metal history, providing complete traceability.



Tracker Antenna Set (shown) or optical cameras can be positioned at any key measurement location in the foundry.



RFID tags or 2D optical matrix plates (shown) can be used to identify ladles.

#### **Ladle Tracker Features:**

- *Identification:* Precise identification of any number of ladles throughout the casting process via Radio Frequency Identification (RFID) tags or 2D optical matrix plates on each ladle and RFID readers or optical cameras located at any critical position in the process.
- Additional Inputs: Multiple peripheral inputs can be added to the system for enhanced data collection.
- **Process Adherence:** Limits on input parameters, timing sequences and process flow steps can be established for ladles that trigger alarms and lock-out the process to avoid pouring of out-of-spec metal.
- Documentation: Data for each process step is stored in a database with upload capability to any internet connected device and download capability to defined reports. No information is stored on the RFID tag or 2D matrix plate.
- Process Optimisation: On demand daily, weekly and/or monthly reports of ladle movement to identify where
  and why ladles drop-out of the process, allowing supervisors and managers to identify and resolve process
  bottlenecks.
- **Process Improvement:** Quantitatively measure process efficiency improvements and establish KPI targets to link operator performance directly to productivity.
- **Process Traceability:** Ladle movement and process data (temperatures, weights, chemistries, wirefeeder data, etc.) can be uploaded to the foundry database for process traceability and customer assurance.
- *Flexibility:* Flexible hardware platform can be configured to suit the layout, process flow, and production volume of any type of foundry. Additional measurement locations can be added at any time.

- **Robustness:** Robust equipment designed for the foundry environment, including protected RFID tags and 2D optical solutions, provides a highly reliable, low maintenance system.
- Real-time Monitoring: The system can be configured on the main operator interface computer screen for real-time monitoring of ladle status and process data such as weight, temperature, and the performance of ancilliary devices.
- Data Display Options: All results available for downloading, streaming to the foundry quality or ERP system, or viewing in real-time on any internet-connected device.
- Remote Technical Support: VPN access by SinterCast for technical support and maintenance.

# SinterCast Cast Tracker™- "More Measurements, More Control"

Cast Tracker provides complete traceability of each casting from the date and time of core production (inception), shelf storage time, pouring (birth) and shake out. Together with the Ladle Tracker technology, Cast Tracker links the moulding history to the liquid metal history. For the OEM end-user, this novel capability provides complete traceability of each casting. For the foundry, Cast Tracker provides the detailed information (such as cast sequence) needed to determine robust correlations between defects and process parameters.



Real-time position monitoring and tracking with Cast Tracker.

#### **Cast Tracker Features:**

Additional features for Cast Tracker beyond the Ladle Tracker features include:

- Core Traceability: Inputs for core marking that define the date and time of manufacture (inception); determination of shelf storage time; and, identification of the mould in which the cores are set.
- Mould Tracking: RFID tags or 2D optical matrix plates on each flask match the mould with:
  - the marked cores identified by printed bar codes or sand etching
  - the ladle identification, the liquid metal history and the cast sequence within the ladle
  - shakeout time
- Casting Traceability: Synchronisation of the coremaking, mould identification, and metal history data (including pouring times and temperatures), ultimately relating each component to the entire process history.

# 

RFID tags or 2D optical matrix plates provide traceability of every core package, every mould and every flask to the parent ladle.

#### SinterCast Operator Tracker™

Operator Tracker can identify and record which operator performed any task, allowing foundry managers to reward consistent performance, to provide additional training, and to promote and measure efficiency competitions between shift teams. The Operator Tracker technology can also be used to set and quantitatively measure KPI's for individual operators, and to give added confidence to customers.



RFID tags or 2D optical matrix plates enable ladles to be traced throughout the process, linking each mould to the liquid metal history.

#### SinterCast and the Environment

SinterCast contributes to the environment directly and indirectly. In the foundry, the improved efficiency of the SinterCast-CGI technology reduces energy consumption, reduces CO<sub>2</sub> emissions, and reduces the demand for raw materials. On the road, CGI enables the use of more efficient downsized engines, improving fuel economy and reducing CO<sub>2</sub> emissions.



Foundry Efficiency: Process Control and Tracking Technologies.

#### Foundry Efficiency

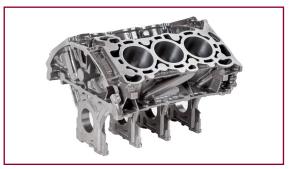
- Improved process control in the foundry, resulting in less scrap and re-melt, reduces energy consumption and CO<sub>2</sub> emissions.
- The energy needed to melt cast iron: 10,000 MJ per tonne.
- Annual energy demand for a foundry producing one million Engine Equivalents with a mould yield of 65%: 800 million MJ.
- For every 1% of scrap reduction, annual energy demand is reduced by 8 million MJ.



The Audi 3.0 litre V6 with a CGI cylinder block is 15 kg lighter than the Mercedes 3.0 litre V6 based on an aluminium cylinder block.

#### Cast Weight Reduction

- SinterCast contributes to the environment by enabling the reliable high-volume production of CGI.
- The increased strength and stiffness of CGI allows engine engineers to achieve 10-20% weight reduction vs. conventional grey iron.
- 15% weight reduction results in 7,500 less tonnes of castings needed for a foundry producing one million Engine Equivalents.
- Savings of 7,500 tonnes of castings decreases liquid metal demand by approximately 10,000 tonnes, resulting in savings of 100 million MJ of electricity with a corresponding reduction in CO<sub>2</sub> emissions.



The SinterCast-CGI 2.7L V6 provides the same torque as the 5.0L V8.

#### Passenger Vehicles

- The increased strength of CGI allows engineers to reduce weight while increasing combustion pressure, resulting in more power per litre.
- Smaller CGI engines can replace larger engines while providing similar performance.
- Typical CGI weight reduction in a large passenger vehicle engine is approximately 25 kg.
- Every 100 kg of weight reduction results in fuel savings of approximately 0.2 litres for every 100 km driven.
- 25 kg weight savings corresponds to 100 litres of fuel saved over 200,000 km life of the vehicle.
- 100 litres of fuel savings corresponds to a reduction of approximately
   250 kg of CO<sub>2</sub> over the life of each vehicle.

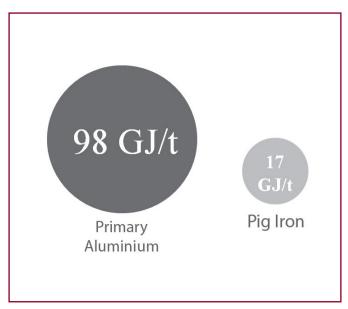


Engine downsizing with CGI can save 100 kg, corresponding to 250 kg of CO<sub>2</sub> per year (Courtesy Navistar)

#### **Commercial Vehicles**

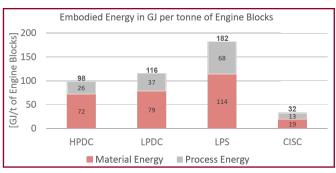
- Weight reduction in commercial vehicles enables increased payloads, reduced vehicle-miles, and improved fuel economy.
- Every 100 kg of weight reduction results in fuel saving of approximately 0.1% in commercial vehicles.
- In a typical 12 litre engine with a fuel consumption of 40 litres per 100 km, SinterCast-CGI can reduce weight by approximately 100 kg.
- Weight reduction of 100 kg can yield fuel savings of 0.04 litres for every 100 km.
- Fuel savings amount to 100 litres of diesel fuel per year based on annual mileage of 250,000 km.
- The reduction of 100 litres of diesel fuel results in a reduction of 250 kg of CO<sub>2</sub> per year and two tonnes of CO<sub>2</sub> over the typical lifetime of the vehicle.

#### Cast Iron vs Aluminium - Life Cycle Energy



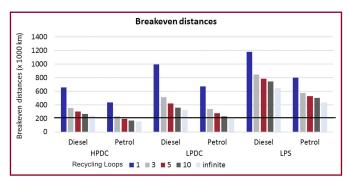
The energy required to produce virgin aluminium is five times higher than the energy needed to smelt iron

The production of primary aluminium from ore requires approximately five times more energy than the mining and smelting of iron. The foundry processing of aluminium also requires more energy than cast iron. To provide a net benefit to society, the reduced weight of the aluminium engine must provide fuel savings that are larger than the extra energy contained in the raw materials plus the extra energy consumed to produce the cylinder block. For a typical 1.6 litre fourcylinder engine, the weight difference between an aluminium engine and a cast iron engine is usually less than 10 kg. Weight reduction in passenger vehicles saves approximately 0.2 litres of petrol (0.15 litres of diesel) for each 100 km driven and 100 kg of weight saved. Considering the 34.2 MJ/litre energy content of petrol (38.6 MJ/litre for diesel), a 10 kg lighter aluminium engine must drive approximately 200,000-500,000 km before the initial energy penalty is recovered. This is beyond the life of most vehicles. For V-type engines, CGI engines are often lighter than aluminium engines. For these engines, it is impossible for aluminium to provide a net CO2 benefit to society.



The energy needed to produce one tonne of aluminium cylinder blocks is three-to-six times higher than the energy needed to produce one tonne of cast iron cylinder blocks

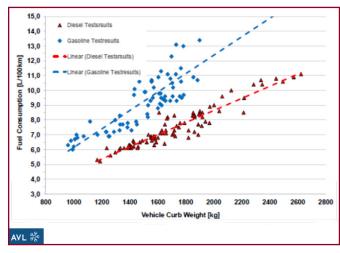
The total energy embodied in a component is the sum of the energy in all of the raw materials arriving at the foundry, plus the energy consumed by the manufacturing processes needed to produce the component. The plot shows the total energy for aluminium cylinder blocks produced by High Pressure Die Casting (HPDC); Low Pressure Die Casting (LPDC) and Low Pressure Sand Casting (LPS) and in Cast Iron Sand Casting (CISC). To provide a net benefit to society, the higher energy consumed during the production of an aluminium cylinder block must be recovered through reduced fuel consumption during the life of the vehicle.



Under most production conditions, the higher energy needed to produce an aluminium cylinder block cannot be recovered during the life of the vehicle

The plot shows the driving distance required to payback the higher energy consumed during the manufacture of an aluminium cylinder block. Each recycling 'loop' dilutes the embodied primary energy in an aluminium cylinder block. The dark blue bar represents the total energy after one recycling loop. The light grey bar represents the total energy after infinite recycling. Most aluminium cylinder blocks in service today have been recycled less than five times. The horizontal black line represents the average life of a passenger vehicle – 210,000 km. Under most production conditions, the use of aluminium does not a provide a net energy benefit to society.

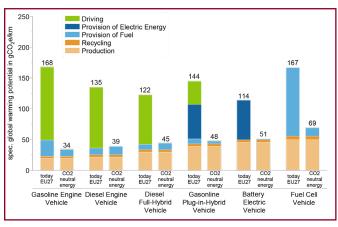
#### Vehicle Life Cycle - Clean Diesel



The higher efficiency of diesel engines reduces fuel consumption and CO<sub>2</sub> emissions. The difference is most significant in larger vehicles, where SinterCast-CGI engines are used. (Courtesy AVL)

Diesel fuel contains approximately 12% more energy than petrol and diesel engines have a higher thermodynamic efficiency than petrol engines. The net result is that diesel engines are 20-30% more fuel efficient than petrol engines.

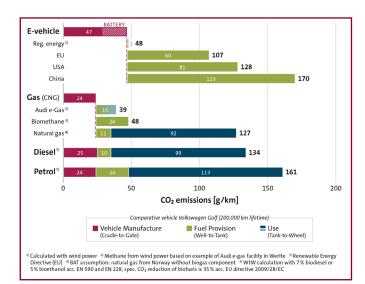
Diesel engines contribute to reduced  $CO_2$  emissions. However, the political debate has evolved from  $CO_2$  and climate change toward  $NO_x$  and air quality. Several major Tier I suppliers to the automotive industry have presented solutions to reduce diesel  $NO_x$  emissions below legislated levels. These solutions are generally based on combining established treatment technologies to sequentially reduce the  $NO_x$ . These technologies enable continued use of diesel engines in larger SUV, luxury vehicles and pick ups, where the benefits are greatest, and where drivers seek the drivability, range and fuel economy offered by diesels. The cost of these technologies may be too high for lower cost vehicles, reducing the diesel take rate in small vehicles.



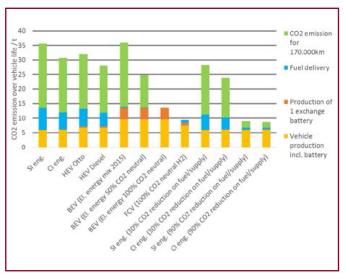
Life cycle analysis conducted by IAV GmbH, Germany, based on a 200,000 km vehicle lifespan [C. Severin et. al. 38<sup>th</sup> Vienna Motor Symposium 2017]

Today's legislation focusses only on the tailpipe emissions during the on-road use phase, with no regard for the energy consumption or emissions during the manufacture of the vehicle; the provision of the fuel (or electricity); or, the end-of-life recycling. The full environmental impact of electric vehicles must include the additional energy needed to manufacture the batteries and the emissions associated with the generation and distribution of the electricity used to charge the batteries.

For a typical mid-size vehicle, battery manufacturing adds 15% to the  $CO_2$  emissions associated with vehicle manufacture and assembly. For a full-size vehicle, the larger battery pack can add 60-70% to the vehicle  $CO_2$  emissions. Life cycle studies (left and below) consistently show that the total life cycle  $CO_2$  of diesel vehicles and electric vehicles is not significantly different, and that electric vehicles can often have higher life cycle  $CO_2$  emissions.



Life cycle analysis conducted by Wingas GmbH and Volkswagen, based on a 200,000 km vehicle lifespan [L. Möhring et al. 38<sup>th</sup> Vienna Motor Symposium 2017]



Life cycle analysis conducted by FEV, Germany, based on a 170,000 km vehicle lifespan [C. Schernus et al. 29th AVL Engine and Environment Conference 2017]

#### The SinterCast Management



The executive management with more than 50 years of combined service

#### Steve Wallace

Operations Director Rejmyre, Sweden Born 1967

Nationality: British Employed since 2003 \*No. of shares: 8,000

\*As of 15 March 2019

#### Steve Dawson

President & CEO
London, United Kingdom
Born 1962
BEng, MASc, PhD, PEng, FIMechE
Nationality: Canadian, British
Employed since 1991
\*No. of shares: 37,500

#### **Daphner Uhmeier**

Finance Director
Rönninge, Sweden
Born 1962
BSc
Nationality: Swedish
Employed since 2004
\*No. of shares: 12,000

#### First SinterCast Trial in Russia



Delegates at the Russian Conference on the Science and Technology of Cast Iron observe the first SinterCast-CGI trial in Russia, conducted at the KAMAZ foundry in October 2018.

#### The SinterCast Board



Hans-Erik Andersson Chairman

Stockholm, Sweden Born 1950, Nationality: Swedish

#### Other Assignments

Board Member of Anticimex, New TopHolding AB, JLT Risk Solutions AB and Chairman of Skandia

#### Professional background

Former Chairman of Cision AB, Semcon AB, Erik Penser Bank and Canvisa AB as well as CEO Skandia, Nordic Region Head Marsh & McLennan Companies and Executive Director Mercantile & General Re

Elected 2013 5,000 SinterCast Shares



Lars Hellberg Board Member BsC

Göteborg, Sweden Born 1959, Nationality: Swedish

#### Other Assignments

President & CEO of Fortaco Group Oy, Member of the Board of Directors at Komas Oy

#### Professional background

Former Executive Board Member of Wärtsilä Group, Saab Automotive Group, General Motors Europe Quality Board and Volvo Cars Senior leadership teams

Elected 2018

0 SinterCast Shares



Robert Dover Board Member FR Eng, FIMechE, FIED, FRSA

London, United Kingdom Born 1945, Nationality: British

#### Other Assignments

Chairman, e-PPI Ltd, Autoscan Ltd, Advanced Propulsion Centre UK Ltd and Dymag Ltd

#### Professional background

Professor of Manufacturing, Warwick University, Professor of Engineering, Coventry University, Former Chairman and CEO of Jaguar and Land Rover. Former Chairman and CEO Aston Martin, Former Vice President, Ford Motor Company

Elected 2004

1,249 SinterCast Shares



Caroline Sundewall Board Member MBA

Skillinge, Sweden Born 1958, Nationality: Swedish

#### Other Assignments

Board Member Cramo Oy, Elanders, Hemfosa, Mertzig Asset Management and the Tillväxt Helsingborg Foundation. Founder & owner Caroline Sundewall AB, Chairman and co-founder of Streber Cup Tennis Foundation

#### Professional background

Former Business Journalist, Commentator and Editor for Dagens Industri, Affärsvärlden, Sydsvenska Dagbladet and Finanstidningen. Business Controller at Ratos, worked at Chase Manhattan Bank, London and Handelsbanken.

Elected 2017

2,000 SinterCast Shares



Jun Arimoto Board Member BEng

Rickmansworth, United Kingdom Born 1954, Nationality: Japanese

#### Other Assignments

No other Board duties

#### Professional background

Former Powertrain Executive of ISUZU MOTORS Ltd, Japan. Former Managing Director and Member of the Board of ISUZU subsidiary companies in Europe and China for 16 years in total. Former General Sales Manager of Perkins Engines (Peterborough) Ltd.

Elected 2018

500 SinterCast Shares



Steve Dawson President & CEO, Board Member BEng, MASc, PhD, PEng, FIMechE

London, United Kingdom Born 1962, Nationality: Canadian, British

#### Other Assignments

No other Board duties

#### Professional background

Former Technical Director and Chief Operating Officer, SinterCast Group Senior Research Engineer, LTV Steel

Elected 2007

37,500 SinterCast Shares



Andrea Fessler Alternate Board Member BA, JD

Hong Kong, China Born 1968, Nationality: Canadian

#### Other Assignments

Executive Director at Premiere Performance of Hong Kong

#### Professional background

Corporate lawyer with extensive transactional experience in North America, Europe and Asia Former SinterCast Board Member from 2003 to 2013

Elected 2018

6,249 SinterCast Shares

Information regarding Board meeting presence is presented on page 26 Information regarding Board remuneration is presented on pages 26 and 42-43 Note: All information as of 15 March 2019.

#### Directors' Report

The Board of Directors and the Managing Director of SinterCast AB (publ), corporate identity number 556233-6494, hereby submit the Annual Report and consolidated financial statements for 2018. SinterCast AB, the Parent Company of the SinterCast Group, is a publicly traded limited liability company with its registered office located in Stockholm, Sweden.

#### Operations

In all of our key metrics, SinterCast posted record performance in 2018. Compared to our previous full-year records, revenue increased by 16%; operating result increased by 11%; earnings per share increased by 21%; Sampling Cup shipments increased by 17%; and, series production increased by 19%, providing double-digit growth across the board. Within series production, each of the four main sectors contributed to the growth, with year-on-year volumes up by 4% for passenger vehicles; 41% for commercial vehicles; 113% for automotive components other than cylinder blocks and heads; and, 45% for industrial power components.

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 size, weight, noise and emissions. The SinterCast technology, with 52 installations in 14 countries as of 15 March 2019, is primarily used for the production of petrol and diesel engine cylinder blocks and exhaust components for passenger vehicles, cylinder blocks and heads for mediumduty and heavy-duty commercial vehicles, and industrial power engine components for agriculture, marine, rail, offroad and stationary engine applications. SinterCast supports the series production of components ranging from 2.7 kg to 9 tonnes, all using the same proven process control technology. As a specialist supplier of precision measurement and process control solutions to the metals industry, SinterCast also offers a suite of Tracking Technologies, including the SinterCast Ladle Tracker®, Cast Tracker<sup>TM</sup> and Operator Tracker<sup>TM</sup> to improve process control, productivity and traceability in a variety of applications.

#### Organisation

With successful high volume CGI production in customer foundries located in Europe, Asia and the Americas, SinterCast has established a global organisation with employees and offices in Sweden, the United Kingdom, the United States, China and Korea.

The global organisation includes functions for Sales & Marketing, Operations, Research & Development, Process Engineering and Finance & Administration. All of these functions report directly to the President & CEO of the SinterCast Group and Managing Director of SinterCast AB. The global Sales & Marketing function is responsible for supporting the commercial needs of existing customers and for the active development of new foundry and OEM business opportunities. The Operations function is responsible for the production and supply of the control systems, tracking systems and sampling consumables, commissioning of new installations, and quality management, including the current ISO 9001:2015 certification. The Research & Development function is responsible for the continuous improvement of the core thermal analysis technology, the process control software, new product development and general metallurgical support. The Process Engineering function is responsible for the metallurgical planning and commissioning of new installations and customer training, technical support of ongoing foundry production activities, field trials, and technical support of prospective customers. The centralised Finance & Administration function, based at the Technical Centre in Katrineholm, is responsible for supporting the needs of all Group companies with regard to finance, control, administration, human resources and information technology. The Finance & Administration function also supports the Board and the President & CEO in various matters.



Announced at the North American International Auto Show on 12 January 2019, the Cummins 6.7 litre turbodiesel used in the RAM Super Duty pick up started foundry production during 4Q 2018. The programme has the potential to provide approximately 300,000 Engine Equivalents per year.

#### Legal Structure

SinterCast AB (publ) is the Parent Company of the SinterCast Group, with its registered office located in Stockholm, Sweden. On 31 December 2018, the Parent Company had 16 (16) employees, four (four) of whom are female. The majority of the operations are managed by the Parent Company while local operations in the United Kingdom, United States, Korea and China are managed by the local companies. The information given for the Group in this report corresponds in all material respects to the Parent Company. However, the result for the period may differ between the Group and the Parent Company due to intercompany transactions between the Parent Company and its subsidiaries.

The Parent Company holds all of the patents and trademarks and controls the activities of the Group. The legal structure of the SinterCast Group includes the Parent Company, SinterCast AB (publ), and its subsidiaries SinterCast Ltd in the United Kingdom, SinterCast Inc in the USA, SinterCast Trading (Beijing) Co., Ltd in China, SinterCast Korea Co., Ltd in Korea and SinterCast SA de CV and SinterCast Servicios SA de CV, both in Mexico.

As of 31 December 2018, the Group had 21 (21) employees, four (four) of whom are female. SinterCast is well positioned to support global market activities and to drive the future growth of the company.

# Patents, Intellectual Property and Research & Development

The company has implemented a strategy to protect its technology through patents or other intellectual property rights to preserve its leading position within CGI process control and Tracking Technologies. The company applies for patents in selected countries that are relevant to the foundry and/or automotive industries, while retaining some core technology as knowhow.

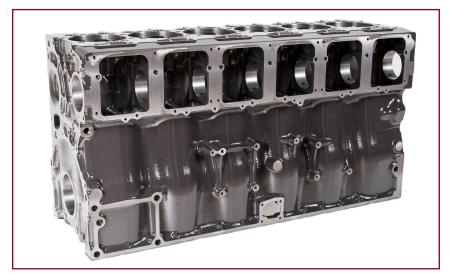
SinterCast currently holds 8 (8) patents, granted or pending, and maintains 42 (49) individual national phase patents

worldwide. These patents address the SinterCast metallurgical technology, thermal analysis, the Sampling Cup for CGI, and product applications and machining.

The emphasis of the R&D activity is to continuously improve the accuracy and the reliability of the thermal analysis and process control software and to develop the SinterCast Tracking Technologies. The SinterCast Ladle Tracker® technology ensures that all treatments and processes are performed within the specified limits, improving process efficiency, product quality, and productivity. The SinterCast Cast Tracker<sup>™</sup> offers complete traceability of each casting from the date of manufacture of the cores (inception), shelf storage time, pouring (birth) to shake out. Installation discussions are ongoing for CGI process control systems and for the new Tracking Technologies, for, grey, CGI and ductile iron foundries, and for other metal processing applications. As production references become established, the suite of Tracking Technologies will begin to contribute to the total installation revenue. SinterCast is also investigating the development of other unique technologies - within and beyond the scope of thermal analysis - to improve quality and production efficiency in the cast iron foundry industry.

#### **Environment**

SinterCast operates within the environmental limits established by local and national legislation and does not have any operations that require specific environmental permission or concessions from the authorities. The accuracy of the SinterCast process enables foundries to produce CGI castings with a lower scrap rate, thus reducing the emissions and the cost associated with re-manufacturing. As a CGI-enabler, the SinterCast technology contributes to the production of smaller and more fuel-efficient engines, thus reducing CO<sub>2</sub> emissions in passenger vehicle and commercial vehicle applications. In general, the engines produced using SinterCast-CGI provide approximately 20-30% better fuel efficiency and 20-30% less CO<sub>2</sub> emissions than the nearest available petrol engine options.



On 29 January 2019, Scania ordered a SinterCast process control system for its new purpose-built CGI production facility. The installation will be commissioned in 2020, providing the potential for SEK 20 million of incremental annual revenue within three-to-five years after the installation.

#### Risks and Uncertainty Factors

Uncertainty factors for SinterCast include the timing of OEM decisions for new CGI engines and other components, adherence to start-of-production dates and ramp projections, the global economy for new vehicle sales, technology trends and emissions legislation, and the individual sales success of vehicles equipped with SinterCast-CGI components.

In Europe, passenger vehicle sales have increased for the last five years. Most forecasters indicate a stable near-term outlook for passenger vehicles and moderate growth for commercial vehicles. However, political uncertainty remains and this could affect infrastructure, investment, trade and, ultimately, vehicle sales. In Asia, the dominant Chinese market has shown recovery in the commercial vehicle sector, which represents the primary opportunity for CGI. Growth for SinterCast in China depends on the continued modernisation of road infrastructure, enforcement of emissions legislation, and acceptance of the SinterCast business model. In North America, passenger vehicle sales remain strong and SinterCast has benefitted from the recent market growth and the trend toward larger crossovers, SUVs and pick ups. Although the top-three best-selling vehicles in America have recently committed to diesel engine options, the long-term outlook for diesel passenger vehicles remains uncertain. The possible renegotiation of international tariffs and free trade agreements could also have an impact on the global passenger vehicle and commercial vehicle markets. For full risk and uncertainty factor information, please see note 26 on pages 50 and 51.

#### **Financial Summary**

#### Revenue

The revenue for the SinterCast Group relates primarily to income from equipment, series production and engineering service.

Revenue Breakdown	January-December		
Amounts in SEK million if not otherwise stated	2018	2017	
Number of Sampling Cups shipped	197,900	144,600	
Equipment <sup>1</sup>	4.6	3.7	
Series Production <sup>2</sup>	81.3	60.7	
Engineering Service <sup>3</sup>	1.8	1.2	
Other	0.0	0.0	
Total	87.7	65.6	

- 1 Includes revenue from system sales and leases and sales of spare parts
- 2 Includes revenue from production fees, consumables and software licence fees
- 3 Includes revenue from technical support, on-site trials and sales of test pieces

The January–December 2018 revenue amounted to SEK 87.7 million (SEK 65.6 million). Revenue from series production increased to SEK 81.3 million (SEK 60.7 million), due to a

19% increase in series production and a 37% increase in Sampling Cup shipments to 197,900 (144,600) Equipment revenue amounted to SEK 4.6 million (SEK 3.7 million) primarily due to the installation of a SinterCast Mini-System 3000 and a wirefeeder at the Shanxi Sanlian Casting Co., Ltd foundry in China, the rental of a SinterCast Mini-System 3000 to the Tupy foundry in Ramos Arizpe, Mexico, the sale of wirefeeding equipment at the Scania and Tupy foundries, and the installation of a Cast Tracker system at the Scania foundry in Sweden. Engineering Service amounted to SEK 1.8 million (SEK 1.2 million) following support provided to various customers globally and the sale of test pieces.

#### Results

The business activities of SinterCast are best reflected by the Operating Result. This is because the "Result for the period after tax" and the "Earnings per Share" are influenced by the financial income and costs and by the revaluation of tax assets.

Results Summary	January-D	ecember
Amounts in SEK million if not otherwise stated	2018	2017
Operating Result	29.4	17.7
Result for the period after tax	32.7	18.6
Earnings per share (SEK)	4.6	2.6

The January–December 2018 operating result of SEK 29.4 million (SEK 17.7 million), increased by SEK 11.7 million as a result of higher gross results of SEK 18.3 million primarily derived from higher revenue, combined with higher operating costs of SEK 6.6 million, primarily due to increased sales-related expenses, increased R&D costs and the fourth quarter nonconformity provision. The Result for the period after tax amounted to SEK 32.7 million (SEK 18.6 million), increased by SEK 14.1 million, primarily related to the increased operating result of SEK 11.7 million and increased tax income of SEK 2.4 million.

#### **Deferred Tax Asset**

Tax income for the January–December 2018 period amounted to SEK 3.3 million (SEK 0.9 million), of which SEK +5.5 million was due the reassessed deferred tax calculation and SEK -2.2 million was due to the change in the Swedish corporate tax rate from 22% to 21.4% in 2019 and 2020 and to 20.6% after 2021 and onwards. The estimated future taxable profit and deferred tax asset calculation is reassessed every quarter. As of 31 December 2018, SEK 171.6 million (SEK 147.0 million) of the SinterCast total carried-forward tax losses are the basis of the updated calculation, resulting in SEK 35.6 million (SEK 32.3 million) being capitalised as a deferred tax asset.

Cashflow Summary	January-De	Cashflow Changes	
Amounts in SEK million if not otherwise stated	2018	2017	2018 vs. 2017
Cashflow from operations, before change in working capital	31.6	18.9	12.7
Change in working capital	-6.8	-2.0	-4.8
Cashflow from operations	24.8	16.9	7.9
Cashflow from investing activities	-2.6	-3.7	1.1
Cashflow from financing activities, including dividend	-19.5	-28.4	8.9
Exchange rate differences in cash and cash equivalents	0.0	0.0	0.0
Cashflow total	2.7	-15.2	17.9
Liquidity	32.8	30.1	

#### Cashflow, Liquidity and Investments

The January–December 2018 cashflow from operations increased by SEK 7.9 million due to the cashflow increase before change in working capital of SEK 12.7 million and the SEK 4.8 million increase in working capital, primarily related to increases in short-term receivables. Total investments amounted to SEK 2.6 million, primarily related to the activation of products under development (SEK 1.6 million), facilities and computer hardware upgrades (SEK 0.1 million), production equipment (SEK 0.8 million) and patents (SEK 0.1 million). The total cashflow amounted to SEK 2.7 million (SEK -15.2 million), primarily due to the dividend of SEK 19.5 million (SEK 28.4 million). Liquidity on 31 December 2018 was SEK 32.8 million (SEK 30.1 million). SinterCast has no loans.

#### Annual General Meeting 2019

The Annual General Meeting 2019 of SinterCast AB (publ) will be held on Thursday 23 May 2019.

Shareholders wishing to have a matter considered at the Annual General Meeting should provide written submissions to agm.registration@sintercast.com or to the company: SinterCast AB (publ), Kungsgatan 2, 641 30 Katrineholm, Sweden, at least seven weeks prior to the Annual General Meeting for the proposal to be included in the notice of the meeting. Further details on how and when to register will be published in advance of the Annual General Meeting.

#### Dividend Distributed in 2018

The Annual General Meeting of SinterCast AB (publ) held on 24 May 2018 approved an ordinary dividend for the financial year 2017 amounting to SEK 2.75 (2.5) per share and no extraordinary dividend (SEK 1.5). A total amount of SEK 19.5 (28.4) million was distributed to the shareholders.

#### Proposed Dividend 2019

The Board's intention is to continue to provide an ordinary dividend to the shareholders, based primarily on the cashflow from operations. In the event that the Board considers that the liquidity exceeds the amount needed to support the operational requirements and strategic objectives, the Board has the option to propose an extraordinary dividend or a share buy-back to further adjust the liquidity.

The Board of Directors propose an ordinary dividend of SEK 3.50 per share (SEK 2.75 per share) with an extraordinary dividend amounting to SEK 1.50 (SEK 0.0 per share), representing a distribution of SEK 35.5 million (SEK 19.5 million) to the shareholders of SinterCast AB (publ) for the financial year 2018, distributed to the shareholders in two equal payments of SEK 2.50. The Board proposes 27 May 2019 as the record date for the first payment and 27 November 2019 as the record date for the second payment. In deciding the amount of the ordinary dividend to be proposed to the AGM 2019, the Board considered cashflow from operations, the financial position, investment requirements and other factors, such as market outlook, growth strategy and the internal financial forecast for the Group.

As a basis for the Board's dividend proposal, the Board of Directors made an assessment in accordance with Chapter 18, Section 4 of the Swedish Companies Act including the liquidity of the Parent Company and the Group, the need for financial resources, the current financial position, and the long-term

ability to meet commitments. The Group reports an equity ratio of 90% (91%) and a net cash amount of SEK 32.8 million (SEK 30.1 million). Unrealised changes in the value of assets and liabilities at fair value have had a net effect on equity of SEK -0.1 million (SEK -0.2 million). The Board of Directors also considered the Parent Company's result and financial position and the Group's position in general. In this respect, the Board of Directors has taken into account known commitments that may have an impact on the financial positions of the Parent Company and its subsidiaries. The proposed dividend does not limit the Group's ability to make investments or raise funds, and it is the Board's assessment that the proposed dividend is well-balanced considering the nature, scope and risks of the business activities as well as the capital requirements for the Parent Company and the Group.

#### Proposed Allocation of Profits in SinterCast AB (publ)

The following earnings in the Parent Company are at the disposal of the Annual General Meeting.

Result for the year	31,393,688
Result brought forward	2,398,206
Share premium reserve	35,336,610
(Amounts in SEK)	

The Board of Directors proposes to the AGM that earnings be distributed as follows.

(Amounts in SEK)	
A dividend of SEK 5.0 per share shall be distributed	35,450,665
To be retained by the Parent Company	33,677,839
Total	69.128.504

#### Events after the Balance Sheet Date

There have been no significant events since the balance sheet date of 31 December 2018 that could materially change these financial statements. The following press releases have been issued:

16 January 2019 – Ram launches new SinterCast-CGI diesel engine at North American International Auto Show

28 January 2019 – China Shipbuilding Industry Corporation adopts SinterCast process control technology

29 January 2019 – Scania orders SinterCast process control technology for new Compacted Graphite Iron foundry

20 February 2019 – SinterCast Results October-December 2018 and Full Year Results 2018

4 March 2019 - SinterCast Nomination Committee proposals

12 March 2019 - Series production breaks three million Engine Equivalent milestone



SinterCast-CGI is used for two of the six engine options in the Ford F-150. The 2.7 litre V6 Ecoboost petrol engine is referred to as "the best-selling engine option in America's best-selling vehicle", while the 3.0 litre V6 turbodiesel won a coveted Wards 10 Best Engine award at the 2019 North American International Auto Show.

#### Corporate Governance Report 2018

#### Corporate Governance in SinterCast

SinterCast focuses primarily on providing process control technology and know-how for the reliable high volume production of Compacted Graphite Iron. SinterCast promotes CGI within the foundry and end-user communities to increase the overall market opportunity for CGI and to define the forefront of CGI development, production and application. This focus and these efforts will secure SinterCast's global leadership in the field of CGI. SinterCast also builds upon its technical expertise in thermal analysis and cast iron process control to develop new technologies beyond the core CGI market. These focused activities will provide the foundation for increasing the long-term value of the company. As a technology led company, SinterCast is able to grow and prosper by earning the respect of its customers.

Corporate Governance at SinterCast is aimed to ensure continued strong development of the company and, consequently, that the Group fulfils its obligations to shareholders, customers, employees, suppliers and society.

Corporate Governance includes: establishing the overall operational goals and strategy of the company; ensuring that there is an effective system for follow-up and control of the company's operations; ensuring that there is a satisfactory process for monitoring the company's compliance with laws and other regulations relevant to the company's operations; and, defining necessary guidelines to govern the company's ethical conduct and ensuring that the company's external communications are characterised by openness and that such communications are accurate, reliable and relevant. The Group's risks are well-analysed and risk management is integrated in the work of the Board and in operational activities.

#### External Regulation of Corporate Governance

The Swedish Annual Accounts Act prescribes that listed companies shall, on a yearly basis, present a Corporate Governance Report, to be included in the Annual Report. The Swedish Companies Act defines the legal framework for limited liability companies including rules for the Articles of Association, the share, the Annual General Meeting (AGM), and the management of the company. The Corporate Governance Report must be in accordance with the Swedish Code of Corporate Governance which is applicable to all Swedish companies whose shares are traded on a regulated market in Sweden.

#### SinterCast Shareholders

The SinterCast shares have been listed since 26 April 1993 and are quoted on the Small Cap segment at Nasdaq Stockholm stock exchange. On 31 December 2018, Swedish shareholders held and controlled 80.6% (80.6%) of the capital and votes in SinterCast AB. The largest shareholder, Försäkringsbolaget Avanza Pension AB (Sweden), held 12.4% (12.1%) of the capital and votes as a nominee shareholder. SinterCast AB had 2,783 (2,909) shareholders on 31 December 2018. The ten largest shareholders, of which five (five) were nominee shareholders, held 53.8% (52.2%) of the capital and votes. As of 31 December 2018, the SinterCast Board, management and employees controlled 1.1% (1.1%) of the capital and votes.

During the year, shareholders have provided feedback and proposals to the Board, the Managing Director and to the Nomination Committee.

#### **Nomination Committee**

Nomination Committee prior to the AGM 2018

The Nomination Committee, elected by the AGM 2017, consisted of Ulla-Britt Fräjdin-Hellqvist (Chairman), Hans-Erik Andersson (Chairman of the Board of Directors), Andrea Fessler and Aage Figenschou. The Committee concluded that the current Board fulfilled the demands imposed on it in consideration of the company's position and future focus. Also, prior to the AGM 2018, Board Members Laurence Vine-Chatterton, Carina Andersson and Jason Singer declined re-election. As a result of this review, the declined re-elections, and after consultations with the shareholders, the Nomination Committee proposed to the AGM 2018 that the Board Members, Hans-Erik Andersson, Robert Dover, Caroline Sundewall and Steve Dawson be re-elected and that Jun Arimoto and Lars Hellberg be proposed as a new Board Members and Andrea Fessler was proposed as a new alternate Board Member. The Nomination Committee proposed the Board remuneration to the AGM and nominated the Auditor for election, for the period until the next AGM.

#### Annual General Meeting (AGM) 2018

The AGM was held on Thursday 24 May 2018, in Stockholm, Sweden. All Members of the Board, the Group Management, the Nomination Committee and the external Auditor were represented during the meeting. The AGM was attended by 36 (48) shareholders and employees, in person or by proxy, representing 1,959,209 (1,360,444) votes.

Hans-Erik Andersson was elected as Chairman of the AGM. During the AGM, presentations were provided by Dr Ralf Marquard, a former executive manager at AVL, Deutz, FEV and MAN and by Dr Steve Dawson, Managing Director. During his presentation, Dr Dawson provided an overview of recent market activities and presented an outlook for the potential market development of SinterCast.

The Auditor presented how the audit work was conducted and presented the annual Audit Report to the AGM. The AGM adopted the Annual Report and the consolidated financial statements as of 31 December 2017, as presented by the Board of Directors and the Managing Director; decided upon allocation of the company's result; and, granted the Directors and the Managing Director discharge from liability.

The Nomination Committee presented how it conducted its work during the year and presented its proposals. Thereafter, the AGM decided, for the period until the next AGM, six ordinary Board Members and one alternate Board Member; that the company shall have a registered auditing company as auditor; that the Board shall receive a total remuneration of SEK 960,000 (SEK 1,120,000), with no remuneration for the Managing Director nor for the alternate Board Member, and that the Nomination Committee shall consist of four (four) Members.

The AGM also decided upon a remuneration policy in respect of the Managing Director and other members of the Group Management and authorised the Board to decide upon

#### Overview of Corporate Governance of SinterCast

# Nomination Committee

The SinterCast Nomination Committee is, after consultation with the shareholders, responsible for nominating candidates for election to the Board; to propose remuneration for the Board and for each member of the Board; to nominate Auditors for election; to make recommendations on remuneration for the external auditors; and, to establish certain other proposals for consideration at each AGM. The majority of the members of the Nomination Committee are to be independent of the company and its Group Management. No members of the Group Management are to be members of the Nomination Committee and at least one member of the Nomination Committee is to be independent of the company's largest shareholder. The AGM appoints members of the Nomination Committee or specifies how members shall be appointed. The Nomination Committee also considers the merits of equal gender distribution on the SinterCast Board with regard to the requirements of the company and the potential contribution of each new candidate.

# General Meeting of Shareholders

The Shareholders' main influence to govern the company is during the AGM, which is the company's highest decision-making body, where the Shareholders meet the Board of Directors, the Management and the Company Auditors and where the Shareholders are given the opportunity to raise questions and to vote on the proposals distributed prior to the meeting. The shareholders shall be given the opportunity to exercise their ownership role in an active, well-informed manner. All shares represented at the AGM have the same voting rights. The Board is elected annually at the AGM and the majority of the Directors elected shall be independent of the company and its Group Management. Independence shall be determined by a general assessment of all factors that may give cause to question the individual's independence.

# Articles of **Association**

The Articles of Association of SinterCast defines the name, location, objectives of the company, number of shares, number of Board Members, number of Auditors, and proceedings for convening Annual General Meetings. Changes to the Articles of Association must be decided by the AGM. The Articles of Association of SinterCast do not regulate dismissal of Directors.

The Articles of Association is available on SinterCast's website.

# Compensation Committee

The Board shall appoint a Compensation Committee whose main tasks are to monitor and evaluate the remuneration guidelines that the AGM is legally obliged to establish, as well as the current remuneration structures and levels in the company and to propose new incentive programmes to the Board to decide upon. The Compensation Committee shall also agree on the principles for remuneration and other terms of employment of the Managing Director and, after advice from the Managing Director, for Directors and Managers reporting directly to the Managing Director. The Compensation Committee shall also monitor and evaluate programmes for variable remuneration, both ongoing and for those that have ended during the year.

#### **Board of Directors**

The Board is appointed at the Annual General Meeting. The Board is responsible for establishing the overall operational goals and strategy of the company and for ensuring that there is an effective system for follow-up and control of the company's operations. The Board shall fulfil applicable independence rules. The AGM appoints the Chairman of the Board. The Chairman's role is to head the Board's work and ensure that the Board completes its mandate. The Board has executed a Work Programme including instructions regarding distribution of work and financial reporting, as a complement to the regulations of Swedish Companies Act, Articles of Association of the Company and the Swedish Code of Corporate Governance and other instructions.

# **Audit** Committee

On behalf of the Board, the responsibility of the Audit Committee is to ensure that the company has adequate internal controls and formal routines to ensure that the company's financial reports are produced in accordance with legislation, applicable accounting standards and other requirements for listed companies. The Audit Committee has established a Review Group. The primary task of the Review Group is to ensure the quality of the financial reports. The Audit Committee is also responsible for the evaluation of the Auditors' work, fees and independence and assists the Nomination Committee with proposals for potential Auditors. The Audit Committee also assists the Group Management in determining how identified risks will be handled in order to ensure good internal control and risk management. The Audit Committee prepares and decides on the Corporate Governance Report.

# Work Programme and other Instructions

Each year the Board adopts a written Work Programme documenting the Board's responsibilities and regulating the internal division of duties between the Board; its Committees and Group Management; the decision-making process within the Board; the Board's meeting schedule; summonses to Board meetings; agendas and minutes, and the work of the Board and its committees on accounting and auditing matters and financial reporting. The Work Programme also regulates how the Board shall receive information and documentation in order to be able to make well informed decisions. Other controlling documents adopted by the Board include the Finance Policy and the Authorisation Policy, including the organisation chart and the Code of Conduct for the company.

# Managing Director

The Board appoints the Managing Director who is responsible for the operational and strategic management of the company in accordance with the Board of Directors' instructions and guidelines.

The Managing Director has established. as the President & CEO for the SinterCast Group, the Group Management including the Operations Director and the Finance Director.

# External Auditor

The company shall appoint one or two Auditors with not more than two Alternate Auditors. A registered accounting firm may also be appointed as Auditor.

The company's statutory Auditor shall be appointed by the AGM to examine the company's annual accounts and accounting practices and to review the Board's and the Managing Director's management of the

The Auditor shall present its report to the owners at the AGM in the annual audit report.

acquisition and disposal of SinterCast shares, as proposed by the Board of Directors. During the AGM the shareholders raised various questions to the Board and management. All of the proposals presented to the AGM were approved by the shareholders.

#### **Board of Directors**

At the AGM 2018, Hans-Erik Andersson, Robert Dover, Caroline Sundewall and Steve Dawson were re-elected as Board Members. Hans-Erik Andersson was re-appointed as Chairman. Jun Arimoto and Lars Hellberg were elected as new Board Members and Andrea Fessler was elected as a new alternate Board Member. Laurence Vine-Chatterton, Carina Andersson and Jason Singer declined re-election and were thanked for their many contributions. The Board remuneration, decided at the AGM 2018, shall be divided between the Chairman SEK 320,000 (SEK 320,000) and four (five) ordinary Board Members SEK 160,000 (SEK 160,000) each, with no remuneration for the Managing Director. With the exception of the Managing Director, no member of the Board holds an operational position in the company. The Board is judged to be independent of the company and its management. A more detailed description of the Board of Directors is presented on page 18. The content of the main meetings is summarised in the table below.

#### **Statutory Board Meeting**

In the statutory Board meeting held immediately after the AGM, Hans-Erik Andersson was re-confirmed as Chairman of the Board. Hans-Erik Andersson and Caroline Sundewall were elected to constitute the Compensation Committee. Steve Dawson was re-elected Managing Director for SinterCast AB (publ) and President & CEO of the SinterCast Group. Further, the entire Board was elected to constitute the Audit Committee. Caroline Sundewall and Lars Hellberg were elected to constitute the Review Group.

#### Chairman of the Board

The Chairman directed the Board's activities and promoted the overall efficiency of the Board. The Chairman ensured that the Board's activities were conducted in accordance with the Swedish Companies Act and other applicable laws and regulations and ensured that the resolutions of the Board were implemented. The Chairman also conducted the evaluation of the Board's activities and shared the evaluation with the Nomination Committee. The Chairman approved the agenda for each Board meeting in consultation with the Managing Director. The Chairman had regular communication with the Managing Director, relayed opinions from shareholders to the other Board Members and acted as spokesperson on behalf of the Board.

#### **Board Meetings**

During 2018, the Board of Directors of SinterCast carried out eight minuted meetings. In connection with every quarterly report, the Managing Director presented the market and financial outlook and reported on operations and important current events. The Board of Directors dealt with long-term strategies, structural organisational issues, approval of the budget for the following year, the annual evaluation of the Board of Directors, and risk assessment. Individual Board Members also assisted the Group Management in various strategic and operational matters. The Work Programme defines the Board's work during the year.

#### Managing Director and Group Management

The SinterCast Board appointed Steve Dawson as the Managing Director for SinterCast AB (publ) and President & CEO for the Group. The Managing Director, as responsible for the operational and strategic management of the company, has managed the company in accordance with the Board of Directors' instructions and guidelines. The Managing Director assisted the Chairman with the preparation for each Board

Main Board Meetings During the Calendar Year including Auditor presence						
February	April	May	July/August	November		
Market Report and Financial outlook	Approve 1Q financial report	Market Report and Financial outlook	Market Report and Financial outlook	Market Report and Financial outlook		
Approve Book Closing Report	Approve Annual Report	AGM preparations	Approve 2Q financial report	Approve 3Q financial report		
Evaluate Managing Director	Approve AGM notice	Statutory Board Meeting	Approve Strategy and Business plan	Approve Finance Policy		
AGM preparations and decisions	Auditor present at Audit Committee Meeting	Auditor present at Audit Committee Meeting	Revise and approve Work Programme	Approve Budget for the coming year		
Decide upon incentive programmes, if any				Auditor present at Audit Committee Meeting		

#### Board Meeting Summary and Remuneration of the Board elected at the AGM 2018

	Board _	Presence <sup>2</sup>			Presence <sup>2</sup>		
	Remuneration (SEK) <sup>1</sup>	Board Meetings	Audit Committee	Compensation Committee	Independent <sup>3</sup>		
Hans-Erik Andersson <sup>4</sup>	320,000	8/8	4/4	2/2	Yes		
Robert Dover	160,000	8/8	4/4	-	Yes		
Caroline Sundewall <sup>4, 5</sup>	160,000	7/8	4/4	2/2	Yes		
Jun Arimoto <sup>6</sup>	160,000	7/7	3/3	-	Yes		
Lars-Erik Hellberg 5, 6	160,000	7/7	3/3	-	Yes		
Steve Dawson	-	8/8	4/4	-	No		

- 1. Decided for the period 24 May 2018 23 May 2019
- 2. For the period 4 April 2018 3 April 2019
- 3. Independent of the company, the management and major shareholders
- 4. Member of the Compensation Committee
- 5. Member of the Review Group, Fee SEK 20,000 each
- 6. Jun Arimoto and Lars-Erik Hellberg were elected on 24 May 2018 at the AGM 2018

and Audit Committee Meeting and distributed information, according to the Work Programme, to be decided upon by the Board. In addition, the Managing Director provided the Board with monthly reports including significant events and financial information.

The Managing Director established, as the President & CEO for the SinterCast Group, the Group Management including the Operations Director and the Finance Director. More detailed information of the Managing Director and the Group Management is presented on page 17.

#### **Compensation Committee**

The Compensation Committee, elected by the Board, consists of Hans-Erik Andersson and Caroline Sundewall. The tasks and responsibilities of the Compensation Committee are defined in the Board's Work Programme. During the year, the Compensation Committee has evaluated variable remuneration programmes, special remuneration given for extraordinary efforts and the remuneration policy approved by the AGM. The Committee has also reviewed the remuneration for the Managing Director and the Group Management.

Since the AGM 2018, the Compensation Committee carried out two minuted meetings. The Board was informed of the Compensation Committee's activities and ratified its proposals.

#### Remuneration Policy for Group Management

The Annual General Meeting 2018 decided upon a remuneration policy in respect of the Managing Director and other members of the Group Management as follows:

The remuneration shall consist of a balanced combination of fixed remuneration, variable remuneration, pension and other benefits. The total remuneration shall be in accordance with market practice and shall be based on performance. The fixed remuneration shall be individually determined and shall be based on each individual's responsibility, role, competence and position. Variable remuneration shall be based on predetermined targets on the Group level and the individual level, considering the effect on the long term result. In extraordinary situations a special compensation may be paid out to attract and retain key competence. Variable remuneration and special compensation may not exceed an amount corresponding to 75 percent of the fixed annual salary.

Pension benefits are in the form of defined contribution plans.

A defined contribution plan is a pension plan under which the Group pays fixed contributions into a separate entity. The Group has no legal or constructive obligations to pay further contributions if the entity does not hold sufficient assets to pay all employees the benefits relating to employee service in the current and prior periods. Variable remuneration and special compensation in extraordinary situations shall not constitute a basis for pension as far as this does not conflict with applicable collective agreement or applicable law.

Upon termination by the company, the notice period for the Managing Director is nine months, and six months for the other members of the Group Management. Upon termination of the Managing Director by the company the Managing Director is entitled to a severance payment corresponding to nine months compensation. Deduction shall not be made for remuneration paid by another employer. No severance payments have been agreed with the other members of the Group Management.

The Board of Directors and, on behalf of the Board of Directors, the Compensation Committee, shall be entitled to deviate from the guidelines if there are specific reasons in an individual case.

The main conditions for remuneration to the Group Management in the current employment agreements are described in Note 5 in this Annual Report.

There were no material transactions between the company and any of the Board Members during the year, with the exception of the ordinary Board fees.

#### **Audit Committee**

During the Statutory Board Meeting, all Board Members were elected to sit on the Audit Committee and two Board Members were elected to constitute a separate Review Group. The primary task of the Review Group is to ensure the quality of the Financial Reports.

During the year, the Audit Committee has ensured that the company has adequate internal controls and formal routines to ensure that approved principles for financial reporting and internal controls have been applied, and that the company's financial reports have been produced in accordance with legislation, applicable accounting standards and other requirements for listed companies.

The Review Group reviewed each financial report in detail, provided feedback to the Finance Director and the Auditors

and reported its observations regarding the financial reports in advance of the Board's approval of the financial reports.

The Audit Committee met the Auditor during the year to discuss the Audit Report and the audit plan. The Audit Committee also met the Auditor in the absence of the Group Management. The Audit Committee evaluated the Auditors' work and provided feedback to the Nomination Committee in preparation for the election of the Auditor during the Annual General Meeting 2019. The Audit Committee also determined and identified risks to be handled in order to ensure good internal control and risk management. The Audit Committee prepared and approved the Corporate Governance Report for 2018. During the period 5 April 2018 - 4 April 2019, the Audit Committee carried out four minuted meetings.

#### **External Auditor**

At the AGM 2018, Öhrlings PricewaterhouseCoopers was re-appointed as Auditor and Tobias Stråhle was re-appointed as Auditor in charge by PwC. The Auditor in charge has had four Auditors assisting in the audit work during the year. The audit follows an audit schedule, based on the Auditor's risk assessment, in agreement with the Audit Committee.

Prior to the AGM 2018, in conjunction with the approval of the Annual Report 2017, the Auditor met with the Audit Committee. The Auditor reported on the audit of the company's annual accounts and consolidated accounts and accounting practices and reported observations directly to the Audit Committee. The Auditor audited the company's annual accounts and accounting practices and reviewed the Board's and the Managing Director's management of the company. The Auditor presented the annual Audit Report at the AGM 2018 and provided a presentation of the Audit Plan for 2018. The Audit Report contained a statement that the Annual Report has been compiled in accordance with the relevant legislation and recommended that the Directors and the Managing Director be discharged from liability.

The Auditor provided a presentation of the Audit Plan for 2018 during the April Audit Committee meeting and met with the Board of Directors at the Board meeting in May, where the Auditor reported observations directly to the Board of Directors both with and without the presence of the Group Management. The Auditor provided a follow-up of the Audit Plan for 2018 during the May, November and April Audit Committee meetings and presented the result from the review of the financial report for the period January-September 2018 and gave audit feedback from the interim audit procedures that were conducted during the third quarter of 2018. The

Auditor
Öhrlings
PricewaterhouseCoopers AB
Tobias Stråhle, Authorised
Public Accountant
Company auditor since 2013.
Assignments: Medivir AB, Trention AB
Hoist Group Holding Intressenter AB,
Liv Ihop AB, Saxlund Group AB, Advanced
Stabilized Technologies Group AB,
Stockwik Förvaltning AB

Auditor also had separate discussions and meetings with the Chairman and company management during the year.

In conjunction with the approval of this Annual Report 2018, the Auditor met with the Audit Committee. The Auditor reported on the audit of the company's annual accounts and consolidated accounts and accounting practices and reported observations directly to the Audit Committee. The Auditor audited the company's annual accounts and accounting practices and reviewed the Board's and the Managing Director's management of the company.

#### **Nomination Committee**

Nomination Committee after the AGM 2018

At the AGM 2018, Hans-Erik Andersson, Chairman of the Board of Directors, Ulla-Britt Fräjdin-Hellqvist, Andrea Fessler and Aage Figenschou were re-elected as members of the Nomination Committee and Ulla-Britt Fräjdin-Hellqvist was appointed as Chairman. The committee is judged to be independent of the company and the largest shareholder.

The Chairman of the Board has described to the Nomination Committee the process applied for the annual evaluation of the Board of Directors and Managing Director and has provided information regarding the results of these evaluations to the Nomination Committee. The Nomination Committee's proposals to the AGM 2019 are to be presented in the notice of the AGM and on the company website. During the AGM 2019 the Nomination Committee will also present how it conducted its work and explain its proposals. Since the AGM 2018, the Nomination Committee of SinterCast carried out several informal meetings and one minuted meeting. According to rules regarding equal gender distribution, the Nomination Committee intends to report to the upcoming AGM how it has fulfilled its work regarding gender distribution in the Board.

The Nomination Committee can be contacted at the following e-mail address: nomination.committee@sintercast.com.

#### Information

SinterCast must comply with the EU Market Abuse Regulation nr 596/2014 (MAR), which include strict requirements of how SinterCast shall manage inside information. The MAR-rules include rules of how insider information shall be disclosed; under which conditions the disclosure may be postponed; and when SinterCast is obliged to keep a list of persons having access to inside information (a so-called logbook).

During 2018, the company has used the digital tool InsiderLog to ensure compliance under the EU market abuse regulation MAR and the insider policy of the company; from the decision to postpone the disclosure of insider information; up to the mandatory message including the close of the logbook and the disclosure date, to the Swedish Finansinspektionen. Only authorised personnel have access to InsiderLog.

#### Summary

According to the Swedish Companies Act, the Board is responsible for ensuring that the company's organisation is designed in such a way that the bookkeeping, financial management and the company's financial conditions are controlled in a satisfactory manner. The Swedish Code of Corporate Governance clarifies and prescribes that the Board

is to ensure that the company has adequate internal controls and formal routines to ensure that approved principles for financial reporting and internal controls are applied, and that the company's financial reports comply with legislation, applicable accounting standards and other requirements for listed companies.

It has been decided by the Board that SinterCast shall comply with the Swedish Code of Corporate Governance and present

a Corporate Governance Report in accordance with the Code including the Board of Directors' Report on internal control of financial reporting. The procedure and routines of SinterCast are compliant with the Corporate Governance code and this Corporate Governance Report does not indicate any significant deviations from the code.

#### Board of Directors' Report on Internal Control and Risk Management of the Financial Reporting

#### Internal Control

The Board of Directors has the overall responsibility for internal control related to financial reporting. An important part of the Board's internal control management is to issue policies and instructions for the organisation with the objective to maintain a low risk profile regarding financial and legal matters, including: the Work Programme that clarifies the Board of Directors' responsibilities and regulates the internal distribution of work between the Board, its committees and the management; the Finance Policy, to define the Board of Directors' instructions regarding risk management and financial reporting, to ensure an effective risk profile and correct financial reporting; and the Authorisation Policy, including the organisation chart. In addition to the policies and instructions, the Board has established the Audit Committee. The entire Board constitutes the Audit Committee and the primary task of the Audit Committee is to ensure that established principles for financial reporting and internal control regarding financial reporting are followed and that appropriate relations are maintained with the Auditor. The Audit Committee has established a separate Review Group. The primary task of the Review Group is to ensure the quality of the financial reports. The management and the Audit Committee assess the most critical accounting areas on an annual basis to prepare instructions for the financial reporting and to define how to apply the accounting policies according to IFRS, including accounting judgements and estimates.

#### Risk Assessment

The Business is monitored in a structured process and associated risks have been discussed and evaluated during most Board Meetings. Any change in significant risks will result in changes in the instructions for the preparation of financial reports. Processes to track changes in accounting regulations and to ensure that these changes are implemented correctly in the financial reporting are in place, in which the Auditors play an important role. The most critical accounting areas for SinterCast have been defined and include the valuation of deferred tax on tax losses carried forward, the principle of capitalisation of research and development costs and patent costs.

#### Control Activities and Monitoring

The primary purpose of control activities is to prevent, or to discover at an early stage, errors in the financial reporting so that these can be addressed and rectified. Control activities take place on both the overview and the detail levels within the Group. Routines and activities are designed in order to find and rectify significant risks associated with the financial reporting. Regarding control activities in critical areas of the financial reporting, the management follows the business regularly and conducts normal control activities on daily operation, monthly, quarterly and year-end closings. Quarterly reports and the Annual Report have been sent to the Board and the Audit Committee for review and approval. The management and the Board especially monitored critical accounting areas, including: quarterly review of the estimated future taxable profit and deferred tax asset calculation, by reviewing the forecast for secured series production programmes and probability factors (the forecasted contribution from secured production, reduced by the forecasted expenses for the operations provides the base for the final deferred tax asset calculation); the revenue recognition of system sales and related revenue streams, in which contract review including delivery terms and fulfilment of contractual obligations are included to define the individual revenue streams (equipment, Engineering Service, Annual Software Licence Fee); and, review of research and development projects during the period to assess to what extent expensed costs should be capitalised.

The Board's monitoring of the internal control with respect to financial reporting took place through the Audit Committee follow-up on the financial reporting where the Review Group's detail review plays an important role. In advance of each major Board Meeting, management distributed pre-defined and various ad hoc reports to the Board. The reports and key audit areas were reviewed and discussed during the Board Meetings. The results of internal self-assessment and reports from the Auditors have been reported to the Board.

#### Information and Communication

All external information must be provided in accordance with the listing agreement for listed companies in Sweden and according to EU market abuse regulation MAR. Information concerning the SinterCast Group and the Parent Company may only be provided by the Managing Director. The Board of Directors has issued and approved the Interim Reports and the Annual Report of the financial year. The reports have been published on the website after having first been sent to Nasdaq Stockholm stock exchange.

# **Income Statement**

		GR	GROUP		PARENT COMPANY	
Amounts in SEK million	Note	2018	2017	2018	2017	
Revenue	1, 9	87.7	65.6	87.1	64.8	
Cost of goods sold	3, 17	-18.8	-15.0	-18.8	-15.0	
Gross result		68.9	50.6	68.3	49.8	
Gross result %		79%	77%	78%	77%	
Cost of sales and marketing	3, 5, 9	-21.4	-18.7	-21.4	-18.7	
Cost of administration	3, 4, 5, 9	-7.4	-6.3	-7.4	-6.3	
Cost of research & development	2, 3, 5, 9	-10.3	-7.3	-10.3	-7.3	
Other operating income	10	0.0	0.0	0.0	0.0	
Other operating costs	10	-0.4	-0.6	-1.1	-0.3	
Operating result		29.4	17.7	28.1	17.2	
Financial income		0.1	0.1	0.1	0.2	
Financial costs		-0.1	-0.1	-0.1	-0.1	
Financial net	11	0.0	0.0	0.0	0.1	
Result before income tax		29.4	17.7	28.1	17.3	
Income tax	12	3.3	0.9	3.3	1.0	
Result for the period for the Parent Company shareholders		32.7	18.6	31.4	18.3	
Average number of shares, thousands	25, 29	7,090.1	7,090.1	7,090.1	7,090.1	
Earnings per share, SEK	29	4.6	2.6	4.4	2.6	
Earnings per share diluted, SEK	29	4.6	2.6	4.4	2.6	
Dividends per share, SEK		2.8	4.0	2.8	4.0	

# Statement of Other Comprehensive Income

	GRO	PARENT COMPANY		
Amounts in SEK million	2018	2017	2018	2017
Results for the period for the Parent Company shareholders	32.7	18.6	31.4	18.3
Other comprehensive income				
Items may be reclassified to the income statement:				
Translation differences, foreign subsidiaries	-0.1	-0.2	-	-
Other comprehensive income, net of tax	-0.1	-0.2	-	_
Total comprehensive income for the period	32.6	18.4	31.4	18.3
Total comprehensive income attributable to:				
Shareholder of the Parent Company	32.6	18.4	31.4	18.3
Non-controlling interests	_	_	_	_

# **Cashflow Statement**

		GROUP		PARENT COMPANY	
Amounts in SEK million	Note	2018	2017	2018	2017
Operating activities					
Operating result		29.4	17.7	28.1	17.2
Adjustments for items not included in the cashflow					
Depreciation	13, 14	2.2	1.5	2.2	1.5
Other		0.0	0.0	0.0	0.0
Unrealised exchange rate differences		0.0	-0.1	0.0	-0.1
Received interest		0.1	0.0	0.1	0.0
Paid interest		-0.1	-0.1	-0.1	-0.1
Paid income tax		0.0	-0.1	0.0	-0.1
Total cashflow from operating activities before chang	ge in working capital	31.6	18.9	30.3	18.4
Change in working capital					
Inventory	17	-2.3	0.1	-2.4	0.1
Operating receivables	15	-6.9	0.8	-6.7	0.4
Operating liabilities	18, 19, 21, 22	2.4	-2.9	3.4	-1.4
Total change in working capital		-6.8	-2.0	-5.7	-0.9
Cashflow from operating activities		24.8	16.9	24.6	17.5
Investing activities					
Acquisition of intangible assets	13	-1.7	-3.3	-1.7	-3.3
Acquisition of tangible assets	14	-0.9	-0.4	-0.9	-0.4
Cashflow from investing activities		-2.6	-3.7	-2.6	-3.7
Financing activities					
Dividend		-19.5	-28.4	-19.5	-28.4
Cashflow from financing activities		-19.5	-28.4	-19.5	-28.4
Exchange rate differences in cash and cash equivalents		0.0	0.0	0.0	0.0
Change in cash and cash equivalents*		2.7	-15.2	2.5	-14.6
Cash – opening balance		30.1	45.3	28.7	43.3
Cash – closing balance	26	32.8	30.1	31.2	28.7

 $<sup>^{\</sup>star}$  The cash and cash equivalents comprise of short-term deposits and cash at bank and in hand.

# Balance Sheet – Group

Amounts in SEK million	Note	31 Dec 2018	31 Dec 2017
ASSETS			
Fixed assets			
Intangible assets	13		
Capitalised development	10	6.4	5.9
Patents		1.2	1.8
Total intangible assets		7.6	7.7
Total intaligible assets		7.0	1.1
Tangible assets	14		
Laboratory & Production Equipment, Facility Upgrades & Computers		2.1	1.7
Process Control Equipment		0.0	0.0
Total tangible assets		2.1	1.7
Financial assets	16		
Other long-term receivables	23	0.4	0.4
Total financial assets		0.4	0.4
Defended	40.40	25.0	00.0
Deferred tax asset  Total deferred tax assets	12, 16	35.6 35.6	32.3
Total fixed assets		45.7	32.3 42.1
Total fixed assets		45.7	42.1
Current assets			
Inventory	17	6.5	4.2
Total inventory		6.5	4.2
Short-term receivables			
Trade debtors	15, 23, 26	22.9	15.0
Other debtors	18, 23, 26	0.5	0.5
Prepaid expenses and accrued income	19	1.8	2.8
Total short-term receivables		25.2	18.3
Cash and cash equivalents	26	32.8	30.1
Total cash and cash equivalents		32.8	30.1
Total current assets		64.5	52.6
TOTAL ASSETS		110.2	94.7
SHAREHOLDERS' EQUITY AND LIABILITIES			
Shareholder's Equity			
Share capital	24, 25	7.1	7.1
Additional paid in capital		44.9	44.9
Translation differences, foreign subsidiaries	26	1.9	1.9
Accumulated result		45.3	31.9
Total shareholders' equity		99.2	85.8
Long-term liabilities			
Other long-term liabilities	20	0.0	0.0
Total long-term liabilities		0.0	0.0
Current liabilities			
Accounts payable	23, 26	3.4	2.8
Other current liabilities	21, 23, 26	1.0	0.8
Accrued expenses and prepaid income	22	6.3	5.1
Provisions	22	0.3	0.2
Total current liabilities		11.0	8.9
TOTAL SHAREHOLDERS' EQUITY AND LIABILITIES		110.2	94.7

# Statement of Changes in Equity – Group

	Share	Additional Paid	Translation	Accumulated	Total
Note	Capital	In Capital	Differences*	Results	Equity
	7.09	44.87	2.10	41.71	95.77
	-	_	-0.19	18.57	18.38
	_	_	_	-28.36	-28.36
25	7.09	44.87	1.91	31.92	85.79
	7.09	44.87	1.91	31.92	85.79
	-	_	_	0.28	0.28
	7.09	44.87	1.91	32.20	86.07
	-	_	-0.06	32.65	32.59
	-	_	_	-19.50	-19.50
25	7.09	44.87	1.85	45.36	99.17
_	25	Note Capital 7.09 25 7.09 - 7.09 - 7.09 - 7.09	Note         Capital         In Capital           7.09         44.87           -         -           25         7.09         44.87           -         -           7.09         44.87           -         -           7.09         44.87           -         -	Note         Capital         In Capital         Differences*           7.09         44.87         2.10           -         -         -         -0.19           -         -         -         -           25         7.09         44.87         1.91           -         -         -         -           7.09         44.87         1.91           -         -         -         -           7.09         44.87         1.91           -         -         -         -           -         -         -         -           -         -         -         -	Note         Capital         In Capital         Differences*         Results           7.09         44.87         2.10         41.71           -         -         -0.19         18.57           -         -         -         -28.36           25         7.09         44.87         1.91         31.92           -         -         -         0.28           7.09         44.87         1.91         32.20           -         -         -0.06         32.65           -         -         -         -19.50

<sup>\*</sup> Translation of foreign subsidiaries financial statements

# Balance Sheet – Parent Company

Amounts in SEK million	Note	31 Dec 2018	31 Dec 2017
ASSETS			
Fixed assets			
	40		
Intangible assets	13		
Capitalised development		6.4	5.9
Patents		1.2	1.8
Total intangible assets		7.6	7.7
Tangible assets	14		
Laboratory & Production Equipment, Facility Upgrades & Computers		2.0	1.7
Process Control Equipment		0.0	0.0
Total tangible assets		2.0	1.7
Financial assets			
Shares in subsidiaries	24	1.9	1.9
Other long-term receivables	23, 16	0.4	0.2
Deferred tax asset	12, 16	35.6	32.3
Total financial assets		37.9	34.4
Total fixed assets		47.5	43.8
Current assets			
Inventory	17	6.5	4.1
Total inventory		6.5	4.1
Short-term receivables			
Trade debtors	23, 26	21.7	14.0
Inter company receivables	,	1.1	1.0
Other debtors	18, 23, 26	0.5	0.5
Prepaid expenses and accrued income	19	1.6	2.7
Total short-term receivables		24.9	18.2
Liquidity	23, 26	31.2	28.7
Total liquidity	20, 20	31.2	28.7
Total current assets		62.6	51.0
TOTAL ASSETS		110.1	94.8
SHAREHOLDERS' EQUITY AND LIABILITIES			
Restricted capital			
Share capital	24, 25	7.1	7.1
Statutory reserve		9.5	9.5
Other reserve		6.0	5.1
Total restricted capital		22.6	21.7
Retained result			
Share premium reserve		35.3	35.3
Result brought forward		3.2	5.3
Result for the year		31.4	18.3
Total retained capital		69.9	58.9
TOTAL SHAREHOLDERS' EQUITY		92.5	80.6
Long-term liabilities			
Other long-term liabilities	20	0.0	0.0
Total long-term liabilities		0.0	0.0
Current liabilities			
Accounts payable	23, 26	3.2	2.7
Inter company payable		8.4	9.0
Other current liabilities	21, 23, 26	0.8	0.6
Accrued expenses and prepaid income	22	5.2	1.9
Total current liabilities		17.6	14.2
TOTAL SHAREHOLDERS' EQUITY AND LIABILITIES		110.1	94.8

# Statement of Changes in Equity – Parent Company

Amounts in SEK million	Note	Share Capital	Statutory Reserve	Other Reserve	Share Premium Reserve	Results Brought Forward	Results for the Year	Total Equity
Opening balance 1 January 2017		7.09	9.53	1.95	35.34	10.57	26.14	90.62
Appropriation of last year's result		_	_	_	_	26.14	-26.14	_
Change other reserve		_	_	3.13	_	-3.13	_	_
Total comprehensive income		_	_	_	_	_	18.30	18.30
Dividend		_	_	_	_	-28.36	_	-28.36
Closing balance 31 December 2017	25	7.09	9.53	5.08	35.34	5.22	18.30	80.56
Opening balance 1 January 2018		7.09	9.53	5.08	35.34	5.22	18.30	80.56
Change in accounting principles		_	_	_	_	0.07	_	0.07
Revised opening balance 1 January 2018		7.09	9.53	5.08	35.34	5.29	18.30	80.63
Appropriation of last year's result		_	_	_	_	18.30	-18.30	_
Change other reserve		_	_	1.70	_	-1.70	_	_
Reversal, change other reserve		_	_	-0.79	_	0.79	_	_
Total comprehensive income		_	_	_	_	_	31.39	31.39
Dividend		_	_	_	_	-19.50	_	-19.50
Closing balance 31 December 2018	25	7.09	9.53	5.99	35.34	3.18	31.39	92.53

#### **Accounting Policies**

#### **General Information**

SinterCast AB (publ) is the Parent Company of the SinterCast Group with its registered office located in Stockholm, Sweden. SinterCast is the world's leading supplier of process control technology for the reliable high volume production of Compacted Graphite Iron (CGI). The consolidated financial accounts for SinterCast AB (publ) for the financial year ending 31 December 2018 were approved on 3 April 2019 by the Board of Directors and the Managing Director, for publication on 4 April 2019 and will be presented at the Annual General Meeting on 23 May 2019 for approval.

#### **Basis of Preparation**

The consolidated financial statements for 2018 have been prepared in accordance with International Financial Reporting Standards (IFRS), as endorsed by the European Union. The consolidated accounts of the Group also comply with the Swedish Annual Accounts Act and the Swedish Financial Reporting Board's recommendation RFR 1 – Supplemental Accounting Rules for Groups. The accounts of the Parent Company comply with the Swedish Annual Accounts Act and the Swedish Financial Reporting Board's recommendation RFR 2 – Accounting for Legal Entities. The accounting policies used by the Parent Company comply with the policies used by the Group unless otherwise stated. The consolidated financial statements have been prepared under the historical cost convention, unless otherwise stated.

New standards, amendments and interpretations adopted by the Group

It is judged that there are no IFRS or IFRIC interpretations that are effective for the first time for the financial year beginning 1 January 2018 that had a material impact on the Group.

New standards, amendments and interpretations not yet adopted

The following new IFRS standards were applied from the financial year beginning 1 January 2018: IFRS 9 Financial Instruments and IFRS 15 Revenue from Contracts with Customers. IFRS 9 Financial Instruments will replace IAS 39 Financial Instruments: Recognition and Measurement. IFRS 9 presents a model for classification and measurement of financial assets and liabilities, impairment of financial assets and hedge accounting.

- IFRS 9 does not impact how SinterCast classifies financial assets and financial liabilities. The changes regarding hedge accounting does also not impact the Group or the Parent Company. However, the transition to IFRS 9 have an impact on how SinterCast makes provisions for trade receivables. IFRS 9 requires a loss allowance to be recognised for expected credit losses, while IAS 39 requires an impairment loss to be recognised only when there is objective evidence of impairment. SinterCast has historically had low credit losses. Therefore, the loss allowance for trade receivables increases by less than SEK 0.1 million after tax as of 1 January 2018, due to the new impairment requirements in IFRS 9. This is reported as an adjustment against opening retained earnings as of 1 January 2018, since SinterCast will opt to not restate

comparative figures. Figures in the comparison period have not been restated.

- IFRS 15 Revenue from Contracts with Customers is a new standard for revenue that will replace all existing standards and interpretations regarding revenue. Revenue shall be recognised to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods and services. The new standard will not have any significant effect, neither with regard to the amounts recognised as revenues, nor to the timing of when revenues are recognised. Areas most impacted are the timing of when revenue for systems, sold together with installation service and Annual Software Licence Fees, are recognised. At initial application, SinterCast recognises approximately SEK 0.3 million for the Annual Software Licence Fee as an adjustment to the opening balance of retained earnings as of 1 January 2018. No adjustment is needed for earlier sold systems. Figures in the comparison period have not been restated.
- The new IFRS standard IFRS 16 Leases were applied from the financial year beginning 1 January 2019. The new lease standard that will replace IAS 17 Leases and the related interpretations IFRIC 4, SIC-15 and SIC-27. The standard requires assets and liabilities arising from all leases, with some exceptions, to be recognised on the balance sheet. This model reflects that, at the start of a lease, the lessee obtains the right to use an asset for a period of time and has an obligation to pay for that right. The portion of the lease payments currently included in other operating expenses in the consolidated statement of income will be transferred to depreciations and amortisations and the interest portion to financial expenses. The standard will affect primarily the accounting for the Group's operating leases increasing the balance sheet totals and some changes in key figures. The accounting for lessors will in all material aspects be unchanged. The parent company will use the exception in RFR 2 to not report lease agreements in accordance with IFRS 16. In 2019 and onwards, the same principles that was applied in 2018 will continue to apply.
- SinterCast has assessed the impact of the transition to the new standard. The initial estimate is that IFRS 16 will have a small positive impact on operating profit and a smaller negative impact on profit after financial items. The lease portfolio includes a limited number of contracts, primarily related to operational leases for offices, warehouses, company cars and office equipment. SinterCast has chosen to perform the transition in line with the cumulative catchup approach and has opted to not restate comparative figures. Right-of-use assets have been determined as an amount equal to the lease liabilities as identified at initial application. A single discount rate has been applied. Lease contracts shorter than 12 months or ending within 12 months at the date of application are considered short-term and hence not recognised as lease liability or right-of-use asset. Low value contracts (with a value below EUR 5,000) are also excluded from being recognised as lease liability or right-of-use asset.

The estimated adjustment to the opening balance 1 January 2019 is shown in the following table:

	Closing balance	Estimated	Estimated	
	31 Dec 2018	reclassifications due	adjustments	Estimated adjusted
	before transition to	to transition to	due to transition to	opening balance
(SEK MILLION)	IFRS 16 Leases	IFRS 16 Leases	IFRS 16 Leases	1 Jan 2018
Right-of-use assets	_	-	3.6	3.6
Lease liabilities, interest bearing	_		3.6	3.6

#### Critical Accounting Judgements and Estimates

The preparation of financial statements according to IFRS requires judgement of how to use accounting policies. Further, the management must decide how to apply chosen accounting principles. The principle of capitalisation of Research & Development costs, patent costs and the valuation of deferred taxes on tax losses carried forward are important for SinterCast.

The standard for accounting for deferred tax is IAS 12 "Income Taxes". SinterCast's interpretation of IAS 12 is that recognition of deferred tax assets for the carry forward of unused tax losses may be recognised to the extent that it is probable that future taxable profit will be available against which the unused tax losses and unused tax credits can be utilised.

SinterCast uses a model to calculate to which extent the carried forward tax losses can be utilised. The calculation is based on the SinterCast business model in the form of its contracts with foundries for the programmes that are in current series production or where SinterCast's foundry customers have received definitive orders for future series production. The input for the model is based on the forecast volume, as communicated by the foundry and/or OEM, and is adjusted with a probability factor for each series production programme. The programmes and probability factors are reviewed regularly. To determine the future taxable profit, the forecast contribution from secured production is reduced by the forecast expenses of the operations. The calculations are based on fixed currency rates.

The above model is only used to determine the amounts of the tax losses that are probable to be utilised within the forecast horizon, as required by IAS 12, and does not constitute a profit forecast.

Costs that are directly associated with filing a patent controlled by the Group in a new market, and where the patent is expected to generate economic benefits exceeding costs beyond one year, are recognised in the balance sheet. In applying this principle, management considers the probability of future benefits in the specific local market, for each patent.

Development costs that have been directly associated with specific and unique development projects and where management is confident that the resulting products will generate economic benefits exceeding costs beyond one year are recognised as intangible assets and therefore capitalised. In applying this principle, management also considers the ability of market success and the future economic benefits.

#### **Group Consolidation**

The consolidated accounts include the Parent Company and all companies in which the Parent Company directly or indirectly controls more than 50% of the voting rights or by

other means has full control. No minority interest currently exists. The consolidated accounts have been prepared in accordance with the purchase method.

The cost of an acquisition is measured as the fair value of the assets given, equity instruments issued, and liabilities incurred or assumed at the date of exchange.

Inter-company transactions, balances and unrealised gains on transactions between Group companies are eliminated. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group. The Group has no additional shareholdings at present other than the subsidiaries.

#### Cost by Functions and Segment Reporting

Costs in SinterCast are presented in the profit and loss statement classified by function. This coincides best with how SinterCast looks upon and controls its business.

SinterCast constitutes one segment and the financial statements are presented accordingly. At present, SinterCast provides only two products, process control systems for the reliable production of Compacted Graphite Iron, and related services for product development, installations, calibration, and technical support; and SinterCast also supplies a suite of tracking technologies, including the SinterCast Ladle Tracker®, Cast Tracker™ and Operator Tracker™, to improve process control, productivity and traceability in a variety of applications. The company judges that the opportunities and risks with its business are related to the overall CGI market development. The format of the financial statements presented in this Annual Report coincides with the internal reporting structure that management uses to plan, control and follow the company's business activities.

#### Tangible Assets

Tangible assets consist of laboratory and production equipment, facility upgrades, computers, installed process control equipment, lease agreements for facilities and vehicles and office furniture's. The tangible assets are stated at historical cost less depreciation. Expenses for improvement of the assets are included in the carrying amount when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. Costs for maintenance and repair are expensed. The assets are depreciated systematically over the anticipated useful life using the straight-line method. The rate of depreciation, after evaluation of the useful life for each asset is 3 years (33%) for computers, 3-4 years (24-33%) for laboratory and production equipment, 3-4 years (24-33%) for installed process control equipment, 10 years (10%) for production tooling, 5 years (20%) for facility upgrades and 7 years (14%) for lease agreements.

The residual values and useful lives of assets are reviewed, and adjusted if appropriate, at each balance sheet date. An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount. Gains and losses on disposals are determined by comparing proceeds with the carrying amount. These are included in the income statement.

## Intangible Assets

### Capitalised Patent Expenses

Expenses that are directly associated with filing a patent controlled by the Group in a new market, and where the patent is expected to generate economic benefits exceeding costs beyond one year, are recognised in the balance sheet. The annual patent fees are expensed. Amortisation of capitalised patent expenses is included in the costs for Research & Development.

## Capitalised Development Costs

Development costs that are directly attributable to the design and testing of identifiable and unique new products controlled by the Group are recognised as intangible assets when the following criteria are met:

- It is technically feasible to complete the product so that it will be available for use;
- Management intends to complete the product and sell it;
- There is an ability to sell the product;
- The means by which the product will generate probable future economic benefits can be demonstrated;
- Adequate technical, financial and other resources are available to complete the development and to sell the product; and
- The expenditure attributable to the product during its development can be reliably measured.

Directly attributable costs that are capitalised include direct employee costs.

Costs that have been directly associated with the development of specific and unique customer products controlled by the Group and that are expected to generate economic benefits exceeding costs beyond one year, are recognised as intangible assets. Capitalised development costs related to specific customer projects are amortised over the estimated useful life of the projects. Amortisation of capitalised development costs are included in the costs for Research & Development.

Capitalised development costs in the Parent Company are reported as restricted equity in other reserves. Depreciation of capitalised development costs recognised in profit for the year is transferred from restricted equity to non-restricted equity to the extent that depreciation relates to these investments.

### Depreciation

The rate of depreciation, after evaluation of the useful lives is 12 years (8%) for patents and similar rights and 5–7 years (14–20%) for capitalised development.

## Impairment of Assets

Assets that are subject to amortisation are reviewed for impairment whenever events or changes in circumstances

indicate that the carrying amount may not be recoverable. The impairment test is based on future estimated income.

An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash generating units. Assets that suffered impairment are reviewed for possible reversal of the impairment at each reporting date. Assets not subject to amortisation, which refer to capitalised development yet to be finalised, are tested for impairment on an quarterly basis.

## Financial Instruments 2017

A financial instrument is a real or virtual document such as derivative instruments, commercial papers, fixed income instruments, debt or loan agreements, representing a legal agreement between two or more parties regarding a right to payment of money.

A financial asset or liability is recognised when the company is a party to the contractual conditions of the instrument. Acquisitions and sales of financial instruments are accounted for at trade date. An instrument is removed from the balance sheet when cashflow rights from the instrument have expired or been transferred and when the Group has transferred substantially all of the risks and rewards of ownership.

Financial instruments are recognised at amortised costs or at fair value depending on the initial classification according to IAS 39. SinterCast classifies its instruments in the following categories:

Financial assets at fair value through profit or loss, consists
of derivative instruments, included in other debtors or
other creditors, and commercial papers and fixed income
instruments, included as cash equivalents.

At book closing, the fair value of derivative instruments, not traded on an active market, is based on observable market currency rates. Cash flows are discounted using market interest rates. Commercial papers and fixed income instruments are traded on an active market and the fair value is determined by available market prices. The effect is accounted for as financial income or financial cost. See Notes 18, 21 and 26.

 Loans and receivables consist of the following balance sheet items: cash, trade debtors, other debtors and long term receivables, excluding deferred tax assets.

Investments and trade receivables are recognised initially at fair value including transaction costs and subsequently measured at amortised cost using the effective interest method, less provision for impairment.

A provision for impairment of trade receivables is established and presented as sales costs when there is objective evidence that the Group will not be able to collect all amounts due according to the original terms of receivables. Significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy or financial reorganisation, and default or delinquency in payments are considered indicators that the trade receivable is impaired. The amount of the provision is the difference between the asset's

carrying amount and the present value of estimated future cashflows, discounted at the original effective interest rate.

- Financial liabilities consist of the following balance sheet items: long term loans, accounts payable and other current liabilities, excluding accruals.

Financial liabilities are recognised initially at fair value, net of transaction costs incurred. Subsequently, the liabilities are stated at amortised cost. Any difference between the proceeds (net of transaction costs) and the redemption value is recognised in the profit and loss statement over the period of the liabilities using the effective interest method. SinterCast posts cost of borrowing for each period to its profit and loss statement.

### Financial Instruments 2018

In the financial year starting 1 January 2018, IFRS 9 Financial Instruments replaces IAS 39 Financial Instruments: Recognition and Measurement. IFRS 9 presents a model for classification and measurement of financial assets and liabilities, impairment of financial assets and hedge accounting. IFRS 9 will not impact how SinterCast classifies financial assets and financial liabilities. The changes regarding hedge accounting will also not impact the Group or the Parent Company. However, the transition to IFRS 9 will have an impact on the how SinterCast makes provisions for trade receivables.

A financial instrument is a real or virtual document such as derivative instruments, commercial papers, fixed income instruments, debt or loan agreements, representing a legal agreement between two or more parties regarding a right to payment of money. A financial asset or liability is recognised when the company is a party to the contractual conditions of the instrument. Acquisitions and sales of financial instruments are accounted for at trade date. An instrument is removed from the balance sheet when cashflow rights from the instrument have expired or been transferred and when the Group has transferred substantially all of the risks and rewards of ownership.

# Classification

From 1 January 2018 SinterCast classifies its instruments in the following measurement categories:

- Financial assets at fair value through profit or loss
- Financial assets to be measured at amortised cost
- Financial liabilities to be measured at amortised cost

The classification for interest-bearing assets is based on the nature of the assets' cash flows and business model. Investments in equity instruments shall be measured at fair value in accordance with IFRS 9. SinterCast has chosen to report the changes in value of such instruments in the income statement.

## Financial asset at amortised cost

Interest-bearing assets (debt instruments) held for the purpose of collecting contractual cash flows and where these cash flows consist only of principal amounts and interest are valued at amortized cost. The carrying amount of these assets is adjusted with any expected loan losses (see paragraph below). Interest income from these financial assets is reported using the effective interest method and is reported as financial income. The Group's financial assets that are valued at amortized cost consist of long term receivables, trade debtors and cash and cash equivalents.

### Financial asset at fair value through profit or loss

The Group's financial assets at fair value through profit or loss consist of funds, short term investments and derivative instruments.

Investments in funds and other short-term investments are valued at fair value through the income statement as the Group's business model is to manage the funds based on value development and to continuously realize results by divesting parts of the investments. Equity instruments where the Group has chosen to report these at fair value through the income statement are also included in this category. A gain or loss on a financial asset recognized at fair value through the income statement is recognized net in the income statement in the period in which the gain or loss arises.

Derivative Instruments, included in other debtors or other creditors are always recognized at fair value through the income statement and gain or loss is recognised in the financial net in the income statement in the period in which the gain or loss arises.

### Financial liabilities at amortised cost

The Group's financial liabilities are classified as valued at amortized cost using the effective interest method. Financial liabilities at amortized cost consist of accounts payable and other liabilities, excluding accruals. Liabilities are initially reported at fair value, net after transaction costs. Liabilities are subsequently reported at amortized cost and any difference between the amount received (net after transaction costs) and the repayment amount is reported in the statement of comprehensive income distributed over the loan period, applying the effective interest method. Liabilities is classified as short-term in the balance sheet if the company does not have an unconditional right to postpone the debt's regulation for at least twelve months after the reporting period. Dividends paid are reported as a liability after the Annual General Meeting has approved the dividend. Accounts payable and other operating liabilities have short expected maturities and are valued without discounting at nominal amounts.

### Impairment of financial assets

At each reporting date, the Group assesses the future expected loan losses that are linked to assets reported at accrued acquisition value based on forward-looking information. The Group's financial assets for which expected loan losses are expected to consist essentially of accounts receivable and other receivables. The Group applies the simplified approach for credit reservation, that is, the reserve will correspond to the expected loss over the entire life of the accounts receivable.

### Foreign Currency Translation

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the functional currency). The consolidated financial statements are presented in Swedish Kronor, which is the company's functional and presentation currency.

### Transactions and Balances

Transactions in foreign currency have been translated into the functional currency at the transaction date using the exchange rate prevailing at the dates of the transactions. Payment in foreign currency following the transaction, resulting in currency gain or loss, is accounted for in the profit and loss statements. Conversion of monetary liabilities or receivables in foreign currency has been made at the currency rate at the end of the period. Gains or losses from recalculation of receivables or liabilities related to the operation are presented in the profit and loss statements as other income or costs.

## **Translation of Group Companies**

Translating the foreign subsidiaries' financial statements into Swedish Kronor has been made according to the following principles:

- All assets and liabilities for each balance sheet presented are translated at the closing rate at the date of that balance sheet
- Income and expenses for each profit and loss statement are translated at average exchange rates. The exchange rate differences that consequently arise are recognised as Other Comprehensive Income.

## Revenue Recognition 2017

Revenue comprises the fair value for the sale of goods and services. Revenue is shown, net of value-added tax, rebates and discounts and after eliminated sales within the Group.

### Revenue is recognised as follows:

- Sales of systems and consumables are recognised when, essentially, all risks and rights connected with ownership have been transferred to the customer. This usually occurs in connection with the shipment of the goods, after the price has been determined, the collectibles of the related receivable are reasonably assured, the installation and final inspection are of a standard nature and after establishing provisions for estimated residual expenses. The shipment is normally made according to the Incoterms rules, ex-works.
- Sales of systems, including unique installations in terms of new technologies or new applications, are recognised when the installation or final inspection is accepted by the customer.
- In Customer Agreements, including goods and services, revenue is distributed to the individual items, after equal distribution of any discounts.
- Services provided to customers are recognised in the accounting period in which the service is performed, and recognised according to the percentage of completion method and established by comparing actual cost against estimated cost.
- Revenues from Production Fees are recognised on an accrual basis when the customers have reported shipped castings.
- An annual software licence fee is charged and SinterCast retains ownership of the software. The fee is recognised in the profit and loss statement on a straight-line basis over the contractual period of the lease.

 Lease payments under operating leases are recognised in the profit and loss statement on a straight-line basis over the contractual period of the lease. If equipment is sold after the lease period has expired, the revenue from the sale is accounted as revenue.

## Revenue Recognition 2018

In 2018, the Group adopted the new standard IFRS 15, effective for financial periods beginning on 1 January 2018. IFRS 15 Revenue from Contracts with Customers is a new standard for revenue that will replace all existing standards and interpretations regarding revenue.

IFRS 15 is based on the principle that revenue is recognised when control of a good or service transfers to a customer. When applying the new standard, the entity needs to assess whether the revenue will be recognised over time or at a point in time. The effect of variable considerations and the time value of money on transaction price need to be assessed. In addition, IFRS 15 requires quantitative and qualitative disclosures about the entity's contracts with customers, performance obligations in the contracts and significant judgements to be made.

Remuneration can be paid in the form of payments for the delivery of equipment and spare parts, delivery of consumables, production fees, license fees for leased software and service services. Revenue from contracts made with customers to SinterCast is reported based on when SinterCast's various distinct performance obligations in the contracts are fulfilled. When SinterCast becomes a party to an agreement, it is analyzed to determine how many distinct performance obligations it contains. The remuneration received or will be received under the agreement, i.e the transaction price, is allocated to each distinct performance obligation based on the respective obligations' relative share of estimated independent sales prices for the total obligation. Then the allocated amount is recognized as revenue when the obligation is fulfilled. The following describes how each revenue stream is handled in SinterCast accounting.

### Sales of equipment

Remuneration for the sale of systems is based on payment for hardware, software and installation of the system at the customers site. The sale of a system installation, containing an interconnected hardware supply, software delivery and on-site services for commissioning, is considered to be a joint undertaking and is reported when the installation has been accepted by the customer. The reason why these different parts of the agreement are regarded as a performance undertaking is that the total promise to the customer is that it buys a fully installed calibrated machine. Machine and service are thus reported together as a performance commitment and revenue is reported when control over this total distinct commitment is transferred.

The sale of spare parts, consumables and stand-alone system components that are delivered without interconnected services are usually reported in connection with the shipment of the goods and after the above criteria have been established. The transport is normally done in accordance with Incoterm's rules, ex-works (ex-works).

### Series Production

The sale of consumables that are delivered are usually reported in connection with the shipment of the goods and after the above criteria have been established. The transport is normally done in accordance with Incoterm's rules, ex-works (ex-works).

Revenues from production fees, ie a license fee per tonne of cast goods which, based on the use of SinterCast's intellectual property rights, shall be recognized as revenue when the license is distinct and based on the use of the intellectual property right, ie the revenues relate specifically to the license and not to other obligations. Production fees are recognised on an accrual basis when the customers have reported shipped castings. Production not reported on time is accounted for after made estimates.

Software Licence Fee. Licenses identified as separate performance commitments are of the character "right to use" (right to use). A "right to use" license means the right to use SinterCast's IP right in its existing condition at the time the license is granted. The right to use licenses is reported at a given time, ie at the time when the customer gets control of the license. Typically, distinct licenses of the kind are "the right to use" because the services that could affect the value and benefit of the license are reported separately as a separate distinct performance commitment. SinterCast defines the licenses as "right to use" and an annual software license fee is charged according to the customer agreement. The license fee is reported in the income statement at the time when the lease term starts and the customer has control over the asset.

## Engineering Service

Revenue from services refer to service contracts where no assets are created and where the customer consumes the service when it is provided. The commitment is assessed to be met over time. Service revenue are recognised in the accounting period in which the service is performed and to the SinterCast have right to invoice the customer.

### Inventory

Inventories are stated at the lower of cost and net realisable value. Cost consists of purchase price, and other costs directly related to the purchase, and is determined using the first in, first out method (FIFO). Net realisable value is the estimated selling price in the ordinary course of business, less applicable variable selling expenses.

### **Provisions**

Provisions are recognised when: the Group has a present legal or constructive obligation as a result of past events; it is more likely than not that an outflow of resources will be required to settle the obligation; and, the amount can be reasonably estimated. Provisions are not recognised for future operating losses.

Where there are a number of similar obligations, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations as a whole. A provision is recognised even if the likelihood of an outflow with respect to any one item included in the same class of obligations may be small.

## **Employee Benefits**

All expenses related to the remuneration of the employees have been accounted for in the period the work has been performed. If notice terminating the employment has been served, expenses until termination of the employment are accounted for during the notice period.

If future period contributions are received from the employee, the expense will be recognised as cost in that future accounting period. The pension plan for employees in the UK is based on a 30% contribution of the salary while, for employees in the US, it is based on a 15% contribution of the salary, without any future commitments in either country. All commitments to the employees are in the form of defined contribution plans. A defined contribution plan is a pension plan under which the Group pays fixed contributions into a separate entity.

The pension plan for employees in Sweden follows the ITPplan insured by Alecta. The Alecta ITP-plan is by definition a multi-employer benefit plan but is constructed such that it is not possible to calculate surplus or deficit on the pension plans that fulfil the requirements in IAS 19 enabling defined benefit accounting, for the respective participating legal entities. The plan is therefore accounted for as a defined contribution plan. Alecta reported a preliminary collective consolidation level at December 31, 2018 of 142 (154) percent. The collective consolidation level is defined as the fair value of Alecta's plan assets in percent of the insured pension commitments calculated according to Alecta's actuarial assumptions, which are not in accordance with IAS 19. Such a surplus can be distributed among the employers or the beneficiaries, but there is no agreement concerning this that enables the company to report a receivable from Alecta. Alecta's pension commitments to SinterCast are insignificant (0.0031%) for Alecta in relation to their total pension commitments. SinterCast represents 0.0027% of the total number of insured individuals at Alecta.

The pension age for the majority of SinterCast employees is expected to be 65-67 years; however, this is regulated by the relevant national laws rather than by the individual employment agreements.

## Leasing Agreements

### SinterCast as Lessor

The Group has classified its lease agreements as operational because the Group maintains the ownership and associated risks and returns. At all times, SinterCast retains the ownership of the SinterCast software and systems.

Lease payments under operating leases are recognised in the profit and loss statement on a straight-line basis over the contractual period of the lease. If equipment is sold after the lease period has expired, the revenue from the sale is accounted as revenue.

## SinterCast as Lessee

The Group has classified its lease agreements as operational because the lessor maintains the ownership and associated risks and returns for premises and equipment. Expenses for leasing are charged to profit and loss on a straight-line basis over the period of the lease.

### **Taxes**

Tax on temporary differences is accounted for using the balance sheet liability method. The accounting policy for deferred tax in relation to unused carry-forward tax losses is described under the heading "Critical Accounting Judgements and Estimates" and presented in the Accounting Notes.

## Liquidity/Cash and Cash Equivalents

Cash and cash equivalents are defined as cash, cash holdings at bank and short-term deposits available with less than three months' notice.

## Rounding

The total amount in tables and statements might not always summarise as there are rounding differences. The aim is to have each line item corresponding to the source and it might therefore be rounding differences in the total.

Amount below SEK 50,000 is presented as "0.0". Where no amount is applicable, the value is presented as "-".

# Accounting Notes to the Financial Statements

ALL AMOUNTS IN SEK MILLION UNLESS OTHERWISE STATED

### 1 Revenue Breakdown

Equipment includes sold and leased Systems, Mini-Systems and Spare Parts. Series Production includes Consumables, Production Fees and Software Licence Fees. Engineering Service includes performed Engineering Services, Demonstrations and sales of Test Pieces. Group sales represent delivery to foreign subsidiaries of Equipment and Engineering Service. Group purchases represent mainly services provided by the subsidiaries.

	GR	GROUP		COMPANY
	2018	2017	2018	2017
Equipment	4.6	3.7	4.5	3.1
Series Production	81.3	60.7	76.9	57.4
Engineering Service	1.8	1.2	1.7	0.9
Other	0.0	0.0	0.0	0.0
Group Sales	_	_	4.0	3.4
Total	87.7	65.6	87.1	64.8
Group sales of total sales for the Parent Company			5%	5%

Group sales of total sales for the Parent Company	570	5%
Group purchases of costs of goods sold for the Parent Company	58%	66%
	GROUP	

Revenue Breakdown per Country	2018	2017
Brazil	33.4	28.5
Mexico	23.0	14.9
China	8.6	4.5
Sweden	7.4	3.9
Korea	5.6	3.6
USA	4.2	3.7
Germany	3.2	4.3
Other	2.3	2.2
Total	87.7	65.6

# 2 Research & Development

	GR	GROUP		COMPANY
	2018	2017	2018	2017
Costs for Personnel and Administration	7.5	6.7	7.5	6.7
Material in R&D	1.0	0.4	1.0	0.4
Depreciation and Write Down	1.7	1.0	1.7	1.0
Other	1.7	1.7	1.7	1.7
Capitalised Development	-1.6	-2.5	-1.6	-2.5
Total	10.3	7.3	10.3	7.3

## 3 Costs per Category

	GROUP		PARENT	OMPANY	
	2018	2017	2018	2017	
Personnel expenses	31.7	29.2	17.8	16.1	
Material in cost of goods sold and in R&D	12.2	8.3	28.8	24.0	
Depreciation and write down	2.2	1.5	2.2	1.5	
Office and related costs	2.4	2.4	1.8	1.7	
Travel, commission, exhibition and other sales costs	3.5	2.2	2.1	0.8	
Consultants; sales, marketing and administration	3.4	2.3	2.9	1.8	
Operational foreign exchange difference	0.4	0.6	1.0	0.3	
Other	4.0	4.0	3.9	3.9	
Total	59.8	50.5	60.5	50.1	

### 4 Auditors' Fees

	GRO	GROUP		COMPANY
	2018	2017	2018	2017
PricewaterhouseCoopers (Sweden)*				
Audit fees	0.2	0.2	0.2	0.2
Other statutory audit fees	0.1	0.1	0.1	0.1
Tax consultancy	0.2	0.0	0.2	0.0
Other services	-	-	_	-
Gorman Darby & Co Ltd (United Kingdom)				
Audit fees	0.1	0.1	-	-
Tax consultancy	0.0	0.0	-	-
Beijing Jiarun CPA Ltd (China)				
Audit fees	0.0	0.0	-	-
Total	0.6	0.4	0.5	0.3

<sup>\*</sup>The total fee to PwC is SEK 0,5 million. In addition to audit services, PwC provided certain audit-related services. The audit-related services include quarterly review.

### 5 Salaries and Remunerations

### **Remuneration Policy for Group Management**

The Annual General Meeting 2018 decided upon a remuneration policy in respect of the Managing Director and other members of the Group Management as follows: The remuneration shall consist of a balanced combination of fixed remuneration, variable remuneration, pension and other benefits. The total remuneration shall be in accordance with market practice and shall be based on performance. The fixed remuneration shall be individually determined and shall be based on each individual's responsibility, role, competence and position. Variable remuneration shall be based on predetermined targets on the Group and individual levels, considering the effect on the long term result. In extraordinary situations a special compensation may be paid out to attract and retain key competence. Variable remuneration and special compensation may not exceed an amount corresponding to 75 percent of the fixed annual salary.

Pension benefits are in the form of defined contribution plans. A defined contribution plan is a pension plan under which the Group pays fixed contributions into a separate entity. The Group has no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service in the current and prior periods. Bonus shall not constitute a basis for pension.

Upon termination by the company, the notice period for the Managing Director is nine months, and six months for the other members of the Group Management. Upon termination of the Managing Director by the company the Managing Director is entitled to a severance payment corresponding to nine months compensation. Deduction shall not be made for remuneration paid by another employer. No severance payments have been agreed with the other members of the Group Management.

The Board of Directors and, on behalf of the Board of Directors, the Compensation Committee, shall be entitled to deviate from the guidelines if there are specific reasons in an individual case.

### Total salaries, remunerations and Board remunerations allocated per country

ALL AMOUNTS IN SEK THOUSANDS

		2018			2017	
GROUP	Salaries and	Social security	Pension	Salaries and	Social security	Pension
GROUP	remuneration	costs	costs	remuneration	costs	costs
China	1,376	172	_	1,259	155	
Korea	1,778	_	152	1,798	_	171
Sweden	12,718	4,034	2,178	11,615	3,560	2,005
United Kingdom	4,033	526	800	3,645	498	742
USA	4,277	210	478	4,039	191	464
Total	24,182	4,942	3,608	22,356	4,404	3,382
PARENT COMPANY						
Sweden*	12,718	4,034	2,178	11,615	3,560	2,005
Total	12,718	4,034	2,178	11,615	3,560	2,005

<sup>\*</sup> Contributions to the Alecta ITP-2 pension plan amounted to SEK 0.7 million (0.6). The expected contribution for 2019 is approximately SEK 0.7 million.



### **Group Management**

The remuneration to the Managing Director amounted to SEK 4.0 million (3.6). The remuneration is allocated according to the compensation committee's resolution and includes variable remuneration of SEK 0.4 million (0.3), taxable benefits in the form of insurance premiums paid for life, long term disability and medical, and school fees amounting to SEK 0.8 million (0.7). Pension contributions (30% of salary), amounted to SEK 0.8 million (0.7), which are based on contributions made without any further commitments. The social costs for the Managing Director amounted to SEK 0.5 million (0.5). The remuneration to the other two (two) members of the Group Management, presented on page 17, amounted to SEK 2.5 million (2.4), including variable remuneration amounting to SEK 0.13 million (SEK 0.16 million). In addition, pension contributions amounting to SEK 0.7 million (0.7) were paid, including additional voluntary contributions. The social costs amounted to SEK 0.9 million (0.9). The pension plan follows the Swedish ITP-Plan, according to collective agreement.

### Variable Cash and Share Based Remuneration Programmes

For all other employees, the remuneration package included a variable element during 2018. The variable part constituted a minor part of the total remuneration package. The variable remuneration for 2018 has been accounted for on an accrual basis. During 2018, no share based related benefits existed in SinterCast.

### The Board of Directors

The Annual General Meeting on 24 May 2018 (AGM 18 May 2017) decided upon a total Board remuneration, for the period until the next AGM, of SEK 960,000 (SEK 1,120,000). It was further decided that the remuneration shall be divided between the Chairman, SEK 320,000 (SEK 320,000) and the ordinary Board Members, SEK 160,000 (SEK 160,000) each, with no Board remuneration for the Managing Director. The AGM decided that the Board should consist of six (seven) ordinary Board Members and one (-) alternate Board Member.

The Board remuneration during 2018 has been in accordance with the AGM decision, in total SEK 0.96 million (1.12). The remuneration to the Chairman, Hans-Erik Andersson, amounted to SEK 0.32 million (0.32) and the remuneration to the ordinary Board Members Robert Dover, Caroline Sundewall and to the new ordinary Board Members Jun Arimoto and Lars Hellberg amounted to SEK 0.16 million (0.16) each. No Board fees were allocated to the Managing Director. No bonus schemes, incentive programmes, pension commitments, or pension liabilities exist for the Board Members, with the exception of the Managing Director. The Board of Directors has established a Review Group consisting of two members, Caroline Sundwall and Lars Hellberg, who received an additional remuneration of SEK 0.02 million (0.02) each.

### **Total Board Remuneration**

ALL AMOUNTS IN SEK THOUSANDS

	2018	2017	2018	2017
	Board <sup>1</sup>	Board <sup>2</sup>	Re	view Group
Hans-Erik Andersson	320	320	-	
Robert Dover	160	160	-	_
Laurence Vine-Chatterton	-	160	-	20
Carina Andersson	-	160	-	_
Jason Singer	-	160	-	_
Caroline Sundewall	160	160	20	20
Jun Arimoto	160	-	-	_
Lars-Erik Hellberg	160	-	20	_
Steve Dawson	_	-	_	_
Total	960	1,120	40	40

<sup>1.</sup> For the period 24 May 2018 - 23 May 2019

### Salaries and remuneration allocated per country and between Board, Group Management and other Employees

ALL AMOUNTS IN SEK THOUSANDS

	20	2018		
	Board and Group	Other	Board and Group	Other
GROUP	Management	Employees	Management	Employees
China	_	1,376	_	1,259
Korea	-	1,778	_	1,798
Sweden	3,522	9,196	3,532	8,083
United Kingdom	4,033	_	3,645	_
USA	-	4,277	_	4,039
Total	7,555	16,627	7,177	15,179
PARENT COMPANY				
Sweden	3,522	9,196	3,532	8,083
Total	3,522	9,196	3,532	8,083

### 6 Transactions with Related Parties

No substantial transactions took place between SinterCast and the Board or management during 2018.

<sup>2.</sup> For the period 18 May 2017 - 24 May 2018

## Board and Group Management

·		<b>2018</b> 2017				,
GROUP	Total	Female	Female %	Total	Female	Female %
Board Members	13	2	15	14	3	21
CEO and Group Management	3	0	0	3	0	0
PARENT COMPANY						
Board Members	6	1	17	7	2	29
CEO and Group Management	3	0	0	3	0	0

# 8 Average Number of Employees During the Year

GROUP		2018		2017	
	Total	Male	Total	Male	
China	1	1	1	1	
Korea	1	1	1	1	
Sweden	16	12	16	12	
United Kingdom	1	1	1	1	
USA	2	2	2	2	
Total	21	17	21	17	
PARENT COMPANY					
Sweden	16	12	16	12	
Total	16	12	16	12	

# 9 Leasing

	GRO	OUP	PARENT COMPANY	
SinterCast as Lessor	2018	2017	2018	2017
Income from leased equipment	0.1	0.3	0.1	0.1
Contracted future income	0.5	1.5	0.5	0.5
Receivables within 1 year	0.1	0.3	0.1	0.1
Receivables within 2–5 years	0.4	1.2	0.4	0.4
Receivables beyond 5 years	0.0	0.0	0.0	0.0

Leased equipment refers to Agreements with SKF.

		GROUP	PAR	ENT COMPANY
SinterCast as Lessee	2018	2017	2018	2017
Cost from leased premises and equipment	1.4	1.4	0.8	0.8
Contracted future commitments	6.7	7.0	4.0	3.9
Payable within 1 year	1.3	1.4	0.8	0.8
Payable within 2–5 years	5.4	5.6	3.2	3.1
Payable beyond 5 years	0.0	0.0	0.0	0.0

Leasing fees for operational leasing charged to the operating result refer primarily to leased premises used for production, inventory, development, and office space.

# 10 Other Operating Income and Costs

	G	GROUP		COMPANY
	2018	2017	2018	2017
Other Income				
Exchange gains from operations	2.4	1.7	2.6	2.1
Total	2.4	1.7	2.6	2.1
Other Costs				
Exchange loss from operations	-2.8	-2.3	-3.7	-2.4
Total	-2.8	-2.3	-3.7	-2.4
Total other operating income and costs	-0.4	-0.6	-1.1	-0.3

### 11 Financial Income and Expenses

GROUP		PARENT COMPANY	
2018	2017	2018	2017
0.1	0.1	0.1	0.1
-0.1	-0.2	-0.1	-0.1
0.0	-0.1	0.0	0.0
0.0	0.1	0.0	0.1
0.0	0.0	0.0	0.0
0.0	0.1	0.0	0.1
0.0	0.0	0.0	0.1
_	2018 0.1 -0.1 0.0 0.0 0.0 0.0	2018         2017           0.1         0.1           -0.1         -0.2           0.0         -0.1           0.0         0.1           0.0         0.0           0.0         0.1	2018         2017         2018           0.1         0.1         0.1           -0.1         -0.2         -0.1           0.0         -0.1         0.0           0.0         0.1         0.0           0.0         0.0         0.0           0.0         0.1         0.0           0.0         0.1         0.0

### 12 Tax

	C C	ROUP	PARENT (	COMPANY
Income tax	2018	2017	2018	2017
Income tax for the year	0.0	-0.1	0.0	0.0
Change in deferred tax asset	3.3	1.0	3.3	1.0
Income tax in the income statement	3.3	0.9	3.3	1.0
	O	GROUP		PARENT COMPANY
Deferred tax asset	2018	2017	2018	2017
Deferred tax asset brought forward	22.2	31.3	32.3	31.3
Deletted tax asset blought forward	32.3	31.3	32.3	31.3
· ·	5.5	1.0	5.5	1.0
Capitalised carry forward tax losses during the year Change in Swedish income tax rate				

Deferred tax asset relates to carry forward tax losses in Sweden, only. No tax effects on items included in other comprehensive income. Fixed currency rates have been used when calculating the value of the deferred tax asset on the balance sheet date, USD/SEK 6.51 EUR/SEK 8.6.

### Carry forward tax losses

Based on the filed tax returns for the financial year 2017, with addition of the calculated taxable result of the financial year 2018.

Country	Valid until	2018	2017	Tax Rates
Sweden	indefinitely	390.9	418.2	22%
United Kingdom	indefinitely	31.7	31.4	20%
USA*	20 years from the year of filing	24.4	24.1	21%
Total**		447.0	473.7	22%

 $<sup>^\</sup>star \text{Of which USD 2.4}$  million is due within 5 years, USD 0.5 million within 10 years.

<sup>\*\*</sup>SEK 171.6 million (SEK 147.0 million) of the Group's total carried-forward tax losses have been used as the basis of the deferred tax asset calculation SEK 275.4 million (SEK 326.7 million) of the Group's carried forward tax losses have not yet been used.

	GR	PARENT COMPANY		
Tax expenses based on actual tax rate	2018	2017	2018	2017
Result before tax	29.4	17.7	28.1	17.3
Tax calculated based on Swedish tax rate	-6.5	-3.9	-6.2	-3.8
Tax effect on non tax deductible expenses	0.0	0.0	0.0	0.0
Tax effect on foreign tax	0.0	-0.1	0.0	0.0
Tax effect on utilised carried forward tax losses	6.5	3.9	6.2	3.8
Tax effect on capitalised tax losses	3.3	1.0	3.3	1.0
Tax on the result for the period as per the income statements	3.3	0.9	3.3	1.0

The income tax rate valid for the Group was 22% (22%). The income tax rate valid for Sweden was 22% (22%).

The income tax rate valid for UK was 20% (20%). The income tax rate valid for UK was 21% (15-35%).

# 13 Intangible Assets\*

	Patent		Capitalised Development		Total	
GROUP	2018	2017	2018	2017	2018	2017
Acquisition value brought forward	16.3	16.4	7.4	4.5	23.7	20.9
Acquisitions during the year						
Research & development	0.1	0.3	1.6	3.1	1.7	3.4
Disposals	-0.6	-0.4	0.0	-0.2	-0.6	-0.6
Accumulated acquisition carried forward	15.8	16.3	9.0	7.4	24.8	23.7
Depreciation brought forward	-14.5	-14.5	-1.5	-1.2	-16.0	-15.7
Depreciation for the year						
Research & development	-0.2	-0.2	-1.1	-0.3	-1.3	-0.5
Disposals	0.1	0.2	0.0	0.0	0.1	0.2
Accumulated depreciation carried forward	-14.6	-14.5	-2.6	-1.5	-17.2	-16.0
Book value carried forward	1.2	1.8	6.4	5.9	7.6	7.7
	Patent		Capitalised Development		Total	
PARENT COMPANY	2018	2017	2018	2017	2018	2017
Acquisition value brought forward	16.3	16.4	7.4	4.5	23.7	20.9
Acquisitions during the year						
Research & development	0.1	0.3	1.6	3.1	1.7	3.4
Disposals	-0.6	-0.4	0.0	-0.2	-0.6	-0.6
Accumulated acquisition carried forward	15.8	16.3	9.0	7.4	24.8	23.7
Depreciation brought forward	-14.5	-14.5	-1.5	-1.2	-16.0	-15.7
Depreciation for the year						
Research & development	-0.2	-0.2	-1.1	-0.3	-1.3	-0.5
Disposals	0.1	0.2	0.0	0.0	0.1	0.2
Accumulated depreciation carried forward	-14.6	-14.5	-2.6	-1.5	-17.2	-16.0
Book value carried forward	1.2	1.8	6.4	5.9	7.6	7.7

<sup>\*</sup> All intangible assets are related to Sweden.

### 14 Tangible Fixed Assets\*

	Laboratory & Production Equipment, Facility Upgrades & Computers		Process Control Equipment		Total	
GROUP	2018	2017	2018	2017	2018	2017
Acquisition value brought forward	4.4	4.4	5.3	5.3	9.7	9.7
Acquisitions during the year						
Administration	0.9	0.3	-	-	0.9	0.3
Sales and marketing	-	_	-	_	-	0.0
Disposals						
Sales and marketing	-	_	-3.2	-	-3.2	0.0
Administration	0.0	-0.3	-	-	0.0	-0.3
Accumulated acquisition carried forward	5.3	4.4	2.1	5.3	7.4	9.7
Depreciation brought forward	-2.7	-2.5	-5.3	-5.3	-8.0	-7.8
Depreciation for the year						
Sales and marketing	-	_	-	_	-	0.0
Administration	-0.5	-0.5	-	_	-0.5	-0.5
Disposals						
Sales and marketing	_	_	3.2	_	3.2	0.0
Administration	0.0	0.3	-	_	0.0	0.3
Accumulated depreciation carried forward	-3.2	-2.7	-2.1	-5.3	-5.3	-8.0
Book value carried forward	2.1	1.7	0.0	0.0	2.1	1.7

	Laboratory & Production Equipment, Facility Upgrades & Computers		Process Control Equipment		Total	
PARENT COMPANY	2018	2017	2018	2017	2018	2017
Acquisition value brought forward	5.0	5.0	1.7	1.7	6.7	6.7
Acquisition during the year						
Administration	0.9	0.3	-	_	0.9	0.3
Sales and marketing	_	_	_	_	_	_
Disposals						
Sales and marketing	-	-	-	_	-	-
Administration	-0.1	-0.3	-	_	-0.1	-0.3
Accumulated acquisition carried forward	5.8	5.0	1.7	1.7	7.5	6.7
Depreciation brought forward	-3.3	-3.1	-1.7	-1.7	-5.0	-4.8
Depreciation for the year						
Sales and marketing	-	-	-	_	-	0.0
Administration	-0.5	-0.5	-	_	-0.5	-0.5
Disposals						
Sales and marketing	-	-	-	_	-	0.0
Administration	0.0	0.3	-	-	0.0	0.3
Accumulated depreciation carried forward	-3.8	-3.3	-1.7	-1.7	-5.5	-5.0
Book value carried forward	2.0	1.7	0.0	0.0	2.0	1.7

<sup>\*</sup>All fixed assets in the Parent Company relates to Sweden.

### 15 Accounts Receivable – Trade

	GRO	DUP
	2018	2017
Accounts receivable not due	17.7	14.0
Accounts receivable overdue 0–30 days	2.3	0.7
Accounts receivable overdue 31–90 days	2.5	0.3
Accounts receivable overdue 91–180 days	0.0	_
Accounts receivable overdue >180 days	0.4	0.0
Provision for bad debts	0.0	0.0
Accounts receivables net	22.9	15.0

Accounts receivable net, including a provision for bad debts amounting to SEK 0.05 (0.03) million. The carrying amount of accounts receivable represents the fair value.

# 16 Other Long Term Receivables

	G	GROUP		COMPANY
	2018	2017	2018	2017
Deposits*	0.4	0.4	0.1	0.1
Deferred Tax Asset	35.6	32.3	35.6	32.3
Accrued Interest from Subsidiary	_	-	0.3	0.1
Total	36.0	32.7	36.0	32.5

<sup>\*</sup>Mainly office rental deposits.

### 17 Inventory

	GROUP		PARENT	COMPANY
	2018	2017	2018	2017
Work in progress	2.0	1.3	2.0	1.3
Finished products	4.5	2.9	4.5	2.8
Total	6.5	4.2	6.5	4.1
	GROUP		PARENT COMPANY	
	2018	2017	2018	2017
The amount of inventories recognised as an expense during the period	11.2	7.8	11.0	7.7
Total	11.2	7.8	11.0	7.7

### 18 Other Debtors

	GROUP		PARENT COMPA	
	2018	2017	2018	2017
VAT and tax receivables	0.4	0.5	0.5	0.5
Other current receivables	0.1	0.0	0.0	0.0
Total	0.5	0.5	0.5	0.5

<sup>\*</sup> The fair value of forward foreign exchange contracts is determined by using forward exchange rates at the balance sheet date, with the resulting value discounted back to present value. The fair value of derivative instruments is established by using valuation techniques. For this purpose, observable market information is used.

## 19 Prepaid Expenses and Accrued Income

	GROUP		PAR	ENT COMPANY
	2018	2017	2018	2017
Prepaid rents	0.1	0.1	0.1	0.1
Prepaid insurance	0.7	0.6	0.5	0.5
Accrued income from Production Fee	0.0	0.0	0.0	0.0
Others	1.0	2.1	1.0	2.1
Total	1.8	2.8	1.6	2.7

# 20 Long Term Liabilities

		GROUP		PARENT COMPANY	
	2018	2017	2018	2017	
Other long term liabilities	0.0	0.0	0.0	0.0	
Total	0.0	0.0	0.0	0.0	

### 21 Other Current Liabilities

	GROUP		PARENT COMPANY	
	2018	2017	2018	2017
Withholding tax and national insurance contributions for employees	1.0	0.8	0.8	0.6
Fair value on currency forward foreign exchange contracts*	0.0	0.0	0.0	0.0
Total	1.0	0.8	0.8	0.6

<sup>\*</sup> The fair value of forward foreign exchange contracts is determined by using forward exchange rates at the balance sheet date, with the resulting value discounted back to present value. The fair value of derivative instruments is established by using valuation techniques. For this purpose, observable market information is used.

# 22 Accrued Expenses, Prepaid Income and Provisions

	GR	GROUP		COMPANY
	2018	2017	2018	2017
Accrued personnel expenses	3.9	4.2	2.6	1.2
Accrued adminstrative costs	0.3	0.3	0.2	0.2
Deferred income	1.5	0.5	1.5	0.2
Provisions for cost of goods sold	0.3	0.2	0.3	0.2
Others	0.6	0.1	0.6	0.1
Total	6.6	5.3	5.2	1.9

### 23 The Link Between IFRS 9 Categories and SinterCast Balance Sheet Items in the Balance Sheet in 2018

	Financial assets at fair	Financial assets at	Financial liabilities at	
31 December 2018	value through profit and loss	amortised cost	amortised cost	Total
Other long term receivables	-	0.4	_	0.4
Trade debtors	_	22.9	_	22.9
Other debtors	_	0.5	_	0.5
Cash and cash equivalents	10.0	22.8	_	32.8
Accounts payable	_	_	-3.4	-3.4
Other current liabilities	_	_	-1.0	-1.0
Total	10.0	46.6	-4.4	52.2

The Group holds short-term investments that are included in cash and bank balances which are valued at level 1 (quoted prices in an active market). The short-term investments in the form of municipality bonds are managed as a group of financial assets and are reported at fair value through profit and loss.

### 24 Shares in Subsidiaries for the Parent Company, SinterCast AB (publ)

Saltillo, Mexico

Saltillo, Mexico

ALL AMOUNTS IN SEK				2018	2017
Acquisition value brought forward				66,268,332	66,268,332
Acquisition during the year					
New share issue				0	0
Accumulated acquisition value carried	forward			66,268,332	66,268,332
Impairment brought forward				-64,352,300	-64,352,300
Impairment for the year					
Write-off of shares in subsidiaries				0	0
Accumulated impairment carried forwa	ard			-64,352,300	-64,352,300
Book value carried forward				1,916,032	1,916,032
		Corporate	Votes and Percentage		Book Value
List of subsidiaries to SinterCast AB (p	oubl)	Identification Number	of Equity, %	2018	2017
SinterCast Trading (Beijing) Co., Ltd.	Beijing, China	911101055976721753	100	1,848,047	1,848,047
SinterCast Korea Co., Ltd	JeonJu-City, South Korea	418-81-40366	100	67,981	67,981
SinterCast Ltd.	London, UK	2021239	100	1	1
SinterCast, Inc.	Chicago, USA	187363	100	1	1

SIN960415AY5

SSE960408EX1

100

100

### 25 Share Capital Development in SinterCast AB (publ)

Number of Shares					
	A*	B**	Total	Par Value (SEK)	Share Capital (SEK)
Share capital as of 1 January 1993	101,200	2,660	103,860	0.50	51,930
March 1993: Share issue I	161,200	2,660	163,860	0.50	81,930
April 1993: Split 10:1	1,612,000	26,600	1,638,600	0.05	81,930
April-May 1993: Share issue II	2,084,600	26,600	2,111,200	0.05	105,560
April-May 1993: Share issue III	2,311,350	26,600	2,337,950	0.05	116,898
December 1993: Bonus issue	2,311,350	26,600	2,337,950	1.00	2,337,950
January 1994: Directed share issue	2,811,350	26,600	2,837,950	1.00	2,837,950
October 1994: Directed share issue	2,811,350	626,600	3,437,950	1.00	3,437,950
October 1995: Directed share issue	3,435,350	626,600	4,061,950	1.00	4,061,950
December 1995: Subscription via warrants	3,435,350	628,600	4,063,950	1.00	4,063,950
June 1996: Subscription via warrants	3,435,350	655,600	4,090,950	1.00	4,090,950
February 2002: Directed share issue	4,235,350	655,600	4,890,950	1.00	4,890,950
		Number of Outst	anding Shares		
June 2002: Change share structure* (B shares converted to A)			4,890,950	1.00	4,890,950
September 2002: Subscription via warrants			4,900,062	1.00	4,900,062
November 2003: Subscription via warrants			5,364,200	1.00	5,364,200
December 2003: Subscription via warrants			5,389,200	1.00	5,389,200
December 2004: Subscription via warrants			5,552,900	1.00	5,552,900
September 2009: Directed share issue			6,478,383	1.00	6,478,383
October 2010: Subscription via warrants			6,930,653	1.00	6,930,653
December 2010: Subscription via warrants			6,975,653	1.00	6,975,653
December 2013: Subscription via warrants			7,090,133	1.00	7,090,133
Share capital as of 31 December 2018			7,090,133	1.00	7,090,133

<sup>\*</sup> One vote per share

SinterCast SA de CV

Total

SinterCast Servicios SA de CV



1

1,916,032

1

1

1,916,032

<sup>\*\*</sup>One tenth vote per share

### 26 Risk Management, Risks and Uncertainty Factors

All business and share-ownership involves some measure of risk. The risk factors reported herein are not ranked in order of priority or significance, and do not claim to be comprehensive. Shareholders should make their own assessment of each risk factor and its significance for the future development of the company. The risk exposure for SinterCast can be broadly divided into strategic risks, operational risks and financial risks.

The Board of Directors monitors the business development and the associated risks during the Board Meetings. The Board of Directors has established policies to provide a framework for how the various risks that SinterCast can encounter shall be managed and to define the risk exposure with which the business may be operated. The objective of the Board's policies is to maintain a low risk profile regarding financial and legal matters. External monitoring is conducted by auditors and advisors. Internal monitoring takes place in accordance with the operating principles approved by the Board of Directors. Appropriate insurance has been taken against risks associated with assets and interruption of operations and to minimise indemnity risks. Operating procedures have also been implemented to reduce the risk of IT interruptions and recovery procedures have been established. SinterCast is currently not involved in any legal disputes.

### Strategic Risks

### Market Risk

Uncertainty factors for SinterCast include the timing of OEM decisions for new CGI engines and other components, adherence to start-of-production dates and ramp projections, the global economy for new vehicle sales, technology trends and emissions legislation, and the individual sales success of vehicles equipped with SinterCast-CGI components.

In Europe, passenger vehicle sales have increased for the last five years. Most forecasters indicate a stable near-term outlook for passenger vehicles and moderate growth for commercial vehicles. However, political uncertainty remains and this could affect infrastructure, investment, trade and, ultimately, vehicle sales. In Asia, the dominant Chinese market has shown recovery in the commercial vehicle sector, which represents the primary opportunity for CGI. Growth for SinterCast in China depends on the continued modernisation of road infrastructure, enforcement of emissions legislation, and acceptance of the SinterCast business model. In North America, passenger vehicle sales remain strong and SinterCast has benefitted from the recent market growth and the trend toward larger crossovers, SUVs and pick ups. Although the topthree best-selling vehicles in America have recently committed to diesel engine options, the long-term outlook for diesel passenger vehicles remains uncertain. The possible renegotiation of international tariffs and free trade agreements could also have an impact on the global passenger vehicle and commercial vehicle markets.

## **Product Applications**

Series production is diversified between diesel and petrol engines for passenger vehicles, commercial vehicle engine components, and other applications such as exhaust components, bedplates and industrial power components. This diversification, combined with the delivery of SinterCast-CGI castings to more than 30 different end-users in five continents, helps to mitigate the risk of cyclical demand in any one sector or for any one customer. SinterCast also endeavours to offset the risk in its current customer activities by developing new products and applications. The SinterCast Tracking Technologies were launched in 2016, providing the opportunity for supplemental revenue beyond

## Alternative Technologies and Emissions Legislation

The business development of SinterCast is strongly linked to the internal combustion engine, particularly the diesel engine. Recent events in the global passenger vehicle market have increased the scrutiny on diesel engines and some governments are revisiting emissions legislation. While SinterCast believes that the diesel engine can meet stringent NOx legislation and that it remains an important part of the solution for fleet fuel economy and CO2 reduction, revised legislation can present a hindrance to the market development for diesel passenger vehicles. For long-haul commercial vehicles, diesel engines are expected to remain the dominant powertrain technology throughout the SinterCast planning horizon. Within the passenger vehicle market, sales of new powertrain technologies, such as vehicle electrification (hybrid and plug-in vehicles), alternative fuels and fuel cells will grow, however, many automotive industry forecasts agree that the internal combustion engine will remain the dominant powertrain technology well beyond 2025. In perspective, plug-in electric passenger vehicles accounted for approximately 2% of new passenger vehicle sales in Europe and the US in 2018. While considerable attention is given to "electrification", most industry analysts agree that the majority of electrified vehicles for the next 20 years will be hybrids, combining both electric drive and an internal combustion engine. The continued need for efficient internal combustion engines provides an opportunity for SinterCast and SinterCast must promote CGI alternatives for these applications. The internal combustion engine, both diesel and petrol, will

continue to make efficiency improvements to defend its position as the most cost-efficient and convenient powertrain technology. These gains will include downsizing, increased thermal and mechanical loading, and increased specific performance with current product development focussing on more than 200 horsepower per litre. These developments can benefit from stronger material such as CGI.

### Code of Conduct

The Board of Directors has established a Code of Conduct to guide the way that the company is represented. The guidelines provided in the Code of Conduct are established to reinforce the recognition, respect and leadership position that SinterCast enjoys in industry and in society. SinterCast is committed to high and consistent standards of integrity and ethics. The Board and the management are committed to leading by example and to ensuring that the Code of Conduct is honoured by all employees.

### **Operational Risks**

### **Major Customers**

In recent years, SinterCast has actively worked to expand its customer base in order to reduce its dependence on individual foundry customers. As of 15 March 2019. SinterCast has 52 installations in 14 countries and 11 different languages. In 2018, the three largest customers represented SEK 33.2 million (SEK 26.1 million), SEK 22.1 million (SEK 14.9 million) and SEK 6.7 million (SEK 3.8 million) of the company's sales while the five largest customers accounted for approximately SEK 70.4 million (SEK 51.7 million) of sales. As a result, the loss of a single foundry customer, capacity constraints at any such customer, or stoppages in the production of any high-volume engine programme could - at least in the short term - have a significant negative impact on the company's revenue and result.

### **Key Personnel**

For the foreseeable future, SinterCast will be dependent on the expertise and creativity of a core group of key personnel. These people have the knowledge, experience and contacts that develop and support the underlying technology and that maintain the customer support and sales activities. The departure of one or more of these individuals could have a negative effect on the company's business. The Board of Directors has implemented incentive programmes to manage this risk and to motivate, retain and reward employees. The recent recruitment of technical staff has also helped to distribute the core know-how and broaden the competence within the company. SinterCast strives to provide a challenging and rewarding work environment.

### Patents and Intellectual Property Rights

The company has implemented a strategy to protect its technology through patents or other intellectual property rights to preserve its leading position within liquid metal process control. The company applies for patents in selected countries that are relevant to the foundry and/or automotive industries, while retaining some core technology as knowhow. However, there is no guarantee that the company will continue to be granted patents in the relevant geographic markets, or will be able to defend the patents that have been granted. There is also a risk that new technologies may be developed which circumvent the company's patents. During the recent years, as the SinterCast technology has evolved, the company allowed selected patents to lapse, as it was judged that continued payment of the national phase annuities for these patents would not provide a return on the investment.

The risk for claims refers to the costs that SinterCast could incur to replace or rectify non-conforming or defective products or systems and the possible costs for customer-levied penalties. SinterCast endeavours to resolve any claim quickly and efficiently to ensure customer satisfaction and loyalty, even if such resolutions result in short term costs. During 2018, the Group's cost for claims amounted to less than one percent of turnover. SinterCast strives to minimise its risks for claims by means of comprehensive testing during the development phase, through quality control, proactive customer support and adequate insurance.

### Financial Risks and Financial Instruments

The Board of Directors has established the SinterCast finance policy to provide a framework for how different types of financial risks shall be managed and to define the risk exposure with which the business may be operated. The objective of this policy is to maintain a low risk profile. In general, risks and principles are applicable for both the Parent Company and the Group. Please see page 37 "Financial Instruments" for more detailed information regarding the SinterCast classification of financial instruments.

Liquidity risk is the risk that the Group's short term cash and cash equivalents requirements may not be met. Planning of the Group's future requirements for liquid funds is facilitated by continuously updating the Group's requirements for liquidity over a 12-month period. The Board must be promptly notified of any sudden or expected decline in the Group liquidity. The risk is limited by holding sufficient cash and cash equivalents and if necessary, securing granted but unused credit facilities that can be utilised without conditions, for at least a 12-month period. The liquidity risk is considered as low. The Group's liquidity on 31 December 2018 amounted to SEK 32.8 million (SEK 30.1 million).

Liquidity		Group			Parent Company			
Amounts in SEK million		2	018	20	17	2018	3	2017
Bonds, fixed income instrum	ents	1	10.0	15	.0	10.0	)	15.0
Cash at bank		2	2.8	15	5.1	21.2	2	13.7
Total		3	32.8	30	).1	31.2	2	28.7
Maturity Structure		2	018			2	017	
Group (Parent Company)		Total	<30	days		Total	<30	days
Total cash & equivalents	32.8	(31.2)	32.8	(31.2)	30.1	(28.7)	29.1	(27.7)
Receivables	22.9	(21.7)	2.2	(1.8)	15.0	(14.0)	0.7	(0.5)
Income from leases	0.1	(0.1)	0.0	(0.0)	0.3	(0.1)	0.0	(0.0)
Total	55.8	(53.0)	35.0	(33.0)	45.4	(42.8)	29.8	(28.2)
Total payable, ex salaries	3.9	(3.7)	3.8	(3.6)	3.1	(3.0)	2.8	(2.8)
Expenses from leases	1.4	(8.0)	0.1	(0.1)	1.4	(8.0)	0.1	(0.1)
Total	5.3	(4.5)	3.9	(3.7)	4.5	(3.8)	2.9	(2.9)

### Refinancing Risk

Refinancing risk is the risk that the Group will be unable to raise new loans or to refinance existing loans, when falling due. Planning of the Group's future finance requirements is facilitated by continuously updating the Group's finance forecasts over a five year period, and reviewing existing loans, if any. Currently, the SinterCast Group has no external loans. Only the Board can approve new loans.

### Credit Risk, Customers and Deposits

Credit risk is the risk that any counterparty may not be able to fulfil its commitments and, as a consequence, the Group suffers a loss. Prior to entering a business relationship with a new customer, professional credit information about the customer is obtained and reviewed. Before offering credit, financing guarantee products that provide cover against payment risks are evaluated and the credit terms and terms of payments are determined accordingly. This is also valid regarding deposits. Credit risk in excess of SEK 5 million must be approved by the Board. Credit risk is handled by the Group's finance function. Credits are systematically monitored and followedup. The majority of the Group's customers are large, well-known companies and organisations. The credit risk is distributed among the majority of the customers. Historical and present bad debt losses are insignificant. SinterCast operates with credit insurance for most contracts. Provision for bad debts has been made amounting to SEK 0.05 million.

Credit Risk	Group		Group		Parent 0	Company
Amounts in SEK million	2018	2017	2018	2017		
Receivables, not due	17.7	14.0	17.2	13.2		
Due <30 days	2.3	0.7	1.8	0.5		
Due > 30 days	2.9	0.3	2.7	0.3		
Total trade receivables	22.9	15.0	21.7	14.0		

Funds not needed in the operation shall be invested in order to minimise risks and optimise returns. Bond investments shall be made in bond funds such that all funds shall be Standard & Poors BBB or above, with a maximum of 50% of the funds allocated to the BBB class. The Group shall not invest in securities or funds which are exposed to long term interest rate risks.

### Interest Rate Risk

Interest rate risk is the risk that variations in interest rates will have a negative impact on the Group results. The aim is to minimise the interest rate risk by investing the Group's liquid funds in a well-balanced portfolio. Interest rate risk exists in short term investments, bank deposits and outstanding loans due to variability of interest rates. An interest rate change of one percentage point up or down corresponds to an interest risk of approximately SEK 0.3 million for SinterCast's short term investments and bank deposits.

### **Currency Risk**

Currency risk is the risk that the value of future flows, loans, and equity may change as a result of foreign exchange rate fluctuations. This risk can be further subdivided as follows:

Transaction exposure is the risk that the value in Swedish krona of actual and estimated net inflows in foreign currencies varies with the exchange rate. The net inflow of exposed currencies shall be budgeted for the next 12 months and presented to the Group's banks and other financial advisors for guidance on future hedging. The hedging for the following year will thereafter be decided by the Board.

The Group's net inflow of foreign currency primarily consists of USD and EUR while its expenses are primarily in SEK. The increased expenses outside Sweden have increased the natural hedge of the USD and EUR inflow. The

net surplus of foreign currency primarily consists of USD and EUR which are exchanged to SEK and GBP. During 2018, foreign currencies exchanged to SEK amounted to approximately USD 3.9 million (USD 3.9 million) and EUR 1.3 million (EUR 1.4 million). Foreign currencies exchanged to GBP amounted to approximately USD 0.5 million (USD 0.6 million) and EUR 0.3 million (EUR 0.2 million). During 2018, the average USD/SEK exchange rate increased slightly by 0.2%, from 8.67 to 8.69. The EUR/SEK exchange rate increased by 8.8% from 9.43 to 10.26. The exchange rate movement in these currencies in 2018 effected the net currency flow by approximately SEK 0.6 million (SEK 0.3 million). The exchange rate movements in GBP compared to USD and EUR affected the 2018 net currency flow by approximately SEK 0.0 million. An exchange rate increase of 10 percent in the main net currency flows versus SEK, has an effect of approximately USD 0.4 million (USD/SEK) and EUR 0.1 million (EUR/SEK) on the future net currency flows. All presented figures above are before consideration of hedges made in accordance with the Finance Policy. It is estimated that the combined currency movement, phasing on conversions made and other currency effects on the Income Statement during 2018, amounts to approximately SEK -0.1 million.

In accordance with the Group's Finance Policy, part of the expected and budgeted flow of USD and EUR was hedged for the following 12 month period. Outstanding currency forward exchange contracts on the balance sheet date were:

### Forward Exchange Contracts

Amounts in million		2018		2017
	Total	<6 month	Total	<6 month
USD	1.2	1.0	0.9	0.9
EUR	1.2	1.0	0.8	0.4

Translation exposure is the risk of holding net assets in a foreign subsidiary (i.e. subsidiaries with a base currency other than SEK). Currently, the net assets in foreign subsidiaries are not hedged. This is reviewed on a yearly basis, in conjunction with the Finance Policy review and approval. Any changes to the hedge decision must be approved by the Board. The value of the Group's net assets, meaning the difference between capital employed and net debt, amounted to SEK 6.6 million, (SEK 7.1 million) and was distributed among the following currencies:

### Net Assets in Foreign Subsidiaries

Amounts in SEK million	2018	2017
USD	3.9	3.0
GBP	1.5	1.2
KRW	0.7	0.7
RMB	0.3	2.0
MEX	0.2	0.2

If the currency moves 10% towards SEK, the following translation effect will arise, and will affect the result before tax correspondingly.

## Translation Risk

Amounts in SEK million			
USD	0.4		
RMB	0.1		
GBP	0.1		
KRW	0.1		
MEX	0.0		

Loan exposure is the risk of holding loans denominated in a foreign currency, which are not used to hedge the transaction or equity position. The matching principle is applied to funds borrowed externally. Accordingly, if possible, money is raised, or hedged, in the currency in which it is intended to invest the funds. Internal loans are denominated in the currency of the lender. External foreign currency loans must be approved by the Board.

### Capital Risk

Capital Risk is the risk that the Group's capital structure is not efficient or that there are risks to cease the Group's operation.

The Group's objective in respect of the capital structure is to optimise the capital structure in order to secure that SinterCast is able to continue to conduct its operations so that it can generate a return for shareholders and value for other stakeholders and in order to maintain an optimal capital structure so that the cost of capital can be reduced.

To manage the capital structure, the Group must seek approval from the shareholders to issue new shares, buy-back shares or distribute dividends. The capital structure is regularly monitored and the Board is updated of the current capital structure and provided with proposals to be decided upon. The Group equity on 31 December 2018 amounted to SEK 99.2 million (SEK 85.8 million). The equity of SinterCast AB amounted to SEK 92.5 million (SEK 80.6 million). The foreign subsidiaries have been financed by internal loans and equity.

### 27 Events After the Balance Sheet Date

The following press releases have been issued:

- 16 January 2019 Ram launches new SinterCast-CGI diesel engine at North American International Auto Show
- 28 January 2019 China Shipbuilding Industry Corporation adopts SinterCast process control technology
- 29 January 2019 Scania orders SinterCast process control technology for new Compacted Graphite Iron foundry
- 20 February 2019 SinterCast Results October-December 2018 and Full Year Results 2018
- 4 March 2019 SinterCast Nomination Committee proposals
- 12 March 2019 Series production breaks three million Engine Equivalent milestone

There have been no other significant events since the balance sheet date of 31 December 2018 that could materially change these financial statements.

The balance sheets and the income statements shall be presented for approval at the Annual General Meeting of shareholders on 23 May 2019.

### 28 Proposed Allocation of Profits in SinterCast AB (publ)

The following earnings in the Parent Company are at the disposal of the Annual General Meeting.

(Amounts in SEK)					
Share premium reserve	35,336,610				
Result brought forward	2,398,206				
Result for the year	31,393,688				
Total non-restricted equity of the Parent Company	69 128 504				

The Board of Directors proposes to the AGM that earnings be distributed as follows.

(Amounts in SEK)	
A dividend of SEK 5.0 per share shall be distributed	35,450,665
To be retained by the Parent Company	33,677,839
Total	69,128,504

### 29 Definitions

### **Definitions and reconciliation**

The European Securities and Markets Authority (ESMA) has issued guidelines regarding alternate key ratios for listed companies. Alternative ratios relate to financial key figures and share data used by management to control and evaluate the Group's business, other than those defined in the applicable financial reporting framework (IFRS). These ratios are also considered to be of interest to external investors and analysts who monitor the company. The key ratios are calculated according to the following definitions using the figures presented in the financial statements. According to management judgement, reconciliation of the key ratios has not been presented because the calculations are based on non-adjusted figures.

### Operating margin %

Operating result as percentage of revenue

### Solidity %

Shareholders' equity expressed as percentage of total assets end of period

## **Equity per share**

Shareholders' equity divided by the average number of shares

### Capital employed

Total assets less non-interest bearing liabilities

### Return on shareholders' equity %

Result for the period as a percentage of average shareholders' equity

Quarterly values are not annualised

## Return on capital employed %

Result for the period as a percentage of average capital employed

Quarterly values are not annualised

### Return on total assets %

Result for the period as a percentage of total average assets.

Quarterly values are not annualised

### Average number of shares

Weighted average of the number of shares outstanding for the period

## Average number of shares adjusted for dilution

Weighted average of the number of shares for the period adjusted for dilution

### Earnings per share

Result for the period divided by the average number of shares

## Earnings per share, diluted

Result for the period divided by the average number of shares adjusted for dilution

### Dividend per share

Dividend divided by the number of shares

## Cashflow from operations per share

Cashflow from operations divided by the number of shares

## Share price at the end of the period

Latest paid price for the SinterCast share at Nasdaq Stockholm stock exchange



# Signatures

The Board of Directors and the Managing Director declare that the consolidated financial statements have been prepared in accordance with IFRS as adopted by the EU and give a fair view of the Group's financial position and results of operations. The financial statements of the Parent Company have been prepared in accordance with generally accepted accounting principles in Sweden and give a true and fair

view of the Parent Company's financial position and results of the operations. The Directors' Report of the Group and the Parent Company provides a fair review of the development of the Group's and the Parent Company's operations, financial position and results of the operations, and describes material risks and uncertainties facing the Parent Company and the companies included in the Group.

Stockholm 3 April 2019

Hans-Erik Andersson Chairman of the Board

Robert Dover Member of the Board Caroline Sundewall Member of the Board

Jun Arimoto Member of the Board Lars Hellberg

Member of the Board

Steve Dawson

Member of the Board & Managing Director

Our audit report was submitted on 3 April 2019 Öhrlings PricewaterhouseCoopers AB

> Tobias Stråhle Authorised Public Accountant



### **Auditor's report**

To the general meeting of the shareholders of SinterCast AB (publ), corporate identity number 556233-6494

### Report on the annual accounts and consolidated accounts

### Opinions

We have audited the annual accounts and consolidated accounts of SinterCast AB (publ) for the year 2018 except for the corporate governance statement on pages 23-28. The annual accounts and consolidated accounts of the company are included on pages 19-53 in this document.

In our opinion, the annual accounts have been prepared in accordance with the Annual Accounts Act and present fairly, in all material respects, the financial position of parent company as of 31 December 2018 and its financial performance and cash flow for the year then ended in accordance with the Annual Accounts Act. The consolidated accounts have been prepared in accordance with the Annual Accounts Act and present fairly, in all material respects, the financial position of the group as of 31 December 2018 and their financial performance and cash flow for the year then ended in accordance with International Financial Reporting Standards (IFRS), as adopted by the EU, and the Annual Accounts Act. Our opinions do not cover the corporate governance statement on pages 23-28. The statutory administration report is consistent with the other parts of the annual accounts and consolidated accounts.

We therefore recommend that the general meeting of shareholders adopts the income statement and balance sheet for the parent company and the group.

Our opinions in this report on the annual accounts and consolidated accounts are consistent with the content of the additional report that has been submitted to the parent company's audit committee in accordance with the Audit Regulation (537/2014) Article 11.

### Basis for Opinions

We conducted our audit in accordance with International Standards on Auditing (ISA) and generally accepted auditing standards in Sweden. Our responsibilities under those standards are further described in the Auditor's responsibilities section. We are independent of the parent company and the group in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements. This includes that, based on the best of our knowledge and belief, no prohibited services referred to in the Audit Regulation (537/2014) Article 5.1 have been provided to the audited company or its controlled companies within the EU.

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

### Our audit approach

### Audit scope

We designed our audit by determining materiality and assessing the risks of material misstatement in the consolidated financial statements. In particular, we considered where management made subjective judgements; for example, in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain. As in all of our audits, we also addressed the risk of management override of internal controls, including among other matters consideration of whether there was evidence of bias that represented a risk of material misstatement due to fraud. We tailored the scope of our audit in order to perform sufficient work to enable us to provide an opinion on the consolidated financial statements as a whole, taking into account the structure of the Group, the accounting processes and controls, and the industry in which the group operates.

The transaction flow, as well as the processes that the company applies to ensure financial reporting, is limited in scope. The financial reporting is supervised by a small group of people within the company's finance department, management and board. For efficiency reasons audit evidence was mainly obtained by testing details, on sample basis, of individual transactions in the accounting records.

Our audit of the consolidated financial statements have included the all material unit in the Group. Continuous meetings with the management and the audit committee was held where we reported our findings.

### Materiality

The scope of our audit was influenced by our application of materiality. An audit is designed to obtain reasonable assurance whether the financial statements are free from material misstatement. Misstatements may arise due to fraud or error. They are considered material if individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

Based on our professional judgement, we determined certain quantitative thresholds for materiality, including the overall materiality for the financial statements as a whole. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements, both individually and in aggregate on the financial statements as a whole.

### Keu audit matters

Key audit matters of the audit are those matters that, in our professional judgment, were of most significance in our audit of the annual accounts and consolidated accounts of the current period. These matters were addressed in the context of our audit of, and in forming our opinion thereon, the annual accounts and consolidated accounts as a whole, but we do not provide a separate opinion on these matters.



### Key audit matter

### Deferred tax assets - valuation of tax losses carried forward

The consolidated and the parent company's balance sheet include deferred taxes amounting to SEK 36 million. This corresponds to SEK 172 million of the accumulated tax losses carry forward in Sweden. Details of the total tax losses are disclosed in note 12 in the financial statements.

Under IFRS tax losses should be recognized as deferred tax assets to the extent it is likely that these can be offset against future taxable income over the foreseeable future.

The company management assesses that the utilization of tax losses carried forward are limited to future earnings from secured CGI programs. The future taxable income which can be offset against tax losses carry forward is calculated, based on a mathematical model. The utilization rate is re-assessed on quarterly basis and reviewed by the board. As described in the accounting principles (pages 35-41), "critical accounting estimates and judgements" (page 36) and internal control section in the financial statements, The company management asses that the deferred tax asset is a significant area of judgment for the financial statements.

For the above reasons, valuation of tax losses carry forwards is considered a key audit matter.

### How our audit addressed the Key audit matter

Our audit has included, but is not limited to, the following:

- We have obtained the mathematical model and assessed if it is mathematical correct and if it is consistently applied.
- We have assessed the reasonableness of the calculation by comparing estimated future production rates, revenue and cost levels against historical information in the company's system.
- We have compared revenue data that is applied in the model against underlying agreements on sample basis.
- We challenged management assessments as to whether the data relating to future taxable income is reasonable and if there are any known changes regarding income from production fees and consumables.
- We have also made inquiries to management and board regarding the fairness and sustainability of future production levels and revenues.

Our review has not resulted in any adjustments and we have not reported any significant observations to the Audit Committee.

### Other Information than the annual accounts and consolidated accounts

This document also contains other information than the annual accounts and consolidated accounts and is found on pages 2-18 and 57-60. The Board of Directors and the Managing Director are responsible for this other information.

Our opinion on the annual accounts and consolidated accounts does not cover this other information and we do not express any form of assurance conclusion regarding this other information.

In connection with our audit of the annual accounts and consolidated accounts, our responsibility is to read the information identified above and consider whether the information is materially inconsistent with the annual accounts and consolidated accounts. In this procedure we also take into account our knowledge otherwise obtained in the audit and assess whether the information otherwise appears to be materially misstated.

If we, based on the work performed concerning this information, conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

### Responsibilities of the Board of Directors and the Managing Director

The Board of Directors and the Managing Director are responsible for the preparation of the annual accounts and consolidated accounts and that they give a fair presentation in accordance with the Annual Accounts Act and, concerning the consolidated accounts, in accordance with IFRS as adopted by the EU. The Board of Directors and the Managing Director are also responsible for such internal control as they determine is necessary to enable the preparation of annual accounts and consolidated accounts that are free from material misstatement, whether due to fraud or error.

In preparing the annual accounts and consolidated accounts, The Board of Directors and the Managing Director are responsible for the assessment of the company's and the group's ability to continue as a going concern. They disclose, as applicable, matters related to going concern and using the going concern basis of accounting. The going concern basis of accounting is however not applied if the Board of Directors and the Managing Director intends to liquidate the company, to cease operations, or has no realistic alternative but to do so.

The Audit Committee shall, without prejudice to the Board of Director's responsibilities and tasks in general, among other things oversee the company's financial reporting process.

### Auditor's responsibility

Our objectives are to obtain reasonable assurance about whether the annual accounts and consolidated accounts as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs and generally accepted auditing standards in Sweden will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these annual accounts and consolidated accounts.

A further description of our responsibility for the audit of the annual accounts and consolidated accounts is available on Revisorsinspektionen's website: www.revisorsinspektionen.se/rn/showdocument/documents/rev\_dok/revisors\_ansvar.pdf. This description is part of the auditor's report.



## Report on other legal and regulatory requirements

### Opinions

In addition to our audit of the annual accounts and consolidated accounts, we have also audited the administration of the Board of Directors and the Managing Director of SinterCast AB (publ) for the year 2018 and the proposed appropriations of the company's profit or loss.

We recommend to the general meeting of shareholders that the profit be appropriated in accordance with the proposal in the statutory administration report and that the members of the Board of Directors and the Managing Director be discharged from liability for the financial year.

### Basis for Opinions

We conducted the audit in accordance with generally accepted auditing standards in Sweden. Our responsibilities under those standards are further described in the Auditor's Responsibilities section. We are independent of the parent company and the group in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements.

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

### Responsibilities of the Board of Directors and the Managing Director

The Board of Directors is responsible for the proposal for appropriations of the company's profit or loss. At the proposal of a dividend, this includes an assessment of whether the dividend is justifiable considering the requirements which the company's and the group's type of operations, size and risks place on the size of the parent company's and the group's equity, consolidation requirements, liquidity and position in general.

The Board of Directors is responsible for the company's organization and the administration of the company's affairs. This includes among other things continuous assessment of the company's and the group's financial situation and ensuring that the company's organization is designed so that the accounting, management of assets and the company's financial affairs otherwise are controlled in a reassuring manner. The Managing Director shall manage the ongoing administration according to the Board of Directors' guidelines and instructions and among other matters take measures that are necessary to fulfil the company's accounting in accordance with law and handle the management of assets in a reassuring manner.

### Auditor's responsibility

Our objective concerning the audit of the administration, and thereby our opinion about discharge from liability, is to obtain audit evidence to assess with a reasonable degree of assurance whether any member of the Board of Directors or the Managing Director in any material respect:

- · has undertaken any action or been guilty of any omission which can give rise to liability to the company, or
- in any other way has acted in contravention of the Companies Act, the Annual Accounts Act or the Articles of Association.

Our objective concerning the audit of the proposed appropriations of the company's profit or loss, and thereby our opinion about this, is to assess with reasonable degree of assurance whether the proposal is in accordance with the Companies Act.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with generally accepted auditing standards in Sweden will always detect actions or omissions that can give rise to liability to the company, or that the proposed appropriations of the company's profit or loss are not in accordance with the Companies Act.

A further description of our responsibility for the audit of the administration is available on Revisorsinspektionen's website: www.revisorsinspektionen.se/rn/showdocument/documents/rev\_dok/revisors\_ansvar.pdf. This description is part of the auditor's report.

### The auditor's examination of the corporate governance statement

The Board of Directors is responsible for that the corporate governance statement on pages 23-28 has been prepared in accordance with the Annual Accounts Act.

(Our examination of the corporate governance statement is conducted in accordance with FAR's auditing standard RevU 16 The auditor's examination of the corporate governance statement. This means that our examination of the corporate governance statement is different and substantially less in scope than an audit conducted in accordance with International Standards on Auditing and generally accepted auditing standards in Sweden. We believe that the examination has provided us with sufficient basis for our opinions.

A corporate governance statement has been prepared. Disclosures in accordance with chapter 6 section 6 the second paragraph points 2-6 of the Annual Accounts Act and chapter 7 section 31 the second paragraph the same law are consistent with the other parts of the annual accounts and consolidated accounts and are in accordance with the Annual Accounts Act.

Öhrlings PricewaterhouseCoopers AB, Torsgatan 21 in Stockholm, was appointed as auditors of SinterCast AB (publ)s by the annual general meeting of the shareholders on May 24, 2018 and has been the company auditors since April 26, 1993. Tobias Stråhle has been main responsible audit of SinterCast AB (publ) since November 14, 2013

Stockholm April 3, 2019 Öhrlings PricewaterhouseCoopers AB

Tobias Stråhle Authorized public accountant



# Historical Summary – Group

Profit and Loss accounts         Revenue         65.6         75.4         72.4         54.5         54.5         54.5         75.4         72.4         54.5         54.5         54.5         75.4         72.4         54.5 <t< th=""><th>Amounts in SEK million</th><th>2018</th><th>2017</th><th>2016</th><th>2015</th><th>2014</th></t<>	Amounts in SEK million	2018	2017	2016	2015	2014
Operating result         29.4         17.7         26.4         20.3         10.2           Financial ret         0.0         0.0         0.0         4.1         1.2           Tax         3.3         0.0         1.0         0.0         20.2         12.3           Result for the year for Parent Company shareholders         32.7         18.6         26.8         25.2         12.3           Cashflow from poperations before change in working capital         4.6         8.20         0.1         0.0         4.0           Cashflow from operations         24.8         16.9         25.4         20.4         6.7           Cashflow from operations         24.8         16.9         25.4         20.4         6.7           Cashflow from operations         24.8         16.9         25.4         20.4         6.7           Cashflow from investments         2.6         3.7         2.3         1.1         6.7           Cashflow from investments         2.6         3.7         2.3         1.1         6.0           Cashflow from investments         2.6         3.7         2.3         1.1         2.3           Cashflow from investments         2.2         2.2         3.1         2.2 <t< td=""><td>Profit and Loss accounts</td><td></td><td></td><td></td><td></td><td></td></t<>	Profit and Loss accounts					
Financial net Tax         0.0         0.0         0.0         4.1         1.2           Tax         3.3         0.9         1.0         0.2         0.2           Result for the year for Parent Company shareholders         25.2         1.2         2.5         25.2         1.2           Cashflow analysis         31.6         1.8         2.6         2.5         1.0         4.2           Change in working capital         31.6         1.8         2.6         2.1         5.0         9.2           Change in working capital         4.6         8.2         2.5         2.0         4.2           Change in working capital         4.6         8.2         2.5         2.0         4.2           Change in cash position         2.2         2.5         2.3         1.7         1.3         2.2           Exchange rate differences in cash and cash equivalents         9.0         0	Revenue	87.7	65.6	75.4	72.4	54.5
Tax         3.3         0.9         1.0         0.8         0.9           Result for the year for Parent Company shareholders         32.7         18.6         26.8         25.2         12.3           Cashflow analysis         2         2.0         1.0         4.0         2.0         1.0         4.0           Cashflow from operations before change in working capital         6.8         2.0         1.5         0.0         4.2           Cashflow from preations         24.8         16.9         25.4         20.4         4.0           Cashflow from investments         2.0         3.7         3.3         1.7         4.1           Cashflow from financial operations         9.1         2.0         0.0	Operating result	29.4	17.7	26.4	20.3	10.2
Result for the year for Parent Company shareholders         32.7         18.6         26.8         25.2         12.3           Cashflow analysis         Section of perations before change in working capital         31.6         18.9         26.9         21.3         10.9         4.2           Change in working capital         6.8         2-0.9         -1.5         -0.9         4.2           Cashflow from operations         24.8         16.9         25.4         20.4         6.7           Cashflow from investments         -2.6         -3.7         -3.3         -1.7         -1.3           Cashflow from investments         -2.8         -3.4         -24.8         -15.6         -8.5           Exchange rate differences in cash and cash equivalents         -2.8         -2.8         -2.8         -3.7         -3.3         -3.5	Financial net	0.0	0.0	-0.6	4.1	1.2
Cashflow analysis           Cashflow from operations before change in working capital         31.6         18.9         26.9         21.3         10.9           Change in working capital         -6.8         -2.0         -1.5         -0.9         -4.2           Cashflow from operations         24.8         16.9         25.4         20.4         -6.7           Cashflow from investments         -2.6         -3.7         -3.3         -1.7         -1.5           Cashflow from financial operations         -19.5         -28.4         -24.8         -15.6         -8.5           Exchange rate differences in cash and cash equivalents         0.0         4.6         1.6         4.6         1.6         4.6         4.6         4.6         4.6         4.6         4.6         4.6	Tax	3.3	0.9	1.0	0.8	0.9
Cashflow from operations before change in working capital         31.6         18.9         26.9         21.3         10.0           Change in working capital         -6.8         -2.0         -1.5         -0.9         -4.2           Cashflow from operations         24.8         18.9         25.4         20.4         6.7           Cashflow from investments         -2.6         -3.7         -3.3         -1.7         -1.3           Cashflow from financial operations         -19.5         -28.4         -24.8         -18.6         -8.5           Exchange rate differences in cash and cash equivalents         0.0 <t< td=""><td>Result for the year for Parent Company shareholders</td><td>32.7</td><td>18.6</td><td>26.8</td><td>25.2</td><td>12.3</td></t<>	Result for the year for Parent Company shareholders	32.7	18.6	26.8	25.2	12.3
Change in working capital         -6.8         -2.0         -1.5         -0.9         -4.2           Cashflow from operations         24.8         16.9         25.4         20.4         6.7           Cashflow from investments         -2.6         -3.7         -3.3         -1.7         -1.3           Cashflow from financial operations         -19.5         -28.4         -24.8         -15.6         -8.5           Exchange rate differences in cash and cash equivalents         0.0         0.0         0.0         0.0           Change in cash position         2.7         -15.2         -2.7         -3.1         -2.5           Balance sheet	Cashflow analysis					
Cashflow from operations         24.8         16.9         25.4         20.4         6.7           Cashflow from investments         2.6         3.7         -3.3         1.7         1.3           Cashflow from financial operations         -19.5         -28.4         -24.8         -15.6         -8.5           Exchange rate differences in cash and cash equivalents         0.0         0.0         0.0         0.0         0.0           Change in cash position         2.7         -15.2         -2.7         3.1         -2.8           Balance sheet         Salance sheet           Fixed assets         45.7         42.1         38.8         35.6         33.7           Other current assets         31.7         22.5         23.4         22.8         18.2           Cash and bank deposits         32.8         30.1         45.3         48.0         44.9           Total shareholders' equity         99.2         85.8         95.8         93.2         88.4           Long-term liabilities         10.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0 <td>Cashflow from operations before change in working capital</td> <td>31.6</td> <td>18.9</td> <td>26.9</td> <td>21.3</td> <td>10.9</td>	Cashflow from operations before change in working capital	31.6	18.9	26.9	21.3	10.9
Cashflow from investments         2.6         3.7         -3.3         -1.7         -1.8           Cashflow from financial operations         -19.5         -28.4         -24.8         -15.6         -8.5           Exchange rate differences in cash and cash equivalents         0.0         0.0         0.0         0.0           Change in cash position         2.7         -15.2         -2.7         3.1         -2.8           Balance sheet           State of	Change in working capital	-6.8	-2.0	-1.5	-0.9	-4.2
Cashflow from financial operations         .19.5         .28.4         .24.8         .15.6         .28.5           Exchange rate differences in cash and cash equivalents         0.0         0.0         0.0         0.0         0.0           Change in cash position         2.7         -15.2         -2.7         3.1         -2.8           Balance sheet         Security           Existed assets         45.7         42.1         38.8         35.6         33.7           Other current assets         31.7         22.5         23.4         22.8         18.2           Cash and bank deposits         32.8         30.1         45.3         48.0         44.2           Total shareholders' equity         99.2         85.8         95.8         93.2         88.8           Cong-term liabilities         110.2         94.7         107.5         106.4         96.8           Total shareholders' equity and liabilities         110.2         94.7         107.5         106.4         96.8           Rey ratios         9.2         85.8         95.8         93.2         88.8           Operating margin, %         33.5         27.0         35.0         28.0         91.2           Solidity, %	Cashflow from operations	24.8	16.9	25.4	20.4	6.7
Cashflow from financial operations         -19.5         -28.4         -24.8         -15.6         -8.5           Exchange rate differences in cash and cash equivalents         0.0         0.0         0.0         0.0         0.0           Change in cash position         2.7         -15.2         -2.7         3.1         -2.0           Balance sheet         3.2         -2.5         -2.2	Cashflow from investments	-2.6	-3 7	-3 3	-1 7	-1 3
Exchange rate differences in cash and cash equivalents         0.0         0.0         0.0         0.0           Change in cash position         2.7         -15.2         -2.7         3.1         -2.9           Balance sheet         Seets         Seets         Seets         Seet Seet Seet Seet Seet Seet Seet Seet						
Change in cash position         2.7         -15.2         -2.7         3.1         -2.9           Balance sheet           Assets         Fixed assets         45.7         42.1         38.8         35.6         33.7           Other current assets         31.7         22.5         23.4         22.8         18.2           Cash and bank deposits         32.8         30.1         45.3         48.0         44.9           Total shareholders' equity         99.2         85.8         95.8         93.2         88.4           Long-term liabilities         0.0         0.0         0.0         0.0         0.0         0.0           Current liabilities         11.0         9.9         85.8         95.8         93.2         88.4           Long-term liabilities         10.0         0.0	·					
Assets         45.7         42.1         38.8         35.6         33.7           Other current assets         31.7         22.5         23.4         22.8         18.2           Cash and bank deposits         32.8         30.1         45.3         48.0         44.0           Total assets         110.2         94.7         107.5         106.4         96.8           Total shareholders' equity         99.2         85.8         95.8         93.2         88.4           Long-term liabilities         0.0						
Fixed assets         45.7         42.1         38.8         35.6         33.7           Other current assets         31.7         22.5         23.4         22.8         18.2           Cash and bank deposits         32.8         30.1         45.3         48.0         44.9           Total assets         110.2         94.7         107.5         106.4         96.8           Total shareholders' equity         99.2         85.8         95.8         93.2         88.4           Long-term liabilities         0.0 <td< td=""><td>Balance sheet</td><td></td><td></td><td></td><td></td><td></td></td<>	Balance sheet					
Other current assets         31.7         22.5         23.4         22.8         18.2           Cash and bank deposits         32.8         30.1         45.3         48.0         44.9           Total assets         110.2         94.7         107.5         106.4         96.8           Total shareholders' equity         99.2         85.8         95.8         93.2         88.4           Long-term liabilities         0.0         0.0         0.0         0.0         0.0         0.0           Current liabilities         110.2         94.7         107.5         106.4         96.8           Total shareholders' equity and liabilities         110.2         94.7         107.5         106.4         96.8           Key ratios         70.0         90.0         90.0         35.0         28.0         18.7           Solidity, %         90.0         90.0         89.1         87.6         91.3           Capital employed         99.2         85.8         95.8         93.2         88.4           Return on capital employed, %         35.4         20.5         28.4         27.8         14.2           Return on total assets, %         31.9         18.4         25.1         24.8	Assets					
Other current assets         31.7         22.5         23.4         22.8         18.2           Cash and bank deposits         32.8         30.1         45.3         48.0         44.9           Total assets         110.2         94.7         107.5         106.4         96.8           Total shareholders' equity         99.2         85.8         95.8         93.2         88.4           Long-term liabilities         0.0         0.0         0.0         0.0         0.0         0.0           Current liabilities         110.2         94.7         107.5         106.4         96.8           Total shareholders' equity and liabilities         110.2         94.7         107.5         106.4         96.8           Key ratios         70.0         90.0         90.0         35.0         28.0         18.7           Solidity, %         90.0         90.0         89.1         87.6         91.3           Capital employed         99.2         85.8         95.8         93.2         88.4           Return on capital employed, %         35.4         20.5         28.4         27.8         14.2           Return on total assets, %         31.9         18.4         25.1         24.8	Fixed assets	45.7	42.1	38.8	35.6	33.7
Total assets         110.2         94.7         107.5         106.4         96.8           Total shareholders' equity         99.2         85.8         95.8         93.2         88.4           Long-term liabilities         0.0         0.0         0.0         0.0         0.0           Current liabilities         11.0         8.9         11.7         13.2         8.4           Total shareholders' equity and liabilities         110.2         94.7         107.5         106.4         96.8           Key ratios         Operating margin, %         33.5         27.0         35.0         28.0         18.7           Solidity, %         90.0         90.6         89.1         87.6         91.3           Capital employed         99.2         85.8         95.8         93.2         88.4           Return on shareholders' equity, %         35.4         20.5         28.4         27.8         14.2           Return on capital employed, %         35.4         20.5         28.4         27.8         14.2           Return on total assets, %         31.9         18.4         25.1         24.8         12.9           Earnings per share, SEK         4.6         2.6         3.8         3.6		31.7	22.5	23.4	22.8	18.2
Total assets         110.2         94.7         107.5         106.4         96.8           Total shareholders' equity         99.2         85.8         95.8         93.2         88.4           Long-term liabilities         0.0         0.0         0.0         0.0         0.0           Current liabilities         11.0         8.9         11.7         13.2         8.4           Total shareholders' equity and liabilities         110.2         94.7         107.5         106.4         96.8           Key ratios         Operating margin, %         33.5         27.0         35.0         28.0         18.7           Solidity, %         90.0         90.6         89.1         87.6         91.3           Capital employed         99.2         85.8         95.8         93.2         88.4           Return on shareholders' equity, %         35.4         20.5         28.4         27.8         14.2           Return on capital employed, %         35.4         20.5         28.4         27.8         14.2           Return on total assets, %         31.9         18.4         25.1         24.8         12.9           Earnings per share, SEK         4.6         2.6         3.8         3.6	Cash and bank deposits	32.8	30.1	45.3	48.0	44.9
Long-term liabilities         0.0         0.0         0.0         0.0         0.0           Current liabilities         11.0         8.9         11.7         13.2         8.4           Total shareholders' equity and liabilities         110.2         94.7         107.5         106.4         96.8           Key ratios         Support of a part of a p		110.2	94.7	107.5	106.4	96.8
Long-term liabilities         0.0         0.0         0.0         0.0         0.0           Current liabilities         11.0         8.9         11.7         13.2         8.4           Total shareholders' equity and liabilities         110.2         94.7         107.5         106.4         96.8           Key ratios         Solidity, %         33.5         27.0         35.0         28.0         18.7           Solidity, %         90.0         90.6         89.1         87.6         91.3           Capital employed         99.2         85.8         95.8         93.2         88.4           Return on shareholders' equity, %         35.4         20.5         28.4         27.8         14.2           Return on capital employed, %         35.4         20.5         28.4         27.8         14.3           Return on total assets, %         31.9         18.4         25.1         24.8         12.9           Earnings per share, SEK         4.6         2.6         3.8         3.6         1.7           Dividend per share, SEK         2.8         4.0         3.5         2.2         1.2           Cashflow from operations/share, SEK         3.5         2.4         3.6         2.9	Total shareholders' equity	99.2	85.8	95.8	93.2	88.4
Current liabilities         11.0         8.9         11.7         13.2         8.4           Total shareholders' equity and liabilities         110.2         94.7         107.5         106.4         96.8           Key ratios         Superating margin, %         33.5         27.0         35.0         28.0         18.7           Solidity, %         90.0         90.6         89.1         87.6         91.3           Capital employed         99.2         85.8         95.8         93.2         88.4           Return on shareholders' equity, %         35.4         20.5         28.4         27.8         14.2           Return on capital employed, %         35.4         20.5         28.4         27.8         14.3           Return on total assets, %         31.9         18.4         25.1         24.8         12.9           Earnings per share, SEK         4.6         2.6         3.8         3.6         1.7           Dividend per share, SEK         2.8         4.0         3.5         2.2         1.2           Cashflow from operations/share, SEK         3.5         2.4         3.6         2.9         0.9           Employees           Number of employees at the end of the period						
Key ratios         33.5         27.0         35.0         28.0         18.7           Solidity, %         90.0         90.6         89.1         87.6         91.3           Capital employed         99.2         85.8         95.8         93.2         88.4           Return on shareholders' equity, %         35.4         20.5         28.4         27.8         14.2           Return on capital employed, %         35.4         20.5         28.4         27.8         14.3           Return on total assets, %         31.9         18.4         25.1         24.8         12.9           Earnings per share, SEK         4.6         2.6         3.8         3.6         1.7           Dividend per share, SEK         2.8         4.0         3.5         2.2         1.2           Cashflow from operations/share, SEK         3.5         2.4         3.6         2.9         0.9           Employees           Number of employees at the end of the period         21         21         21         20         19						
Operating margin, %       33.5       27.0       35.0       28.0       18.7         Solidity, %       90.0       90.6       89.1       87.6       91.3         Capital employed       99.2       85.8       95.8       93.2       88.4         Return on shareholders' equity, %       35.4       20.5       28.4       27.8       14.2         Return on capital employed, %       35.4       20.5       28.4       27.8       14.3         Return on total assets, %       31.9       18.4       25.1       24.8       12.9         Earnings per share, SEK       4.6       2.6       3.8       3.6       1.7         Dividend per share, SEK       2.8       4.0       3.5       2.2       1.2         Cashflow from operations/share, SEK       3.5       2.4       3.6       2.9       0.9         Employees         Number of employees at the end of the period       21       21       21       20       19		· · · · · · · · · · · · · · · · · · ·				
Operating margin, %       33.5       27.0       35.0       28.0       18.7         Solidity, %       90.0       90.6       89.1       87.6       91.3         Capital employed       99.2       85.8       95.8       93.2       88.4         Return on shareholders' equity, %       35.4       20.5       28.4       27.8       14.2         Return on capital employed, %       35.4       20.5       28.4       27.8       14.3         Return on total assets, %       31.9       18.4       25.1       24.8       12.9         Earnings per share, SEK       4.6       2.6       3.8       3.6       1.7         Dividend per share, SEK       2.8       4.0       3.5       2.2       1.2         Cashflow from operations/share, SEK       3.5       2.4       3.6       2.9       0.9         Employees         Number of employees at the end of the period       21       21       21       20       19	Key ratios					
Solidity, %       90.0       90.6       89.1       87.6       91.3         Capital employed       99.2       85.8       95.8       93.2       88.4         Return on shareholders' equity, %       35.4       20.5       28.4       27.8       14.2         Return on capital employed, %       35.4       20.5       28.4       27.8       14.3         Return on total assets, %       31.9       18.4       25.1       24.8       12.9         Earnings per share, SEK       4.6       2.6       3.8       3.6       1.7         Dividend per share, SEK       2.8       4.0       3.5       2.2       1.2         Cashflow from operations/share, SEK       3.5       2.4       3.6       2.9       0.9         Employees         Number of employees at the end of the period       21       21       21       20       19	-	33.5	27.0	35.0	28.0	18.7
Return on shareholders' equity, %       35.4       20.5       28.4       27.8       14.2         Return on capital employed, %       35.4       20.5       28.4       27.8       14.3         Return on total assets, %       31.9       18.4       25.1       24.8       12.9         Earnings per share, SEK       4.6       2.6       3.8       3.6       1.7         Dividend per share, SEK       2.8       4.0       3.5       2.2       1.2         Cashflow from operations/share, SEK       3.5       2.4       3.6       2.9       0.9         Employees         Number of employees at the end of the period       21       21       21       20       19		90.0	90.6	89.1	87.6	91.3
Return on capital employed, %       35.4       20.5       28.4       27.8       14.3         Return on total assets, %       31.9       18.4       25.1       24.8       12.9         Earnings per share, SEK       4.6       2.6       3.8       3.6       1.7         Dividend per share, SEK       2.8       4.0       3.5       2.2       1.2         Cashflow from operations/share, SEK       3.5       2.4       3.6       2.9       0.9         Employees         Number of employees at the end of the period       21       21       21       20       19	Capital employed	99.2	85.8	95.8	93.2	88.4
Return on total assets, %       31.9       18.4       25.1       24.8       12.9         Earnings per share, SEK       4.6       2.6       3.8       3.6       1.7         Dividend per share, SEK       2.8       4.0       3.5       2.2       1.2         Cashflow from operations/share, SEK       3.5       2.4       3.6       2.9       0.9         Employees         Number of employees at the end of the period       21       21       21       20       19	Return on shareholders' equity, %	35.4	20.5	28.4	27.8	14.2
Earnings per share, SEK       4.6       2.6       3.8       3.6       1.7         Dividend per share, SEK       2.8       4.0       3.5       2.2       1.2         Cashflow from operations/share, SEK       3.5       2.4       3.6       2.9       0.9         Employees         Number of employees at the end of the period       21       21       21       20       19	Return on capital employed, %	35.4	20.5	28.4	27.8	14.3
Dividend per share, SEK       2.8       4.0       3.5       2.2       1.2         Cashflow from operations/share, SEK       3.5       2.4       3.6       2.9       0.9         Employees         Number of employees at the end of the period       21       21       21       20       19	Return on total assets, %	31.9	18.4	25.1	24.8	12.9
Cashflow from operations/share, SEK3.52.43.62.90.9Employees2121212019Number of employees at the end of the period2121212019	Earnings per share, SEK	4.6	2.6	3.8	3.6	1.7
Cashflow from operations/share, SEK 3.5 2.4 3.6 2.9 0.9  Employees  Number of employees at the end of the period 21 21 21 20 19		2.8	4.0	3.5	2.2	1.2
Number of employees at the end of the period 21 21 20 19		3.5	2.4	3.6	2.9	0.9
	Employees					
Average number of employees <b>21</b> 21 20 19 18	Number of employees at the end of the period	21	21	21	20	19
	Average number of employees	21	21	20	19	18

Definition of key ratios can be found in Note 29.

## SinterCast Share

The SinterCast share has been listed and quoted on the Small Cap segment of the Nasdaq Stockholm stock exchange, since 26 April 1993.

ABG Sundal Collier is the appointed liquidity provider for the SinterCast share in order to improve the volume and thereby the liquidity, and to decrease the difference between quoted prices. ABG Sundal Collier undertakes to continuously, for its own account, and during the opening hours of the Nasdaq, quote prices for the SinterCast share in accordance with the at all times prevailing minimum requirements for liquidity providers set out by Nasdaq Stockholm. The Liquidity Provider guarantees that; prices shall be quoted at least 85% of the

continuous trading during normal trading conditions; to quote at least SEK 30,000 in trading volume on bid and ask side and to provide a maximum spread of four percent (4%) calculated from the bid price.

The SinterCast share capital on 31 December 2018 was SEK 7,090,133 (SEK 7,090,133 at 31 December 2017) at par value of SEK 1 per share.

SinterCast had 2,783 (2,909) shareholders on 31 December 2018. The ten largest, of which five were nominee shareholders, controlled 53.8% (52.2%) of the capital and votes.

As of 31 December 2018, the SinterCast Board, management and employees controlled 1.1% (1.1%).

## Major Shareholders 31 December 2018

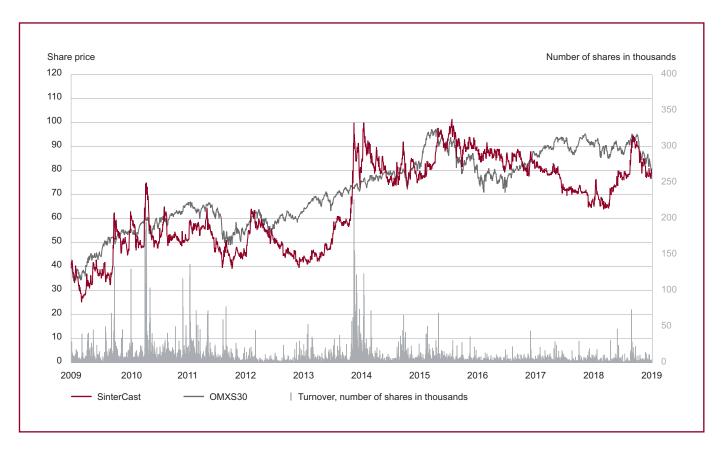
	No. of Share	No. of Shares	% of Total Share
	holders	31 December 2018	Capital and Votes
Försäkringsbolaget Avanza Pension*		881,407	12.43%
UBS Switzerland AG, W8IMY*		796,271	11.23%
Nordnet Pensionsförsäkring AB*		643,718	9.08%
Ahlström, Lars incl. affiliates		441,875	6.23%
HSBC Bank PLC, W8IMY*		259,665	3.66%
Stenbeck, Ulf incl. affiliates		221,949	3.13%
Coeli Wealth Management AB*		221,492	3.12%
Brandels, Olle		176,375	2.49%
Gustafsson, Torbjörn		103,293	1.46%
S & B Christensen AB		64,560	0.91%
Subtotal	10	3,810,605	53.75%
Other shareholders approx.	2,773	3,279,528	46.25%
Total	2,783	7,090,133	100.00%
Total foreign shareholders	109	1,378,294	19.44%
Total Swedish shareholders	2,674	5,711,839	80.56%

<sup>\*</sup>Nominee shareholder

# Distribution of Share Ownership 31 December 2018

No. of shares	No. of Shareholders	Holding %	No. of Shares	Votes %
1-500	2,048	4.23%	300,052	4.23%
501-1,000	275	3.12%	221,194	3.12%
1,001-5,000	306	9.87%	699,626	9.87%
5,001-10,000	70	6.99%	495,506	6.99%
10,001-15,000	31	5.49%	389,251	5.49%
15,001-20,000	12	2.94%	208,693	2.94%
Above 20,001	41	67.36%	4,775,811	67.36%
Total	2,783	100.00%	7,090,133	100.00%

# SinterCast Share January 2009 – December 2018



# **Share Data**

2018	2017	2016	2015	2014
7,090,133	7,090,133	7,090,133	7,090,133	7,090,133
7,090,133	7,090,133	7,090,133	7,090,133	7,090,133
7,090,133	7,090,133	7,090,133	7,090,133	7,090,133
4.6	2.6	3.8	3.6	1.7
4.6	2.6	3.8	3.6	1.7
14.0	12.1	13.5	13.1	12.5
14.0	12.1	13.5	13.1	12.5
2.8	4.0	3.5	2.2	1.2
80.8	65.0	81.8	88.3	76.0
94.6	83.8	91.8	102.5	100.0
63.8	64.5	77.5	76.2	73.0
2,783	2,909	3,172	3,408	3,554
19	19	17	18	18
81	81	83	82	82
572.9	460.9	580.0	626.1	538.9
	7,090,133 7,090,133 7,090,133 4.6 4.6 14.0 14.0 2.8 80.8 94.6 63.8 2,783 19 81	7,090,133 7,090,133 7,090,133 7,090,133 7,090,133 7,090,133 4.6 2.6 4.6 2.6 4.0 12.1 14.0 12.1 2.8 4.0 80.8 65.0 94.6 83.8 63.8 64.5 2,783 2,909 19 19 81 81	7,090,133         7,090,133 <t< td=""><td>7,090,133         3,6         4.6         2.6         3.8         3.6         3.6         4.6         3.8         3.6         4.6         3.5         2.2         2.2         80.8         4.0         3.5         2.2         80.8         88.3         91.8         102.5         63.8         64.5         77.5         <t< td=""></t<></td></t<>	7,090,133         3,6         4.6         2.6         3.8         3.6         3.6         4.6         3.8         3.6         4.6         3.5         2.2         2.2         80.8         4.0         3.5         2.2         80.8         88.3         91.8         102.5         63.8         64.5         77.5 <t< td=""></t<>

## Notes:

1 Calculated as per the recommendations of IAS 33

For definitions see Note 29

# **Important Dates**

# **Annual General Meeting**

The Annual General Meeting 2019 will be held at 15:00 on 23 May 2019 at The Royal Swedish Academy of Engineering Sciences (IVA), Grev Turegatan 16, Stockholm.

## Information

The financial report January-March 2019 will be published on 24 April 2019.

The financial report April-June 2019 will be published on 22 August 2019.

The financial report July-September 2019 will be published on 13 November 2019.

The financial report October-December and Full Year Results 2019 will be published on 19 February 2020.

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The Annual Report 2018 is distributed in PDF-format and is available on the SinterCast website. The Annual Report 2018 will not be distributed as a printed document. This Annual Report is available in Swedish and English. The English version is an unofficial translation of the Swedish original. Financial reports and the Annual Report can be obtained by contacting SinterCast AB (publ), or at the SinterCast website:

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