# COMPONENTA



# Reporting principles

omponenta's Sustainability Report covers economic, environmental and social responsibility. The report for 2008 is the third sustainability report published by the Group. The first sustainability report was published for 2006. Prior to that, Componenta has published three environmental reports in 2003–2005.

Sustainability Report 2008 combines information on the Group's business units in Finland, Turkey, the Netherlands and Sweden according to the guidelines of Global Reporting Initiative (GRI). Componenta's financial information has been prepared in accordance with the International Financial Reporting Standards or IFRS. The figures given, except for financial information, are un-audited.

Environmental information is reported from those Componenta production units that have the most significant environmental impact. In the environmental figures presented in this report, the figures for the foundries include both the iron and the aluminium foundries, unless otherwise stated. Exceptions to this are raw materials, tonnes produced and energy consumption, for which the iron and aluminium foundries are presented separately. The figures have been calculated per tonne produced (cast, forged and machined).

Information on social responsibility include the total personnel of the Group. Environmental and personnel figures include the figures from Turkey since 2006.

Componenta regularly follows and reports its operations and their effects and publishes the figures once a year in the sustainability report. The next report will be published in 2010.

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A responsible company, like Componenta, operates ethically, complying with legislation, and takes responsibility for the effects of its operations, thus promoting sustainable development. In addition to our economic responsibility we take also into account our environmental and social responsibilities. Our corporate responsibility is built on the basis of our ISO quality system and ISO 14001 environmental management system. We introduced an OHSAS health and safety quality management system, relating to social responsibility, at our business units in Turkey in 2008.

Our daily operations are structured so that our responsibility not just in our words but also in our action. In production one of

# Casting Future Solutions

the focus areas for our operations is continuous improvement so that ways of working and processes that save materials and energy are continuously developed. In product development we can affect the geometry of a component, the choice of material or the production method. Changing the construction of a component, or casting instead of welding it, can save costs and raw materials, and can reduce the weight of the component, resulting in lower emissions from vehicles.

Global warming can be fought for example by improving the energy efficiency of facilities or increasing the recycling of waste. Componenta is a party to the Energy Efficiency Agreement of the Federation of Finnish Technology Industries and is committed to decreasing the energy consumption of its foundries in Finland by 10% from the level of 2005 by 2016. Improving the sorting of waste and cutting the amount of non-reusable waste are objectives for each of our production units. In the Group, the amount of waste that was reused rose in 2008 to 72% from 54% in the previous year thanks to the action taken at the units.

Taking into account our external and internal stakeholders and their expectations, and responding to these expectations, is part of our daily operations. Sustainability at Componenta starts with the Group's values and is part of the Group's strategy. Values also govern our cooperation with our stakeholders. The economic re-

cession which began towards the end of 2008 has called for major adjustments in response to decreased demand. We started adjustment measures in production already in October 2008 as demand slowed down. Negotiations on the adjustments have been conducted with personnel in a constructive spirit and all possible working hour arrangements have been in use.

Changes in our living environment challenge all of us, including businesses, to take action to save and improve our environment. Sustainability is part of business operations, and its effects — both positive and negative — can also be seen in the results of operations. We have brought together the three areas of sustainability — economic, social and environmental responsibility — at Componenta and the action taken in these areas in 2008 in this report for our stakeholders. In this way we are giving our important stakeholders information about matters that are crucial for us as a company and which we strive to improve and develop.

Heikki Lehtonen President and CEO



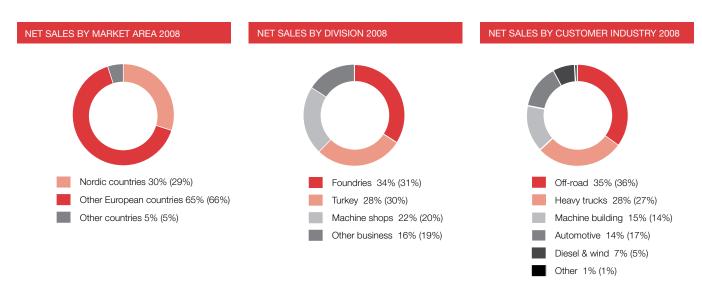
# Componenta in brief

# Componenta excels in cast components

Componenta is international metal sector group that manufactures cast, machined and surface-treated ready-to-install components and total solutions made up from these. In 2008 30% of the net sales came from Nordic countries, 65% from other European countries and 5% from other countries.

omponenta is the second largest independent cast component supplier in Europe. The Group's production plants, foundries, machine shops and forges, are located in Finland, Turkey, the Netherlands and Sweden. The Group had net sales of EUR 681 million in 2008 and it employs some 4,500 people. Componenta's shares are quoted on the NASDAQ OMX Helsinki.

Componenta excels in cast components, with 90 years' experience. With strong local presence in key markets Componenta is ready to serve customers offering them the whole supply chain of components, from engineering to casting, machining and surface treatment. Componenta's customers are well-known companies in off-road, heavy trucks, diesel & wind, automotive and machine building industries.



# Group strategy

# Becoming the leading European cast component supplier by 2012

Componenta is today the second largest cast component supplier in Europe. We manufacture iron and aluminium cast components in Finland, Turkey, the Netherlands and Sweden. Our cooperation with the customer starts in the component's design phase, after which we cast, machine, surface-treat and pre-assemble the components, as needed, ready for delivery directly to the customer's production line.

omponenta's mission – the reason for its existence – is Casting Future Solutions. We contribute to the success of the business of customers by creating for them value adding solutions, through advanced engineering and close partnership.

# Business operations based on values

Componenta's values – openness, honesty and respect – form a firm foundation for the Group's operations. These values are reflected in our daily work as follows:

- We are open to new ideas and to change, and through this we look to continually improve our ways of working.
- We are honest with ourselves and with each other. We do what we promise.
- Our work with colleagues, superiors, subordinates, customers and other partners is based on trust and mutual respect.

# Long-term strategy

Our vision is to become the leading European cast component supplier by 2012 by:

- utilizing the growth possibilities in chosen strategic markets and the existing customer base
- serving our customers proactively with solutions from components to engineering (selected customers globally)

- allocating our production optimally between production units through internal sourcing
- optimizing our logistical processes and warehousing
- working as One Componenta with uniform processes and procedures.

# Strategic actions in 2008

Growing to the leading supplier calls for continuous development and progress in the direction set by the strategy. With this in mind, the following measures were taken in 2008:

- We strengthened the service resources in sales and engineering by recruiting new sales professionals.
- In product development and engineering we carried out many joint projects with customers, utilizing our casting and machining capabilities.
- We increased our production capacity and raised operational efficiency with investments at the iron foundries in Karkkila and Iisalmi in Finland and in Orhangazi, Turkey as well as at the machine shop in Orhangazi.
- We optimized production with internal transfers to balance production between our units in Finland, Turkey, the Netherlands and Sweden.
- We strengthened our common ways of working (One Componenta) by creating common strategies for divisions and functions and by exchanging knowledge and best practices between the different units in the Group.

# Componenta has 90 years of history

Componenta celebrated its 90th anniversary in November 2008. The great-grandfather of the current President and CEO, foreman Matti Lehtonen started a foundry in Helsinki, Finland in 1918, which was then called Rauta ja Metallivalimo Suomi (Iron and Metal Foundry Finland).

Componenta has travelled a long way from a small family foundry into an international group. However, competitiveness of the Group is even today based on same issues that the founder of the company named as his success factors — high quality, competitive prices, quick deliveries and good customer service that is based on understanding and satisfying customer needs. The foundry started as an order foundry but took its first steps in product development already in the 1930s, when the first own product was patented.

Over the years the company has faced good and bad times, war and recession, and each of them have had its effect in the company's operations. Flexibility, quick decision making and adjustments have often been needed in the ever changing environment.

Componenta's story of nine decades, "A Company with Nine Lives" can be read in the company's website at www.componenta.com/history.

# Whole supply chain from Componenta

We serve our customers as One Componenta, offering them the whole supply chain of a component starting from engineering. Sales and product development ensure that the Group's expertise is available for our customers through the whole process, from order to delivery.

# Nine foundries, six machine shops and forge

Componenta can offer its customers the whole supply chain of a component from concept design to casting, machining, surface treatment, pre-assembly and logistic services.

The basis of Componenta's operations are effective supply chains, specialized divisions and production units. The Group has nine foundries, six machine shops and one forge. Operations are divided into three divisions that are Foundries, Machine shops and Turkey. The Foundries division includes the Group's iron foundries in Finland and the Netherlands, and the Turkey division includes the iron foundry, aluminium foundry and wheel production in Turkey. The Machine shops division comprises the Group's machine shops in Finland, Turkey, Sweden and the Netherlands and forge in Sweden.

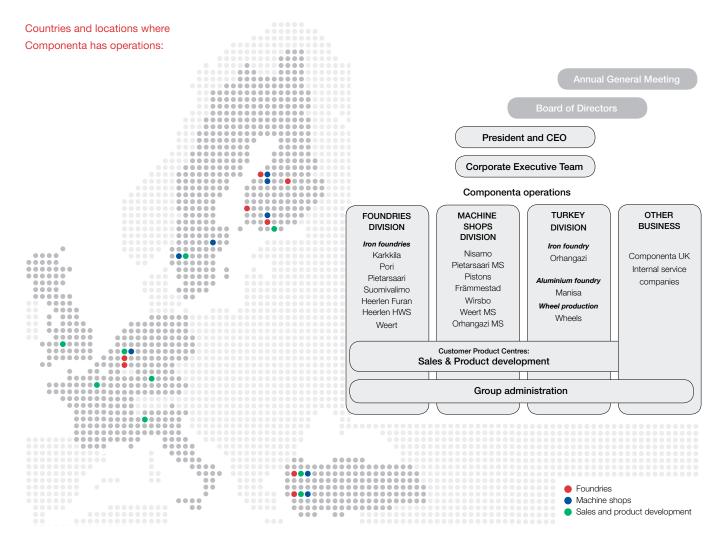
Sales and product development as well as other central operations of the Group administration — finance and accounting, human resources, communications, business development, quality, purchasing and IT — create joint and transparent processes, tools and practices throughout the Group.

#### Added value close to customers

At Componenta, sales and product development take responsibility of customer service. Sales are organized by customer segment and by market area. Our customer segments are heavy trucks, off-road, automotive, diesel & wind and machine building. During 2008 we established new sales offices in Italy and France. In addition to these, Componenta has sales offices in the UK and Germany as well as sales and engineering centers in Finland, Sweden, the Netherlands and Turkey.

Product development offers customers engineering services by optimizing the design of the component or by developing an en-

tirely new components for customers' products. We provide our customers added value through close cooperation in product development. This cooperations starts from the customer's needs, and during the product development process the customer has the use of Componenta's expertise in casting, machining, surface treatment and pre-assembly, assisted by modern simulation and modelling tools.



# Componenta and sustainability

# Sustainability is a part of daily work

Corporate responsibility is an integral part of Componenta's operations. The Group takes into account its economic, social and environmental responsibility in daily operations and in management. The Group's values — openness, honesty and respect — form a firm foundation for business operations and for cooperation with stakeholders. Componenta listens to stakeholders, recognizes their expectations and requirements, and responds to these in the most effective way.

componenta's goal is to become the leading European cast component supplier by 2012. Achieving this goal requires continuous improvement as well as decisions and choices that will promote sustainable development.

# Economic responsibility - for the company's profitability

Economic responsibility is responsibility for the company's profitability and competitiveness, so that it can respond to the expectations of shareholders and other stakeholders. Through profitable, well organized and balanced operations, the Group can meet its commitments and the expectations of stakeholders and further develop its operations to maintain its competitiveness.

# Environmental responsibility – for the environmental impact of production and products

Environmental responsibility means promoting eco-friendly production methods and processes and minimizing the environmental impact of products throughout their life cycle — taking into account market expectations and the need for global competitiveness. The environmental impact of Componenta's foundry and forge operations is specified in the environmental permits granted by local authorities. Regular measurement ensures that the environmental load from production processes remains within the permitted limits. A further objective of the Group's environmental and quality policy is the continuous improvement of operations.

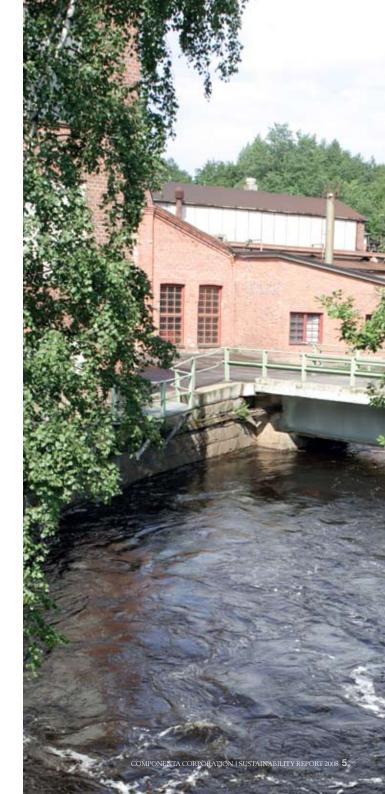
The management system is designed to make it easier to take environmental issues into account. The Group actively monitors and anticipates changes in environmental legislation and analyzes their impact on its business operations. The company aims to minimize the use of materials and energy, and looks for further improvements in these areas through product design. The optimal choice of raw materials and supply chains and minimizing the number of rejects are key factors in production.

Environmental responsibility affects not only internal functions, such as management systems, product design and production, but also subcontractors and suppliers.

# Social responsibility - for personnel and other stakeholders

Social responsibility means that Componenta looks after the well-being of personnel, develops their competence, and acts responsibly in other stakeholder relations.

Continuous development of the skills of personnel is important. To achieve its strategic goals, Componenta must possess and develop the expertise, knowhow and skills needed in its business operations. Our committed and skilled personnel, and the further production units operate effectively as a specialized network as one Componenta.



# Stakeholder interaction

Componenta takes its stakeholders into account in its operations, and key stakeholders are customers, personnel (current and potential), shareholders and investors, financial institutions, suppliers of raw materials etc. and subcontractors, society, authorities, and the neighbours of its production plants. *Interaction and cooperation with stakeholders has been close.* Each category of stakeholder has different expectations of Componenta, which the company recognizes and takes into account in its decision-making. An important element of effective stakeholder cooperation is reciprocity, so that both parties feel that they benefit from the relationship. Cooperation with stakeholders is also governed by the Group's values: openness, honesty and respect for others. The diagram in the following page shows the expectations of different stakeholders from Componenta and the indicators used to monitor how successful Componenta has been in meeting these expectations.

#### Customers

Componenta generates added value for its customers through its close cooperation in product development. Products designed by the customer or jointly with Componenta are manufactured in specialized production units and are delivered just in time, often direct to the customer's assembly line.

Many of Componenta's customer relationships have continued for a long time. Building and maintaining trust is a basic requirement for smooth collaboration. Interaction and communication with customers is ongoing and is based on personal meetings and maintaining contacts at various levels in the customer's organization.

#### Personnel

Componenta employs some 4,500 people at more than 20 production units in eight countries. One key goal is to build together a strong, united Componenta, and ensure that Componenta functions as one Group in serving customers.

Dialogue with personnel takes place daily in many ways, openly and with mutual respect. The Componenta Climate and Employee Satisfaction Survey carried out in spring 2008 obtained the views of personnel on their work and their place of work, as well as proposals for improvements. One key conclusion was that personnel consider Componenta to be a secure, stable employer. Measures to improve the areas needing development revealed in the survey have been agreed on and will be implemented together.

Ongoing channels for interaction with students and potential new Componenta personnel are the events arranged by educational establishments and Componenta's website.

#### Shareholders and investors

Componenta is a listed company that had 1,867 shareholders at the end of 2008. Shareholders and investors are interested in the company's operations and in its key performance indicators, and they expect to receive a continuous flow of up-to-date information about these.

Transparency, openness, correct timing and balance are the requirements for communications set by investors, the stock exchange and supervising authorities. The means for giving information include written reports (annual and interim reports, sustainability report), the website, information events, visits by investors and other meetings.

## Financial institutions

The availability and price of financing depend on how well the company's operations are performing and on its results, as revealed by various key figures (net result and cash flow, solvency and liquidity, sufficient equity ratio etc.). The transparency of operations, effective reporting and risk management are especially important for financiers. Interaction with financiers takes place in the form of various reports and personal meetings.

# Suppliers of raw materials etc. and subcontractors

Suppliers and Componenta have similar expectations of each other: they want a reliable, stable partner with which to build and maintain a long-term, flourishing business relationship. To meet these mutual expectations, regular dialogue is held in the form of various reports, discussions and meetings.

# Society, authorities, neighbourhood of the production units

In their operations Componenta's production units have to comply with legal, ethical and environmental requirements and expectations. The whole Group, and each unit locally, is expected to be an active agent in its area /society and a good taxpayer and to offer employment opportunities.

Interaction and cooperation with the authorities, the neighbours of the production plants etc are maintained by reporting, through the website, by holding information meetings and open doors events, by participating in activities at different levels, and by supporting various activities and organizations.

# Stakeholder groups, expectations and indicators

#### FINANCIAL INSTITUTIONS

## Their expectations from Componenta

- transparency and good communication
- reasonable result and cash flow
- solvency and liquidity
- sufficient equity ratio
- risk management

# Indicators for example

- result development
- interest rate
- financial expences
- key financial figures



# SUPPLIERS OF RAW MATERIALS AND SUBCONTRACTORS

## Their expectations from Componenta

- opportunity to succeed
- long-term stable partnership

#### Indicators for example

- development of purchases
- number of partners, sub-contractors and suppliers
- terms of supply agreements
- payment of invoices



#### PERSONNEL

# Their expectations from Componenta

- possibility to affect decision making, own work and working environment
- competitive salary
- opportunity to learn and develop
- safe and reliable employer

# Indicators for example

- climate and employee satisfaction surveys
- performance review discussions
- training days
- number of absences and accidents
- attraction as a workplace





# COMPONENTA

Expectations: What do stakeholders expect from us?

#### **Indicators:**

Show how we have succeeded in responding to the stakeholders' expectations.



#### SOCIETY, AUTHORITIES AND NEIGHBOURHOOD

## Their expectations from Componenta

- legal, ethical and environmentally friendly operations
- active player in the society
- good tax payer
- employment opportunities
- responsibility
- growth

#### Indicators for example

- paid taxes
- number of employees
- paid salaries
- investments
- participation
- sponsoring



#### **CUSTOMERS**

# Their expectations from Componenta

- competitive offering
- solutions based on customer's needs
- technology know-how and engineering cooperation
- continuity

# Indicators for example

- customer feedback
- customer satisfaction surveys
- customer meetings
- number of offers
- number of orders and order book



#### SHAREHOLDERS AND INVESTORS

# Their expectations from Componenta

- growth of share value and/or good dividends
- reliability
- balanced business risk management
- transparency and open communication (corporate governance)

#### Indicators for example

- share price
- dividend
- key financial figures

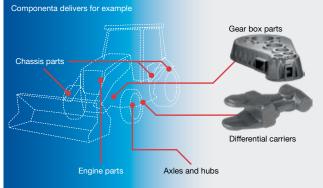


# Customer industries

Omponenta operates in five customer segments, namely off-road, heavy trucks, automotive, diesel and wind, and machine building. Our customers are leading players in their sectors.

At Componenta, understanding the customer's business is linked to the company's own design, casting and machining expertise. Componenta aims to be the preferred partner of its customers in designing and making casting solutions by 2012, when projects including product development and product optimization will form the biggest part of the Group's operations.



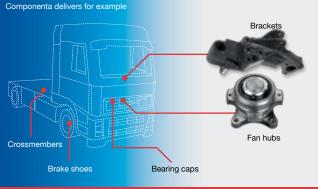


# Off-road

Our customers in the off-road business are manufacturers of off-highway equipment for agriculture, mining, construction and the infrastructure industry as well as component suppliers to these manufacturers. Our customers include Agco Fendt, Bomag, Carraro, Case New Holland, Caterpillar, Dana, Dynapac, JCB, John Deere, Ponsse, T.T.F., Valtra and Volvo CE.

Components supplies them with various components used in engines, power transmission, drives and chassis.



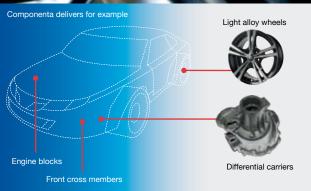


# Heavy trucks

Our customers in the heavy truck industry include manufacturers of heavy commercial vehicles and their system suppliers, such as DAF, Daimler, Ford Trucks, Iveco, MAN, Renault, Scania, Volvo, Wabco and ZF.

Componenta offers them ready-toinstall components used in the chassis and suspension, engine, transmissions, axles, brakes and cabins.





# **Automotive**

Our customers in the automotive industry are manufacturers of passenger cars and other light vehicles, and include Alfa Romeo, Aston Martin, AT U, Ford, PSA, Renault, Tofas, Toyota and Woco.

We offer them a wide range of different nodular and grey iron, CGI and aluminium cast components and aluminium wheels.

Our aluminium wheels are sold under the trademarks DJ Wheels and MAXX.



Customers in the diesel and wind business area are manufacturers of large diesel engines, used for example in ship power and power plant applications as well as makers of wind turbines and related components. Our customers include Caterpillar, Mahle, Moventas, Siemens

and Wärtsilä.

For diesel engine manufacturers, Componenta offers a wide range of cast components and in-house designed pistons.

For the strongly growing wind energy industry we provide cast components for the nacelle and gearbox components such as gear housings and planet carriers.





# Machine building

Our customers in the machine building industry manufacture equipment and machines such as elevators and cranes, and they include ABB, Atlas Copco, Gardner Denver, Ingersoll-Rand, ITT Flygt, Kone, Konecranes, Sampo Hydraulics and Voith.

We offer them various parts, such as rope pulleys and travel wheels, housings and casings, gearwheels and frames.

The components are often of strategic importance to our customers, such as parts used in elevators and robots, various crane and hoist components, and demanding cast products for pumps, stone crushers and hydraulic motors.



# Lighter component for Fiat

Componenta has casted Tofas (Fiat Turkey) various parts for cars and other light vehicles, for example engine parts. The advanced engineering approach was started at the end of 2002.

Since 2003 Componenta Manisa has evolved from part provider to casting solutions partner of Fiat, and provide now in addition to aluminium components design and optimisation in cooperation with the customer. The result of a joint product development project, Fiat's front crossmember, is now in serial production.

Earlier front crossmember was compiled of several parts which were then welded together, with the total weight of 17 kg. With the new design, the whole component is now cast at one time. Thus no further assembly and finishing is necessary in the customer's production, which reduces for example labour costs. Also the component's weight has been reduced to 10 kg by the use of aluminium, by 40% of its original weight. In addition to optimization for casting process, the casting was optimised with the help of stress analysis to ensure optimum weight-strength ratio.

Benefits for end customer are passenger comfort due to lighter components, crash safety, noise improvement and towards more silent suspension. In addition, it is important for the customers to minimize the unsprung weight, which improves acoustics. Furthermore, this leads also lower CO2 emissions, and as the total vehicle weight reduces, tax paid by the end customer may decrease in certain markets.

# Research and development

# Advanced engineering services for customers

Product development is part of the engineering services that Componenta offers to the customers, and includes developing and optimizing cast components for the customer's products. Componenta also carries out joint research and development with universities, research institutions and other companies.

omponenta's product development organization is responsible for developing new components and for technical customer support. The Group aims to significantly increase the volume of advanced engineering projects so that they form a major part of its business by 2012. Product development and engineering take place both at the sales and engineering centres in Finland, the Netherlands, Sweden and Turkey and at production units.

In 2008 the Group spent EUR 2.6 (2.3) million on R & D. The product development function employed 86 (89) people, or  $1.9\,\%$  of the entire personnel. The aim is to offer customers even broader engineering services, and for this purpose the Group is further strengthening its R & D resources.

# Engineering services for customers

Cooperation in product development means that Componenta's engineers and experts are involved right from the start of a customer's product development project. Conventionally, foundries have been involved in optimizing cast components, but only towards the end of product development projects, which gives very limited opportunities for optimization.

Customer requirements for new materials and new properties for cast components and for total solutions direct joint engineering activities. New requirements and legislation, such as new emission limits for vehicles, create more business opportunities: the new limits can be met for example by reducing the weight of vehicles. This is one reason why the use of aluminium as raw material for cast components will increase in the future.

Product development can affect the geometry of a component, the choice of material and the production method. Changing the construction of a component or casting the component instead of welding it typically gives savings in both costs and raw materials. It also reduces the weight of the component, which in turn can cut the emissions from a vehicle. Componenta already has much experience of this sort of engineering cooperation, with very positive results.

## R&D collaboration in 2008

Componenta's business units in different countries collaborated with various universities and research institutes during 2008. In Turkey the company supported the Semi-Solid Casting project at the Celal Bayar University in Manisa. In Sweden Componenta participated in the ongoing VI project at the Chalmers University of Gothenburg. The overall aim of the project is to develop lighterweight components and increase knowhow in this area by focusing on three parts of the supply chain: design, materials and manufacturing. The companies participating in the project are Componenta Främmestad, Atlas Copco, HIAB, Indexator, Mattsons Mekaniska, Sandvik Coromant, Scania, Smålands Stålgjuteri, Square Tools, Storebro Gjuteri, Volvo CE, Volvo Bussar, Volvo Lastvagnar, SweCast, and KTH.

The Componenta Orhangazi Foundry in Turkey and the Customer Product Center in Weert, the Netherlands, have participated in a research project with Ford Otosan Turkey, Ford Research & Advanced Engineering Europe (Germany) and Magmasoft (Germany). The project, with the title "Closed loop optimization of iron castings", aims to study foundry simulation techniques for residual stresses and the connection between residual stresses and the life time of a component.

Componenta Manisa submitted a technical paper, titled "Porosity reduction in HPDC through the use of 6-SIGMA techniques", presenting how Six Sigma techniques can be utilized to reduce porosity in aluminium high pressure die casting. The paper was presented on 16 October 2008 at the 4th International Foundry Congress in Istanbul, which was arranged by TÜDOKSAD – the Foundrymen's Association of Turkey.

Also Componenta Orhangazi studied and prepared technical papers on the effect of the cooling time on mechanical properties of nodular cast iron and decreasing the resin consumbtion at foundries. Three technical papers were presented on the 14th International Metallurgy and Materials Congress in Istanbul, Turkey in October 2008.

Componenta Pistons participated in the AUTOSIM project, Current & Future Technologies in Automotive Engineering Simulation. The project lasted three years from September 2005 to August 2008 and was funded by the European Commission's 6th Framework Programme. The aims of the project included studying advanced methods of integrating simulation with the design process and improving the quality, reliability and robustness of modelling and simulation.

In the Netherlands Componenta representatives have participated in the work of EVO, the European Logistic Organizations, and in a working group of the Dutch Foundry Association "Working and Safety Conditions, Environment and Energy".

# Participation in standardization work

Componenta also has representatives on the European (EN) and ISO committees for the standardization of casting technology and cast irons. Numerous EN standards for cast irons are now under revision to bring them better in line with foundry practices of today.

# Simulation is an indispensable tool

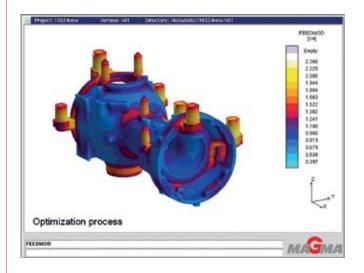
Today, simulation is an indispensable tool to develop in advance on the computer screen the most optimum way of pouring and feeding. It allows the foundry engineer to develop several and alternative virtual solutions and find, step by step, the best overall solutions in terms of required quality, feasible production methods and lowest costs.

For example in the Netherlands we started to use simulation as a tool in engineering in 1996 with Magma simulation program. Traditionally simulation in foundries has been done with the help of one central processing unit. The tool currently in use in the

Netherlands is a high performance cluster with 16 CPUs and special software that distributes work load to the processors.

This high performance tool was used together with Componenta Orhangazi to optimize the gating and feeding of axles castings. With an intensive collaboration between the Group's two customer product centers in the Netherlands and Turkey and the customer we developed within the given boundary conditions a more feasible solution in terms of quality requirements and lower costs.

For this project we did 51 simulation runs and spent in total 204 calculations hours. During this calculation hours we can do also pre and post processing for other projects. With  $1\,\mathrm{CPU}$  hardware time needed for each simulation would have been at least  $60\,\mathrm{hours}$ , in total  $3,060\,\mathrm{hours}$ .





# Aluminium is light metal

In addition to its iron foundries in Finland, Turkey and the Netherlands, Componenta has one aluminium foundry in Turkey.

Aluminium is light, but durable and strong metal. Molten aluminium freezes quickly, in minutes or even seconds by using appropriate casting techniques. The raw materials for molten aluminium include both recycled and primary aluminium. Primary and/or recycled aluminium can be used as raw material depending on mechanical properties required for cast part.

Especially the lightness of aluminium makes it desirable material for example in automotive industry requiring lighter are more environmentally friendly vehicles.

At Componenta, aluminium is cast in high pressure die casting (HPDC), low pressure die casting (LPDC) and gravity die casting. In HPDC, molten aluminium is feed quickly and with a high pressure into a steel mould. HPDC is used for components with thinner wall thicknesses, high mechanical strength and good electrical attributes.

In LPDC molten aluminium is fed upwards into a metal mould with pressure less than 1 atm. LPDC is used generally for radially symmetrical designs which have relatively thick walls, or components requiring heat treatment, since HPDC is not suitable for heat treatment.

In gravity die casting, molten aluminium is poured and flows by gravity into the die. Gravity die casting is suitable for complex components with thicker wall thicknesses where sand cores and local additional feeding can be necessary in a die. In addition, it suits for small series and components that require heat treatment.

# Administration of Componenta

The administration of Componenta Corporation is based on the Finnish Companies Act and the company's Articles of Association. The company applies the Corporate Governance recommendations for public listed companies issued by NASDAQ OMX Helsinki, the Central Chamber of Commerce of Finland and the Confederation of Finnish Industry EK, which came into force on 1 July 2004.

# Componenta Corporation shares

All Componenta Corporation shares have equal voting rights at the General Meeting. Componenta Corporation's Articles of Association do not contain any voting restrictions other than those in the Companies Act.

All shares carry equal dividend rights.

## **Annual General Meeting**

The highest governing body of Componenta Corporation is the General Meeting. The functions of the General Meeting and matters to be resolved therein are defined in the Companies Act and the Articles of Association.

The Annual General Meeting of Componenta Corporation shall be held within six months of the end of the financial period. In 2008, the Annual General Meeting of Componenta Corporation was held on 25 February 2008.

#### **Board of Directors**

The Annual General Meeting elects each year Componenta Corporation's Board of Directors, which according to the Articles of Association consists of 3–7 members. The term of office of the Board of Directors expires at the close of the following Annual General Meeting. The Board of Directors elects from its members a chairman and a vice-chairman.

The 2008 Annual General Meeting elected five members to the Board: Heikki Bergholm, Heikki Lehtonen, Juhani Mäkinen, Marjo Raitavuo and Matti Tikkakoski. The Board chose Heikki Bergholm as its chairman and Juhani Mäkinen as vice chairman.

Heikki Bergholm, Juhani Mäkinen, Marjo Raitavuo and Matti Tikkakoski are independent of the company and of the share-

holders. Heikki Lehtonen is President and CEO of Componenta Corporation. He is also the company's largest shareholder through companies which he controls.

Taking into account the membership of the Board and the nature and size of Componenta's operations, the Board has not considered it necessary to set up committees to prepare matters for which the Board is responsible.

The Annual General Meeting decides on the remuneration of the members of the Board of Directors. The 2008 Annual General Meeting decided that the remuneration for the chairman would be EUR 50,000 and for the other members of the Board EUR 25,000 a year. Travel expenses are paid in accordance with the company's travel regulations.

The tasks and duties of the Board of Directors are laid down primarily in the Articles of Association and the Finnish Companies Act. The Board has drawn up written Rules of Procedure which define the tasks and operating principles for the Board. According to these Rules of Procedure, the Board's tasks include matters that have a far-reaching impact on the operations of Componenta Group. These include confirming the strategic guidelines, the annual budget and operational plans, and deciding on major corporate restructuring and capital expenditure. The Board assessed its activities in December 2008 under the leadership of the chairman.

During 2008 the Board met 10 times with an average attendance rate of 96 per cent.

#### President and CEO

The Board of Directors appoints the President and CEO and decides upon the President's remuneration and other benefits. The functions and duties of the President are defined in the Companies Act. In addition to these, the duties of Componenta Corporation's President include

- managing and developing Componenta's business in accordance with the instructions given by the Board of Directors,
- presenting matters for consideration at meetings of the Board of Directors and
- implementing the decisions of the Board of Directors

Heikki Lehtonen is President of Componenta.

The President receives a salary of EUR 20,960 a month and benefits in kind of altogether EUR 230 a month.

The President is entitled to Componenta share based incentive program which includes 3 earning periods. From the earnings period 2007–2008, allocation of shares for the President is 3,300 shares.

The President is eligible to take retirement as laid down in legislation. The President's contract of employment may be terminated by the company by giving 12 months notice and by the President with six months notice. The President is not entitled to any separate compensation due to notice but the salary and benefits agreed in the terms of notice.

Salaries and other remuneration paid to the members of the Board and the President totalled EUR 414,151 in 2008. Other benefits received by the members of the Board and the President in 2008 totalled EUR 6,097.

The company has no specific pension commitments for Board members or managing directors.

# Corporate Executive Team

The Corporate Executive Team assists the President in managing and developing Componenta Group. The appointment of members to the corporate executive team and their terms of employment are decided on by the Board of Directors from a proposal by the President and CEO. In accordance with the "one over one" principle in use at the Group, the Chairman of the Board of Directors approves these decisions.

In 2008 the corporate executive team consisted of eleven persons. The corporate executive team convenes once a month. The President acts as chairman and the Communications Director as secretary at the meetings. Information about the areas of responsibility and shareholdings of the members of the corporate executive team can be found on Componenta's website www.componenta.com.

# Monitoring systems

#### Audit

The Annual General Meeting appoints the auditor and decides on the remuneration to be paid to the auditor. The company has at least one and a maximum of two auditors, and one deputy auditor when needed. In addition to the duties prescribed in current accounting regulations, the auditor reports as necessary to the Board of Directors of Componenta Corporation.

Componenta Corporation's auditor during the accounting period 1 January–31 December 2008 was Oy Audicon Ab, Authorized Public Accountants.

The Annual General Meeting on 25 February 2008 decided that the remuneration for the auditor would be based on invoicing.

Remuneration in 2008 based on invoicing for Componenta Group's auditors totalled EUR 587,000 comprising EUR 485,100 in audit fees and EUR 101,900 for other services.

# **Insider regulations**

Componenta Corporation complies with the insider regulations of the NASDAQ OMX Helsinki and also with its own insider regulations. Componenta's statutory insiders are the Board of Directors of the parent company, the President and CEO, and the auditors. Company-specific insiders are the Group's corporate executive team and named individuals.

The holdings of Componenta's statutory insiders are given on the Group's website. The holdings in Componenta Corporation of statutory and company-specific insiders are monitored regularly through the SIRE system of the Finnish Central Securities Depository.

# Risk management

Internal monitoring at Componenta Group takes place in accordance with the operating principles approved by the Board of Directors, and these are based on the Group's internal reporting and the annual audit plan approved by the Board.

Financial reporting that covers the entire Group is used to monitor how well financial targets are being met. The reports include actual figures, plans and up-to-date forecasts for the current year.

The financial risks relating to Componenta Group's business operations are managed in accordance with the Treasury Policy approved by the Board of Directors. This aims to protect the Group against adverse changes in the financial markets and safeguard the economic performance of the Group and its financial

position. Management of financial risks takes place in the Group Treasury function.

Appropriate insurance has been taken against risks associated with assets and interruption of operations and to minimize indemnity.

The financial administration of Componenta Group conducts an internal audit of Group companies with the auditors as part of the annual plan.

# Right to sign Company name

Componenta Corporation's name is signed by the chairman of the Board of Directors and the President, each alone, and by other members of the Board of Directors, two together. Furthermore, the Board of Directors may also authorize members of the Company's management to sign for the Company per procuram.

#### Incentive schemes

For personnel in key positions Componenta has in use performance based short- and long-term incentive schemes. Componenta's Board of Directors confirms the contents of and positions entitled to the incentive schemes.

Short-term bonus programs are linked to achieving measurable personal and business targets annually. The amount of the bonus depends on the position and varied between 0% and 32% of annual income in 2008.

The long-term share-based bonus scheme is linked to the Group's return on investment and to the result after financial items and was introduced in 2007. The scheme lasts a total of five years.

At some Componenta business units, blue collar employees are entitled to productivity related bonuses. In Componenta B.V, the personnel is entitled to profit sharing program, based on return on investment achievement.

Contemporary persons are entitled only to one short term incentive program.





# Economic responsibility

# Added value for shareholders and other stakeholders

Economic responsibility at Componenta means responsibility for the company's financial results and profitability. By looking after these, we can meet the expectations of shareholders and other stakeholders and at the same time develop our operations to safeguard our competitiveness.

# An exceptional year 2008

Componenta's net sales rose to EUR 681 (635) million and the profit after financial items, excluding one-time items, improved 29% to EUR 19.2 (14.9) million. The strong result built up during the first nine months of the year, for in the final quarter of the year the level of both sales and the result rapidly took a downward turn.

The high demand early in the year in Componenta's customer sectors brought in many orders, and production capacity at the Group's business units was in almost full use. Towards the end of the year the situation changed into significantly poorer, as demand slowed down and capacity usage at the business units fell sharply. In the automotive industry, for instance, which has long supply chains for components, a fall in demand is felt first at component suppliers. The volume of or-

ders fell and the order book at the end of the year was more than 40% lower than at the same time in the previous year.

Componenta started to take the first remedial measures to reduce production and bring it in line with lower demand back in October. Further measures were needed towards the end of the year, and at the same time, as the credit risk increased, the company intensified its actions to collect customer receivables.

Fluctuations in the prices of raw materials emphasized the exceptional nature of the year, as prices first rose to extremely high levels and then dropped sharply towards the end of the year. The prices of the most important raw materials for cast components, such as recycled metal and the pig iron produced from iron ore, rose significantly during the first half of 2008. In June Componenta introduced a system that enabled the company to pass on the impact of raw material prices to customer prices on a monthly basis.

#### Investments to raise capacity and boost efficiency

In 2008 Componenta carried out certain projects that are of major importance for its competitiveness. These projects raised capacity

# THE YEAR 2008 IN BRIEF

Net sales EUR 681 (635) million, comparable growth from the previous year was more than 8%.

The profit after financial items, excluding one-time items, increased 29% to EUR 19.2 (14.9) million.

The order book at the end of the year stood at EUR 73.6 (129.0) million, more than 40% lower than in the previous year.

Major investments were made at foundries and machine shops, which raised production capacity and efficiency. A new machine shop was opened at Orhangazi in Turkey.

Salaries and bonuses paid by Componenta amounted to EUR 120.1 (117.7) million.

The number of shareholders rose to 1,867 (1,565) during the year.

and enhanced production at the foundries in Karkkila and Iisalmi in Finland and at Orhangazi in Turkey. A new, modern machine shop was also completed at Orhangazi.

Componenta's total investments in production facilities during the year amounted to EUR 42.3 (23.6) million, and finance lease investments accounted for EUR 4.3 (1.6) million of these. During the year Componenta spent EUR 1.3 million on purchasing shares of its Turkish subsidiary Componenta Dökümcülük Ticaret Ve Sanayi A.S on the Istanbul stock exchange. At the end of 2008 Componenta owned 93.6% of the shares of Componenta A.S.

In the summer decisions were taken to make two investments: to build a new aluminium foundry in Manisa in Turkey and to install a new induction smelting furnace at the Orhangazi foundry in

Turkey. The planning for both investments has been completed, but with the decline in the economic situation towards the end of the year, the investments have been halted for the time being.

FINANCIAL OBJECTIVES		
	A -+ 1 00000 *\	Obi
	Actual 2008 *)	Objectives 2012
Net sales	681 MEUR	800 MEUR
Operating profit *)	7.0%	10%
Return on investment *)	13.7%	> 20%
Equity ratio (including capital loans in equ	uity) 27.8%	40%

<sup>\*)</sup> Excluding one-time items

KEY FIGURES						
	2008	2007	2006	2005	2004	
Net sales, MEUR	681.4	634.7	362.1	343.2	316	
Operating profit, MEUR	47.3	42.7	14.5	9.9	25.7	
Operating profit, %	6.9	6.7	4.0	2.9	8.1	
Net result, MEUR	13.9	21.6	3.5	2.2	14.2	
Earnings per share (EPS), EUR	1.24	1.97	0.36	0.26	1.62	
Return of equity, %	14.5	23	5.9	4.2	28.1	
Return on investment, %	13.6	11.9	6.6	5	14.2	
Equity ratio, %, capital notes in debt	16.4	20.3	19.2	18.1	20.6	
Order book. MEUR	73.6	129	95.4	60.4	59.2	
Investments in non-current assets, MEUR	43.6	64.5	123.6	25.1	37.0	
Personnel including leased personnel	4,163	5,064	2,628	2,429	2,213	





# The new machine shop at Orhangazi strengthens our offering and helps create extra added value for customers

In October 2008 Componenta celebrated in Turkey the inauguration of the new machine shop commission in Orhangazi. In addition to the EUR 3 million investment in the building, the company also spent EUR 2 million on machinery and equipment for the machine shop during the year.

The new, modern machine shop has 20 CNC machining centres and five CNC lathes. With this investment, the Group's machine shops have a total capacity of 1,000,000 machining hours.

The machine shops and the Group's foundries together form a closely linked value chain. About one quarter of the components cast by Componenta are machined at the Group's machine shops before being supplied to customers. Today customers are increasingly looking for total solutions, in which the components are cast, machined and often also designed in cooperation with the customer.

The investment in the Orhangazi machine shop is one further step towards Componenta's goal of becoming the leading supplier of cast components in Europe.

#### Contributions

Componenta has supported sports, research and culture during 2008. It is some time challenging to make distinction between donations, sponsoring and commercial marketing. Contributions here include donations and sponsoring for supporting sports and culture, non-profit organizations and research. The amount of given contribution and sponsoring in 2008 was some 130,000 euros.

In Finland, Componenta Group sponsored Finnish national team swimmer Matti Rajakylä and basketball team Team Componenta in Karkkila. In culture we supported implementation of children's opera. Since 2001 Componenta has sponsored sports high school Mäkelänrinne in Helsinki and supported their sports actions. The money reserved for Christmas cards and gifts was donated this time to WWF, World Wildlife Fund for Nature.

In addition to these, many Componenta locations in Finland, Turkey, the Netherlands and Sweden supported for example sports organizations, schools and non-profit organizations. Received contribution from public sector for Componenta's locations in 2008 amounted to some 644,000 euros. Contribution was typically received for example for training of personnel as well as research and development.



MEUR	2008	2007	2006	2005
Creation of value added				
- Customers (net sales)	681.4	634.7	362.1	343.2
Suppliers (purchases and external services)	-324.1	-305	-175.7	-171.8
Produced added value	357.3	329.7	186.4	171.4
Distribution of value added				
- For personnel (salaries and pensions)	-135.7	-132	-91.5	-89.2
- For society (income taxes and social security costs)	-18.7	-15.8	-11.2	-7.6
- For financial institutions (financial expenses)	-45.1	-31.4	-12.6	-12
- For investors (dividends)	-3.3	-5.5	-3.3	0
Value added distributed to stakeholders	-202.8	-184.7	-118.6	-108.8
Retained for developing the company operations	154.5	145.0	67.8	62.6

# Financial risks

Componenta Group's risk management is defined and included in the company's corporate governance systems.

Fluctuations in the prices of Componenta Group's main raw material, scrap metal, affect the sales margins on the Group's products. When the price of recycled metal rises, the increase in the price of the raw materials is passed on to the products supplied to customers after a certain delay, so price increases in recycled metal reduce the sales margin temporarily. When recycled metal prices go down, the Group's margins correspondingly improve for a while.

The **electricity consumption** of the Group's foundries and machine shops creates a spot price risk for the purchased electricity, so the Group purchases electricity price forwards to hedge against the impact of electricity prices on the financial performance. The target hedging level for the forecast electricity consumption by the Group's production plants is 90 % for the next 12 months, 60 % for the following year and 40 % for the third year. Trading in electricity price forwards has been outsourced. The Group aims to pass on the increase in the price of electricity to customers with a separate electricity surcharge.

Appropriate insurance has been taken against risks associated with assets and interruption of operations and to minimize indemnity.

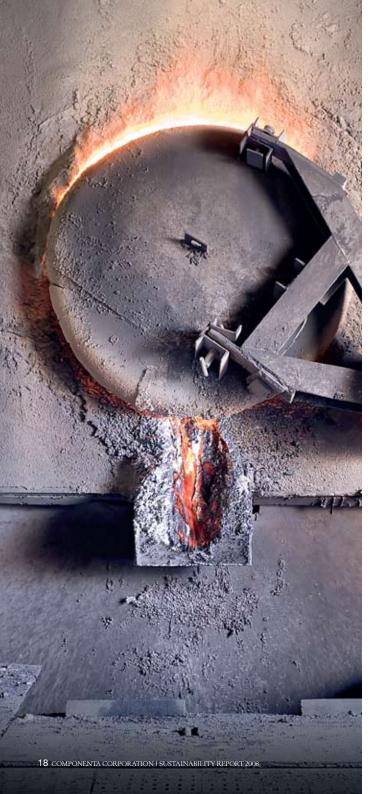
The financial risks relating to Componenta Group's business operations are managed in accordance with the treasury policy approved by the Board of Directors. The objective is to protect the Group against unfavourable changes in the finance markets and to secure the Group's financial performance and financial position. Management of financial risks takes place in the corporate treasury function.

Translating the shareholders' equity of Componenta Turkey into euros creates a significant **translation risk** for the Group. Changes in the value of the US dollar, the UK pound and the euro in relation to the Turkish lira have an impact on the company's operating profit and profit after financial items in the short term.

Each Group company is primarily responsible for the **credit risks** associated with their own customer receivables. The Group treasury gives advice on and monitors the management of credit risk. The Group has no major concentrations of credit risk for customer receivables. The Group's customer base is fragmented, and the receivables from no single customer group exceed 6% of the Group's trade receivables. The Group recognized no major credit losses in 2008.







# Shareholders

# Listed on the Helsinki stock exchange

omponenta Corporation is a listed company and its shares are quoted on the NASDAQ OMX in Helsinki. The quoted price of the shares stood at EUR 4.75 (8.37) at the end of 2008. The average price during the year was EUR 8.34, the lowest quoted price was EUR 4.62 and the highest EUR 11.76. At the end of the year the share capital had a market capitalization of EUR 52.0 (91.6) million and the volume of shares traded during the period was equivalent to 32% (52%) of the share stock. The share has a liquidity guarantee (LP) by Nordea Bank Finland Plc. The company has one share series.

The number of Componenta shareholders rose during 2008 and at the end of the year the company had 1867 (1565) shareholders. Nominee registered shares and those in other foreign ownership form the largest group of shareholders, with 38.7% (38.0%) of the shares. Other shareholders were Finnish companies 38.5 % (29.8%), households 21.2% (23.5%), financial institutions and insurance companies 0.3% (5.3%), public institutions 0.6% (0.6%) and non-profit organizations 0.7% (2.8%).

Componenta's two largest shareholders are Heikki Lehtonen, who owns 39.4% of the shares through the companies he controls

"Componenta provides investors and shareholders with up-to-date, transparent information on the Group's website. The company keeps in contact actively through webcasts, trade fairs and other meetings."

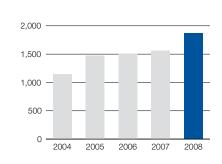
Cabana Trade A.S. and Oy Högfors-Trading Ab, and Etra Invest Oy Ab, which has a 29.6% holding.

At the end of 2008 the company had a total of 10,945,698 (10,942,498) shares. The share capital at the end of the year stood at EUR 21.9 (21.9) million. During the year 3,200 new shares were subscribed with the capital notes from the convertible capital notes issued by Componenta Corporation in 2006 and 2005.

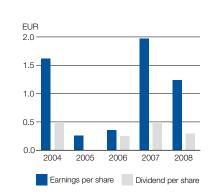
# Dividend policy

The Board of Directors takes into account the Group's financial performance, financial structure and growth expectations when

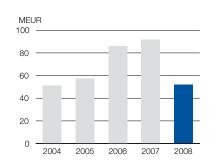
# COMPONENTA SHAREHOLDERS



# EARNINGS PER SHARE AND DIVIDEND PER SHARE



# MARKET CAPITALIZATION



making its proposal for a dividend payment. The goal is to pay a dividend of 30–50% of the net profit. The Annual General Meeting on 23 February 2009 resolved to pay a dividend of EUR 0.30 per share for the 2008 financial year.

# Turkish subsidiary listed on Istanbul Stock Exchange

The shares of Componenta's Turkish subsidiary Componenta A.S are quoted on the Istanbul Stock Exchange. At the end of 2008 Componenta owned 93.6% (92.6%) of the shares of Componenta A.S. The remaining 6.4% (7.4%) of the shares are owned by households. Componenta A.S. has 63,360,000,000 shares. At the end of the year the share capital had a value of 189,989,995 (175,452,676)



Turkish lira (YTL). At the end of the year the company had 2352 (2485) shareholders, including Componenta Group. The average quoted price of the shares was 3.89 (4.69), the lowest quoted price was 2.41 (3.84) and the highest 5.40 (4.32).

# Transparent, up-to-date information for investors

Componenta's investor relations team produces information about Componenta and its business environment for institutional investors, small investors, analysts and the press. In addition to its annual report and three interim reports, Componenta provides the market with continuously updated information, especially on its website.

The website contains for example a financial calendar, key indicators and a key figure monitor as well as information relating to shares (share monitor, historical price lookup, total return calculator, prospects), shareholders and insiders. Releases and publications are available on the Group's website immediately after publication, and releases can be ordered direct to an email address from the result service.

A press conference is held in connection with the publishing of interim reports, and this is videoed and broadcast live on the Internet at www.componenta.com. Componenta's stakeholders watch these webcasts regularly , and they are open to all. It is also possible to ask the company's president and CEO questions on the webcast and receive an immediate reply.

The IR team meets analysts and investors during the year. In November 2008 Componenta took part for the third time in the annual two-day investor event in Helsinki. The room was full of eager investors for the presentation "Componenta today" on both days.

Before the publication of its financial statements and interim reports, Componenta maintains a 30-day quiet period, when the company does not meet investors or comment on its financial performance.



Further information on matters relating to financial responsibility at Componenta Group is given in the 2008 annual report and on the website at www.componenta.com/economic More details about shares and shareholders can be found at www.componenta.com/investors.



# Videomeetings save time, costs and environment

Componenta's production units are located in Finland, Turkey, the Netherlands and Sweden, and in addition we have sales companies in France, Germany, Italy and the UK.

Distances between locations even in the same country can be long, so to ease contacts and meetings in the Group-videomeeting possibility is widely utilized. In the Group-wide operations there are several teams who meet once or twice a month and where there are members from several or even all Componenta countries.

A possibility to have videomeetings has a lot of benefits. When you do not need to travel long distances to have meetings, it results in savings in both costs and times. In addition to air travel, also the number of long-distance car travels has decreased. It also easier to keep in contact with different stakeholders more often, which shows in the progress of issues and operations. At the same we have for our part been able to decrease the environmental impact of our operations.

The first videomeeting equipment at Componenta was acquired already in 2002. Today all units have at least one videomeeting equipment, and there are several of them in the bigger units.

# Life cycle of a cast component



- The choices made in the design phase affect the geometry, material and production method and thus the environmental emissions of a cast component during its life cycle. → Research and development p. 10 and Aluminium as raw material p. 11.
- The most important raw material of cast components is recycled metal.Use of raw materials p. 28.
- 3 Energy is needed in the melting of the raw materials, mainly from electricity, coke or natural gas. → Energy consumption p. 26.
- 4 Casting moulds are made from sand or metal. Sand circulates in the process, and in the end part of it will be reused and part will end as waste. Metal moulds are used for a long time. → Environmental impacts of production p. 24, Emissions p. 30 and Waste and recycling p. 32.
- 5 Fettling and surface treatment of cast component cause some environmental emissions. → Dust and VOC emissions p. 30.
- 6 Cutting fluids used in machinining of cast components are reused, and resulting machining chips are sent for remelting. > Waste and recycling p. 32.
- 7 Transporting cast components for customers cause environmental emissions. Logistics p. 35.
- 8 At the end of its life cycle, cast component will be recycled and remelted.

# Environmental responsibility

# Environmental issues are an integral element of decision making

At Componenta, environmental responsibility means in production choosing the optimal materials and sustainable production processes and minimizing the environmental impact throughout the life cycle of a product. Environmental and quality activities aim at continuous improvement.

Foundry and forge operations require environmental permits and are subject to certain environmental requirements. Componenta's foundries and forges meet all their environmental requirements, and they continuously improve their production processes and take measurements, to ensure that the environmental load remains within the permitted limits.

## MAIN ENVIRONMENTAL PROJECTS IN 2008

A new paint shop was commissioned at the Karkkila foundry, which reduced VOC emissions from painting.

The project started to close Karkkila foundry's landfill site.

An assessment was made of the environmental impact of expanding production at the Suomivalimo foundry, and the foundry obtained a new environmental permit.

The Heerlen foundry in the Netherlands continued its investigations with the authorities into ways to prevent problems with odours.

Meters were installed at the Orhangazi foundry to continuously measure dust emissions.

New filter plant was installed in the Pietarsaari foundry to comply with environmental requirements and to improve energy efficiency.

**→** 

Further information about environmental issues on the Group's website at www.componenta.com/environment.

The Group's environmental and quality policies and management systems define the main environmental management principles for the businesses. The systems encourage personnel to take responsibility, develop quality and take the environmental impact into account. Activities are managed at business unit level, and each unit has appointed persons responsible for environmental and quality issues. Quality and environmental activities support each other, for high quality operations keep the number of rejects to a minimum. This in turn reduces the environmental impact.



# Environmental costs increased

omponenta Group's environmental costs in 2008 totalled EUR 6.0 million (EUR 5.5 million in 2007). Environmental costs as a percentage of net sales rose by 1.5% compared to 2007. Costs increased mainly in waste management, mainly since due to the closing of own landfill site in Karkkila, Finland the foundry sand was sent for reuse in the municipal landfill site.

Waste management accounted for 73% (71%) of environmental costs, protection of the atmosphere for 8% (10%), waste water management for 6% (8%), protection of the soil and groundwater for 2% (2%) and other environmental protection activities for 11% (9%). These included waste taxes, the costs of noise measurements, and environmental permit fees. The protection of biological diversity and the landscape accounted for 0% (0%) of these costs.

Environmental investments in 2008 were at the same level as in the previous year, totalling EUR 1.7 (1.7) million. Most of the investments were on reducing VOC and dust emissions from the foundries, enhancing energy usage, and improving the outdoor areas. The largest individual investments that had an impact on the environment were the new filter plant at the Pietarsaari foundry to extract dust and the new paint shop at the Karkkila foundry. The Group always takes the environmental impact into account in its other investments as well.

# Environmental risk situations are identified and analyzed

At Componenta, the risks to the environment have been identified in the environmental management systems at each of the business locations. Some of the risks relating to business operations are fire, chemicals being spilt, leaking or exploding, a furnace bursting, dust emissions, and vandalism in the plant area. These events may result in emissions to the air, water or soil. Componenta aims to prevent these risk situations by preventive maintenance, through instructions and systematic action. The systems also contain guidelines on what to do after an incident of this nature occurs.

One of the biggest risks at the foundries is molten iron, which is stored, handled and transported in vessels of different sizes. The holding furnace can contain more than 30 tonnes of molten iron at a time. Liquid gas is the highest risk chemical at the foundries. Certain risks are a typical feature of foundry work, and a few 'close calls' occur every year. Lessons are learnt from these and they form the basis for instructing personnel, for changing practices, and making improvements. Emergency plans are in place at all the foundries.

A few high-risk situations that could have had an impact on the environment occurred in the business units in 2008. All were well controlled, and they had no significant environmental impact.

A fire occurred in a shot-blasting machine used to clean castings at the Weert foundry. The workers were evacuated and the fire brigade was called out. The foundry's own organization managed to put out the fire before the fire brigade arrived. A similar fire occurred in the shot-blasting machine at the Heerlen foundry. After the fires, measures were taken to prevent the occurrence of similar incidents.

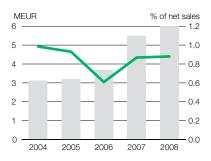
Two incidents occurred at the Pori foundry in 2008. In one incident the cooling water in the inductor on the holding furnace sprayed on to the inductor. The incident caused no personal injuries or damage to the environment. The inductor housing and the cooling pipes were replaced.

In the other incident hydraulic oil from the furnace got into the emergency collection pit under the furnace, and molten iron that spattered from the furnace into the pit set it on fire. The workers in the smelting plant started to put out the fire, and the fire brigade, which had been called out, completed the work. Melting and moulding production stopped for about an hour. The incident caused no personal injuries or damage to the environment. The hydraulic oil used in the furnaces was replaced with oil that is less flammable and the hydraulic hoses and pipes were replaced.

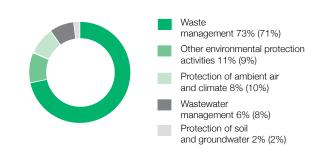
Three incidents occurred at the Karkkila foundry, where small amounts of molten iron spilt from the ladle or furnace on to the foundry floor or into the furnace's emergency collecting pit. The fire brigade was not needed and no personal injuries or damage to the environment occurred for any of these incidents. The material damage was small. The causes were examined for each incident and corrective measures were taken.

A fire took place during maintenance work on the painting line at the Manisa aluminium foundry, but no-one was injured. After the incident the number of fire extinguishers available was increased.

# TOTAL ENVIRONMENTAL COSTS



## DISTRIBUTION OF ENVIRONMENTAL COSTS 2008



# Production units must have quality and environmental management systems

We supply products that meet customer requirements just in time, taking environmental factors into account. Each production unit defines its own quality and environmental policies that are in accordance with this corporate policy and with the requirements of the relevant standards. Each Componenta employee is responsible for carrying out their daily activities to a high quality and with respect for the environment.

# **Environmental policy**

We promote awareness of both customer and legal requirements throughout the organization. We monitor customer satisfaction and work to continuously improve this. We maintain a management system that encourages compliance with the instructions in the quality and environmental systems, the acceptance of responsibility, and commitment to quality, environmental factors and continuous improvement. We target continuous development activities to reduce variation in the manufacturing processes and to adjust the processes in line with individual product properties.

When setting and reviewing their environmental goals, each production unit must take into account the following environmental factors:

- reducing consumption of energy and raw materials
- reducing particle and VOC emissions
- reducing the level of ambient noise caused by business operations
- enhancing the sorting of waste
- reducing the amount of non-recyclable waste.

We ensure that production units have sufficient resources to maintain their competitiveness and develop their manufacturing processes. In capital expenditure we utilize the best and most practicable technology, taking into account financial and environmental considerations. One requirement for approving major investments is an environmental impact assessment.

# Quality and environmental management systems

The Group requires each production unit to have a third-party certified quality management system. Depending on customer requirements, the quality systems conform to either ISO 9001 or ISO/TS 16949 standards. According to the Group's environmental management policy, each production unit must also have an environmental management system conforming to ISO 14001 standards. The table below shows the certified quality and environmental management systems at Componenta's units.

Componenta Pistons is the only production unit that does not have certified environmental and quality systems for its operations. Work on building the systems has begun at Componenta Pistons, and the target is to have the ISO 9001 system in place during 2009.

The environmental management systems guide development at the units and help them to identify the environmental impact of their production and correct major environmental aspects. The systems also highlight the responsibility of everyone in environmental matters and increase environmental awareness and commitment to environmental issues.

In addition to ISO 9001 quality system and ISO 14001 environmental quality system, Componenta's business units in Manisa and Orhangazi were in the autumn of 2008 certified according to OHSAS 18001, which concerns social responsibility related quality. OHSAS is an occupational health and safety management system.

Unit	ISO 9001	ISO/TS 16949	ISO 14001	OHSAS 18001
Heerlen HWS	✓	✓	✓	
Heerlen Furan	<b>√</b>		✓	
- rämmestad	<b>√</b>	✓	✓	
Karkkila	<b>√</b>	✓	✓	
Manisa	<b>√</b>	✓	✓	✓
Nisamo	<b>√</b>		✓	
Orhangazi	<b>√</b>	✓	✓	✓
Pietarsaari	<b>√</b>	✓	✓	
Pietarsaari MS	<b>√</b>	✓	✓	
Pistons	under construction		under construction	
Pori	<b>√</b>	✓	✓	
Suomivalimo	<b>√</b>		✓	
Veert	<b>√</b>	✓	✓	
Weert CPV	<b>√</b>	✓	✓	
Wirsbo	<b>√</b>	/	<b>√</b>	

# Environmental permits at production plants

The operations of the foundries and forges are such that they require an environmental permit. Componenta aims to comply with the terms of the environmental permits to avoid the risk that our operations might be restricted on environmental grounds.

The environmental permits for the foundries are such that they set the direction for development relating to the environment. The new permits contain numerous requirements that develop environmental issues at the production units far into the future. These requirements focus for example on particle and VOC emissions.

The Finnish and Dutch foundries have permits that are valid indefinitely but have to be renewed if significant changes take place in operations. The permits for the Finnish foundries have a date when the permit needs to be checked and a new application must be submitted if required.

The European Union has defined the best available techniques (BAT) for foundries. The BAT reference document for example defines the emissions limits that can be achieved with the best available techniques. Authorities take BAT requirements into account when granting new environmental permits for foundries.

Environmental permits in Turkey are split into several parts, including a waste water permit, emissions permit and hazardous waste permit for landfilling. Emissions permits may even have to be renewed at two year intervals. The Weert foundry in the Netherlands also has a waste water permit for discharging cooling water into the river.

# Amendments to environmental permits in 2008

Amendments were made in 2008 to the environmental permits for Componenta's production plants in Finland and the Netherlands, and preparations were made for renewing permits in Sweden and Turkey.

The environmental impact assessment carried out in connection with raising production capacity at the Suomivalimo foundry was completed during 2008 and the new environmental permit was granted in November 2008. The project to raise capacity was largely completed by the end of 2008. Application was also made for an environmental permit at Suomivalimo to use the foundry sand in earthworks.

An environmental permit was obtained for the Pietarsaari foundry to use the foundry sand as filler material in the outdoor area during 2008. To ensure that the waste sand is usable, a representative sample of the sand must be taken before starting to fill the area, to determine the harmful metals content. The representative sample is being collected and the results of the assessment should be available at the beginning of May 2009.

The Pietarsaari foundry is applying for a revision of the environmental permit that is valid indefinitely, because of the surface treatment line in the machine shop building. An external business has been responsible for its operations until now.

An amendment was made to the environmental permit at the Weert foundry in 2008 because of the catalytic after-burner installed in the paint shop towards the end of 2007, which achieved its full impact in reducing VOC emissions during 2008.

The environmental permit at Heerlen was amended because the location of the oxygen store in the foundry area was changed. Heerlen is the only one of Componenta's iron foundries that does not use electricity as the source of the energy for smelting. The Heerlen foundry uses coke for smelting in a cupola furnace, and adding oxygen provides extra power for the process.

The Orhangazi foundry has a current, valid waste water permit. To renew the emissions permit, during 2008 four continuously operating meters were installed at the foundry to monitor VOC and dust emissions. The results are reported to the Turkish Ministry of Environment and Forestry. Specific measures need to be carried out at Orhangazi in order to renew the hazardous waste permit.

The Manisa aluminium foundry is not required to have a waste water permit. It also does not need a hazardous waste permit, for the core sand waste has been shown to conform to the regulations and is not hazardous waste. The readings needed to renew the emissions permit have been sent to the authorities.

In connection with the Wirsbo forge operations, the process has begun to renew the environmental permit for the Smedjebacken production plant.

**3** 

More information at www.componenta.com/environment.

# Componenta Orhangazi focuses on productive maintenance

The Componenta Orhangazi foundry was in 2008 rewarded by the Japan Institute of Plant Maintenance (JIPM) for productive maintenance. This reward is an acknowledgement of years of work for improving maintenance, quality and safety.

Total Productive Maintenance or TPM is a systematic operational model that covers the whole company and aims at achieving troubleproof processes at the lowest possible cost. Maintenance is taken into account in all the company's operations and entire personnel from the management to employees are committed to operate according to the model. The aim is that there are no machine breakdowns or shutdowns or occupational accidents, nor are any defective products manufactured. When only good quality is produced, the company's costs decrease and productivity increases at the same time as customers' satisfaction improves.

Reaching these targets requires participation and commitment of the entire personnel. At the Orhangazi foundry, an extensive training program was carried through. Each equipment in production got its own maintenance program for its entire operating life. Continuous improvement and so called 5S method were in use and with their help for example cleanliness of working environment and work-stations was taken care of, which also affected the work efficiency. Development work was done in small groups that developed their own area of work and tasks according to the Kaizen principles, progressing step by step.

Work for productive maintenance and getting the JIPM award started in Orhangazi already in 2005. An appointed consultant audited the company's operations every three months, and deficiencies noticed in the audits were corrected at once. At the end of the third year the development work has progressed so far that the JIPM inspectors stated that the foundry fulfilled the criteria of the JIPM award.



# Environmental impact of production process

# Environmental impact of production

Production of cast components takes place in specialized foundries. The moulds that give the product its exterior shape are made from sand (iron foundries) or steel (aluminium foundry). The cores that go inside the mould are made of sand.

The casting moulds used at the iron foundries are made on an automatic moulding line, and only the largest moulds are made by hand. The raw material is melted in an electric or cupola furnace, and the main raw material is recycled steel. In the smelting process the temperature of the iron is raised to about 1,500 °C. The moulds are disposable, so that after casting the mould is broken up and most of the sand used in the mould is recycled in the process. After cooling and shake out, the sand mould is broken up and the cast components move on for fettling, which is followed by other further processing such as heat treatment, painting or other surface treatment and machining, in accordance with the customer's requirements.

At the aluminium foundry the casting moulds last even for very long production series, since they are made of steel. Different permanent mould methods are used in casting: high pressure die casting, low pressure die casting and gravity die casting. The temperature of the molten aluminium is about 700 °C. Because of the effective cooling of the steel mould and the lower casting temperature, aluminium castings can be removed from the mould much more quickly than iron castings. The work stages after casting are fettling, machining, any painting and despatch to the customer.

# Tons 350,000 250,000 250,000 150,000 100,000 1

#### Foundries

In the foundries the environmental load arises from:

- the use of energy in the foundries to melt the recycled or new metal
- the spent sand from the sand circulation system for casting moulds made with the one-time mould process
- dust waste extracted by the filtering equipment in the work phases that generate dust
- VOC (volatile organic compounds) emissions from the chemicals used in painting and in the manufacture of cores
- noise, for example in the handling of scrap metal
- odour, which comes from the casting process, for example from the pouring line, cooling and shake out.

# Machine shops

Machining of the cast components takes place at modern machining centres, on CNC machines or with conventional machining tools. After machining, the castings can be surface treated and part assembled as required by the customer. The operations of Componenta's machine shops are such that they do not impose a significant load on the environment.

At the machine shops environmental load arises from:

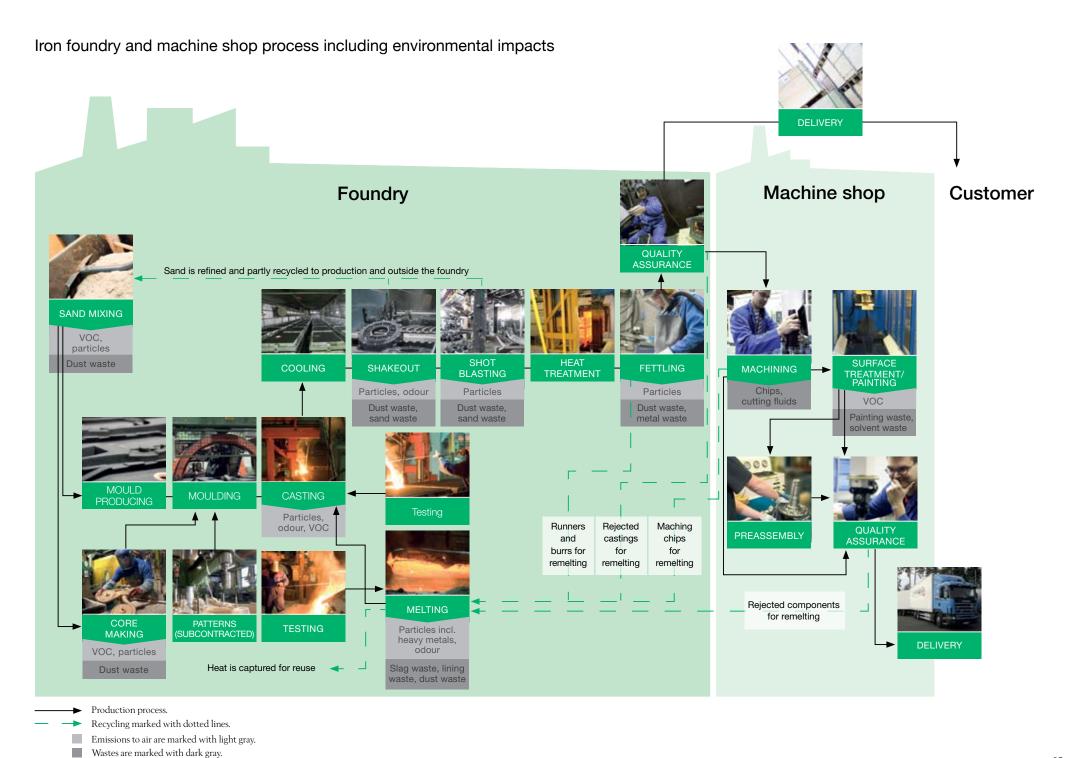
- oils and chemicals; the cutting fluids used in machining, and the resulting cutting fluid waste
- fluid waste (other chemicals such as liquid gas).

#### Forges

Forged components are manufactured on largely automated production lines

At the forges environmental load arises from:

- use of energy
- noise
- oil emissions.



# **Energy consumption**

# Energy efficiency declined slightly

In 2008, the combined energy consumption of the foundries, machine shops and forges totalled 795 GWh (814 GWh). Total energy consumption declined from the previous year because production volumes were lower in all business areas.

The lower production levels increased the amount of energy required per tonne produced especially at the foundries, which use most energy. Production at the foundries declined almost 7% from the previous year, at the machine shops 2% and at the forges 4%.

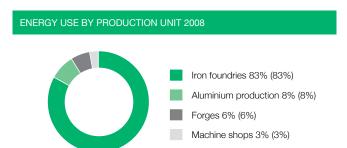
The foundries use more than 90% of all the energy used by the Group. Melting the raw material is one of the most energy-intensive work stages, for the temperature of the molten metal may be raised to more than 1500 °C in the iron foundries and to more than 700 °C in the aluminium foundries. Because of the nature of the process at the foundries they need powerful dust extraction systems, and large amounts of hot air flow out through these. Fine dust is given off in the melting, moulding and shake out stages and in further processing. Heating the incoming air in the dust extraction systems consumes much energy, and heat recovery systems have been installed to recover the waste heat from melting and the dust extraction system. The heat recovered is used for example to heat the property or hot water.

Other places where energy is used at the foundries are the machines and equipment, heat treatment, heating, air conditioning, lighting and internal transportation.

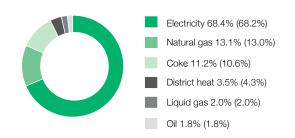
About two thirds of the energy used by Componenta is obtained from electricity. Coke is used in melting in the cupola furnace at the Heerlen foundry and natural gas at the Manisa aluminium foundry. Melting at the other foundries takes place in electric induction furnaces. The Orhangazi iron foundry has induction furnaces and arc furnaces.

Liquid or natural gas is mainly used for keeping casting equipment hot and for pre-heating. District heating is used to heat most of the Group's properties, although natural gas is used to heat the foundry properties in the Netherlands and Turkey.

Energy reviews and analyses of existing energy flows based on these have been carried out at all the foundry units and some of the machine shops. The analyses have identified areas with savings potential, and







their results are used when planning future investments. The energy reviews are updated as required. In 2008 the update of the energy analysis for the Pietarsaari and machine shop was completed.

Componenta has committed to the Energy Efficiency Agreement of the Federation of Finnish Technology Industries to decrease the energy consumption of its Finnish foundries by 10% from the level of 2005 by 2016.

#### **Foundries**

Energy consumption per tonne produced at the iron foundries rose some 4% in 2008 from the previous year. The iron foundries where production volumes increased succeeded in improving their energy efficiency. At some of the foundries, such as Orhangazi



and Suomivalimo, energy efficiency declined slightly. At Orhangazi, the fall in production volumes from the previous year contributed to the change in energy efficiency. Orhangazi remained by far the biggest producer of all of Componenta's iron castings. At Suomivalimo the reason for the decline was an increase in the volume of heat treatment as the product range changed.

Weert is the most energy-efficient of all the iron foundries. This is because its casting system has a smaller proportion of runners and feeders, so a larger proportion of the molten metal goes straight into the end product, resulting in lower relative energy consumption. In addition in Weert, as in Suomivalimo, there are no holding furnaces and the molten metal is taken straight from the melting furnace to the casting ladle. Holding furnaces are used as intermediate stores of molten metal and they require energy to keep the molten metal at the right temperature. The other iron foundries use holding furnaces.

The Pietarsaari foundry succeeded in raising energy efficiency, despite the lower production tonnes at the end of the year, by channelling more of the melting to more energy efficient furnaces and by pouring more of the left-over molten metal back into the melting furnace instead of allowing the molten metal to cool down before re-melting. The Pietarsaari foundry also commissioned

a new dust extraction plant in November 2008, and the heat recovery system connected to this improves energy efficiency at the foundry. The full benefits from this will be obtained during 2009.

The Pori foundry introduced a reactive power compensation unit and started to recover the cooling water from the melting furnace, and the energy obtained from this is used to heat the property.

Energy consumption per tonne produced increased 24% from the previous year in Manisa's aluminium production. Some of the deliveries of the main raw material, aluminium, have been in molten form. In 2008 the proportion of aluminium supplied in molten form declined, as the stock of aluminium blanks was run down because of the lower production volumes.

## Machine shops

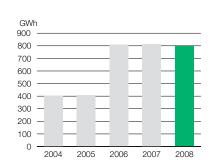
The machines shops accounted for 3% (3%) of the Group's total energy consumption. Most of this energy was consumed by machine tools and in heating and air conditioning the buildings. Energy consumption per tonne produced at the machine shops declined 4% from 2007. One reason was the merger of the Främmestad and Åmål machine shops at the end of 2007, with the larger unit improving energy consumption in 2008. The new lathe purchased for Främmestad has a lower energy consumption than the old ones.



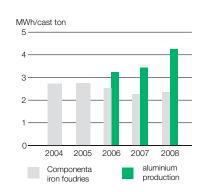
# Forges

The forges accounted for 6% (6%) of Componenta's energy consumption. Most of this energy is consumed in heating the blanks to the forging temperature of about 1200 °C. Energy consumption per tonne produced declined 5% at the forges from 2007. Forging different types of components requires different amounts of energy, so the type of products being manufactured has an impact on energy consumption. Several goals have been set to reduce energy consumption, and one way to achieve these is to minimize the mass of the forging blanks being heated.

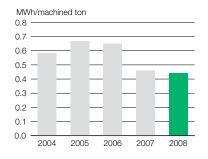
## TOTAL ENERGY CONSUMPTION



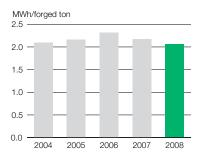
#### **ENERGY CONSUMPTION IN FOUNDRIES**



#### ENERGY CONSUMPTION IN MACHINE SHOPS



#### **ENERGY CONSUMPTION IN FORGES**





# Recycled steel in Finland is sourced from as close as possible

The most important partner for foundries and steelworks in Finland in the sourcing of recycled steel is Osuuskunta Teollisuuden Romu or OTR (the Industrial Scrap Cooperative), established in 1977. OTR procures the recycled steel raw material to meet the requirements of each plant in terms of quantity and quality as and when it is needed. Most of the recycled steel is purchased in Finland close to the plants and is transported in full truck loads.

The specific quality requirements for different grades of recycled steel comply with international quality standards. For recycled steel we only accept raw material from suppliers who have been audited and certified in accordance with the ISO 9001 quality system and ISO 14001 environmental quality system used by the steel and foundry industries.

The quality requirements for recycled steel are high, and objects that could be dangerous in the melting process, such as closed containers, explosives or radioactive parts, are not accepted in deliveries. Under OTR's terms, suppliers who do not meet their responsibilities in this area may have to compensate the recipients of the recycled steel or lose their status as an approved supplier. In 2008 all our foundries in Finland acquired new manual radiation counters for checking raw material deliveries.

Use of raw materials

# Proportion of recycled raw material increased

Componenta's foundries make efficient use of recycled material in their melting processes. The raw materials for the machine shops come from the Group's foundries.

#### **Foundries**

The raw materials used in melting at the iron foundries comprise three metal raw materials: recycled scrap from the foundry itself (runners and feeders that are removed from the product after casting), recycled steel that is purchased for raw material, and pig iron. Normally these metal raw materials form 97–98% of the charge material. The remaining 2–3% consists of various metallurgical additives and alloying elements such as slag-based binding agents, carburizing agents, ferrosilicon, silicon carbide and copper or tin.

The Heerlen, Pietarsaari and Orhangazi foundries melt into briquettes compressed cast iron machining chips that come from the Group's machine shops and other machine shops. During 2008 the Nisamo machine shop also started to sort machining chips more efficiently so that some of the material can be turned into briquettes for raw material for the Karkkila foundry. The Främmestad machine shop has made plans to introduce a briquette-making plant.

Pig iron is made from iron ore. During 2008 most of the pig iron used by the iron foundries was obtained from Russia, from whe-

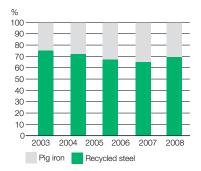
"The proportion of recycled material melted at the foundries rose almost 7% from 2007 thanks to its improved availability and better planning of use."

re the raw material is transported to the foundries ready for use in the melting process. The recycled steel is also supplied sorted and processed so that it can be charged as it is. The recycled steel is obtained for each foundry as locally as possible, allowing for the requirements of the raw material and its availability. Componenta has high requirements for the pig iron and recycled steel concerning their purity, chemical composition and size.

The proportion of recycled material melted at the foundries rose almost 7% from 2007 thanks to its improved availability and better planning of use. The amount of recycled steel used is restricted not just by its availability but also by the different melting processes at the foundries and their product ranges, which result in differences in the material properties of the end product and in the required raw material base.

The raw material used in the aluminium foundry is both primary aluminium and recycled aluminium, which can be further recycled.

#### RECYCLED STEEL AND PIG IRON USED IN MELTING



# Forges and machine shops

The raw material used in the forges is steel blanks, which are manufactured at steel works and supplied to the forges as bars. The number of steel blanks used in forging per tonne produced was almost the same as in the previous year.

The raw materials used at the machine shops are mainly components cast at Componenta's foundries.

	2008	2007	2006	2005	200
PRODUCTION TONS	2000	2007	2000	2003	200
Foundries, t	297,499	318,488	288,303	125,514	126,14
Machine shops, t	48,795	50,020	37,961	30,759	3
Forges, t	21,734	22,629	17,926	19,592	2
r Orges, t	21,704	22,029	17,920	19,592	
MAIN RAW-MATERIALS					
Recycled steel, t (foundries)	196,641	176,225	181,202	93,182	9
Pig iron, t (foundries)	88,994	97,136	90,877	37,209	3
Aluminium, t (Turkey)	23,390	27,633	26,761	-	
Steel blanks, t (forges)	27,613	29,007	24,432	25,953	2
Sand, t (foundries)	87,481	83,606	88,637	47,732	۷
Cutting fluids, t (machineshops and forges)	173	252	242	93	ę
ADDED VALUE TO STAKEHOLDERS					
Electricity, MWh	543,563	555,828	541,372	252,527	263,52
District heat, MWh	28,058	35,169	37,250	40,250	41,70
Coke, MWh	89,054	86,536	85,748	75,773	59,66
Natural gas, MWh	104,080	105,957	115,730	22,489	23,99
Oil, MWh	14,138	14,922	15,544	4,675	3,66
Liquid gas, MWh	15,760	16,025	13,512	13,273	12,62
Elquid gas, MMM	10,700	10,020	10,012	10,270	12,02
WATER CONSUMPTION, m3	469,694	458,024	433,634	224,927	22
EMISSION INTO AIR					
Particle emissions, t *)	66	84	84	44	(
VOC emissions, t	787	867	932	350	29
WASTE					
Wastewater, m3	294,374	304,151	286,750	108,352	12
Waste dust, sludge etc., t	56,861	61,590	21,016	17,223	
Sand, slag etc., t	99,772	82,413	110,075	63,657	-
Unsorted waste, t	831	667	1,204	1,519	
Hazardous waste, t	2,834	2,892	2,629	2,788	
Metal scrap, t **)	24,492	25,798	25,114	16,287	-
Waste wood, t	1,252	1,118	947	758	66
Waste paper, cardboard etc., t	404	364	459	146	30
Other sorted waste, t	15,011	1,179	1,079	1,474	6

<sup>\*)</sup> Particle emissions for 2006 has been corrected in the report of 2007, particle emissions of the Orhangazi foundry were 51 t smaller than reported earlier.



# REACH places obligations on Componenta

REACH is a European Community Regulation on chemicals that deals with the Registration, Evaluation, Authorization and Restriction of Chemical substances. The aim of REACH is to improve the protection of human health and the environment by ensuring the safe use of chemicals.

Under the regulation, a manufacturer or importer of chemicals must make a safety evaluation of the production and use of a chemical, assessing its hazardous properties, its different uses, and exposure in situations of use.

REACH places obligations on Componenta as a user and importer of chemicals. During 2008 Componenta made the necessary preparations for implementing the various requirements set by REACH. These will be phased in after transition periods. At the end of November 2008 Componenta pre-registered all the chemicals imported from outside the European Union in quantities of one tonne or more per year. By pre-registering these chemicals, Componenta can continue to import them up until the final registration date, which is determined by the annual quantities imported. For Componenta, the most important item imported from outside the European Union is pig iron.

Componenta also contacted its most critical raw material suppliers during 2008 to ensure that they are properly prepared for the requirements of REACH.

<sup>\*\*)</sup> The metal scrap figure has been corrected for 2006 in the report of 2007 (from 34,422 to 25,114 tons) due to the change in the Orhangazi figures.



# **Emissions**

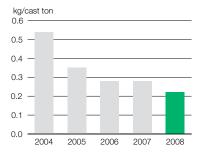
# Dust and VOC emissions declined

The most significant emission from the casting process is dust. Moulds and cores made from sand are used in casting. The sand is recycled continuously in the process, and its grain size gets smaller and smaller. The sand then gives off dust, and the dust has to be extracted at several points in the process. Forging and machining do not cause significant dust or VOC emissions.

Most of the sand used at Componenta's foundries is quartz sand, which is a crystallized form of silica. Breathing fine dust containing crystalline silica can cause damage to the lungs. The typical average grain size of foundry sand varies between 0.15 and 0.35 millimetres, but moving the sand with the pneumatic conveyors and the thermal stress generated during casting wear some of the sand down to finer dust.

The foundries have effective local extraction units which convey the dust to the dust separation plants. The dust is separated from the air flow and the air is conducted outside. Even the most modern dust separation plants cannot remove the very finest dust, and some of the dust escapes into the air outside air. There are also differences in the dust separating capabilities of the dust extractor plants and methods in use. Many foundries have continuously operating dust measuring equipment in use, to be able to identify failures in the dust extraction plants more easily. These meters also measure VOCs and flow levels.

# PARTICLE EMISSIONS FROM FOUNDRIES



The EU-level agreement on silica dust between employer and employee organizations in Finland and the Netherlands in 2006 directs the activities by foundries to prevent damage to health from silica dust. In accordance with the spirit of this agreement, the foundries regularly measure the quality of indoor air, evaluate the exposure of personnel to crystalline silica, take measures to reduce exposure, and regularly monitor the state of workers' health.

The volume of dust that escaped into the air in 2008, both in absolute terms and per tonne produced, was lower than in the previous year. In absolute terms, dust emissions from the foundries declined 21%.

In order to meet the requirements of the environmental permit, the Pietarsaari foundry purchased a filter plant, which was commissioned in November 2008. Introducing the new filter plant improves the quality of the indoor air at the foundry on the casting line, at the cooling points for the moulds and in the smelting plant, and it is estimated that dust emissions to the outside air will be reduced by some 80%. The full benefits of the filter plant will be felt during 2009.

The Pori foundry introduced an extra filter plant close to the shake out point for the moulds in 2008 to improve the indoor air. Plans have also been drawn up at Pori to improve dust extraction from the smelting plant. In connection with the expansion of production at Suomivalimo, completely new filtering equipment was taken into use.

Four continuously operating meters were installed in the extraction units at the Orhangazi foundry in 2008. Orhangazi has also improved and overhauled the filters in sand production and the smelting plant. Orhangazi has plans to replace the arc furnaces with modern induction smelting furnaces, which will keep smelting capacity unchanged but will reduce dust emissions to the air by 60%.

# VOC emissions from the use of amines and solvents

The VOC (volatile organic compound) emissions from the foundries arise mainly from the solvents used in painting products, from the alcohol-based thinners used in coating moulds and cores, and from

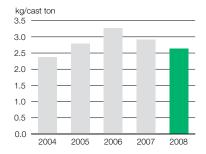
the amines used as catalytic agents for hardening the cores. Coating improves the heat resistance of the sand cores during casting. Some of Componenta's production units have switched to water-based paints, but some products still have to be coated with solvent-based paints due to the requirements of the manufacturing process.

VOC emissions from the use of amines and solvents at the foundries declined 10% per tonne produced in 2008 from the previous year. A catalytic after-burner for the VOC emissions from painting was taken into use at the Weert foundry in January 2008, reducing VOC emissions at Weert by more than 80% from the previous year. Electricity and natural gas is needed to operate the equipment. The new painting line at Karkkila started up during autumn 2008, and operations in the old paint shop ended. The new painting line uses only water-based paints so it generates less VOC emissions, as well as less paint waste.

During 2008 the Pietarsaari foundry has been reducing the use of solvent-based core coatings, so that water-based coatings are used with just under a third of all the cores. It is planned to increase the proportion of cores with water-based coatings as the tests progress.

The moulds used on the furan production line at the Heerlen Furan foundry and the moulds made from furan sand at the Componenta Suomivalimo foundry are coated before casting, to obtain a sufficiently good surface quality and to prevent the metal from

# AMINES AND SOLVENTS (VOC EMISSIONS)



penetrating the sand. An alcohol solvent has to be used for coating since there is little time on the automated production process for it to dry. The alcohol evaporating from coating at the Heerlen Furan foundry and at Suomivalimo is burnt, and only some 30% of it is emitted as gas to the outside air. The amine gas from the production of cores at the foundries in the Netherlands is fed to an acid treatment, which binds the amines to the acid, and less than 5% of the amines are emitted as gas to the air. The acid amine solution used in the treatment is sent to a treatment plant in Germany, where the acid and amine are separated for reuse. The pH levels of the amine scrubber solution are monitored to minimize the odour inconvenience. The Orhangazi foundry in Turkey also has two amine scrubbers in use.

# More environmentally benign materials and reducing odour inconvenience

Componenta has been carrying out several projects aiming to replace raw materials currently in use with more environmentally friendly materials.

The chemicals used in cores are one source of odours at the foundries. An alternative core binding agent was found at the Heerlen HWS foundry, and after testing this was taken into production use during 2008. The new binding agent gives off fewer odours and generates lower BTX compound (benzene, toluene, xylene) emissions. An alternative core binding agent at the Weert foundry proved to be technically effective in initial tests, but longer trial use revealed some technical problems. Use of the agent was suspended until the supplier succeeds in sorting out the problems. The Pietarsaari foundry has replaced some 30% of the alcohol-based coating with water-based coating.

The Wirsbo forge continued the tests to replace the mineral oil lubricant for the hammers with vegetable-based rapeseed oil. So far, however, the forge has only been able to introduce the rapeseed oil on the largest counter-blow hammer. In contrast, the Wirsbo forge operations have completely stopped the surface treatment process using carcinogenic chrome coatings.

One of the biggest environmental projects in the Netherlands has been preventing the odour inconvenience at the Heerlen foundry. The foundry is located in a densely populated area, and since 2005 some 150–200 complaints a year have been made about the odours. Componenta continued to look for a solution to the problem in 2008 by examining all the possible means to reduce the odour inconvenience. Componenta and the authorities have together come to the conclusion that the best solution would be to conduct the emissions from the casting and cooling areas and from the mould shake out area in the foundry to a 100 metre high chimney. The solution would exceed the requirements set by the foundry's current environmental permit, so it is possible to obtain government support for the investment. The authorities will continue to consider the matter during 2009.

Carbon dioxide is one greenhouse gas given off during combustion in the foundry processes and it is also produced from the use of fuels. Indirect carbon dioxide emissions arise from the use of electricity. Transportation also causes carbon dioxide emissions. The biggest source of carbon dioxide at Componenta is the cupola furnace at the Heerlen foundries. The emissions from the furnace are measured and reported to the authorities regularly. However, the total amount of carbon dioxide is relatively small, and it has not been identified as a significant environmental issue for Componenta.

#### Focus on noise abatement

Many of Componenta's production units are situated close to housing, so their operations can disturb people in the surrounding area. These units pay particular attention to noise abatement. The level of noise caused by the production plants is monitored and measured, both by Componenta itself and by an external agent.

The main causes of noise are the handling of raw materials at the foundries, the forging processes at the forges and air conditioning. Of course, transporting products and materials also causes noise. Componenta complies with the stipulations for noise levels in the terms of the operating permits.

# Foundry sand forms biggest waste item

The biggest waste items at the foundries are spent sand from the process and dust. Although the foundry sand is reused in the mould production process, the sand has to be replaced gradually to maintain its technical qualities. Some 2% of new sand and binding agents are added to the sand that returns from the casting process, so 98% of the sand is continuously recycled. Even so, the process produces a large amount of spent sand.

The other major waste fraction is dust, which is separated at dust extraction plants from the air that is conducted there from different points in the sand process. It should be noted that an increase in the amount of dust waste means a decrease in the amount of dust emissions in the air.

Another waste item at the foundries is slag. Slag is impurities, such as sand and oxides, that rise to the surface of the molten metal and are removed before casting.

The other waste at the foundries is normal industrial waste and most of this is sorted for reuse. Hazardous waste is produced mainly from the lubrication oils, the painting processes, the dust extracted from the smelting furnaces, the waste water treatment process at the Orhangazi foundry, and from processing amine gases.

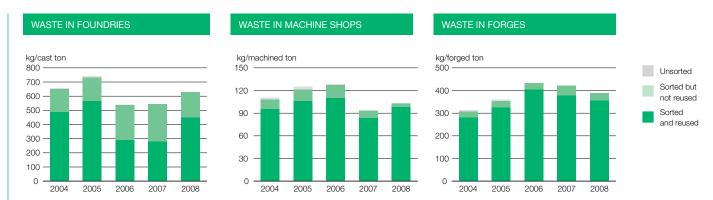
The machine shops produce normal industrial waste and machine chips, which are recycled either by selling them on or by using them as raw material for molten metal at the Group's foundries. Hazardous waste is produced by the lubrication oils for machinery, by the cutting fluids used in machining, and by the painting processes.

The biggest waste item at the forges is burrs. Hazardous waste includes the oil used in forging and cooling emulsions.

In 2008, Componenta generated a total of 201,459 (176,020) tonnes of waste. Of this 72% (54%) was sorted and reused. The proportion of waste fractions being reused increased in 2008. Reasons behind this improvement include sending the dust from the Pori foundry for reuse and increasing the reuse of sand and dust from the Karkkila foundry since the final part of 2007.

#### **Foundries**

The total amount of waste per tonne produced at Componenta's foundries increased 16% from 2007. Most of this increase is explained



by one particular factor during the expansion project at Suomivalimo: sand that had been used as land fill was removed to make room for the expansion of the yard for the smelting plant. The amount of waste generated per tonne of castings produced varies from foundry to foundry. Factors that have a significant impact on the amount of waste produced are the moulding method in use and whether the foundry has a reprocessing plant for the sand. The type of product also affects the amount of waste. The greater the number of cores made from sand, the more the amount of spent sand produced. It often requires more cores to produce products with a complex, demanding geometry than for simple moulds and products.

The Weert and Orhangazi foundries operate reprocessing plants for the moulding sand, which remove the binding agents for the moulding sand from around the grains of sand. The moulding sand can then be used instead of new sand in the production of cores, which correspondingly reduces the need for new sand and the amount of spent sand. During 2008 the Orhangazi foundry invested in a system that separates more effectively from the moulding sand the iron splashes mixed with sand after casting, so that the iron can be reused in smelting.

Much of the spent sand and dust from the foundries is utilised in the construction of waste landfill sites. A separate landfill site for foundry sand and dust has been in use at Karkkila, and dumping stopped there in October 2007. The process of closing down the landfill site began in 2008. Plans for closing the site have been drawn up, and the details of the plan and the schedule have been agreed with the authorities. According to the current timetable, the process of closing the landfill site will be completed by the end of 2011. The foundry sand and dust from Karkkila have been sent for reuse since autumn 2007 and for the first whole year in 2008, and there is no need for a new, separate landfill site for dumping these. This has been one of the biggest reasons for the reduction in the amount of waste that is sorted but not reused from 2007.

Almost all the waste from the foundries meets the requirements set for normal landfill sites. However some dust cannot be disposed of at normal waste landfill sites because of the heavy metals it contains. The Pietarsaari foundry obtained an environmental permit to utilize the foundry sand as filler material in the outdoor area during 2008, and Suomivalimo has applied for an environmental permit to use foundry sand in earthworks.

Almost all the waste from the Dutch foundries is sent for reuse. The smelting plant dust sludge removed from the cupola furnace, for example, is used in road building. Spent sand is used in concrete structures and earthworks. Metal is separated from slag and the slag is then used in covering material mixtures. Only unsorted waste is sent to the landfill site.

At Orhangazi, the dust filtered from the sand reclamation plant is sent to a waste landfill site. Other filtered dust, coming from the fettling and moulding lines, is stored in the plant's stock area. 10% of the filtered moulding dust is reused on moulding lines in

the foundry's own process. The zinc dust from the melting process in the induction furnaces at Orhangazi is separated and sold to a company that produces zinc oxide and uses it in its production process. Melting slag has been sent to a waste processing area in 2008. A chemical treatment system for paint was assembled to reduce the amount of paint waste at Orhangazi.

# Machine shops

The total amount of waste per tonne produced at the machine shops rose 10% in 2008 from the 2007 figure. The biggest waste item at the machine shops is machining chips. In 2008 some of these were sent to the smelting plants of steel manufacturers and some were melted in the Group's foundries. The machining chips from the Pietarsaari and Orhangazi machine shops are compressed to form briquettes, which are used as raw material for melting at the Group's foundries. As from 2008 sorting of machining chips at the Nisamo machine shop was also enhanced so that some of them were used at the Karkkila foundry. The briquetting process also separates the cutting fluid from the chips, and after cleaning this can be reused in the Group's machining operations. At Orhangazi, metal chips purchased from the automotive industry are also compressed to form briquettes.

The machining chips from the Främmestad machine shop are sent for reuse outside the Group. Främmestad has decided to install a new central tank for several machine tools to make more efficient use of cutting fluid. The tank will be taken into use during the spring of 2009.

At the Pietarsaari machine shop, water is separated from the cutting fluid recovered during the briquetting process with an evaporator, which reduces the amount of cutting fluid processed as hazardous waste by 85%. The purity of the water that remains has been tested and it can be disposed of in the municipal sewage system.

# Forges

The amount of waste per tonne produced declined at the forges 8% in 2008 from the previous year. Forging burrs form the largest waste item, and they are sent for reuse to the smelting plants at steel work. Almost all the waste at the forges is sorted.

# Wastewater treatment

The amount of wastewater in 2008 at Componenta's foundries increased 8% from 2007, due to increased water consumption in the Manisa aluminium foundry. The increased water consumption in Manisa is due to a increased testing process for a casting where water is needed for rinsing out the penetrating liquid.

Water is used at the foundries and forges for cooling. The bentonite binding agent is used in the green sand process and this requires additional water when it is mixed for it to work properly. The green sand process is used at all the iron foundries except for Suomivalimo and the Heerlen furan line. The water used to dampen the sand at the foundries evaporates during the casting process and does not end up in the municipal sewage system.

At the machine shops, the amount of wastewater in 2008 declined 10% from 2007. Water is used at the machine shops in cutting fluids and in the painting process. The new wastewater treatment equipment for the paintshop reduced the amount of paint sludge at Orhangazi.

At the forges, the amount of water subject to a wastewater charge in 2008 fell to one quarter of the amount in the previous year. Water for cooling the heat treatment furnace introduced in 2007 was taken from the municipal water supply, and the new pump installed in 2008 reduced the need for municipal water, since more effective use could be made of river water for cooling.

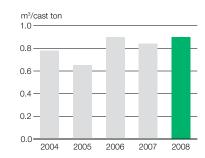
The surface treatment plant at Främmestad and Virsbo forge have a closed water system. The Weert, Karkkila and Pori found-



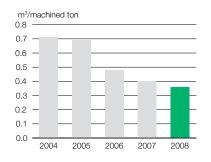
ries and Componenta Wirsbo's Kolsva forge take the cooling water used in their processes from rivers. The water circulates in a closed system and is then returned to the river at a slightly higher temperature, so no wastewater is produced.

The Orhangazi foundry has its own wastewater treatment plant, so all wastewater is reused and no wastewater needs to be piped away. Water is used at the Manisa aluminium foundry in cooling, rinsing and in the painting department. Improvements were made to reusing the hot cooling water from the compressors. The amount of paint sludge was also reduced by introducing new technology on the surface treatment line.

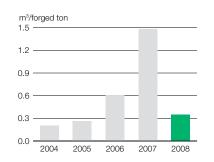
# WATER TO THE WASTEWATER PLANT FROM FOUNDRIES



# WATER TO THE WASTEWATER PLANT FROM MACHINE SHOPS



# WATER TO THE WASTEWATER PLANT FROM FORGES





# Purchasing

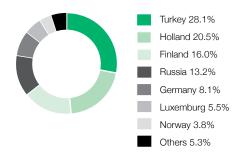
# Purchasing policy covers safety, environment and social responsibility

Componenta purchases raw materials and services from all over the world, and supplies components to customers in many different locations. As a producer of high-quality components, Componenta is aware of its responsibilities. The Group's purchasing and other policies and principles ensure consistent ways of working throughout the supply chain as one Componenta and in cooperation with business partners.

In 2008 the Group purchased materials and services from outside the company to the value of EUR 324.1 million (EUR 305.0 million in 2007). In 2008, due to extremely high demand, some of Componenta's suppliers were operating at maximum capacity and in some cases the supply was at risk. To counter this, Componenta has put much effort into finding alternative materials and suppliers, and has now reached a situation where critical materials can be supplied from at least two sources, in order to reduce the risk to supply in the future.

The Group has a group-level purchasing organization that handles purchases of large volumes and high value, the selection of suppliers and contracting. In addition to materials Componenta also purchases services and energy and leased workforce services. Purchasing personnel at the business units carry out operational

COUNTRIES OF ORIGIN OF PURCHASED
MATERIALS AND SERVICES 2008



activities such as ordering and follow-up action. The procedures are the same at both group and unit level. The purchasing department and those involved in the purchasing process agree to and act in accordance with the Code of Conduct.

# Purchasing policy and Code of Conduct set principles

Componenta follows the corporate purchasing policy concerning safety and environmental management, social responsibility and ethical standards in purchasing. For purchasing tasks and personnel there is also a specific Code of Conduct.

Concerning safety and environmental responsibility, suppliers and their personnel must be familiar with Componenta's applicable rules of conduct and safety and environmental instructions, and must conduct themselves in accordance with these before they start to carry out a contract. No supply orders will be placed with suppliers if there is doubt concerning compliance with the applicable environmental provisions. When awarding supply orders, efforts are made to reduce waste streams.

Componenta does not pay bribes or other illegal payments for business, and there is no preferential treatment for suppliers. Where financial or other interests are involved, the employee should report this to the management. It is not permitted for example to charge suppliers for travel costs, accommodation, lunches and dinners or to accept gifts on a scale that could affect objectivity.

Purchasing aims to build up a network of suppliers to strengthen the position of Componenta, to safeguard the moral standards and values of the Group, and to comply with the legislation and directives of government. The same standards apply to suppliers as to Componenta, and those who meet Componenta's standards are considered as preferred suppliers. ISO certification is a minimum requirement for suppliers. The Group monitors and evaluates its suppliers extensively to secure its material requirements.

Concerning social responsibility, Componenta requires certain certificates and also requires suppliers to provide basic information about the company as well as their terms and conditions of em-

#### Logistics

# Reducing environmental impact and improving delivery certainty

In its logistics, as stated in its strategy Componenta aims at world-class delivery certainty. The logistics for raw materials and finished goods plays a key role in this.

#### Aiming at full truck loads

Componenta always aims at full loads when transporting raw materials and finished products. Some 50% of the raw materials delivered are of recycled steel, and this is always delivered to the foundries in full loads, eliminating unnecessary traffic. Supply is arranged on a regional basis, avoiding the need for long distance deliveries.

The other major raw material transported is pig iron, which is mainly imported for the Group's foundries from Russia. Ship is the preferred form of transport, with shiploads of 1000 – 4000 tonnes. Other raw materials are brought in containers or by truck.

For its finished products, ship and rail are also seen as effective, sustainable options. Componenta does not normally use air transport.

During 2008, Componenta reviewed its logistics structure and decided to change this, so as to ensure minimal use of trucks that are not full, thus reducing the CO2 footprint and improving delivery certainty. In some areas the new structure has already been implemented, mainly in Sweden, the Netherlands, Belgium, UK and US. In the remaining areas this project is currently on hold because of the economic downturn.

In the new logistics structure a number of consolidation points are used to reduce the amount of empty kilometres. In the near future this network will cover all the areas in Europe and North America where Componenta delivers finished products to customers.

Where possible, to minimize the use of road transport, alternative forms of transport will be used, such as (short) sea or rail, to deliver products to the consolidation points and/or directly to customers.

Componenta follows the NLG 03 joint Scandinavian delivery terms for cast products for transport within and between Scandinavian countries. When choosing transport companies, Compo-

nenta ensures they have certified quality and environmental management systems. The required cost efficiency means the shortest routes possible, with the highest possible loading efficiency. For road transportation from the Netherlands, the aim is that logistic partners use only trucks that comply with Euro IV or V emission norms for Componenta's deliveries.

#### Sustainable packaging

The packaging materials for products are recyclable pallets and pallet collars owned by the customer, or metal racks. The Group's own packaging material is mainly recyclable EUR pallets and EUR pallet collars. These are also used in traffic between the Group's production units. In Turkey various disposable wooden packaging is also used.

A project is underway to further unify packaging within the Group, as well as to reduce the range of packaging options. The aim is to use sustainable and recyclable packaging materials that can be used for a long time. Although the Group will increasingly use returnable packaging, it wishes to minimize the transportation of empty packaging material, so the packaging will be re-used at the nearest Componenta business unit to the customer.

Raw materials are usually purchased as bulk goods, without packaging. Whenever raw materials are packaged, the aim is to use the largest possible size of packaging. Metal additives, for instance, come in 1000 kg large sacks, and paint in 200 litre barrels or larger containers. Componenta insists that raw material suppliers use EUR pallets.

In its countries of operation Componenta is a member of local packaging organisations. In Finland it is a member of PYR Ltd, the environmental register of the packaging sector in Finland, in the Netherlands it belongs to BVNL and in Sweden its forge operations are a member of REPA. In Turkey, Componenta reports on the packaging material used to the Ministry of Environment.



ployment. No supply orders are awarded to suppliers suspected of not acting in accordance with the law. Employees in the purchasing department support the company's objectives and do all they can towards achieving these in their daily activities.

Many customers require us, as a component supplier, to have an environmental management system. The automotive industry maintains lists of 'black' and 'grey' chemicals. End products supplied to them must not contain any chemicals on the black list and it is necessary to look continuously for more environmentally friendly alternatives to using them in the production process. Use of substances on the grey list should also be avoided. Componenta continually checks that it meets the requirements of the black and grey lists. The company has, for example, succeeded in meeting the strict requirements of the automotive industry concerning lead. It primarily chooses raw material suppliers that have environmental management systems in use.



#### Social responsibility

## Social responsibility at Componenta

At Componenta, we understand the people-related aspects and requirements set by a changing business environment, the business strategy and organizational efficiency, and turn these into short- and long-term strategic action. By aligning human resources management actively with business development and general management processes, we are able to compete in different phases of the business cycle and strengthen our position as a trustworthy and long-term employer.

The key aspects of human resource management during 2008 were continuing the post-merger integration of operations, creating enhanced value and developing competences, and adapting to changes in market environment.

omponenta's values – openness, honesty and respect – are guiding principles in everyday management, between Componenta team members and towards our external stakeholders. As an employer Componenta complies with and respects local labour laws and contractual agreements. International agreements for human rights and equality are actively monitored and integrated into company wide policies and ways to cooperate between colleagues.

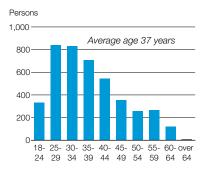
At Componenta, human resources management is one of the critical management processes, through which we ensure the availability and development of capabilities that are needed for the strategy implementation, efficiency of operations and well-being of personnel.

Managers and supervisors implement human resources management daily in their work, according to the Group values.

Through corporate human resource management practices and policies we ensure that our employees have opportunities to actively participate in the improvement of their work and to develop as professionals throughout their careers.

Pro-activeness in safety and well-being, combined with close follow-up of related key performance indicators in daily management, ensures that our employees are able to perform in a safe and supportive environment.

#### AGE STRUCTURE



#### YEAR 2008 IN BRIEF

The integration of operations in the Group continued in accordance with the One Componenta principle, for example in performance management and business reporting.

In 2008 Componenta recruited altogether 542 (593) employees.

The account management and engineering functions were strengthened by appointing new account managers and recruiting new engineering resources.

Componenta started its first two-year International Traineeship programme in all its countries: a total of 25 students were recruited to the programme.

Climate and employee satisfaction survey was done in all Componenta countries to understand better strengths and weaknesses of the organization.

The profound changes in the financial markets and in customer industries forced Componenta to adjust its production capacity to demand by cutting back on working hours and reducing the number of personnel.

At the year-end, the number of personnel including leased personnel (full-time equivalent) was 4,163 (5,064).

#### Leading European Cast Component Supplier in 2012

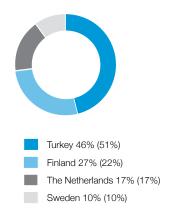
As a part of the strategy process, an analysis was made of the external and internal change forces affecting choices in human resource management. The six external and internal forces with the biggest impact on competitiveness are presented below. They will guide our target setting and development in the future.

- 1. Accelerating economic volatility and industry consolidation
- 2. Increasing restrictions and legislation on operations from the authorities in the areas of environment and utilization of workforce
- 3. Decreasing resources of skilled people in the Western countries and development of labour costs in Western countries
- 4. Rapid learning curve in growing and emerging countries
- 5. Fast creation of necessary new competencies aligned with future business potential
- 6. Internal and efficient integration of operations

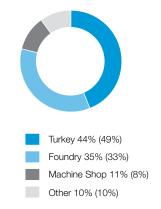
KEY FIGURES			
	2008	2007	2006
Number of personnel including leased personnel, FTE	4,163	5,064	5,249
Number of personnel on own payroll, FTE	3,969	4,158	4,316
Change during the year, %	-22	- 4	+ 9
New recruitments	542	593	628
Type of employment			
- permanent, %	93	81	79
- temporary, %	3	3	3
- leased, %	4	18	18
Gender			
- male, %	93	93	93
- female, %	7	7	7
Turnover, %	13	8	10
Absenteeism due to sickness and accidents, %*)	4.5	4.4	5.5**)

<sup>\*)</sup> Includes all days absence from first to last

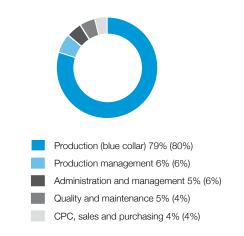
#### PERSONNEL BY COUNTRY, OWN AND LEASED 2008



#### PERSONNEL BY DIVISION, OWN AND LEASED 2008



#### PERSONNEL BY FUNCTION 2008



<sup>\*\*)</sup> Without Turkey

### According to the law

"In October 2008 the employer invited us to codetermination negotiations, which were then initiated," tells shop steward Jaakko Koskela from Pietarsaari, Finland. In the first meeting the reasons for starting of the co-determination negotiations pertaining to all personnel groups were stated. "At first we agreed that all possible vacations would be taken before temporary lay-offs. We also agreed that we would communicate weekly about decisions taken in the negotiations."

It was decided that negotiations would continue real-time until there would be no need for any adaptation. "This was a good decision, since when the order book was still decreasing we did not need to start a new negotiation process. We have been able to implement the notification period of 14 days flexibly, for individuals."

The heaviest solutions concerned permanent lay-offs. "In December 2008 all employees born in 1949–1952 were offered an opportunity for an early retirement through earnings-related unemployment allowance. The positive side to all this is that no-one will be subject to an unreasonable situation because of advanced age and weak employment situation."

All in all the negotiations have gone on well, even though they concern difficult issues, notes Jaakko Koskela. "There have been some difficulties, but that is understandable in such an extensive process. Although co-determination negotiations are sad for both parties, we have taken enough time and negotiations have progressed well and according to the law."

#### Resource planning and recruitment

# Long-term resource planning is critical success factor

Proactive, effective resource planning and flexibility in resource utilization demonstrated their importance in all phases of the business cycle, and proved to be key factors in Componenta's success especially during 2008.

The whole company follows in a consistent way a common recruitment policy and process. Vacant positions are always advertised across the Group to encourage internal career rotation and to offer employees opportunities to move ahead within the Group. Competent internal candidates are always given priority over external ones, and considerable attention is paid to internal career rotation. Web-based recruitment tools are in use for job postings and managing the application process. Componenta works with selected, certified recruitment partners to ensure external recruitment of high quality.

#### Adapting to business conditions

The economic expansion in all industry sectors in Europe during the 2000s challenged the availability especially of blue collar employees in the heavy metal sector.

To ensure the availability of experienced workers in production, Componenta continued its cooperation with leading leased workforce companies. At Componenta business units in the Netherlands, long-term agreements with selected leased workforce companies guarantee that workers joining the Group's units are provided with in-depth induction to the tasks and safety issues at Componenta. They work under Componenta supervision and are able to become familiar with the work and the company. New agreements with selected workforce providers were established in the Netherlands and Turkey.

The turbulence in the financial market and the reactions of customers to the market downturn also caused Componenta to evaluate its operational priorities and effectiveness during the second half of 2008.

The Group has adapted to declining working hours through temporary lay-offs, hour banks, paid and unpaid holidays, pension arrangements and all other methods possible under the local agreements in each country. Permanent lay-offs have been used only in cases where any other adaptation methods are not available. In Turkey, where temporary measures to adapt working hours are not available, there have been permanent lay-offs. It was mutually agreed with both parties that laid-off employees will be hired back to the company when business conditions start to improve. Through these actions and procedures the aim of the Group is to minimize permanent lay-offs, keep the competency in house, guarantee the fast availability of competent resources for its production operations and, above all, support the employees and their families in overcoming challenging times.

#### Strengthening the resource base in critical processes

The sales organization and account management were reorganized at the end of 2007 by customer segment and major market areas. In 2008 the sales and engineering organization was further strengthened by new appointments and by further unifying the sales processes. This also involved establishing new sales offices, Componenta France and Componenta Italy, with new sales professionals, and also strengthening the sales organization in Germany. The Group continued to reinforce its product development and engineering capabilities in 2008 by recruiting young professionals for career rotation programmes in the Netherlands and Finland.

Building One Componenta highlights not only the importance of value-adding group-wide functions and processes, but also the speed of development. To boost the development of necessary group-wide operations, new recruits from outside the Group have been appointed to both group and division-level positions. Special attention has been given to finance and business controlling, to ensure business focused and consistent financial reporting. The man-

agement of internal sourcing was further strengthened through new operation model and appointments.

#### Building for the future

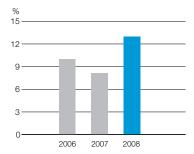
Componenta was an attractive place to work for many new team members in 2008. The total number of new recruits in 2008 was 542 (593 in 2007).

Through cooperation with schools and universities, Componenta builds up its image as an employer and guarantees the flow of young professionals to the company. In 2008 Componenta started successfully its first International Traineeship Programme in Turkey, Finland, Sweden and the Netherlands. The idea was to provide outstanding students with a job opportunity for two summers and to get to know the industry through interesting tasks and training. After the first summer period when trainees worked in their native countries, the International Traineeship Programme has already resulted in permanent employment for some participants and part-time work during the winter for several students. The programme will continue in 2009 with the international part of the programme.

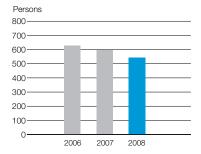
Componenta also cooperates with schools in offering students other traineeships, topics for their final thesis and other employ-

ment opportunities during their studies. In Sweden, Componenta Främmestad works in close cooperation with Essunga Industriprogram (Industrial Programme) which is a high school course for CNC operations. Students are offered both summer jobs and practice-during-studies opportunities. In Turkey Componenta's units in Manisa and Orhangazi offer students at technical high schools traineeship periods during the winter, with approximately 30 students working for the company every year for three days a week during their studies. In the Netherlands, and in nearby Belgium, Componenta has contacts with schools at all levels and provides opportunities for students to do their final theses and obtain practical work experience in the company. In 2008, altogether 19 students completed their practical period at all the Group's locations in the Netherlands. Componenta also participated in recruitment fairs and events at schools and universities close to its locations in Finland, Turkey and Sweden in 2008 to build up awareness as an employer. This provides students with opportunities to find out what the Group has to offer in terms of traineeships, summer jobs and final thesis work, and to awaken their interest in the metal industry.

#### TURNOVER RATE OF PERSONNEL



#### RECRUITMENTS OF PERSONNEL



# "Traineeship has given much for me"



"My first summer in the traineeship programme I spent at Componenta Pori working with warehouse development and new ERP system, SAP. I worked there until the end of 2008, when I started to work in Helsinki.

I graduated in January 2009 as engineer. From the start of February I moved into the Netherlands and started in Componenta B.V. where I help in the challenges of SAP start-up and support after start-up. I have had various tasks during my time at Componenta - warehouse development, report making, data cleansing, support, SAP processes and business intelligence development. My personal knowledge in SAP and business areas has been growing the whole time. I see my time as constant learning phase which suits me very well. Generally there is need for this kind of organized traineeship training and this one has given much for me."

#### Matti Tuominen, Finland



"In the summer of 2008 I worked in quality and R&D department as engineering trainee. I worked in an engineering project together with my mentors to improve the me-

chanical properties of aluminium castings by avoiding gas porosities and impurities from the molten metal. I was able to improve my practical skills with my existing theory knowledge. I took samples from the production line, examined their mechanical properties to ensure quality, learned to use various machines and devices in the laboratory and foundry, and gained a lot of experience on how to carry out an engineering project as teamwork. In the spring I will start the second stage of the programme at Componenta Karkkila in Finland. This time my project subject will be cast iron and ladle treatments. All this has been very useful for me. I feel that I would like to be a Componenta team member in future."

#### Dorukcan Yılmaz, Turkey



### **Exchanging know-how**

16 foundry professionals came from Orhangazi, Turkey to Karkkila, Finland to exchange know-how among colleagues. The group worked in the foundry for a couple of months in the summer of 2008. The aim was to share best practices in production, both in daily work and special assignments. After the beginning, the Turks worked among their colleagues in the usual three shifts.

The group worked in fettling, where cast components are cleaned, grind and in general finished. During the exchange period, our professionals compared ways of working, tools and working environment. One aim was to decide what is the necessary level of finishing.

The Turkish group was headed by Engineer Erdoğan Öztekin. He thought that it was very useful and reports their experiences in their own foundry, hoping that some methods will be taken in use and for instance working environment will be improved. In Karkkila, professionalism, perfectionism and working morale of the Turkish colleagues was much admired.

#### Skills and development

# Value creation through developing capability

Through personnel development the company ensures that its personnel have opportunities to learn new skills and capabilities and work, perform better in their job and that at Componenta we have capable people in place to implement the strategy.

omponenta believes strongly in learning by doing, and this takes place in the form of job rotation, project assignments and active learning at the work place. In Group-level projects, the teams represent different locations, nationalities and depth of experience, to ensure that team members also learn at their work. Formal training and development programmes, with tailor-made content, are organized for specified groups, needs and functions at location, country and group level to enhance the development of existing and new competencies and skills. The training programmes not only develop individual capabilities, but are also essential for creating a common corporate culture and a consistent way of working.

The skills and capabilities required for specific positions are defined in job profiles, and these are reviewed in annual performance reviews and development discussions. The level and depth of the acquired and developed competences also affect salaries.

#### Learning at work

Learning by doing takes place in the form of job rotation, project assignments and active learning at the work place. Learning by doing is heavily emphasized, especially at foundries where no formal training is available and, again, no basic education is required for the work. For group level projects, for example, the teams are put together not simply to provide the required competences but also so that they contain members from different locations and nationalities and with different levels of experience, making sure in particular that the teams include people in the earlier stages of their career.

At the beginning of their careers in the company, new Componenta team members at all levels are introduced to their new tasks, colleagues and organization through a tailor-made orientation

and safety programme. The orientation programme for white collar positions was further enhanced in 2008 by including common Group-level orientation material for all new employees.

The exchange of in-company knowledge began in a structured way when 16 Turkish foundry professionals from Orhangazi came to work in Karkkila, Finland in the summer of 2008. The three-month exchange between Orhangazi and Karkkila was a pilot project, aiming to learn from each other and to share best production practices through everyday work and pre-defined assignments.

To ensure sufficient engineering capacity, Componenta has started an internal engineering rotation programme. Key resources will relocate abroad for planned training periods, and work together with local colleagues. Graduate engineers and engineering trainees were also recruited both for business units and for customer product centers. Trainees participate in career rotation and training programmes to gain the skills needed in their new role. The International Traineeship Programme, which started its first two-year programme in 2008, also brought trainees for engineering and product development at Componenta. The Group is continuing to increase its product development resources and unify engineering capabilities in 2009.

#### Developing management and leadership capabilities

In continuous development of operations, first-rate leadership and management are critical factors. Leadership and management are developed at all levels of the Group, with the aim of offering valuable tools for daily management as well as expanding comprehension of factors that influence own work.

The 'Componenta Compact' management and leadership training programmes continued at country level, with the training focusing on day-to-day issues in personnel management. The training helps team leaders and production supervisors perform better in leading their teams, impacting the financial result, and managing the legal obligations of the employer.

The 'Componenta Conduct' development programme for business unit management teams continued as unit-specific pro-

grammes during 2008. The training aims at improving the work in management team as well as personal management capacity of its members. In connection with this programme, 'Finance for non-financials' seminars were held. The programme will continue in 2009.

After the successful completion of Componenta Core I-a group level general management programme – a new programme started with 35 participants. Componenta Core II is designed for business unit management teams and division management and helps participants to conceptualize, understand and lead business in a changing environment. A special focus was on the world economy and environmental issues, customer decision making processes and internal operational excellence, and on Componenta's response to these changes. Componenta Core plays a special role in the creation of One Componenta, by creating mutual understanding of business priorities and the challenges that lie ahead, and giving opportunities to learn from colleagues from different operations, countries and cultures.

The annual Componenta top management meeting was held in autumn 2009 to communicate and discuss Componenta's revised strategy and the needed actions.

In addition to the Group level management development programmes and sessions, some local management training was also held. For example Componenta Manisa in Turkey offered emotional intelligence courses for managers, communication courses for shift leaders and white collar employees, and English courses for white collar employees.

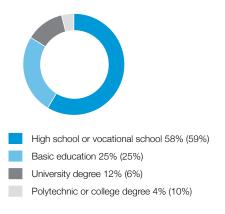
#### Professional training

Internal on-the-job training for blue collar employees at the units focuses mainly on safety, technical and quality issues. For white-collar employees, the units arrange various training programmes to support both personal and professional development and growth. The subjects covered include languages, leadership, IT and finance. On a group level we ensure development of capabilities needed in core business.

To safeguard the necessary foundry technology skills and know-how among blue collar employees, Componenta started a 'VALA-JAT' (Foundrymen) training programme in Finland. The aim was to reinforce the foundry-related technical and vocational competences of the company's foundry personnel. This training was tailor-made for Componenta. The programme lasts for 1.5 years, after which the participants receive a vocational diploma. Similar training has been given in the Netherlands. New in-company training was started in basic foundry education, including safety, understanding technical drawings, quality and all aspects of the technology used in all phases in the casting process.

In the growing Machine Shops division, the availability of professional machinists and CNC operators in the economic boom was challenging. So the division supports apprentice training to ensure it will have the necessary resources in the future. LEAN production system courses have also continued at the machine shops. Thanks to cooperation with schools in the Essunga Industriprogram (Industrial Programme), Componenta employees in the machine shop in Främmestad, Sweden also have the chance to take some courses outside working hours to improve their CNC skills.

#### **EDUCATIONAL BACKGROUND 2008**





# Vocational training for foundry workers started in Finland

In Finland, there is not a general vocational education for foundrymen. To this end, Componenta started in April 2008 its own vocational training for foundry workers in Finland, called VALAJAT ("Foundrymen"), in cooperation with Pirkanmaa Apprenticeship Centre and Tampere Vocational College.

Five workers and shift leaders per foundry were chosen for the programme. Teachers include Componenta's own specialists and teachers from the Tampere College as well as external specialists, such as consultants and representatives of raw material suppliers.

The programme lasts about 1.5 years and includes training periods in the foundry institute and practicing in our own foundries, ending with practical examinations after the training in the foundry, in the presence of teachers from Tampere. At the end of the programme, participants receive a professional qualification.

Shift foreman Kristian Styf from Componenta Karkkila in Finland was one of the participants in this programme. "I was especially interested in becoming multi-skilled. I worked as shift foreman in the core-making and I wanted to get to know the other parts of the process as well. Even at the beginning of the training it seemed to me to be a good package. The programme has excellent teachers and versatile materials."



#### Performance management

# Boosting organizational performance and individual commitment

To achieve the Group's vision to become leading European cast component supplier, it is absolutely essential for employees to understand and be committed to these goals and objectives. To succeed, it is also necessary to be aware of the organizational issues that affect the motivation, commitment and performance of personnel through continuous follow-up, and promote practices that enhance performance.

The new strategy defined in 2007 was actively communicated throughout 2007 and 2008 through management meetings, management development programmes, and discussion sessions specifically arranged at the business units, as well as through discussion at production team meetings. The effect of these efforts was clearly in evidence in the Climate and Employee Satisfaction Survey carried out in the spring of 2008, which showed that Componenta employees are well aware of the Group's targets and values.

#### Performance management process

Communication of the business targets, and working towards these, is boosted through Componenta's Performance Management Process, which brings together company business objectives, individual target setting and evaluation, and performance-based rewards. This process is largely based on the performance review and target setting discussions, which take place annually between manager and employee. The Componenta Bonus Programme is an integral part of this process, rewarding individuals on the basis of achieving financial and individual targets. Through performance management, individual tasks and responsibilities are aligned according to mutually agreed goals of the Group.

In the Netherlands, all employees are included in an annual performance review process. Blue and white collar employees have their reviews at the end of each year. In the Netherlands, performancebased rewarding is part of the overall compensation system. In Turkey, white collar employees that do not belong to the Componenta Bonus Programme are interviewed and their performance evaluated by their superior, using a "White-Collar Performance Card" to measure performance in various areas. A similar process is used for blue-collar employees, who are evaluated by line managers based on criteria specified for blue-collar employees. The evaluations form the basis for development actions in the form of training or job rotation. The best performers and development teams in Turkey are also acknowledged and rewarded annually.

The Climate and Employee Satisfaction Survey clearly indicated that target setting and evaluation discussions are closely linked to employee motivation and engagement. The most highly motivated and engaged employees were those who had participated in the target setting and performance review processes. Implementing these practices at all organizational levels throughout Componenta will therefore be one of the priorities for 2009.

#### Compensation

The basic salaries paid by Componenta conform to local labour union agreements and collective bargaining agreements. In addition, the Group takes into account recommendations from national organizations on adjustments for inflation as well as other local and economical factors.

Experience, competence and individual performance are becoming increasingly important factors in setting individual salaries, as a means to rewarding outstanding performance and recognizing the importance of individual achievement.

Salary and compensation planning reviews are conducted annually in March-April. Salaries may be increased due to individual and performance-based development, changes in responsibilities, contractual increases and any structural corrections. Componenta participates annually in the salary and market data studies carried out by local employer organizations in each country. Componenta

also participates in studies carried out by HAY Group to ensure that the Group remains a competitive employer in the market. The HAY Group studies were taken in use also in Turkey in 2008.

#### Unified incentive schemes with local country flavours

At Componenta, there are unified, target group specified incentive schemes and other rewarding methods related to performance management where local requirements are taken into account when needed. In addition we have in use local rewarding methods that are based on or made possible by local agreements. For example in Componenta's units in the Netherlands there is a rewarding system based on return on investment for both blue and white collar employees.

An essential part of performance management process for Componenta's key personnel is a short-term bonus programme that is based on achieving financial targets at Group, division and unit level as well as on defined individual targets. Some 200 key employees participate in this long-term bonus scheme.

Componenta launched its long-term share-based incentive programme at the beginning of 2007 and this covers some 40 key positions in the company.

To ensure implementation of the Group's strategic projects and there are specific bonus schemes to support and reward good project performance.



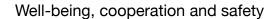
# Climate and employee satisfaction survey was done in all Componenta countries

To find out the strengths and weaknesses of the organization and to identify the most critical areas for development, a Climate and Employee Satisfaction Survey was conducted in 2008 comprising all Componenta countries. This survey was conducted together with Corporate Image Oy.

The purpose of this survey was to examine the opinions of Componenta personnel on matters related to organizational climate, managerial style, working conditions, job satisfaction and employer image to provide employees with an opportunity to express their views and action recommendations regarding their work and workplace. The number of respondents was 3,442, raising the response rate of the whole company to an excellent 81%. Such a high response rate implies that our team members are committed to develop Componenta into an even better place to work.

According to the survey the clear strengths of Componenta include good knowledge among the personnel of the Group values and strategic goals. Componenta employees also felt that their own tasks and responsibilities were clear. Componenta was perceived as safe and stable employer, and the outlook for our business in the future was perceived good. Also the opportunity to participate in task and working place improvement was stressed, as well as positive atmosphere that supports innovation and development. Other strengths included the favourable result development and improvement of working climate.

Main development areas identified on the basis of the survey were further clarification of decision-making processes, improving working conditions in production and the implementation of development discussions and practices to cover a wider scope of Componenta employees. Based on these results, development actions were started, and work continues in 2009.





Well-being and safety at work are developed and followed up at Componenta at unit, country and Group level. Management actively monitors development of key performance indicators, and the necessary corrective and preventive measures are taken based on discussions in safety committees, the key performance indicators, and also the concrete findings of the Componenta Climate Survey.

#### Occupational health

All Componenta employees, including leased personnel, are covered by company occupational healthcare services.

Healthcare and medical plans are created annually at each unit to guide the needed actions.

At Group level, a development project to build up practices, processes and tools to ensure a preventive approach to healthcare management started in 2008, led by a nominated company doctor. The first pilots were held at Finnish units.

Healthcare services are mainly provided by external partners, with whom Componenta has had long-term contracts. In Karkkila, Finland and Manisa and Orhangazi, Turkey, Componenta has its own medical centres. In Finland and the Netherlands in particular, Componenta also works with safety, health and medical care companies in the area of employee well-being.

Typical problems in the working conditions in foundry production are caused by dust, noise and vibration, especially in grinding. In Netherlands these areas were investigated in 2008 by arranging hearing tests, for instance, and induction programmes for new grinders. These development measures will continue in 2009.

Physical examinations are one way of maintaining occupational health in foundries. In Turkey, for example, physical examinations are conducted for all employees regularly, typically once a year. Physical examinations include audiograms, lung radiographies, visual examinations and hemograms. Similar examinations are also conducted in the Netherlands. In 2008, monthly absenteeism due to sickness at Componenta was at the same level as the year before, at 4.5% (4.4%).

#### Other ways of ensuring well-being

In all Componenta countries, employees are encouraged to look after their well-being in various ways both during and outside of working hours. For example in Sweden and in some locations in Finland the company also takes advantage of the opportunity to support employee well-being activities outside the company through sports vouchers, a benefit supported by the company up to the permitted tax limit.

Various social events are also organized in all Componenta countries to increase team spirit and motivation. The jubilee year of 2008 included not only Componenta's 90th anniversary celebrations but also a variety of sports activities such as bowling, volleyball, taekwondo, picnics, and football, golf and tennis tournaments for employees and in some cases for their family members as well.

Other minor improvements have also been made to personnel facilities across units within Componenta. For example in Orhangazi, Turkey a new personnel cafeteria was established in 2008.

#### Safety is clearly linked to well-being at work

Safety-related key performance indicators are followed closely, and the company cooperates actively with the external authorities, especially in Finland. In 2008 the number of accidents resulting in absenteeism or sick leave in Componenta decreased by 6% compared to the previous year (in 2007 the decrease was 3%).

Activities in the area of safety have been both reactive and proactive. For example in Manisa, reactive issues refer to ensuring the availability of first aid and to accident handling procedures. Proactive activities include risk and accident analyses and near-miss applications with probability analyses.

As part of preventive occupational health care and safety, all Componenta locations offer safety training as part of the orientation process. At the business locations, all employees are trained for new work and in using new machines, and this includes discussion and training in safety issues. According to Componenta rules, all employees must participate in a safety course, after which they sign an agreement accepting the agreed safety principles.



Cooperation between the company and employees plays a key role in all matters relating to safety and well-being. Each business unit has its own safety committee with both employee and employer representatives. In Sweden, for example, this safety committee (Skyddskommittén) has representatives of both blue- and white-collar employees, and each department has at least one safety officer (Skyddsombud). Likewise in Turkey, each team has an appointed person responsible for health and safety.

These safety committees formulate and execute the operational tasks contained in the health and safety policy, prepare occupational safety plans in their location, and regularly update and improve safety materials. The safety plans may include training, advice and information for employees as well as periodical medical examinations for employees who work in an environment that may damage their health. In Manisa, Turkey, for example, 10% of the employees from each department have completed first-aid courses.

Componenta's units in Manisa and Orhangazi, Turkey were certified in 2008 in accordance with OHSAS 18001:2007. This certification is for the occupational health and safety management system, which helps an organization manage occupational health and safety risks in a systematic manner, and carry out risk analyses and tasks related to any work accidents.

Many of Componenta's business units have procedures in place for employees to make suggestions for improvements and thus contribute to the working process, and this is one way to help create a safe working environment together. The results of the Componenta Climate and Employee Satisfaction Survey are another source of improvement measures. At Componenta Pistons, Finland, for example the survey resulted in new hearing protectors being purchased.

In the Netherlands a safety project was started in 2008 to decrease the number of accidents by analyzing all the accidents that had taken place in the previous two years. This study indicated four main causes for accidents: inadequate use of personal safety protection, inadequate working methods or equipment, inadequate procedure documents or use of these documents, and inadequate communication about safety and knowledge of the Dutch

language. The development actions include improving safety awareness through training, organizational and technical improvements in the most important parts of the process, and improving communications through posters, meetings and newsletters, supported by the commitment of the management.

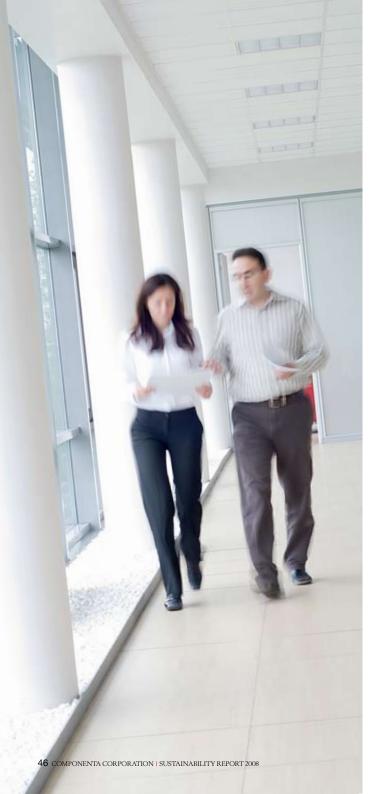
#### Focus on country level employer and employee cooperation

In addition to the safety committees, other cooperation between the employer and employees helps ensure well-being and a safe working place. Componenta carefully complies with national legislation, acts on cooperation within enterprises, and other laws and regulations. The Group has agreed with employee representatives to focus on country-level cooperation, instead of developing a European works council that would meet at group level. All Componenta personnel in Finland, Sweden and the Netherlands are covered by collective bargaining agreements. In Turkey, such agreements cover some 84.3% of employees (88.9% in 2007).

In the Netherlands, the company works closely with the Works Council, which ensures that issues relating to management and business operations are regularly shared and discussed together. There are six regular meetings with the Work Council each year. In Finland, shop stewards participate in business unit management meetings and communicate with unit management about issues and needs for development. Componenta Group management meets employee representatives of the business units at least once a year to discuss business and other common issues.

In Turkey, health and safety topics are covered in formal agreements with trade unions in the areas of workers' health, safety materials, cleaning materials, medical certificates and leaves in connection with social security.





#### Equality

## Equal opportunities for all

Componenta's basic principle for equality is to prevent any kind of discrimination at the workplace in advance. In all Componenta countries business units comply with the company's own management principles and all national regulations on labour relations.

omponenta actively monitors compliance with these principles and laws. In 2008, there were no reported cases of discrimination at any Componenta units in any country. The absence of discrimination was also clearly supported by the Climate and Employee Satisfaction Survey conducted last year, in which personnel stated that they felt that they had not faced any discrimination.

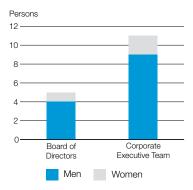
Everyday management at Componenta is based on our values, and these are our best management practices: openness, honesty and respect. These values strongly support equal opportunities and the elimination of any signs of discrimination. Living by our values we are open to new ideas and change and are willing to develop, looking to continually improve our ways of working. We are honest with ourselves and each other, and we do what we promise. Our work - with colleagues, superiors, subordinates, customers and other partners - is based on trust and mutual respect. Our respect is shown by not discriminating against anyone because of their age, sex, race, religion or political conviction.

Equal opportunities are discussed at the business units on the basis of the Group's values as mentioned above. The Group's specific policies also promote equal opportunities at the workplace, concerning terms and conditions of employment and other working conditions as well as opportunities for personal development at work. Issues relating to equal opportunities are therefore part of the normal annual planning and reporting processes. Salaries are determined by position and current collective agreements.

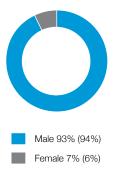
An effective tool for communicating equality practices and ensuring they are implemented is a practical, specific equal opportunities plan. During 2008, the equal opportunities plan for Componenta Pori was completed. The foundry in Karkkila and the

Främmestad machine shop in Sweden have had equal opportunities plans in operation since last year. The plan prepared for Karkkila has been used as the basis for the plans for the Group's other production units.

#### MEN AND WOMEN ON MANAGEMENT BOARD 2008



#### **GENDER DISTRIBUTION 2008**



#### Sponsoring

# Sponsoring and cooperation with schools

Many of Componenta's business units are significant employers in the areas where they operate. Both the Group and its business units support society and the local community through sponsorships, membership of organizations, and other forms of cooperation with universities, for example. Componenta considers co-operation with schools and young people to be extremely important to secure a supply of capable employees also for the future.

#### Membership of organizations

Componenta is a member of various organizations, such as the national foundry men's associations in the Componenta countries. In Finland, for example, Componenta is represented in various organizations, including the Finnish Foundry Men's Association, Chamber of Commerce and the Federation of Finnish Technology Industries.

In the Netherlands Componenta's representatives have participated in EVO, European Logistic Organizations, and in the Dutch Foundry Association, in the working group "Working and Safety Conditions, Environment and Energy", and are participating in the European (EN) and ISO committees for standardization of casting technology and cast irons. All the European standards (EN) for cast irons, which were published in 1997, are now under revision, which will bring them better in line with foundry practices today.

In Sweden, Componenta Främmestad has supported local organisations and communities that lobby for better roads in the area.

In Turkey, Componenta participates in the Turkish Foundry Men's Association and is a member of the Chamber of Commerce and Industry and of the Association of Industrialists and Businessmen.

#### Cooperation with schools

In Finland, Componenta participated during 2007 in organizing the foundry technology programmes at the Helsinki University of Technology and Helsinki Polytechnic Stadia. At both schools Componenta personnel gave foundry-related lessons for approximately 10-20 hours, and personnel also supervised group work and

exercises in certain courses. Componenta team members have organized one- or two-day education seminars for the representatives of customers. These training sessions have been customized for each customer.

In Sweden, Componenta Främmestad has been actively involved in keeping the industrial high school in the community, for example by offering trainee jobs for the students. The cooperation has worked both ways, as the high school has arranged machining training for Componenta Främmestad employees.

In Turkey, Componenta has supported the Celal Bayar University located in Manisa and Tubitak. The Celar Bayar University is a state research and development institute where Componenta has supported a project to develop semi-solid casting technology. At the Bursa Uludag University Componenta takes part in teaching quality sertificate programme in topics of ISO/TS 16949 standard expectations and total quality management.

In both Manisa and Orhangazi, Componenta has a corporate traineeship programme with technical schools. Every year, approximately 30 students are recruited as winter trainees to work in the company.

#### Sponsoring

In Finland, Componenta sponsors a basketball team, Team Componenta in Karkkila, and Finnish national team swimmer Matti Rajakylä. Componenta also cooperates with the Mäkelänrinne sports high school in Helsinki.

In Sweden, Componenta's machine shop in Främmestad sponsors local sports associations. In Turkey, Componenta Manisa supported a local non-profit organization, the TEMA foundation, in combating soil erosion in a reforestation project.



# Componenta rememberance forest in Turkey

In the spring of 2008, Componenta Manisa and Componenta Wheels had a cooperative Afforestation Project with TEMA Forest Foundation in Manisa. TEMA is a Turkish foundation for combating soil erosion, for reforestation and protection of natural habitats. It was established some fifteen years ago by two prominent Turkish businessmen Nihat Gökyiğit and Hayrettin Karaca who had already built Karaca Arboretum and eventually won UN Environment Award. Currently TEMA is one of the biggest environmental, non-governmental organizations in Turkey.

Componenta Manisa and Componenta Wheels planted 100 trees on behalf of Componenta in the "Spil Mountain" National Park in April 2008, in a place showed us by TEMA foundation which had been damaged due to a forest fire.

The team in planting the trees included labour union representatives and 50 white and blue collar employees from Componenta Manisa and Componenta Wheels who were willing to contribute to the project. "We were very pleased to be able to contribute to nature and also to have a Rememberance Forest for Componenta," says HR Manager Evren Çeşmeci.

# GRI Content Index

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EN22	Total weight of waste by type and disposal method	CORE	Full	Waste and recycling, p. 32–33 Environmental balance sheet, p. 29	
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EN28	Monetary value of significant fines and total number of non- monetary sanctions for non- compliance with environmental laws and regulations	CORE	Full	Environmental costs and risks, p. 21	
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LA4	Percentage of employees covered by collective bargaining agreements	CORE	Full	Well-being, cooperation and safety, p. 45				
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LA6	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs	ADD	Full	Well-being, cooperation and safety, p. 44				
LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region	CORE	Full	Social responsibility, p. 36 Well-being, cooperation and safety, p. 44				
LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases	CORE	Partially	Well-being, cooperation and safety, p. 42–43	Occupational health care process described			

CODE	GRI STANDARD DISCLOSURE ITEMS		EXTENT OF REPORTING	CONTENT AND PAGE IN THE REPORT	COMMENTS
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LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	ADD	Full	Skills and development, p. 40-41	
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	Management Approach		Partially	Purchasing, p. 34–35 Social responsibility, p. 36–37	Policy described
	Performance Indicators:				
	Investment and Procurement P	ractices			
HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken	CORE	Partially	Purchasing, p. 34–35	Purchasing policy and Code of Conduct set principles described
	Diversity and Equal Opportunity	/			
HR4	Total number of incidents of discrimination and actions taken	CORE	Full	Equality, p. 46	
	Society				
	Management Approach		Partially	Purchasing, p. 34–35	Policy described

	GRI STANDARD		EXTENT OF	CONTENT	
CODE	DISCLOSURE ITEMS		REPORTING	AND PAGE IN THE REPORT	COMMENTS
	Performance Indicators:				
	Community				
SO1	Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting	CORE	Partially	Sponsoring, p. 47	Sponsoring and cooperation with schools described
	Corruption				
SO3	Percentage of employees trained in organization's anti-corruption policies and procedures	CORE	Partially	Purchasing, p. 34–35	Purchasing policy and Code of Conduct set principles described
	Product responsibility				
	Management Approach		Partially	Research and development, p. 10–11	Policy described
	Performance Indicators:				
	Customer Health and Safety				
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures	CORE	Partially	Research and development, p. 10–11	Activities described





# Independent third-party check of GRI Guidelines Application Level

2future, specialized in corporate sustainability, has checked this report and confirms that Componenta Sustainability Report 2008 conforms to GRI Guidelines Application Level C. Adherence to GRI indicators is illustrated and explained by a GRI index in pages 48–50.

## Glossary

#### ADI - Austempered Ductile Iron

The excellent properties of ADI are achieved by heat treating the high quality SG iron according to the specialized heat treatment programme.

#### Austenitizing

Heat treating in which the structure of ferrous metal is changed completely or partly to austenite.

#### Automatic moulding

A moulding system controlled by machine. An automatic mouldingline operates without the intervention of the machinist apart from when problems occur.

#### CAD

Computer Aided Design.

#### CAM

Computer Aided Manufacturing.

#### Cast iron

Ferrous metal that contains 2.0-4.2% carbon. The carbon is usually in the form of graphite. Ferrous metals are divided into grey cast iron (GJL), nodular cast iron (GJS) and white cast irons. Special cast iron such as wear-resistant ADI.

#### Charge

Charging furnace or holding furnace with metal.

#### Chip

Metal chips, machining waste material.

#### Coating

Coating of the sand cores and moulds made from furan sand to obtain sufficiently high surface quality and to prevent the metal from penetrating the sand.

#### Core

Sand part which forms interior shapes of the casting (cold-box and shell-core).

#### Core box

Box for sand cores production, in which the internal elements give the form of the core.

#### Dimensional accuracy

Quality parameter which describes the accuracy of the dimensions of a part compared to the drawing or CAD file.

#### Finishing, trimming

After casting the remaining runners and feeders are removed by fettling.

#### Grey cast iron

Grey iron, GJL, a cast iron in which the graphite exists in the form of flakes. The fractured surface appears grey.

#### Hardening

Heat treatment method to increase the hardness of the metal.

#### Heat treatment

Heat treatment aims at converting material properties. It consists of heating and usually controlled cooling. Methods are for example hardening and annealing.

#### Holding furnace

Electric furnace for holding molten metal. Typical size 30 tonnes.

#### Lathe

Chipping machine tool (for rotating symmetrical materials).

#### Machining

General name for various machine tool methods, such as drilling, milling, lathing and grinding.

#### Machining allowance, Tooling allowance, Allowance

Additional material in castings for machining purposes. In castings machining allowance is usually 2–3 mm.

#### Machining centre

Machine with several machine tool options, for example drilling, milling, lathing and grinding. Cutting fluid is used in machining to prevent the tool from getting hot from the friction. The cutting fluid is normally water-based.

#### Melting furnace

The furnace in which melting takes place. Source of energy is electricity (= electric furnace) or coke (= cupola furnace). In the electric furnace melting takes place in a single charge, meaning that the furnace is emptied completely or partially once a batch is ready. For example, it takes about one hour 20 minutes to melt 8 tonnes at a power of 4.3 MWh. The cupola furnace process is continuous, so molten metal is taken out and raw material added in a continuous process.

#### Metallurgy

Branch of science and technology concerning metals.

#### Mould

Mould formed from moulding sand for casting a product. The mould contains a hollow area that is the shape of the product, the runners needed to direct the molten metal and feeders to compensate for the shrinking of the molten metal.

#### Moulding

Stage, where by means of a casting pattern, a mould is formed into the moulding sand. A half of the cast pattern is placed in the

moulding box and around it will be stacked the moulding sand, by hands (hand moulding) or by machine (automatic moulding). The cores for making hollow interiors inside the castings are also placed in the moulds in the moulding stage.

#### Nodular cast iron

GJS, cast iron which contains 3.0–3.9% carbon and in which the free graphite exists in nodular form. Sometimes called ductile iron.

#### Particle emissions

Emissions may cause for example dirtying and discomfort.

#### Pattern

Form of wood, metal or plastic, around which moulding material is placed to form a mould.

#### Pressure die casting

Molten metal is led into a metallic die (mould) at high pressure and speed. HPDC means high pressure die casting.

#### Primer and powder coating

Finishing/priming. Protects material from damage, such as corrosion.

#### Produced ton

Produced, accepted tonnes which have been delivered to the customer.

#### Recycled metal

Left-over raw material from the manufacturing process, such as plate cutting waste, and end-of-life iron, aluminium, and steel products.

#### Remelting

Melting material that has already once been molten material, for example burrs, scrapped pieces or machining waste materials.

#### Runners and feeders

The runners and feeders full of molten metal that are removed when cleaning the cast item. These can account for anything from 30% to 70% of the total iron, depending on the product, grade of iron and casting system.

#### Roughing

Machining phase where material is chipped as effectively as possible without aiming at high accuracy or surface quality.

#### Salt bath

Molten salt used in heat treatment for heating or quenching.

#### Sand blasting

Blasting method in which sand is used as abrasive material.

#### Sand core

A core made of sand and core binder used for making hollow interior parts and complex shapes for castings. The sand cores are removed by breaking.

#### Shot peening, Shot blasting

Small metallic balls are shot at high speed onto the surface of the part in order to raise the fatigue strength.

#### Squeeze casting

Casting method for high quality castings produced by a high pressure technique. Castings are heat-treated.

#### Surface treatment

Method which aims to improve the surface quality of materials for example TiN-coating (wear-resistant).

#### Tumble degating, Vibratory finishing

Finishing method for small castings in which burrs are removed by rotating or trembling drum (barrel processing).

#### Ultrasonic testing

A non-destructive method of testing in which the casting is checked by ultrasound.

#### VOC

Volatile organic compounds. VOC emissions form ozone in the lower atmosphere when they react in the presence of sunlight with nitrogen oxide. Ozone in the lower atmosphere is harmful to plants and to the health of human beings. Nitrogen oxide is formed for example by traffic emissions.

### Contact information

The economic, environmental and social responsibility issues in this Sustainability Report are supplemented by the information in our Annual Report and on our website at www.componenta.com.

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