

# COMPONENTA

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SUSTAINABILITY REPORT 2009

A man with short brown hair, wearing a blue and white checkered button-down shirt, is sitting at a desk in an office. He is smiling warmly at another person whose back is to the camera. The man is holding a red pen over a laptop. The background shows a window with a view of greenery.

**Casting  
Future  
Solutions**

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## REPORTING PRINCIPLES

Componenta's Sustainability Report 2009 - printed and web version - covers the three areas of the Group's corporate responsibility - economic, social and environmental responsibility. Componenta has published annually a separate sustainability report since 2006. Prior to that, in 2003 - 2005 we reported the environmental effects of our operations in Environmental Report.

This Sustainability Report 2009 compiles information of the Group's business units in Turkey, Finland, the Netherlands and Sweden according to the G3 guidelines of Global Reporting Initiative (GRI). Financial information has been prepared in accordance with the International Financial Reporting Standards (IFRS). The other information is un-audited.

Environmental information is reported from those production units that have significant environmental effects. Information of social responsibility covers the Group's whole personnel. Environ-

mental and social figures include the information from the business units in Turkey since 2006.

Sustainability Report 2009 includes an independent third-party check of GRI Guidelines Application Level, according to which the report conforms to GRI Guidelines Application Level B.

At Componenta, sustainability is directly linked to the Group's strategy and strategic goals and is part of the daily operations. In this Sustainability Report, we communicate Componenta's essential economic, social and environmental effects to our stakeholders. Following the GRI guidelines in the reporting ensures the reliability and comparability of the reported information.

We follow and report the effects of our operations regularly and publish the related information annually in a sustainability report. The next report will be published in 2011.

# Good quality has an impact



Responsibility at Componenta is part of the Group's fundamental structures and operations. It is based on the Group's values and can be seen in our mission, vision and strategy and in our operating principles and procedures. Responsibility is shown in the commitment of management, and it includes measuring and reporting on the results of operations, continuous

development and dialogue with stakeholders.

Componenta functions and exists through its stakeholders. In 2009 the decline in net sales and production volumes caused by the changes in the business environment made it necessary to adjust working hours and the costs for work. We discussed the measures needed and reached agreement on them with personnel. We used all possible means to adjust working hours, so as to minimize redundancies and to enable us to keep skilled, experienced personnel in the company. The strengthening of the Group's equity structure and balance sheet demonstrated the firm confidence that old and new shareholders have in our business operations. We placed a strong emphasis on cooperation with customers, despite the challenging state of the market. The relationship we have with most of our customers is long-term partnership, based on mutual trust that has built up over the years. We offer our customers the complete supply chain for cast components, and when we work with them right from the design stage for components, we can achieve results that significantly reduce the environmental impact during usage of the end product and during production of the components.

The quality of components is important both for us and for our customers, who rank it as one of the most important areas

for customer expectations in our customer satisfaction surveys. The quality of a cast component is a major factor in how well a product functions in use, and in its durability and safety. The first steps in creating quality are taken in the design of a product, and the finishing touches are given during production. Quality is of importance not just in the properties of the finished component but also in production, for the quality affects the environmental impact and costs of production.

Good quality is a major factor in the amount of energy needed in production. If items cast at the foundry fail to meet the quality criteria, they are remelted and re-cast, which consumes more energy. Thus, consumption of other raw materials used in production and emissions from production also increase. Poor quality and a large number of rejects also affect people's work, for they make them busier, reduce their work motivation, and increase the likelihood of accidents. The increase in costs reduces the profit margin and net profit on a product, which in turn affects other stakeholders. Quality affects many different areas of a company's operations, and when we create high quality we are acting responsibly in respect of our environmental, social and financial obligations.

I trust that our stakeholders will find information of interest to them in this, Componenta Group's fourth sustainability report. We recognize our responsibility and during 2009 as in the past we did our best to work accordingly. For us corporate responsibility means continuously doing our every day work, coordinating numerous little matters and actions. That is also the way that we achieve high quality.

Heikki Lehtonen  
President and CEO

# Second largest independent cast component supplier in Europe

*Componenta is the second largest independent supplier of cast components in Europe. We cast components in iron or aluminium, finish and machine them at the Group's machine shops, and supply them to manufacturers of many different vehicles, machines and equipment. Our customers are global companies and major players in their sectors. We cooperate closely with customers, often starting in the design stage of a component, when the environmental impact of the component throughout its life cycle can be influenced.*

Componenta Group's production plants – foundries, machine shops and a forge – are located in Turkey, Finland, the Netherlands and Sweden. Our sales and engineering experts are based in these countries and also in the UK, Italy, France, Germany and the USA. Componenta employs some 3,700 people.

Componenta has solid experience and knowhow in cast components. The oldest of the Group's production plants have been operating for hundreds of years. Our strong points are our ability to provide customers with the complete supply chain for an application or component – from design through to finished component – and our partnership and close cooperation with customers.

Componenta is a public limited company whose shares are quoted on the Nasdaq OMX Helsinki in the Small Caps/Industrials sector. The shares of Turkish-based subsidiary Componenta Dökümcülük A.S are quoted on the Istanbul Stock Exchange.

### Mission, vision and strategic goal

Componenta's mission is Casting Future Solutions. Our goal is to become the leading supplier of cast components in Europe by 2012. By that date we will have utilized the growth opportunities in selected markets and will serve our customers proactively, supplying them with total solutions that meet their needs: components or full

### FINANCIAL OBJECTIVES

	Objectives 2012	Actual 2009
Net sales, MEUR	800	299.6
EBIT, % <sup>1</sup>	10	-5.2
ROI, % <sup>1</sup>	> 20	-4.2
Equity ratio, % (preferred capital note in equity)	40	26.5

<sup>1</sup> Excluding one-time items

service deliveries which include everything from design to delivery of a ready assembled component to the customer's production line. Our sales and engineering teams are responsible for one-stop customer service within segments that are based on industrial sectors. As from the beginning of 2010 the customer segments are machine building, heavy trucks, automotive, construction and mining, agriculture and wind power.

Other measures towards achieving our strategic goal include optimizing production between the various production plants we have in different countries, so that products are made at the production unit that is most suitable for that purpose. High quality customer service also includes just-in-time deliveries of products to the customer, and we optimize our logistics processes and warehousing to this end.

By operating as One Componenta, with our common processes and practices whatever the place or country in which a unit or operations are located, we are a strong partner for our customers and other stakeholders.

### Administration and management

Componenta's business operations are divided into four operational areas Turkey, Finland, the Netherlands and Sweden. Corporate functions to develop operations - supply chain management, quality and environment, development of foundry and machine shop technology, purchasing and internal sourcing - support the operational areas and their management and help create added value for customers.

As a listed company, supreme authority in the company is exercised by the shareholders at the General Meeting of Shareholders. The company is managed by the Board of Directors and the President and CEO, and other management assists and supports the President and CEO in carrying out his duties. Componenta's corporate governance is based on the Finnish Limited Liability Companies Act and the Securities Market Act, the company's Articles of Association and the Insider Guidelines published by the Helsinki Stock Exchange. Componenta's corporate governance complies with the Corporate Governance Code for Finnish listed companies published by the Finnish Securities Association. More details of the company's corporate governance are given on the Group's website at [www.componenta.com](http://www.componenta.com) and in the 2009 annual report.

### Risk management

Risk management is part of the Company's monitoring system and it ensures that the risks to which the Company's business is exposed are identified, evaluated and monitored. It helps to forecast the threats and opportunities for business operations and ensures the continuity of business.

The Board of Directors confirms the principles for risk management and the President and CEO supervises the implementation of the risk management programme so that we focus on matters that are essential for local and operational activities.

The Corporate Executive Team participates in identifying and evaluating risks, in allocating responsibilities and in monitoring the risks.

The CFO is responsible for financial risks and the General Counsel for all other risks related to operative business and the Group.

Management of business operations is responsible for identifying and managing risks in their own business areas as part of their operational activities.

Each employee is responsible for identifying and evaluating the risks that are related to their own work or which are otherwise under their control and for reporting on them to their supervisors.

The Group's treasury department manages financial risks and helps ensure the availability of equity and debt finance to the Group on competitive terms. The Group's treasury department is also responsible for managing and hedging the cash position.

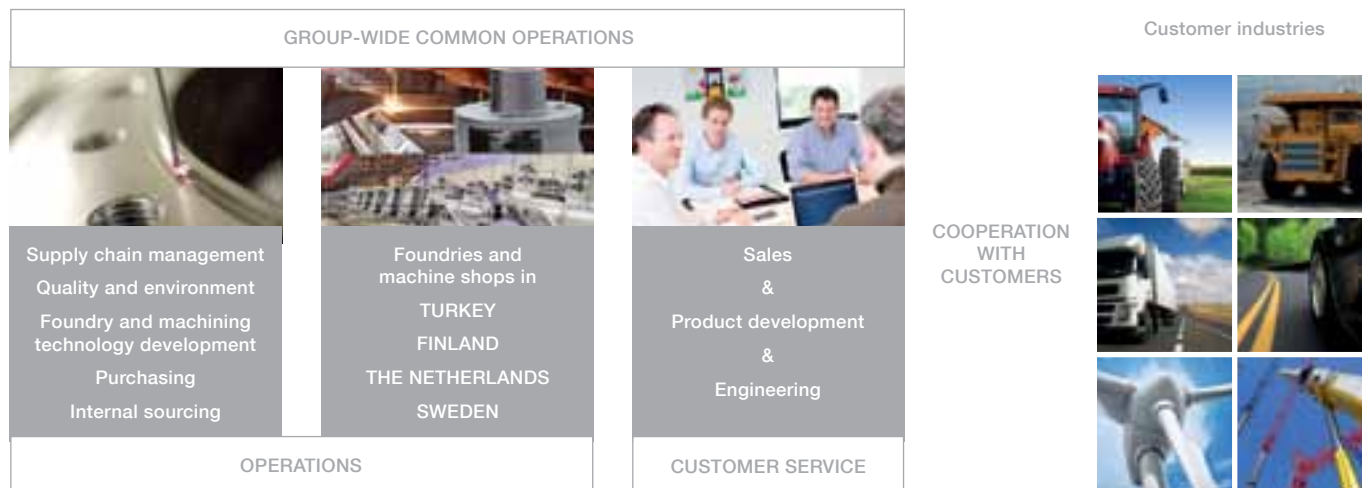
Read more about risk management at Componenta in the 2009 annual report or on the web at [www.componenta.com/riskmanagement](http://www.componenta.com/riskmanagement).

### Componenta's values

Componenta's values are Openness, Honesty and Respect. They form a firm foundation for all the Group's operations and actions.

- Openness means that we are open to new ideas, to develop and to change, and through this to continuous improvement in our work.
- Honesty with ourselves and with others means that we do what we promise.
- Respect can be seen as our work with different stakeholders is based on trust and mutual respect.

#### COMPONENTA WAY TO OPERATE



# Changing business environment and factors affecting demand

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*Componenta serves customers with all stages of the supply chain for cast components, from design to delivery. Depending on the product and the customer, the chain may include not only casting but also joint product development with the customer, machining of the product, surface treatment and assembly.*

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Our iron foundries have an extensive offering in terms of materials, weight of products and volumes. We cast components in production volumes ranging from small series to even hundreds of thousands of castings a year. The cast components weigh anything from less than one kilogram to several tonnes.

The aluminium foundries also have a broad offering. Product weights are in the range 0.1 - 20 kilograms and series are anything from a few dozen to several hundred thousand components a year.

The Group's machine shops, product development operations and foundries together form a close knit value chain, enabling us to provide customers with one-stop service and create considerable added value for them.

## **Business environment – changes and developments**

In 2009 demand of the casting market in Componenta's core business areas fell by about one third. According to estimates by international research institutes, market growth is strongly dependent on economic conditions, which also shows in the figures for 2009. The European foundry industry is still very fragmented, despite recent restructuring. In the mechanical engineering industry, most of the output comes from small machine shops with local operations.

## **Changes in customer sectors**

During the past few years consolidation has also been a clear trend in many customer sectors of Componenta. Customer businesses have then formed larger entities that have stronger purchasing power and

that also require their suppliers to have the capability and capacity for even large-scale deliveries. Customers have also concentrated on their core business and outsourced operations that do not belong to this. This has opened up opportunities for component suppliers to expand their value chain from simply supplying components to product development and engineering operations and providing complete solutions.

Because of the economic recession, customers have made every effort to improve their competitive edge, consolidate their purchases and find new, more competitive suppliers. Their goal is to find strong, expert strategic partners, who have the ability to survive through difficult times and who are able to continuously develop their business operations and supply demanding cast components.

An international presence is for some customers a requirement for strategic partnership. As major customers grow globally, they also require a local presence from their suppliers. Customers are looking for more comprehensive solutions and are also interested in joint product development at their own business locations. To obtain cost benefits on products and services it is often necessary to operate in countries with low production costs, which in Europe means basically Eastern Europe and Turkey.

Globalization of the market, consolidation of purchasing, product development partnership, management of the total value chain, and developing partnerships that will strengthen customer relations are factors that have a key impact on Componenta's business operations.



Net sales and profitability are vitally affected by the overall competitive situation and the state of the market. Customers for cast components are looking to obtain comprehensive solutions from strong suppliers, actively transferring the risks to the previous stage in the value chain. The economic recession has driven many small and medium-sized cast component suppliers to debt restructuring and bankruptcy. This opens up opportunities for consolidation in the foundry industry. It is possible that foundry closures and acquisitions will reduce the number of suppliers, and that those that survive will increase their market shares.

### Business drivers affecting demand

Business drivers are not similar, but vary by industrial sector. Componenta's customers are manufacturers of off-road and mining machinery, cars and trucks, wind power components and other machinery and equipment.

#### BUSINESS DRIVERS



Demand for farming and forest machinery is affected mainly by food prices and growth in demand for food, the size of the harvest, rising standards of living and general growth in GDP, and infrastructure developments in India, Russia and Eastern Europe.



Demand for passenger cars has been increased by the incentive programmes launched in many European countries to renew the fleet of cars, by environmental legislation and new environmental regulations, and by the economic and financial situation in general.



Growth in demand for mining machinery is dependent on developments in prices and demand for raw materials and minerals. Demand for large construction machinery is affected mainly by infrastructure investments such as road and tunnel construction and demand for smaller construction machinery goes up or down according to the volume of housing and office construction.



Demand for wind power components depends on the overall economic situation, financing for projects and on environmental legislation and new environmental regulations. Demand for diesel engines is affected by orders for new ships and various power plant projects worldwide.



Demand for heavy trucks is affected mainly by the general economical and financial situation, developments in logistics especially in Eastern Europe and Russia, and by environmental legislation and regulations.



Demand in the machine building industry is mainly affected by the general economic and financial market situation.



# Componenta and sustainability

*Sustainability 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 and maintains a constant dialogue with them. Matters that are important for stakeholders are important for the company, and they affect the decisions taken. Componenta recognizes the expectations and requirements of stakeholders, and responds to these in the most effective way and by continuous improvement of its operations.*

## **Economic responsibility**

Economic responsibility at Componenta is responsibility for the Group's profitability and competitiveness. Only by operating profitably and developing all operations with a long-term approach can the Group respond to the expectations of shareholders and other stakeholders and safeguard the Group's competitiveness both now and in the future.

The financial impact of Componenta's operations and actions affects personnel, owners and investors, financiers, suppliers, customers and society. This can be seen, for example, in the way the company carries out its obligations, such as the payment of wages and salaries, dividends and taxes and paying for raw materials, in how it communicates about its operations, how well it identifies risks to its business operations and takes measures against these, how it safeguards its competitiveness and the continuity of its operations, and how satisfied customers are with the service and products they receive.

## **Environmental responsibility**

Environmental responsibility means promoting environmentally friendly production methods and processes and minimizing the environmental impact of products throughout their life cycle –

taking into account market expectations and the Group's competitiveness.

At Componenta, working for the benefit of the environment begins right in the design stage of a product. Cooperation with the customer in product development and engineering makes it possible to optimize the construction and properties of a component, to influence the properties of a product during manufacture and use and thus reduce its environmental impact. Careful planning can, for example, reduce the weight of a product or the need for finishing processes, so less materials and energy are used during manufacturing. This can also result in work stages and processes that can raise efficiency in production, obtain cost savings and reduce the environmental impact in the production phase. Preventive maintenance of production equipment and machinery aims to prevent risks to the environment.

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. The Group's environmental and quality policy and environmental and management systems define the main envi-





ESSENTIAL COMPONENTS OF SUSTAINABILITY AT COMPONENTA



Environmental management principles for business operations. Their goal is the continuous improvement of operations.

The systems encourage personnel to take responsibility, develop quality, and take into account the environmental impact of daily activities. Quality and environmental matters are mutually supportive, since high quality operations keep the number of rejected products as low as possible and the environmental impact is also then smaller.

Environmental responsibility affects not only internal functions but also subcontractors and suppliers.

**Social responsibility**

Social responsibility means that Componenta looks after the wellbeing of personnel and develops their competence, aiming to be a responsible employer today and in the future. The company also acts responsibly in other stakeholder relations.

The Group's operations and actions affect not just its own personnel but also those outside the company, potential employees and, for example, people living close to the production units.

The impact of the company's social responsibility can be seen in the way it plans and manages human resources, maintains and develops personnel knowhow and skills, and handles matters relating to management and remuneration, wellbeing at work and safety, and human and equal rights.

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. Its personnel are committed and skilled, and the production units operate effectively as a specialized network, as one Componenta.

# Continuous dialogue with stakeholders

*Issues that are important to our stakeholders are also important to Componenta as a company, and they influence the decisions taken. The company conducts a continuous, open dialogue at many levels and in many forms with stakeholders. Stakeholders have different expectations of Componenta and they are responded in our operations. How do we succeed in this, can be monitored by following different indicators.*

## Stakeholder: Customers

Componenta's customers are manufacturers of equipment and machines for the construction and mining, agriculture, heavy truck, automotive, wind power and machine building industries, for who the company manufactures a wide range of iron and aluminium cast components. Customers are offered a full supply chain of components, depending on their needs, including engineering, casting, machining, surface treatment, subassembly and logistics. Many companies have been customers for a long time.

► Customers expect technical expertise and a high standard of joint engineering from Componenta, as well as competitive, punctual deliveries and long-term business relations and partnership.

◄ Customer relations at Componenta are handled by committed account managers and Product Development Managers appointed to each customer segment or customer. Building and maintaining trust is essential for smooth cooperation. Interaction and communication with the customer are ongoing and are based on meeting in person and personally keeping in contact at several levels in the customer's organization.

### Indicators for example

Success in customer relations and in working together is measured for example through the customer feedback received, through customer satisfaction surveys, by the number of offers and orders and at meetings with customers.

## Stakeholder: Personnel

At the end of 2009 Componenta employed some 3,700 people in more than 20 locations. Skilled and committed people ensure daily operations, long-term development of the company and achievement of the strategic goals. Our target is that the consistent, strong Group, "One Componenta" is an attractive employer not only to its current employees but also to industry experts of the future.

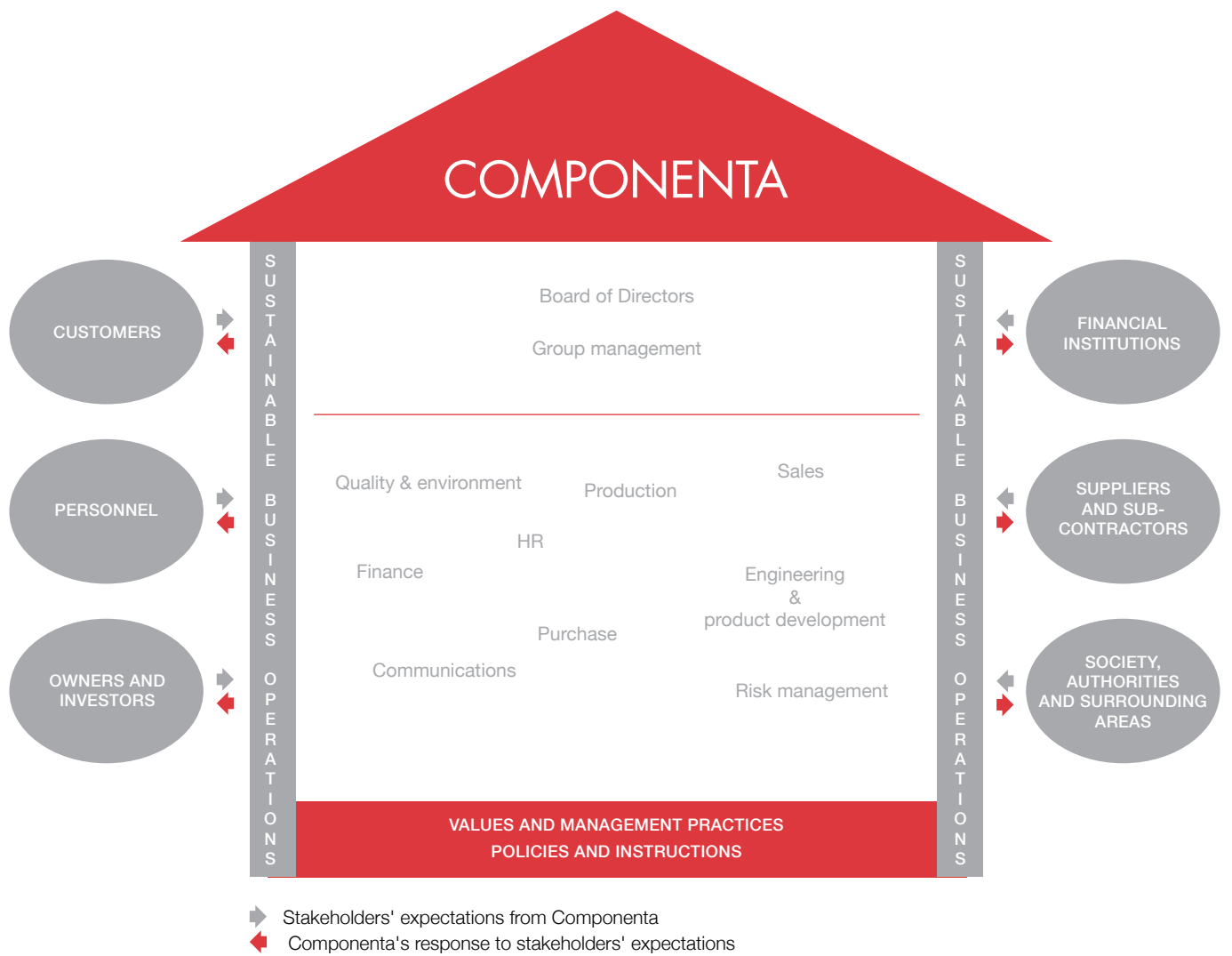
► Employee expectations are linked to the possibility of influencing decisions affecting their own work and the work environment, and to competitive salary and remuneration. Componenta is expected to be a safe, reliable employer that also offers opportunities for continual learning and development.

◄ Effective communication and smooth cooperation needed in everyday work are contributed through various face-to-face briefings and information meetings – one to one and in teams and business units – and also at regular meetings between Group management and personnel representatives. For example, in the Netherlands the employer and the employees' Works Council meet several times a year (more details on page 53). In Finland union representatives participate in the meetings of the business unit management teams.

Interaction with students and potential employees is ongoing, for example through events held at colleges and universities and through the Group's website.



DIALOGUE AND COOPERATION WITH STAKEHOLDERS IS PART OF COMPONENTA'S SUSTAINABLE BUSINESS OPERATIONS





### *Indicators for example*

The work atmosphere and job satisfaction surveys conducted regularly examine the views and experiences of personnel of their own work and of the company. The feedback obtained from these and from the development discussions, the number of training days, the number of days absent and accidents, and the attractiveness of Componenta as an employer show how well Componenta has succeeded in meeting the expectations of its personnel.

### **Stakeholder: Owners, investors**

Componenta is a listed company whose shares are quoted on the Nasdaq OMX Helsinki and which had 2,568 shareholders at the end of 2009. Owners and investors are interested in the return on the capital they have invested and therefore in the company's operations and financial performance, and they expect to receive a continuous flow of up-to-date information about these. When choosing an investment, important issues are the stability and reliability of a company and its business operations, balanced risk management in the business, transparent management and effective communications.

► Investor expectations relate to the rising value of the shares and/or to high dividends as well as to stable risk management. Both investors, and the stock exchange and the authorities expect Componenta to communicate about the company's operations and key indicators, transparently, promptly and in a balanced way.

◆ During the year the company meets analysts and investors at information events, at the AGM, at investor trade fairs and visits, and at other meetings. Information is also shared through the company's reports (annual report, interim reports and sustainability report), the website, and the live and recorded webcasts of information events available on the website.

### *Indicators for example*

Componenta's success in replying to the expectations of shareholders and investors is measured for example by the development of share price, the amount of dividends and various key figures.

### **Stakeholder: Financial institutions**

For its financing, the Group works with several different partners. The availability of financing and its price depend on the company's operations and their success.

► Financial institutions expect the transparency of operations, effective communication, reasonable result and cash flow, solvency and liquidity as well as sufficient equity ratio and risk management.

◆ The company maintains dialogue and contact with financiers through various reports and personal meetings.

### *Indicators for example*

How well the company has succeeded in meeting the expectations of financial institutions is measured in the financial performance and various key figures, interest rates and financing costs.

### **Stakeholder: Suppliers and subcontractors**

The suppliers of Componenta's raw materials and of other substances needed in production have a major impact on smooth production operations and on the quality of products. Cooperation with suppliers has to be confidential and without friction. The availability of raw materials and price variations form a major cost and competitive factor.

The Group has a comprehensive supplier network, and in purchasing Group's values, legislation and directives are complied. The Group's purchasing policy ensures that issues concerning the environment and safety, social responsibility and ethical principles are addressed in purchases. For purchasing tasks and personnel there is also a specific Code of Conduct. We do not pay bribes or make any other unlawful payments, and does not aid and abet suppliers. There were no cases of corruption in the Group during 2009.

► Suppliers and Componenta have similar expectations of each other: a reliable, stable partner with which they can create and maintain a long-term business relationship that grows stronger and stronger. To meet the expectations of both parties, regular dialogue is held in the form of various reports, discussions and meetings.



◆ Suppliers are required to have and comply with the same certification and standards as Componenta, and the company primarily choose suppliers who have an environmental management system. In addition to the certificates, a supplier must get to know Componenta's code of practice relating to safety and the environment and quality guidelines, and operate in accordance with these.

When starting to work with a new supplier, Componenta must have not just basic information about the company but also information about its terms of employment and working conditions. No supply orders are awarded to suppliers suspected of not acting in accordance with the law. Componenta monitors and assesses suppliers comprehensively to make sure that its requirements are met.

#### *Indicators for example*

Our success in meeting the expectations of raw material suppliers and subcontractors is measured by the growth or decline in purchases, the number of partners, suppliers and subcontractors, contract terms and the payment of invoices.

#### **Stakeholder: Society, authorities and surrounding areas**

The Group's production plants are located in Turkey, Finland, the Netherlands and Sweden. Many of the production plants have operated in the same place for a long time: in Pietarsaari for 110 years, in Pori for 150 years, in Karkkila for almost 190 years and in Wirsbo for nearly 400 years. Housing and urban services have grown up around the plants, and since Componenta's units are major employers in their localities, local residents and the municipal authorities are key stakeholders for the company.

The operations of the foundries and forges are also subject to permit. During the basic environmental permit procedure and when expanding operations, the company works closely with the authorities, with people living and working in the surrounding area and with businesses located there.

◆ In their operations, Componenta's production units must meet legal, ethical and environmental requirements and expectations. The whole Group and each individual unit are expected to be an active participant in the life of their locality, as well as a good employer and tax payer.

◆ The Group maintains dialogue and cooperation with the authorities, the neighbours of its production units and the rest of society by reporting on its activities, through its website, by holding information and open door events, by participating in activities at different levels, and by supporting various organizations.

In the countries where it has operations, Componenta is a member in many organizations, such as national foundry associations, chambers of commerce and other organizations related to its business.

#### *Indicators for example*

Componenta's success in meeting the expectations of society, the authorities and the localities of its production units is reflected in the number of jobs, the taxes paid, the investments made, the salaries and bonuses paid, its participation in local life, and its sponsorships.

# RESPONSIBILITY FOR CAST COMPONENT'S ENVIRONMENTAL IMPACTS DURING ITS LIFE CYCLE

THE LIFE CYCLE OF A CAST COMPONENT



**1. Production of a component begins with the design, in cooperation with the customer**  
 Optimizing the material used, the construction and the functional features in the design stage of a product can have a major influence on the life cycle environmental impact of a component. Engineering and product development can also result in work stages and processes that increase production efficiency and give savings in materials and costs. If a process uses less raw material and there is less need for post casting treatment, this reduces the environmental impact during the production phase.

When Componenta's experts in casting and machining participate right from the early stages in a design project for a cast component, this gives the greatest potential for optimizing the material and the production method for the component. Cooperation from an early stage also means that Componenta can offer customers solutions that precisely meet their needs, and even exceed them. Working together in this way can in addition reduce the time needed for a customer's product development project and cut the costs, as new components are brought into production and are ready more quickly.

**2. Raw material is recycled metal**  
 Some 70% of the raw material in iron cast components is recycled material. Aluminium castings contain a smaller proportion of recycled material.

The recycled metal is obtained as close as possible to each foundry and is supplied in full truck loads, to avoid unnecessary transportation. Some of the raw materials are supplied by ship.

Componenta complies with various requirements set for the raw materials of components. We continuously check that the strict requirements e.g. of the automotive industry concerning lead are met.

Developments are being made continually in casting materials and these can significantly improve the machining and other properties of components. For example, casting a component from the new material developed from nodular cast iron that is alloyed with silicon can reduce the costs for machining.

Using different materials can also affect the environmental impact of the end product. Lighter weight vehicles use less fuel, which reduces CO<sub>2</sub> emissions. One way to reduce the weight of a vehicle

is to change the material in which components are cast from iron to aluminium. Componenta has achieved many good results from joint engineering with vehicle manufacturer customers. Use of raw materials p. 30.



### 3. Production processes have environmental impact

The basis for Componenta's operations is formed by third party certified quality and environmental management systems (ISO 9001, ISO/TS 16949 and ISO 14001). The restrictions and obligations for the operations of the foundries and forges are specified in environmental permits that are issued by the authorities. National legislation in the countries where Componenta operates also defines and sets various requirements on operations.

Melting the raw material at the foundries and forges consumes energy, which is obtained from electricity, coke or natural gas. The heat energy generated in the melting process is recovered and utilized, for example in heating buildings. Use of energy p. 32.

Sand is needed in the casting process to make the casting moulds and cores. The sand circulates in the process, and most of the overflow sand is reused and some ends up as waste. Environmental impact of production p. 24, Dust emissions p. 34 and Waste and recycling p. 36.

After a component has been cast, it is cleaned and treated. Cleaning and post-treatment are processes that generate a certain amount of emissions to the environment. Dust and VOC emissions p. 30.

Before instalment in the end product, the cast components are machined, often in the Group's own machine shops. The nature of machine shop production means that it does not generate a significant environmental load. Environmental impact of production p. 24.



### 4. Waste is sorted, most is reused

The waste from the foundries, machine shops and forges is sorted and most of it (sand, dust, slag that rises to the surface of the molten metal, machine chips, forging burrs etc.) is sent for reuse. Much of the sand and dust from the foundries is utilized in the construction of land-fill sites and roads, in concrete structures, as filler material in outdoor areas, or in earthworks.

The cutting fluids using in machining cast components are recycled. At the machine shops, oil is separated from the machine chips and these are compressed to form briquettes for re-melting. Waste and recycling p. 32.



### 5. Most product packaging is recyclable

Recyclable pallets and pallet collars or metal racks are used for packing products being sent to customers and for components being sent from a Group foundry to a machine shop. In Turkey, various disposable wooden packaging is used. The Group's goal is to standardize packaging materials and use durable, recyclable packing materials. The aim is to reduce the trans-

portation of empty packaging and the packaging is used for transport between the Group's production units.



### 6. Component deliveries to the customer's assembly line

Transporting cast components to the customer generates emissions to the environment, so the goal is to have full truck loads, so as to minimize the number of part loads and reduce the carbon footprint. Ship and rail are also effective, sustainable options for transporting end products. Air transport is normally not used.

Componenta aims to choose transport companies that have certified quality and environmental management systems. Companies must have cost-effective operations, use the shortest possible routes, and have efficient loading systems. In addition, in the Netherlands, the company aims to ensure that partners use only low-emission trucks when transporting Componenta products.



### 7. Storage of components

Logistics centres and warehouses are used to reduce the transportation of empty or part loads. The Group has logistics centers in Sweden and the UK and in addition the company is utilizing warehouses in Germany, France, Belgium, the Netherlands and USA.

The logistics centre in Sweden was established in 2009 next to the Främmestad machine shop. Construction of the logistics centre in Karkkila is underway and the centre will be opened in 2010. Componenta aims to have a network of logistics centres that covers all the areas in Europe and North America where the Group supplies end products to its customers.



### 8. Reducing in advance the environmental impact during the working life of a cast component

The cast components supplied by Componenta are different parts of vehicles, machines and equipment. The components are often supplied direct to the customer's production line for installation in the end product. It is possible to reduce the environmental impact of cast components during their production and their working life in the design stage. A component cast as a single item is durable and has a long working life. Looked at from a different angle, aluminium components, which are lighter than iron products, reduce the overall weight of a vehicle, for example, and cut its carbon dioxide emissions.



### 9. Used component ends up as scrap and is recycled

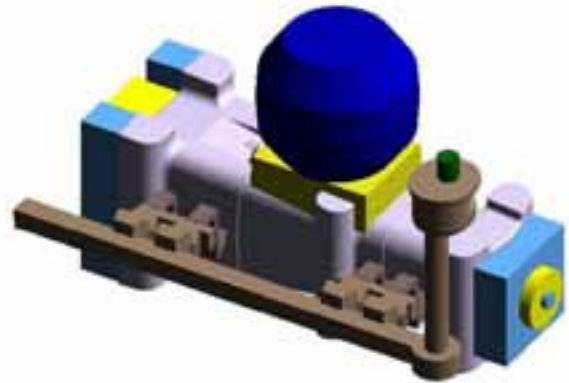
A cast component that has come to the end of its life cycle ends up as scrap, is recycled and re-melted.

## Simulation is an important tool

Casting simulation, in other words modelling, is an absolutely essential and much used tool. It makes it possible to see on a computer screen and find out which is the best and most reliable way to cast an item, how the molten iron fills the mould and how it solidifies. This helps ensure that the actual casting process produces first time, with maximum cost efficiency, a top quality casting that exactly meets the customer's wishes and requirements. At the same time it saves raw materials and energy, with low emissions and little waste.

A good example of modelling is a cast component used in a machine for the mining industry that has extremely high mechanical and wear resistance requirements. The item must not contain any porosity. When designing the product, ADI, a cast iron with outstanding wear resistance, was chosen for the material since it met the durability requirements. However, ADI is very susceptible to porosity. It was also planned to cast the 355 kilogram component in a foundry where previously the biggest items cast had weighed about 250 kilograms.

Working closely with the customer's designers, the shape and casting properties of the original item were improved step by step. After a total of 24 rounds of simulation, the product, which now met all the customer's requirements, was ready for casting in the same foundry as planned. Without simulation this could not have been achieved.



## Working with research institutes to develop new materials and standards

Componenta is continuously improving and developing its operations in its units and different functions. In addition, the Group participates continuously in various development projects in cooperation with other companies, universities and research institutes.

During 2009 the company participated in the following joint projects:

In material development, Componenta worked with Swedish company Indexator AB and developed a new grade of nodular cast iron, with improved mechanical and machining properties. The revised EN 1563 standard for nodular cast iron will contain three grades of the material for different strength categories. The new material is an excellent choice for forgings, for example. Componenta presented a technical report on the new material at the annual conference of the German foundry industry in Berlin in May 2009.

Componenta's representatives have participated in the project to revise the EN and ISO standards relating to casting technology, cast iron and special products, updating the standards so that they correspond to modern foundry practices and customer requirements.

Componenta representatives have also taken part in the work of the "Working and Safety Conditions, Environment and Energy" work group set up by the European Logistics Association (ELA) and the Dutch Foundry Association. In the Netherlands Componenta took part in the "Energy efficiency 2030" initial survey, which is linked to the agreement signed by the Dutch foundry and metal industries to reduce greenhouse gases.

In Turkey Componenta participated in many ways in joint material development projects with local universities.

Componenta was actively involved in the joint product development project between foundries, machine shops and end users in the Nordic countries and Chalmers University to develop lighter weight components. The project ended in 2009.



**ECONOMIC RESPONSIBILITY**



- The Group strengthened its balance sheet and financial position by issuing new shares and offering a subordinated capital loan in September.
- Customer service was improved by new customer segmentation and strengthening sales and engineering resources.
- Costs were reduced from the previous year and cash flow was improved by reducing working capital.
- The Group improved its competitiveness and profitability also by optimizing production through internal sourcing and product transfers.
- New sales, which aim to win new customers and bring new products into production, performed well, in contrast to general economic trends.
- Risk management was enhanced through for example risk analyses

**ENVIRONMENTAL RESPONSIBILITY**



- As a result of engineering and product development projects in cooperation with the customers, new products were designed so that they have clearly less environmental impacts during their life cycle.
- Improving production processes continued in the product units, and among others, use of raw materials was made more efficient and amount of waste and emissions decreased.
- In connection with the renewal of its hazardous waste permit, the Orhangazi foundry began two joint projects with the Turkish Ministry for the Environment that aim to make the Orhangazi foundry a benchmark in processing hazardous waste for other Turkish foundries.
- The project of closing the landfill site of the Karkkila foundry continued, and the authorities approved the closure plan.
- The application by Suomivalimo to utilize overflow sand in landscaping was rejected because a protected plant was discovered in the area where it was planned to use the sand.
- The Heerlen foundry in the Netherlands continued to work with the authorities to overcome the odour inconvenience from the foundry.

**SOCIAL RESPONSIBILITY**



- Componenta continued in all countries to adjust the working hours to the lower production volumes with the aim to keep skilled personnel in the company, so it used all available means to reduce working hours before resorting to redundancies.
- Dialogue and cooperation with the personnel was continuous.
- The Group prepared for the future and improved competitiveness for example by strengthening sales and engineering resources.
- Competence of the personnel was increased and improved through Group-wide and local training programs, International Traineeship Program, on-the-job learning and job rotation.



**Safeguarding  
the company's  
competitiveness**

*Economic responsibility at Componenta means responsibility for the company's financial results, profitability and competitiveness. Operating profitably and building up all areas of the business with a long-term approach enables us to meet the expectations of shareholders and other stakeholders and safeguard our competitiveness for the future.*

The impact of the economic recession was felt strongly in the operations of Componenta Group in 2009. Net sales fell 56% from the previous year to EUR 299.6 (681.4) million, and the value of production fell 59% at the same time. The Group's operating profit for the fiscal year was EUR -15.4 (47.3) million. The sharp decline in the operating profit was mainly due to the lack of activity in the market and low volume of business as customers were running down their own inventories.

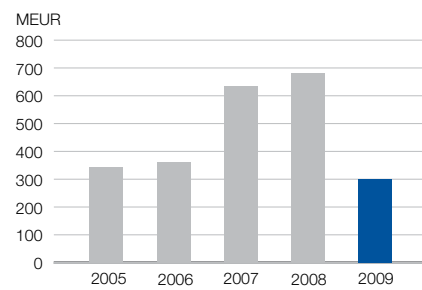
**Adjusting operations to market conditions**

Action to adjust the Group's operations to the global recession began towards the end of 2008 and continued throughout 2009.

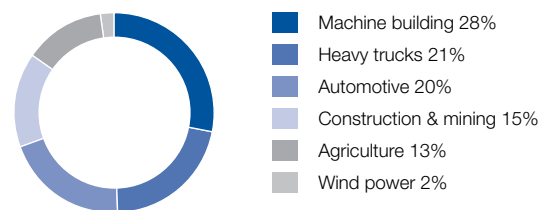
The objective of these measures was to maintain the Group's competitiveness in both the short and the long term. We focused on four areas that are vital for our business operations: cost efficiency and improving productivity, maintaining a positive cash flow, optimizing production through internal transfers, and increasing new sales.

Operating costs were cut almost to the same extent as the decline in net sales. We achieved savings in all functions, for example by cutting fixed costs and bringing outsourced functions back in-house, terminating the employment of fixed term and leased personnel, and minimizing overtime. In consequence of the adaptation measures and lower production volumes, operating costs fell 54% from the previous year in proportion to the value of production.

NET SALES



NET SALES BY CUSTOMER INDUSTRY



KEY FIGURES

	2009	2008	2007	2006	2005
Net sales, MEUR	299.6	681.4	634.7	362.1	343.2
Operating profit, MEUR	-15.4	47.3	42.7	14.5	9.9
Operating profit, %	-5.1	6.9	6.7	4.0	2.9
Net result, MEUR	-28.7	13.9	21.6	3.5	2.2
Earnings per share (EPS), EUR	-2.30	1.24	1.97	0.36	0.26
Return of equity, %	-45.1	14.8	23.0	5.9	4.2
Return on investment, %	-4.1	13.6	11.9	6.6	5.0
Equity ratio, %, capital notes in debt	17.5	15.9	20.3	19.2	18.1
Order book, MEUR	58.8	73.6	129.0	95.4	60.4
Investments in non-current assets, MEUR	17.9	46.0	64.5	123.6	25.1
Personnel including leased personnel	3,698	4,488	5,064	2,628	2,429



To maintain its competitive position, which is based on the knowhow of personnel, the Group reduced the number of working hours in line with the low volume of orders, mainly through fixed term temporary lay-offs. However, due to the different practices for adjusting operations permitted in different countries, it was not completely possible to avoid making redundancies. In addition to the temporary and permanent lay-offs, temporary cuts in pay of 20% were agreed with personnel not included in other working time arrangements.

Working capital was reduced to improve the cash flow, in particular by reducing raw material stocks, enhancing the recovery of receivables, expanding the scheme for selling trade receivables, and tightening the payment terms for certain customers. The net cash flow from operations remained positive at EUR 14.2 (29.4) million. Of this, the change in working capital was EUR 37.5 (-4.2) million. At the end of the financial year the company had sold trade receivables totalling EUR 32.7 (49.0) million.

In accordance with its strategy, the Group continued to optimize production between the different production units through internal sourcing and product transfers, with the goal of improving the competitiveness and profitability of the whole Group. One of the projects started in 2009 was to concentrate production of all the large series made on the DISA moulding lines at the foundry and machine shop in Orhangazi, Turkey and production of small and medium size series at the Pietarsaari foundry and machine shop.

The focus in sales activities was on new sales, aiming to win new customers and get new products into production. In contrast to general economic developments, new sales performed well.

**Larger investments postponed**

Componenta's investments in production facilities totalled EUR 15.5 (44.6) million during the year. The investments to raise capacity at the Karkkila and Suomivalimo foundries, which were mainly carried out in the previous year, were completely finished in the first half of 2009. Major new investments that had already been approved by the Board of Directors, such as construction of a new aluminium foundry in Manisa and installing a new induction furnace at the Orhangazi

foundry in Turkey, had already been postponed for the time being in autumn 2008 after the economic situation had declined.

**Purchases**

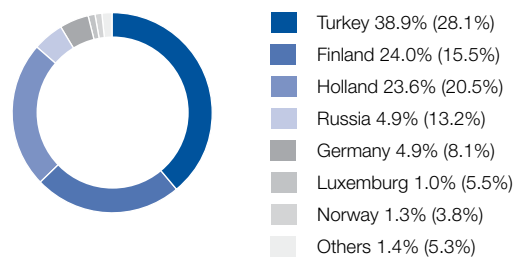
In 2009 Componenta purchased materials and services from outside the company to the value of EUR 113.5 (324.1) million. The most important country of origin was Turkey with the share of 38.9% (28.1%). The company was able to decrease working capital tied in raw materials by 60% from the previous year.

The work continued in 2009 to find alternative materials and suppliers to counter supply risks.

**Contributions**

In 2009 Componenta supported sports, research and schools. It is sometimes difficult to make distinction between donations, sponsoring and commercial marketing. Contributions here include donations and sponsoring for supporting sports and culture, non-profit organization and research. The amount of given contributions and sponsoring in 2009 was 107,000 (130,000) euros. In addition, many Componenta business units in Turkey, Finland, the Netherlands and Sweden have supported local schools, sports and non-profit organizations.

COUNTRY OF ORIGIN OF PURCHASED MATERIALS AND SERVICES





Componenta received 381,000 (644,000) euros as contributions from public sector in 2009. These contributions were targeted at among others wellbeing and training of the personnel, apprenticeship trainings, research and product development activities and investments.

#### Investors and shareholders invested in the company

Under the authorization given by the Extraordinary General Meeting of shareholders, in September 2009 Componenta issued new shares and offered a subordinated capital loan for a total of EUR 41.5 million, using the funds obtained to strengthen the company's balance sheet and financial position.

In the 2009 share issue, 6,500,000 new shares and a capital loan with a total nominal value of EUR 12.3 million were subscribed. The share issue was oversubscribed and subscriptions had to be limited. Through the share issue, the number of shareholders rose to 2,568 (1,867) and the number of shares to 17,457,798 (10,945,698).

Finnish companies owned altogether 43.3% (38.5%) of Componenta's shares at the end of 2009. Nominee registered shares and others in foreign ownership accounted for 22.2% (38.7%) of the shares, households owned 19.7% (21.2%) of shares, public institutions 9.8% (0.6%), financial institutions and insurance companies 3.1% (0.3%) and non-profit organizations 1.9% (0.7%).

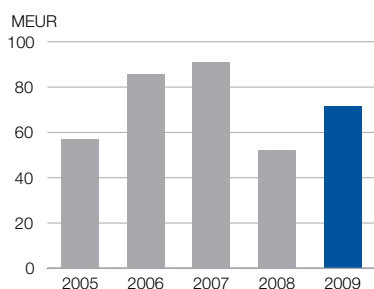
Componenta's two largest owners at the end of 2009 were Heikki Lehtonen, the company's President and CEO, who owned altogether 30.4% of the shares through the companies he controls Cabana Trade S.A and Oy Högfors-Trading Ab, and Etra-Invest Oy Ab which has a 24.3 % holding.

The quoted price of the Componenta share at the end of the year was EUR 4.12 (4.75). The average price during the year was EUR 4.45, the lowest quoted price was EUR 3.60 and the highest EUR 5.73. At the end of the year the share capital had a market capitalization of EUR 72.0 (52.0) million and the volume of shares traded during the year was equivalent to 20.1 % (32.0 %) of the share stock.

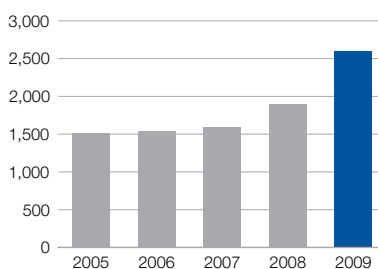
#### Dividend policy

Componenta's dividend policy has a goal of paying a dividend equal to 30–50% of the Group's net profit in the previous year. The Board of Directors takes into account the Group's financial performance, financial structure and growth prospects when it makes its proposal for a dividend payment. The Annual General Meeting held in March 2010 decided in accordance with the proposal of the Board of Directors not to pay a dividend for 2009.

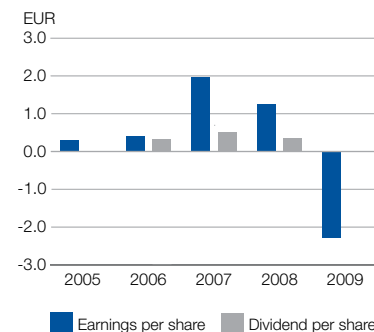
MARKET CAPITALIZATION



COMPONENTA SHAREHOLDERS



EARNINGS PER SHARE AND DIVIDEND PER SHARE





**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 2009 Componenta Corporation owned 93.6% (93.6%) of the shares of Componenta A.S. The remaining 6.4% (6.4%) of the shares are owned by households. Componenta A.S. has 63,844,000,000 shares. At the end of the year the share capital had a value of 174,972,443 (180,484,675) Turkish lira (YTL). At the end of the year the company had 2,556 (2,352) shareholders. The average quoted price of the shares was 3.94 (3.89), the lowest quoted price was 3.60 (2.41) and the highest 5.73 (5.40).

**New organization improves customer service**

In order to maintain its competitiveness for the future, developing the sales and engineering organization and building up its resources were one of the focus areas for Componenta in 2009.

In February 2010 the Group introduced a new operations structure, to strengthen the common way of working in the Group. Instead of the old divisional structure – foundries, machine shops and

Turkey – the Group’s operations were divided into four operational areas, Turkey, Finland, Holland and Sweden. The foundry and machine shop units forming the component supply chain now operate geographically more closely together, and this will result in even better service for customers. The operational areas and their managements are supported by corporate operational support functions, such as supply chain management, quality and environment, foundry and machine shop technology development, purchasing and internal sourcing, which will generate added value for customers. Componenta’s business operations and result are being reported in 2010 based on these four operational areas.

From the beginning of 2010 Componenta improved its management of the customer interface through new customer segments. The new customer segments are machine building, heavy trucks, automotive, construction and mining, agriculture and wind power. Focusing more closely on specific customer segments improves our understanding of customers and markets, enabling us to provide even better service for customers.

ADDED VALUE TO STAKEHOLDERS

MEUR	2009	2008	2007	2006	2005
Creation of value added					
- Customers (net sales)	299.6	681.4	634.7	362.1	343.2
- Suppliers (purchases and external services)	-113.5	-324.1	-305.0	-175.7	-171.8
Produced added value	186.1	357.3	329.7	186.4	171.4
Distribution of value added					
- For personnel (salaries and pensions)	-86.1	-132.2	-132.0	-91.5	-89.2
- For society (income taxes and social security costs)	-1.3	-18.7	-15.8	-11.2	-7.6
- For financial institutions (financial expenses)	-32.2	-45.1	-31.4	-12.6	-12.0
- For investors (dividends)	0.0	-3.3	-5.5	-3.3	0.0
Value added distributed to stakeholders	-119.6	-199.3	-184.7	-118.6	-108.8
Retained for developing the company operations	66.5	158.0	145.0	67.8	62.6

## Disa project improves competitiveness

Componenta has altogether four Disa production lines. 11% of the Group's production volume is moulded on these automatic Disa vertical moulding lines. Two of these lines are located in Orhangazi, Turkey and two in Pietarsaari, Finland.

Componenta's Board of Directors approved in the autumn of 2009 a so called Disa strategy to support the Group strategy. This Disa strategy aims at improving the profitability and competitiveness of the Group in large series of castings, where international competition is intense.

The production of large series will in the future be concentrated at the Orhangazi foundry and machine shop. During 2010, part of the production in Pietarsaari will be transferred to Orhangazi. The foundry and machine shop in Pietarsaari will focus on serving customers of small and medium sized series flexibly.

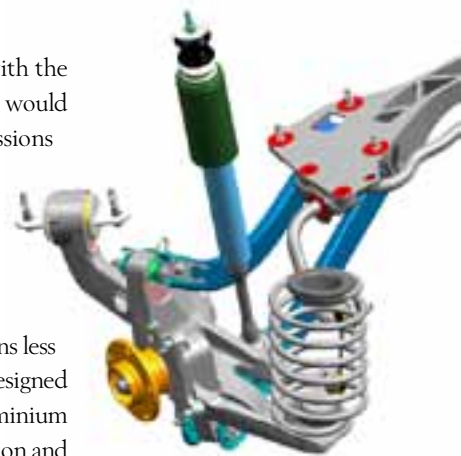


## Engineered, cast, machined and assembled by Componenta

In 2006, the customer approached Componenta Manisa with a request for offer. They had come up with the initial idea or with various requirements and functionalities for a component, or control arm. The car would have to be more comfortable, acoustics were to be improved so that there would be less noise, CO<sub>2</sub> emissions would have to be minimum, fuel consumption as low as possible and the weight of the component needed to be reduced.

As it was, the component was produced of more than three parts in different materials such as steel sheet, iron casting, links etc. To reach all the targets, the old concept needed to be replaced with a modern one.

Componenta Manisa engineered the new solution together with the customer. The new concept means less production operation to minimize manufacturing risks in the functionality of the part. Control arm was designed so that the assembly would be maintainable. Material to be used would be aluminium. Casting it in aluminium meant some 30% reduction in the weight of the control arm. By the weight reduction also fuel consumption and carbon dioxide emissions decreased.



## Wind in sales



New sales – sales of new parts and to new customers alike – has been one of Componenta's focus areas in 2009. As a result, Componenta submitted a record number of offers during the year. Sales Director, Wind power **Jens Peters** was one of those Componenta team members who strived

for new sales despite the global recession.

“New sales require us to be active towards the customers to bring in requests for offer. Part of ramping up a new customer relationship is good communications, from sales, engineering and production alike,” tells Jens who meets customers together with Product Development Manager, Wind power **Timo Vuori**. “We have a unique selling point – not only that we can offer the full supply chain from engineering to casting, machining, surface treatment, assembly and logistics, we have as well multiple internal options of production on each step of the supply chain.”

An example of the new customers is one of the leading wind turbine manufacturers. The parts cast for this company are also new components in Componenta's product range, brake disc and hub part. Both of these projects involved product optimization. “In this case the aim was to offer the most cost-efficient solution for this wind turbine manufacturer, and we were able to optimize production chain,” notes Jens. New product orders came also from an existing customer, whom Componenta advised for redesigning gearbox components.

Despite general development in the world economy, Componenta's new sales improved well during 2009. Serial production for some of these new wind power components has started, with the rest following gradually in 2010. New customers are one of the reasons why wind power is now, since the beginning of 2010, its own business area. As Jens says: “We can now take our resources and technical capabilities to develop the most efficient castings, in order to take our share in helping develop green energy production.”



**Each Componenta  
employee is  
responsible for  
the environment**



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*The production of iron and aluminium cast components has an environmental impact. Componenta takes responsibility for the environment and aims to make its production methods and processes increasingly environmentally friendly and minimize the environmental impact of its products throughout their life cycle.*

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In accordance with our environmental policy, we promote awareness of customer and statutory requirements throughout the organization. We monitor customer satisfaction and aim at continuous improvement in this. We maintain a management system that supports personnel in complying with the instructions of the quality and environmental management system, in taking responsibility, and in committing themselves to quality and environmental aspects and to continuous improvement of these.

As stated in Componenta's quality and environmental policy, each employee is responsible in all their work for complying with internal, customer and other external as well as, legal requirements in a way that benefits the environment.

Each Componenta production unit has its own special features and area of specialization. Each unit maintains its own environmental management system and identifies its own environmental aspects. Some of the environmental aspects are the same at all of Componenta's production units, but local differences in conditions and requirements affect the emphasis and contents of the environmental aspects.

When setting their environmental targets and in their reviews, the production units address at least the following environmental aspects:

- 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.

At corporate level we ensure that production units have sufficient resources to achieve their environmental targets, maintain their competitiveness and develop their manufacturing processes.

### 2009 Summary

In 2009 Componenta's production volumes were low, and the low level of orders meant that there were several scheduled breaks in production during the year at the production units. Production volumes were 63% lower at the foundries than in the previous year, 66% lower at the machine shops and 68% at the forges.

Our environmental indexes are calculated in proportion to production, which makes it more difficult in 2009 to see the results of our environmental activities from the environmental responsibility indicators than in previous years. In absolute terms, however, energy consumption and volumes of emissions and waste, for example, have declined, reducing the environmental impact of production.

One of the most important environmental indicators is energy consumption. The Group consumed less energy in absolute terms than in the previous year, even though energy consumption in proportion to output was 38% higher. This was due to the holding furnaces used as buffer storage at most of the foundries, which use electricity to keep the molten metal hot even when production is temporarily at a standstill. The holding furnaces are not completely emptied except during annual maintenance. Similarly, heating buildings consumes virtually the same amount of energy each year.

# Environmental impact of production

*Componenta casts, machines and forges components for various machines and equipment. Production has a different environmental impact at foundries, machine shops and forges.*



## Foundries

At Componenta, 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.

At the iron foundries the raw materials are melted in an electric or cupola furnace. In the smelting process the temperature of the iron is raised to about 1,500 °C. The casting moulds are made from sand on automated moulding lines, and only the largest moulds are made by hand. 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, 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, steel dies are used for casting components and various permanent mould methods: pressure casting, low pressure casting and gravity die casting. The temperature of the molten aluminium is about 700 °C. Because of the effective cooling of the steel die 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.

## Environmental impact of foundries:

### Energy consumption

- melting of recycled metal and pig iron
- machine tools and heating of property

### Waste

- overflow sand from the casting moulds and cores
- dust extracted from the work stages
- slag

### Air emissions

- particle emissions
- VOC (volatile organic compound) emissions from painting the cast components, and making the cores and furan moulds
- direct and indirect carbon dioxide emissions

### Noise

- for example from the handling of recycled metal, from dust extraction equipment and from air conditioning

### Odour

- from the casting process, for example in the making of cores and from the pouring line, cooling and shake out

### Use of water

- in cooling, in the green sand, in testing castings, in the paint department and sanitary water

### Waste water

- sanitary water and inspection fluids

### Raw materials

- main raw material (97 - 98%) recycled steel or aluminium, and pig iron, and metallurgical additives and alloying elements (2 - 3%)
- quartz sand and binding agents used in moulds



### Machine shops

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

#### Environmental impact of machine shops:

##### Energy consumption

- machine tools and heating premises

##### Waste

- cutting fluid waste
- machining chips

##### Use of water

- in cutting fluids, painting processes, and sanitary water

##### Waste water

- sanitary water

##### Raw materials

- casting blanks
- cutting fluid oil and chemicals

### Forges

Forged components are manufactured on largely automated production lines. At the forges, the bars supplied by steel works are made into forging blanks. The blanks are forged, using hammers, into the correct shape.

#### Environmental impact of forges:

##### Energy consumption

- heating the forging blanks to 1,200°C and heating premises

##### Waste

- forging burrs

##### Air emissions

- oil emissions from the oil used to lubricate the hammers

##### Noise

- hammers

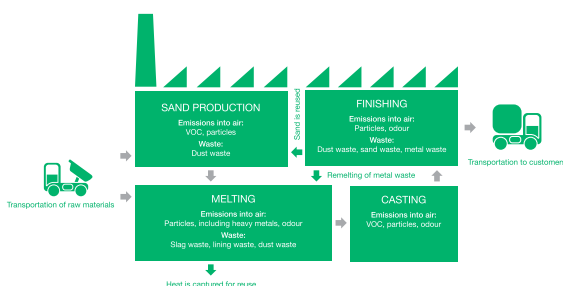
##### Waste water

- sanitary water

##### Raw materials

- steel blanks

#### ENVIRONMENTAL IMPACT OF THE COMPONENTA PRODUCTION



➔ For more details, see [www.componenta.com/environment](http://www.componenta.com/environment).



# Certified quality and environmental management systems are for business operations

*The tools used in environmental and quality activities are the quality and environmental management systems and the permits granted by the authorities. Componenta's policy states that each production unit must have certified quality and environmental management systems. The operations of the Group's foundries and forges are such that their operations require an environmental permit.*

## Quality and environmental management systems

The Group requires each production unit to have third-party certified quality and environmental management systems. Depending on customer requirements, the quality systems conform to either ISO 9001 or ISO/TS 16949 standards, and the environmental system to the ISO 14001 standard.

The quality and environmental management systems are maintained and developed by the persons responsible for them at the individual business units and at corporate level, so practices that are found to be useful and beneficial can be put into wider use. The Group's common quality and environmental policy is observed in all units.

The quality and environmental management systems at Componenta Pistons are the only ones that do not have third-party certification. Componenta Pistons' system complying with ISO 9001 requirements was almost completed in 2009 apart from certification. The work will be finished in 2010, after which the ISO 14001 system will be certified.

The production units in Turkey also have a certified OHSAS 18001 occupational health and safety system.

## Much of our production operations require an environmental permit

Operations that involve an environmental risk must have permits as laid down in legislation. Most of Componenta's production operations, including all production at the foundries and forges, are required to have a valid environmental permit and must meet its requirements. The environmental permits granted by the authorities define the scope of permitted operations and set requirements for emissions and for reducing them. Conditions for granting the permit are, for example, that operations shall not result in a risk to health, in significant pollution of the environment or in the risk of this. In Finland and the Netherlands the permits are valid for an unlimited period, but must be renewed if significant changes take place in operations. In Turkey the permits are for a fixed period.

The environmental permits set the direction for development relating to the environment, and the requirements of the permits for Componenta's units focus on particle and VOC emissions. Authorities take best available technique (BAT) requirements into account when granting environmental permits. The European Union has published a BAT reference document for foundries. As a minimum, Componenta aims to comply with the terms of the environmental permits, to avoid the risk that our operations may be restricted on environmental grounds.

# Environmental essential

## Amendments to environmental permits in Turkey and Finland

All Componenta Group production units requiring an environmental permit have current permits apart from the Orhangazi foundry. Orhangazi's environmental permit and hazardous waste permit expired in 2008. The process of renewing both permits began before the permits expired. The new permits are expected to be granted by summer 2010. A particular issue in the Orhangazi environmental permit is related to dust emissions, which were due to the use of arc furnaces in the smelting plant at the foundry. The permits will be renewed because the arc furnaces are not being used for the time being at the foundry.

In connection with the renewal of the hazardous waste permit, the Orhangazi foundry is carrying out two joint projects with the Turkish Ministry for the Environment, that aim to make the processing of hazardous waste at the Orhangazi foundry a benchmark for the future for other Turkish foundries. Renewing the hazardous waste permit will not cause problems for continuing production operations. Not having a permit does not, for example, create a risk relating to liability for damages, since the process for renewing the permits is in progress.

In 2009, the authorities rejected the environmental permit application from Suomivalimo to use foundry sand for landscaping, since a plant species that is protected in Finland was found close to the area where it was planned to use the sand. Componenta has not appealed against the decision.

➔ For more details, see [www.componenta.com/environment](http://www.componenta.com/environment).

## QUALITY, ENVIRONMENTAL AND HEALTH & SAFETY CERTIFICATES IN PRODUCTION UNITS

Unit	ISO 9001	ISO/TS 16949	ISO 14001	OHSAS 18001
Heerlen HWS	●	●	●	
Heerlen Furan	●	not applicable	●	
Främme stad	●	●	●	
Karkkila	●	●	●	
Manisa	●	●	●	●
Nisamo	●	●	●	
Orhangazi	●	●	●	●
Pietarsaari	●	●	●	
Pietarsaari MS	●	●	●	
Pistons	to be certified in 2010		under construction	
Pori	●	●	●	
Suomivalimo	●	not applicable	●	
Weert	●	●	●	
Weert MS	●	●	●	
Wirsbo	●	●	●	

# Environmental risks are identified

*Certain risks are typical in the foundry, forge and machine shop operations. Risks to the environment have been identified in the environmental management systems at each of the business locations. Componenta aims to prevent these risk situations by preventive maintenance, through instructions and systematic actions.*

## ESSENTIALS ABOUT OPERATIONAL RISKS

The risks to the environment have been identified in the environmental management systems. Some of the risks relating to business operations are fire, accidents with molten metal, 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 through preventive maintenance, instructions and preventive actions. The systems also contain guidelines on what to do after an incident of this nature occurs. Emergency plans have been drawn up for the production units.

In a risk situation or when an incident occurs, the necessary action is carried out immediately and afterwards an assessment is made of the action taken during the emergency and of the readiness for such an incident. Lessons should be learned from all risk situations. The necessary changes to structures, practices and instructions are made on the basis of recorded non-conformities.

## Risk situations in 2009

A few high-risk situations that could have had an impact on the environment occurred at our production units during 2009. All were well controlled and improvements were made to ensure similar incidents do not reoccur. These situations had no significant environmental impact.

- In April, unusually high emissions of the cupola furnace at the Heerlen foundry emerged for a short period due to a problem in the charging equipment.
- An explosion occurred at the Främmestad machine shop in April, due to a gas pipe being broken. Gas had spread outside working hours into the machine shop premises so that some 100 m<sup>2</sup> of roofing was destroyed. No one was injured. After the incident the gas pipes were pressure tested.
- A fire broke out in the basement of the smelting plant at the Weert foundry in June, causing a smoke hazard. After the incident plans were drawn up to improve fire protection.
- On the last day of December, it was noticed that a small amount of oil from the Wirsbo Kolsva forge had got into the river. Water had got into the basement, had mixed with oil on the floor, and this mixture had ended up in the river via the sewer system. The sewer system has been replaced after the incident.

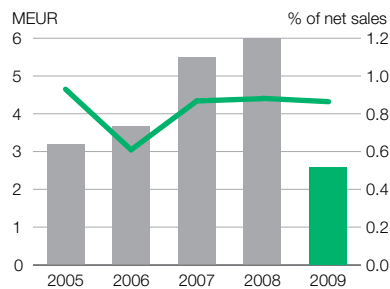
# Environmental costs and investments declined

*Environmental costs include costs directly related to environment, such as waste management and waste water treatment, as well as environmental protection activities, such as protection of ambient air and climate, soil and groundwater.*

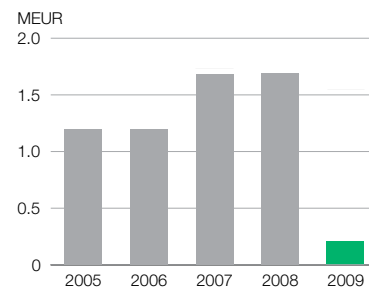
Componenta Group's environmental costs in 2009 totalled EUR 2.6 (6.0) million. Environmental costs as a percentage of net sales remained almost stable compared to 2008.

Environmental investments in 2009, like other investments, were lower than in the previous year, totalling EUR 0.2 (1.7) million. Investments included several small and necessary items. The Group always takes into account the impact on the environment and on occupational safety in other investments.

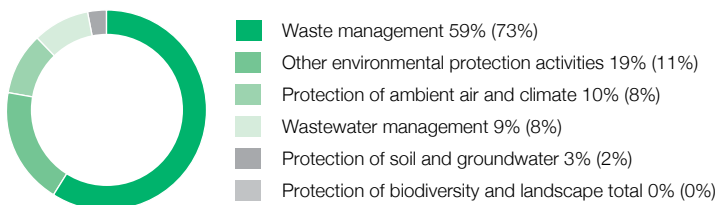
ENVIRONMENTAL COSTS



ENVIRONMENTAL INVESTMENTS



DISTRIBUTION OF ENVIRONMENTAL COSTS IN 2009



# Recycled raw material is utilized in the foundry processes

*The most important raw material for the foundries is recycled metal. The raw materials used in the iron foundries are recycled steel and pig iron and in the aluminium foundry recycled aluminium and aluminium ingots. The raw materials for the machine shops are mainly castings from the Group's foundries and for the forges steel blanks.*

Some two thirds of the raw material for melting at the iron foundries in 2009 was recycled. The recycled steel is obtained for each foundry as locally as possible, allowing for the requirements for the raw material and its availability. Most of the pig iron used by Componenta is produced in Russia.

Most of each charge for melting (60 - 70%) is recycled steel, for which high requirements are set concerning its purity, chemical composition and size. About one third (30%) of the charge is pig iron produced from iron ore, which is used to improve the metallurgical properties of the molten metal. In addition, small amounts of various additives are used in melting, to ensure the quality and purity of the molten metal and to obtain the required properties such as strength, hardness and toughness.

The most important raw material in the production of moulds at the iron foundries is quartz sand, a natural material that is obtained as locally as possible in each country. This sand must be as pure as

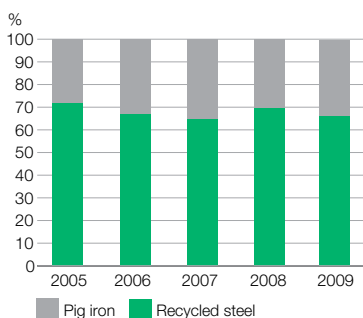
possible, for impurities in the sand reduce its heat resistance and increase the risk of casting defects. The shape and size of the grains of sand must also not vary and must be suitable for the process of each foundry. The binding agents used in making moulds are bentonite clay and water at the green sand foundries and chemically hardened resin at the furan foundries. Furan resin or the cold box process are mainly used in core production.

The main raw material used at the aluminium foundry is primary and recycled aluminium. Aluminium ingots accounted for 68% of raw material purchases and 32% was molten aluminium. The casting dies are made of steel.

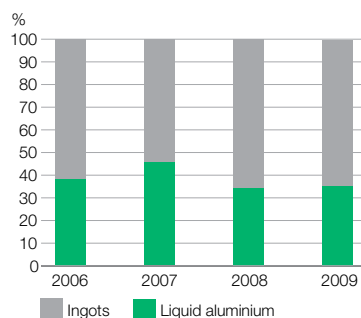
The raw material used at the forges is steel blanks, which are manufactured at steel works and supplied to the forges as bars.

The raw material used at the machine shops is mainly casting blanks cast at Componenta's foundries.

RECYCLED STEEL AND PIG IRON USED IN MELTING



USE OF INGOTS AND LIQUID ALUMINIUM IN ALUMINIUM FOUNDRIES





# ENVIRONMENTAL BALANCE SHEET

## ENVIRONMENTAL BALANCE SHEET

	2009	2008	2007	2006	2005
<b>PRODUCTION TONS</b>					
Foundries, t	117,241	297,499	318,488	288,303	125,514
Machine shops, t	16,787	48,795	50,020	37,961	30,759
Forges, t	7,137	21,734	22,629	17,926	19,592
<b>MAIN RAW-MATERIALS</b>					
Metal scrap, t (foundries)	71,312	196,641	176,225	181,202	93,182
Pig iron, t (foundries)	37,365	88,994	97,136	90,877	37,209
Aluminium, t (Turkey)	13,273	23,390	27,633	26,761	-
Steel blanks, t (forges)	7,943	27,613	29,007	24,432	25,953
Sand, t (foundries)	41,198	87,481	83,606	88,637	47,732
Cutting fluids, t (machine shops and forges)	80	173	252	242	93
<b>ENERGY CONSUMPTION</b>					
Electricity, MWh	272,600	543,563	555,828	541,372	252,527
District heat, MWh	23,286	28,058	35,169	37,250	40,250
Coke, MWh	35,709	89,054	86,536	85,748	75,773
Natural gas, MWh	74,769	104,080	105,957	115,730	22,489
Oil, MWh	7,641	14,138	14,922	15,544	4,675
Liquid gas, MWh	8,064	15,760	16,025	13,512	13,273
<b>WATER CONSUMPTION, m<sup>3</sup></b>					
	315,802	469,694	458,024	433,634	224,927
<b>EMISSION INTO AIR</b>					
Particle emissions, t *	42	66	84	84	44
VOC emissions, t	442	787	867	932	350
<b>WASTE</b>					
Wastewater, m <sup>3</sup>	229,913	294,374	304,151	286,750	108,352
Waste dust, sludge etc., t	19,388	56,861	61,590	21,016	17,223
Sand, slag etc., t	42,916	99,772	82,413	110,075	63,657
Unsorted waste, t	389	831	667	1,204	1,519
Hazardous waste, t	598	2,834	2,892	2,629	2,788
Metal scrap, t **	13,308	24,492	25,798	25,114	16,287
Waste wood, t	808	1,252	1,118	947	758
Waste paper, cardboard etc., t	193	404	364	459	146
Other sorted waste, t	450	15,011	1,179	1,079	1,474

<sup>1</sup> Particle emissions for 2006 has been corrected, particle emissions of the Orhangazi foundry were 51 t smaller than reported in 2006.

<sup>2</sup> The metal scrap figure for 2006 has been corrected in the 2007 report (from 34.422 to 25.114 tons) due to the change in the Orhangazi figures.

# Energy efficiency declined

## ESSENTIALS ABOUT ENERGY CONSUMPTION

Within the Group the foundries use most energy, accounting for more than 90% of the total energy consumption, mainly because of the high amount of energy required for melting metal. Most of the energy for melting metal is obtained from electricity, and two thirds of the energy used by the Group is electricity. At the Heerlen foundry, the energy for melting is obtained from coke, and the Manisa aluminium foundry uses natural gas.

Other areas where the foundries use energy are in heating the incoming air for heating the facilities, in the dust extraction systems, in operating machinery and equipment, in pre-heating production tools, heat treatment, air conditioning, internal transportation and lighting. Heat recovery is utilized in different places where possible.

At the machine shops most of the energy is consumed by machine tools and in heating and ventilating properties.

Most energy is used at the forges for heating the forging blanks.

In 2009, the combined energy consumption by the Group's foundry, machine shop and forge operations totalled 422 GWh (795 GWh). The significant reduction in energy consumption was due to the fall in production volumes in all business areas apart from the production of aluminium wheels, where production volumes in 2009 were higher than in the previous year. The Group's energy consumption per tonne produced was 38% higher than in the previous year, and by far the biggest reason for this was the low capacity usage.

### Foundries

Energy consumption per tonne produced at the iron foundries was 35% higher and at the aluminium foundries 3% lower than in the previous year. At Manisa, the proportion of aluminium raw material melted by Componenta itself and of that purchased as ready molten material also affects the annual variation in the level of energy consumption.

### Machine shops

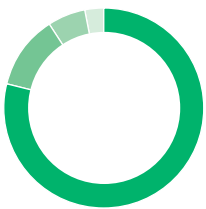
The machine shops accounted for 3% (3%) of total energy consumption. Energy consumption at the machine shops per tonne produced was some 86 % higher than in the previous year.

### Forges

The forges accounted for 6% (6%) of Componenta's energy consumption. Energy consumption per tonne produced was some 63% higher than in the previous year.

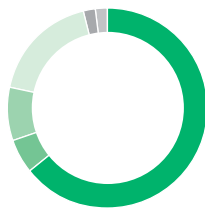


ENERGY USE IN 2009



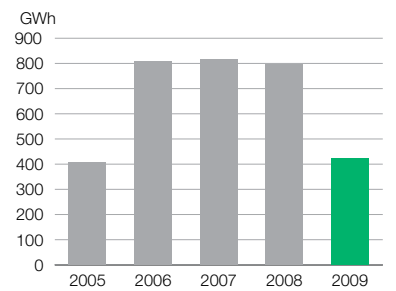
- Iron foundries 79% (83%)
- Aluminium production 12% (8%)
- Machine shops 6% (6%)
- Forges 3% (3%)

DISTRIBUTION OF ENERGY CONSUMPTION IN 2009

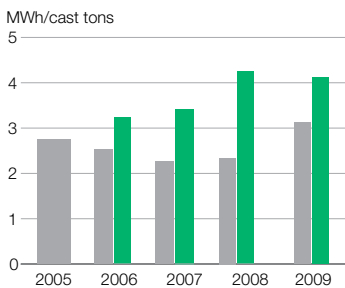


- Electricity 64% (68.2%)
- District heat 5.5% (3.5%)
- Coke 8.5% (10.6%)
- Natural gas 17.7% (13.0%)
- Oil 1.8% (1.8%)
- Liquid gas 1.9% (2.0%)

TOTAL ENERGY CONSUMPTION

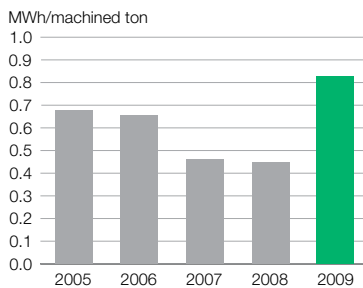


ENERGY CONSUMPTION IN FOUNDRIES

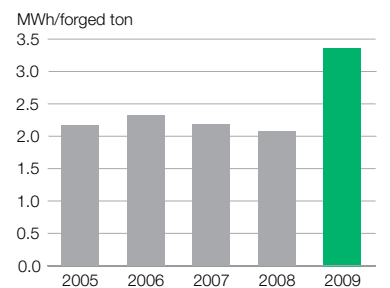


- Componenta iron foundries
- Aluminium production

ENERGY CONSUMPTION IN MACHINE SHOPS



ENERGY CONSUMPTION IN FORGES



# Dust and VOC emissions

*The Group's most significant emissions are dust and volatile organic compound (VOC) emissions. Production operations also cause a certain amount of odour and noise inconvenience. Componenta aims to reduce emission and noise levels, and especially the odour inconvenience experienced by people living close to the Heerlen foundry.*

## ESSENTIALS ABOUT EMISSIONS

One of the biggest environmental aspects in the foundries is dust. The dust is given off at different stages of the process from the mould sand and its binding agents. Inside the foundry the dust is prevented from spreading by enclosing and through extraction points. Filtering equipment is used to prevent the dust escaping into the air outside.

The VOC emissions at 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 in hardening the cores. Some of Componenta's production units have switched to water-based paints and coatings, but some products still have to be painted with solvent-based paints due to the requirements of the customer's manufacturing process.

Many foundries have continuously operating dust measurement equipment in use to identify any possible problems in the dust extraction plants more easily.

Forging and machining do not cause significant dust or VOC emissions.

### Dust emissions declined

The volume of dust emissions into the air in 2009 was in absolute terms 37% less than in the previous year, but per tonne produced it was 60% more.

At Orhangazi, smelting was switched from arc furnaces to induction furnaces, which generate less particle emissions. In order to meet the requirements of the environmental permit, the Pietarsaari foundry purchased a filter plant that was commissioned in November 2008. The new filter plant has improved the quality of the inside air in production at the foundry, and the dust emissions outside the foundry have also been considerably reduced.

It is also planned to improve dust extraction in Pori, and the plans have already been made to improve dust extraction in the melting plant.

The foundries regularly measure the quality of indoor air, evaluate the exposure of personnel to crystalline silica, regularly monitor the state of workers' health, and take measures to reduce exposure. This is in accordance with the EU agreement on silica dust between employer and employee organizations in Europe, which governs the action to be taken by foundries to prevent damage to health from silica dust. Silica dust is formed by using quartz sand used in the foundries and breathing this dust can damage the lungs.

### VOC emissions from the use of amines and solvents

VOC emissions from the use of amines and solvents at the foundries increased 43% per tonne produced in 2009 from the level in 2008. During 2009 the Pietarsaari foundry, for example, was not able to use water-based core coatings as extensively as had been planned, and water-based coatings accounted for only 5 - 6% of the coatings (30% in 2008). The cores with water-based coatings did not dry out



sufficiently since the temperature in the production premises went down when production was at a standstill every other week.

The Group is working to reduce VOC emissions at its production units. A catalytic after-burner for the VOC emissions from painting is in use in Weert. The moulds for the furan production lines in Heerlen and Suomivalimo are coated with an alcohol solvent before casting. The alcohol evaporating from the coating is burnt, and only some 30 % of it is emitted as gas to the outside air. At the foundries in the Netherlands, the amine gas is fed to an acid treatment, and the resulting acid amine solution is sent to a treatment plant in Germany, where the acid and amine are separated for reuse. The Orhangazi foundry in Turkey also has two amine scrubbers in use.

### Carbon dioxide emissions

Direct carbon dioxide emissions derive from the production process in firing the furnaces, from the use of fuel and natural gas, and from the cupola furnace at the Heerlen foundry. In addition, there are indirect carbon dioxide emissions from the use of energy and from transport.

Carbon dioxide emissions are not regarded as one of the most significant environmental aspects, compared to the other environmental aspects of production.

### More environmentally friendly materials

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

The Wirsbo forge is using ecofriendly rapeseed oil in the largest counter-blow hammer. It has so far not been possible to replace mineral oil lubricant with vegetable-based rapeseed oil in the other hammers.

The chemicals used in cores are one source of odours at foundries. The Heerlen HWS production line is using core binding agents gives off fewer odours and generates lower BTX compound (benzene, toluene, xylene) emissions. In Weert and Heerlen, foundries are monitoring developments in binding agents, but have so far not found a low-odour core binding agent with low levels of BTX compounds that is suitable for these foundries.

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 in 2009 the foundry received 100 complaints about the odour. Componenta, the authorities and experts have come to the conclusion that build-

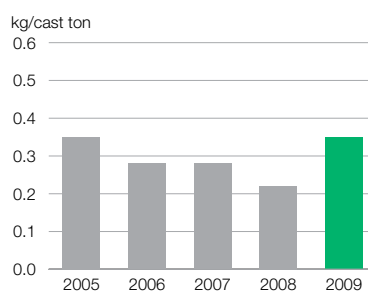
ing a high chimney would solve the odour inconvenience. The authorities are still looking into the matter.

### Noise

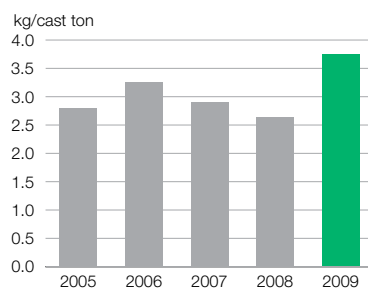
Many of Componenta's production units are located close to housing, so their operations can disturb people in the surrounding area. These units pay particular attention to noise abatement. Noise levels are monitored and measured in the areas close to the plants by Componenta itself and by an external agent.

The main sources of noise are the handling of raw materials at the foundries, the forging processes at the forges, and air conditioning. Transporting raw materials and products also causes noise. Componenta strives to comply with the stipulations for noise levels in the operating permits.

PARTICLE EMISSIONS IN FOUNDRIES



AMINES AND SOLVENTS (VOCs)



# Most waste is reused

*Most of the waste generated by Componenta's production operations is sorted for reuse. As stated in the Group's environmental policy, the goal in the processing of waste is to further increase the sorting of waste and reduce the amount of waste that cannot be reused.*

## ESSENTIALS ABOUT WASTE AND RECYCLING

The biggest waste items at the foundries are spent sand from the process and dust. Some 98% of the sand is recycled in the internal mould production process, but even so the process produces large amounts of spent sand.

Dust is separated at dust extraction plants from the air that is conducted to them 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. At some of the foundries the dust is fed back into the process.

Another waste item at the foundries is slag which contains impurities removed from the molten metal. The remaining waste is normal industrial waste, most of which is sorted for reuse. Hazardous waste arises 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 briquetted chips as replacement for pig iron at the Group's iron foundries. Hazardous waste arises from the lubrication oils for machinery, the cutting fluids used in machining, and the painting processes.

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

In 2009 Componenta generated a total of 78,049 (201,459) tonnes of waste, of which 71% (72%) was sorted for reuse.

### Foundries

The total amount of waste generated at Componenta's foundries per tonne produced was similar to that in 2008. The Weert and Orhangazi foundries operate not just an internal sand circuit but also a reprocessing plant for the moulding sand. The treated sand can be reused by the foundry instead of new sand.

Much of the overflow sand and dust from the foundries is utilized in the structures of waste landfill sites. A separate landfill site for foundry sand and dust was in use in Karkkila, but dumping stopped in this landfill site in 2007. To ensure the waste dumped at this site does not have an environmental impact in the future, the closure of the site is being planned and carried out in accordance with the requirements imposed by the authorities. The final closure plan was approved by the environmental authorities in summer 2009, and the process of closing down the site continues in 2010. The foundry sand and dust from Karkkila is currently sent for reuse and there is no need for a separate landfill site.

Although almost all the waste from foundries meets the requirements for normal landfill sites, some dust cannot be disposed of at these sites because of the impurities it contains. The Pietarsaari foundry has an environmental permit to utilize the foundry sand as filler material in the outdoor area. In 2009 Suomivalimo applied for an environmental permit to use foundry sand in land-



scaping, but the application was rejected because a rare plant was discovered in the area.

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. The 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 on the plant's stock area. The zinc dust from the smelting process in the induction furnaces at Orhangazi is separated and sold for reuse to a company that produces zinc oxide. In 2009 slag has been sent to a waste processing area. The Orhangazi foundry has a chemical treatment system for paint.

**Machine shops**

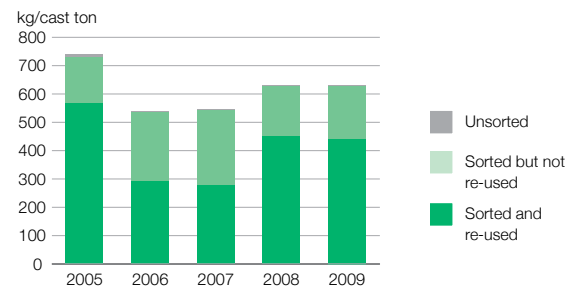
The total amount of waste per tonne produced at the machine shops rose 25% in 2009 from the 2008 figure. The biggest waste item at the machine shops is machining chips. In 2009 some of these were sent to the smelting plants of steel manufacturers and some were melted in the Group's foundries.

A new central tank for several machines was taken into use in Främmestad in August 2009 to make more efficient use of cutting fluid.

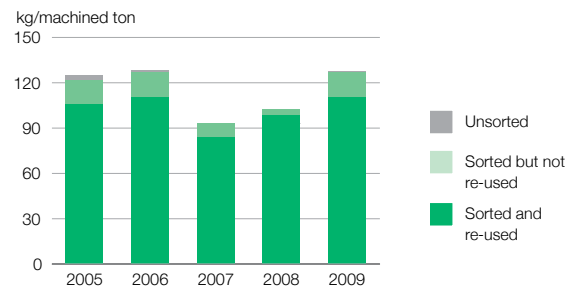
**Forges**

The amount of waste per tonne produced at the forges declined 15% in 2009 from the previous year's figure. Forging burrs form the biggest waste item, and these are sent for reuse to the smelting plants at steel works. Almost all the waste at forges is sorted.

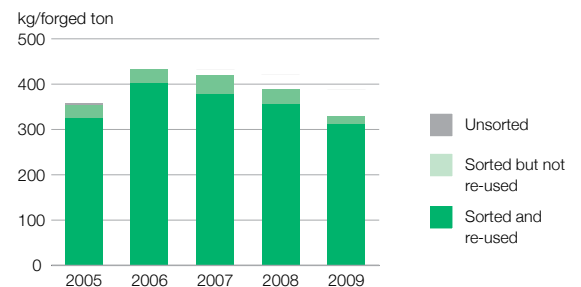
WASTE OF THE FOUNDRIES



WASTE OF THE MACHINE SHOPS



WASTE OF THE FORGES



# Water is recycled in production

## ESSENTIALS ABOUT WASTE WATER TREATMENT

Water is used at the foundries and forges for cooling and at the green sand foundries for sand preparation. The machine shops also use water in cutting fluids and in the painting processes.

Componenta aims to recycle water in production so that the water does not need to go to a waste water treatment plant. Some of the production plants have their own waste water treatment plants, which help reduce the amount of waste water. In addition, some of the production units have a closed water system for cooling that uses river water. The water circulates in the closed system and then returns to the river, so no waste water is generated.

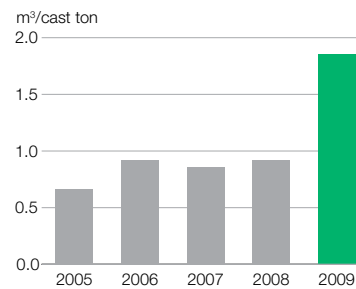
Some 93% of the Group's waste water is generated by the foundry operations, and the Manisa aluminium foundry accounts for 84% of this. The machine shops (4%) and forges (3%) account for much less.

The amount of waste water in 2009 at Componenta's foundries doubled from 2008. Most of this growth was because of the increased use of water at the Manisa aluminium foundry, which was due to the increase in the testing of castings, which requires water to wash off the penetrant fluid.

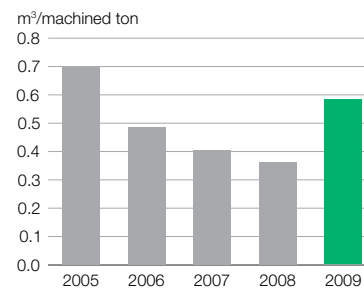
The amount of waste water at the machine shops in 2009 rose 63% from the 2008 figure.

At the forges, the amount of water subject to a waste water charge more than doubled in 2009 from the previous year's figure.

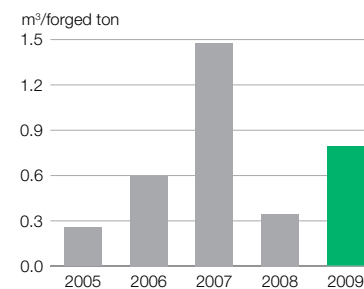
WATER TO THE WASTEWATER PLANT FROM FOUNDRIES



WATER TO THE WASTEWATER PLANT FROM MACHINE SHOPS



WATER TO THE WASTEWATER PLANT FROM FORGES





## Resat Ilman develops tests for studying environmental impact of raw materials

Emissions and odours are some of the main environmental issues at iron foundries, and they are mainly caused by the composition of the materials used in the production of cores and moulds. These materials usually contain organic compounds that are converted during casting by a chemical reaction into environmentally harmful components.

Using environmentally friendly, inorganic materials can significantly reduce these emissions. In the Netherlands Componenta has been closely monitoring the development work carried out by the various suppliers and has been willing to test the latest options. However, in practice this testing has been problematic, for emissions and odours are dependent not only on the raw materials used but also on many other variables such as the quantity of cast iron, the volume of sand, the cooling time etc. Since there was no reliable test method, production engineer **Resat Ilman** started to develop a testing procedure that in practice excluded all other variables. The test is based on methods used by several well known foundry institutes, for example for studying odour emissions.

In this test, cores made of the materials being tested are placed in small moulds and molten iron is then poured into the moulds. The combustion gases are extracted and collected in a closed drum. This makes it possible not only to study visually the colour and the amount of the gas but also to analyze the chemical composition.

The procedure developed by Resat Ilman can be reproduced with identical conditions, for studying the environmental impact of cold box binders, core sand additives and moulding sand additives.



## Waste reuse at Componenta's foundries in the Netherlands

Waste forms one of the most significant environmental aspects at foundries. The amount of waste in proportion to the tonnes produced can be surprisingly high, with some foundries generating as much as 1,000 kilograms of waste for every 1,000 kilograms of good quality castings. The waste has to be processed and transported with all due care. Most of the foundry waste consists of sand, dust and sludge. Each of Componenta's foundries has its own special features due to the products it makes, its manufacturing process and external environmental restrictions. These features affect how much waste is generated and where and how the waste can be reused.

The amount of waste per production tonne may be two or three times more at one foundry than at another. At Weert the sand reclamation unit enables better utilization of used foundry sand, so the foundry generates less waste. Almost all the waste generated at Componenta's Dutch foundries is treated by one company that specializes in the reuse of different kinds of waste fractions. It handles the waste from other Dutch foundries as well, and the larger volumes give better opportunities for reuse. Some of the waste is utilized to generate energy in an incineration plant, but most of it is reused, for example in concrete production or as aggregate for building landfill covers and hydraulic barriers.



## Aiming at 9% energy savings 2008 - 2016

In Finland, Componenta is participating in a scheme of energy efficiency agreements for industry, which have the goal, in accordance with the national energy and climate strategy, of responding to international commitments with efforts to mitigate climate change. The agreements have the target of achieving energy savings of altogether nine per cent by 2016. In The Netherlands, the national foundries association has signed an agreement on targets for saving energy for the country's foundry industry, and Componenta's foundries in the Netherlands have drawn up energy efficiency plans based on these targets.

Comprehensive energy analyses have been carried out at the production plants in Finland to assess the current state of the process, commodity and property systems. The studies are updated regularly in order to identify the measures needed to reduce heat and electricity consumption and to cut costs. The Group is informed of the improvements needed at all the production units, so that it has centralized control over investment decisions.

Measures taken as a result of the energy analyses include modifications to the ventilation equipment to improve energy efficiency, solutions relating to heat recovery for production equipment, and sealing the compressed air network and reducing the pressure in it.

## Radiation risks from raw materials recognized

One environmental concern at foundries is that a radioactive source ends up in the melting process, with the resulting risk of radiation contamination within and outside the foundry. Componenta has estimated that the likelihood of a radioactive source entering the melting process is very small, but that the consequences would be considerable. There has been no case to date at Componenta's foundries of a radioactive source entering the melting process and causing an observed hazard to the surrounding area.

Radioactive sources are typically used in industry in various measuring devices, for example in measuring the level of a surface. When old equipment is taken out of use, it may be put in with other recyclable material and supplied for further processing or use to a steel works or foundry. Every year there are about ten known cases worldwide of radioactive sources being melted, usually at steel works.

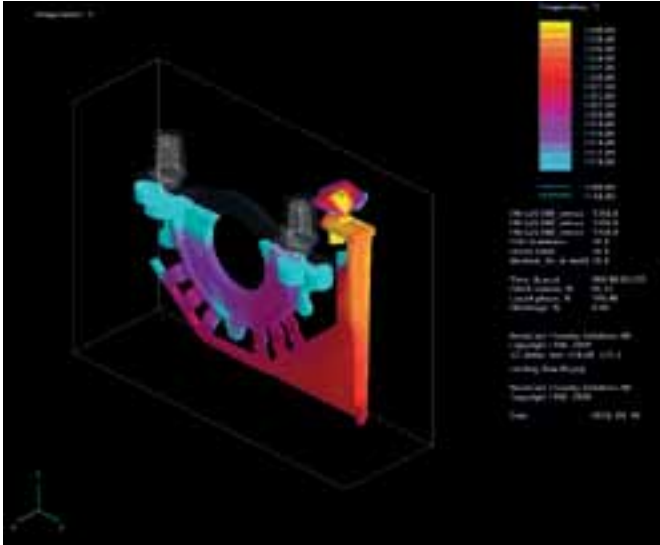
For Componenta's foundries, the risk of melting a radioactive source is smaller than for steel works, since they use smaller amounts of raw material and sourcing is more local. In Finland, for example, radioactive sources are registered with the Radiation and Nuclear Safety Authority of Finland (STUK), and they must be properly disposed of. The incoming rawmaterial inspectors at the foundries in Finland and the work supervisors have received training in identifying and finding radioactive waste and on the related risks, for example at the Outokumpu steel works in Tornio.

All of Componenta's foundries in Finland have radiation monitors for the receiving inspection of recycled metal, and the Group is planning to introduce these inspections in Turkey and the Netherlands.

Sub-contractor **Jouko Rantanen** (in the picture), who is responsible for the reception transport of recycled metal in Pori, measures recycled steel during training held at the Outokumpu steel works in Tornio.



## Improving the yield from each mould reduces environmental impact



Metal compounds shrink while they cool and solidify. In a high quality foundry process, the formation of shrinkage porosity in the end product is prevented by controlling the shrinkage or directing it into parts of the casting that do not affect the strength or other requirements of the customer.

In practice, casting shrinkage and porosity defects are prevented by using risers, that fill up with molten metal during casting, in the parts of the casting that are susceptible to porosity. The risers con-

tinue to feed molten metal into the casting until this has completely solidified, and any porosity is left in the risers, which are removed in the post-casting phase, and not in the casting itself. The risers are re-melted in the foundry's own process.

The Componenta Pori foundry has carried out systematic work since 2006 to improve the yield from moulds. The more feed metal and risers are needed to make a porosity-free casting, the lower the yield, and the more melting energy is needed to achieve the same production volumes.

Procedures and statistical tools based on the Six Sigma quality philosophy have been used in these projects. Using the results obtained, improvements were made to the process in several ways: systems were built to measure the casting time and temperature, and a system for monitoring the dosage of inoculation additives. Several specific causes were found in the projects, and the foundry set to work to correct these. Improvements to the yield were made by modifying the pouring system and by optimizing the amount and the conveyance of the mould sand. Another basic tool is casting simulation software, which makes it possible to assess the effectiveness of different riser arrangements without having to carry out production tests.

By 2009 Pori foundry had succeeded in improving mould yield from 53% to 59%. Thanks to this, the energy consumption in melting has declined nearly 10% when the foundry is operating at full capacity.

## Componenta Manisa received JIPM Excellence Award

Japan Institute of Maintenance (JIPM) gives "Excellent Plant" award to the companies that apply Total Productive Management (TPM) to increase their productivity and employee satisfaction.

This award is one of the most prestigious awards related to quality and productivity in the world. Componenta's Orhangazi plants were awarded for their performance in 2008, and now the aluminium foundry and aluminium wheel production plant in Manisa were rewarded for efforts in 2009.

TPM activities have provided us many improvements in the plants since 2003. The most important achievements are improvements in productivity and OEE (meaning overall equipment effectiveness) as well as decrease in maintenance breakdowns, customer complaints, stock levels, maintenance costs, accidents at work. Employees' suggestions related to improvement areas have also increased.

**Hakan Göral**, SVP, Operations, Turkey says, "All our employees have contributed and supported TPM activities effectively, and their efforts have brought about the excellence award."

"This is the first and important step of a very long and challenging process. We serve our customers in more efficient ways through TPM. We start our TPM journey, with the strategy of high produc-



tivity, zero breakdowns, zero product defects and zero work accidents, until we have succeeded in making Componenta a benchmark company."

**Tevfik Günhan** (right) and **Sabri Özdoğan** (left in the picture), Business Unit Directors of the Componenta Manisa aluminium foundry and Componenta Wheels production unit respectively, received the excellence award on behalf of the Manisa plants on 11 March 2010 in Kyoto, Japan.



**Responsible  
employer**

*A company's competitive edge and success derive from its ability to anticipate and respond to changes. It is decisive to understand the dynamics of a changing business environment, its effects on organizational efficiency and the impact on our people. At Componenta we actively translate this understanding and the requirements set by the strategy into actions that help us achieve our strategic goals and creates agility in our operations.*

Componenta's values – openness, honesty and respect are guiding principles in every day management and cooperation between Componenta team members and towards our external stakeholders. The Group's HR policy encompasses the guidelines that, together with Componenta values, create a sound basis for the efficient and effective management and leadership of human resources throughout Componenta.

Key objectives of human resource management is to ensure strategy implementation through people. Human resource professionals are presented at management teams at Componenta, promoting awareness of critical people-related issues and working with management to create the needed initiatives.

We value long-term employment and acknowledge the importance of learning as a critical success factor for sustainable growth. All employees are encouraged to continuously upgrade their knowledge and broaden their skills, through job rotation, taking on new responsibilities and participating in the formal training offered by the company.

Componenta provides a working environment with proactiveness in developing safety and wellbeing.

Componenta complies with local labour laws and contractual agreements and respects its employee's freedom of association and the right to collective bargaining. International agreements on human rights and equality are integrated into the Group's policies and way to operate, and no discrimination for reason of origin, nationality, religion, race, gender or age will be tolerated. These principles are to be respected everywhere and under all circumstances.

If Componenta needs to adjust its operations due to changes in the market, and it is necessary to reduce the number of working hours, the necessary measures will be taken in full compliance with local legislation, fully honouring bargaining agreements and in accordance with the Group's values. All possible steps will be taken to minimize permanent lay-offs.

KEY FIGURES

	2009	2008	2007	2006
Total number of own and leased personnel head count	3,797	5,207	5,174	5,249
Total number of own and leased personnel in duty, as FTEs	2,424	4,374		
Change during the year %	-37	1	-1	
New recruitments	335	542	593	628
Type of employment (year end), %				
- permanent	93	93	80	79
- temporary	5	3	3	3
- leased	2	4	17	18
Gender, %				
- male	93	93	93	93
- female	7	7	7	7
Turnover % <sup>1)</sup>	26	13	8	10
Absenteeism due to sickness and accidents, %	4.5	4.5	4.4	5.5 <sup>2)</sup>

<sup>1)</sup> Includes all turnover.  
<sup>2)</sup> Excl. Turkey



**Human resources related risks**

Part of Componenta's production units operate in niche foundry business branch in heavy metal industry, which young graduating generation necessarily do not find the most attractive career choice. Additionally we have faced vulnerable and diminishing pipe line in foundry technology education in all our countries. These developments together with less known company brand name outside Finland recall special and continuous actions in proactive resourcing.

The speed to generate learning and develop new needed competencies fast enough is challenged by competitors operating in emerging markets with wide resource base and lower labour costs. Additionally the new customer and product requirements recall enhanced and fastened creation of new solutions and service as well as management of innovation and knowledge management process.

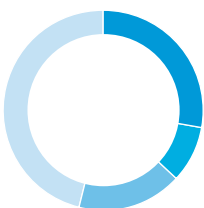
Componenta operations are located in smaller locations, in most cases having not any university level educational establishment. The attraction and retention of professionals recalls competitive compensation, development of responsibilities together with opportunities to grow along the career in the Group. So called Y-generation, new

graduates, also challenge us to develop our traditional ways of working and understanding of commitment and career development.

Building up more international operations and One Componenta way to operate challenge our capacity to unify but also the same time to adapt our management practices to acknowledge the cultural and regional requirements, at adequate level. Establishment of multicultural work teams with global and corporate mindset are crucial to our success already in short term.

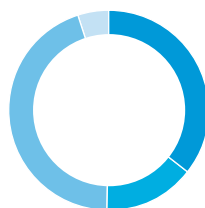
Volatile and unpredictable markets recall effective working hour management and flexible utilization of manpower. Finding a balance between competent own employees and leased employees is the necessity in securing effective and cost-effective operations. At Componenta we have approximately 35 nationalities working in foundry operations, many of them through leased companies. Both management and leadership capabilities are challenged by diverse workforce, aligned with rapidly changing regulations related to utilization of leased employees. Successful creation of multiskilled blue collars is also the necessity when securing competitive operations.

TOTAL NUMBER OF OWN AND LEASED PERSONNEL BY COUNTRY %



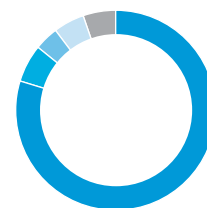
- Finland 28% (27%)
- Sweden 9% (10%)
- The Netherlands 17% (17%)
- Turkey 46% (46%)

TOTAL NUMBER OF OWN AND LEASED PERSONNEL BY DIVISION %



- Foundry 36% (35%)
- Machine Shop 15% (11%)
- Turkey 45% (44%)
- Other 5% (10%)

PERSONNEL BY FUNCTION



- Production (blue collar) 79% (79%)
- Production management 6% (6%)
- Quality and maintenance 4% (5%)
- Administration and management 5% (5%)
- CPC, sales and purchasing 5% (4%)



### Key accomplishments in 2009

Adapting operations to declined production volumes that were in turn caused by the global recession, continued in 2009 with the target to keep competent personnel employed in the company. All other means to shorten working time were used before permanent lay-offs.

During the year active and regular communication about strategy, business objectives and financial situation were carried out with employees. President and CEO met key employees and employee representatives in quarterly meetings and through scheduled webcasts, and locally unit management organized regular information sessions.

Long-term constructive cooperation with employee representatives resulted in high flexibility and determination to go over the challenging business cycle together. Turnover of key personnel based on their own decision to leave Componenta was low in all countries, showing commendable commitment to the company even in challenging times.

To safeguard future competitiveness, we continued to develop Componenta operations and way to operate for the sustainable growth. In sales customer approach was streamlined by dedicating

customer responsables on more clearly defined customer areas and engineering way to operate was clarified and new engineering centers formed.

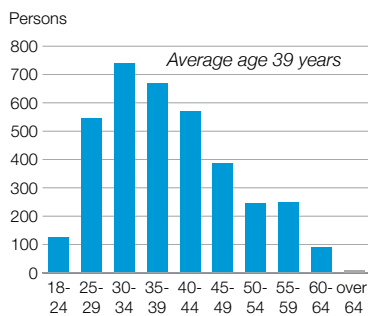
Resources were strengthened through internal career moves and new recruitments in selected, strategically critical functions, such as sales, engineering and specialist positions. Also International Traineeship Program continued in 2009.

Competencies of our personnel was increased and improved through Group-level and local training programs, on-the-job learning and job rotation. Education was also an important part of adaptation actions in all Componenta countries.

In safety and wellbeing, proactiveness is a prerequisite. The wellbeing and work satisfaction of Componenta team members are measured regularly. The previous Group level survey was conducted in 2008. Based on the survey's findings, the necessary measures and actions to improve our operations and overall working environment have been carried out in 2009. Regular risk analyses to avoid accidents continued.

No discrimination for reason of origin, nationality, religion, race, gender or age is tolerated at Componenta. In 2009 there were no reported incidents of discrimination in any units.

AGE STRUCTURE



# Safeguarding the future

*The global crisis in 2009 demanded agility and determination in finding adequate ways to adapt working hours to declining customer orders, as well as persistence in securing jobs and building up competence and future competitiveness.*

## ESSENTIAL ABOUT RESOURCE PLANNING AND RECRUITMENTS

Componenta's values and leadership principles together with relevant skills and experience are the determining principles when selecting new employees to Componenta as well as for career promotions. Values create unquestioned basis for all dealings along the career path and our recruitments and employee promotions are based on equality.

Internal competent candidates are given priority in the selection process to ensure career development for those willing to develop. We also continuously evaluate the opportunities to strengthen our resources and capabilities with external new team members in strategically important areas.

When joining Componenta, all our employees sign legitimate employment contracts that are in conformity with local laws, collective agreements and corporate principles.

To ensure the high visibility of Componenta vis-à-vis relevant recruitment sources, we continuously build up company and industry branch awareness and actively keep in contact with universities and attend recruitment events in the countries we have operations.

### Adapting to compete

At the end of 2009, Componenta employed 3,698 (4,488) people including leased personnel. The headcount was reduced primarily by cutting the number of leased contracts, through various retirement schemes, and by not renewing temporary contracts.

The utilization of leased employees to balance high peak of working hours was proven to be key success factor for fast adaptation. Additionally well-established co-operation with the personnel leasing companies ensured the flexible and respectful adaptation process also for leased employees.

All available methods for adjusting working hours in the different countries were utilized to avoid permanent personnel redundancies and to get through this difficult period together. As an outcome of constructive negotiations and in agreement with employee representatives, the Group was able to make maximum use of paid and un-paid holidays, arrangements to shorten working hours in each country, hour banking and temporary lay-offs, affecting on average 1,600 people across the Group.

Permanent redundancies of the company's own employees anyhow took place at the end of 2008 and the beginning of 2009 mainly because Turkey, the Netherlands and Sweden had no means for temporarily adjusting working hours. During 2009 the Netherlands and Turkey both introduced temporary lay-off schemes, which gave wider scope for adjustment while securing employment.





Agreements for necessary adjustment measures were reached in full with local legislation and bargaining agreements, and taking advantage of local solutions as well. In Finland, for example, local business unit management and shop stewards reached agreement on real-time codetermination negotiations, which made it possible to adjust working hours to the order book flexibly and quickly.

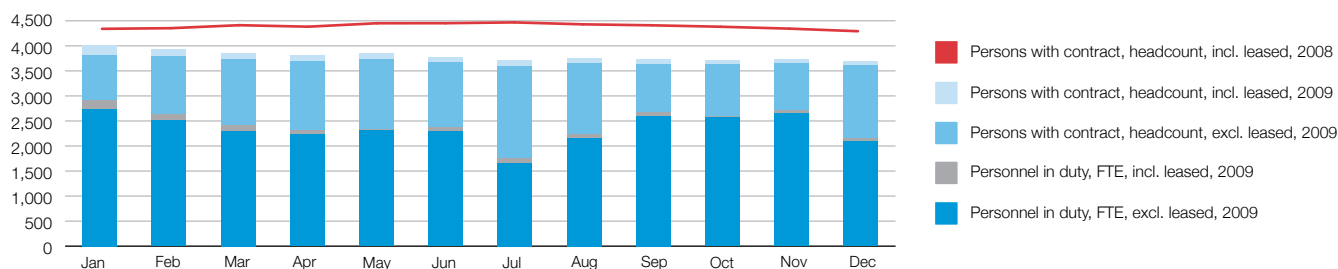
As part of the internal efficiency project relating to fixed costs, key personnel who could not participate in production-linked working hour arrangements were offered a voluntary temporary –term 20% reduction in salary. More than 95% of the employees who were offered this option agreed to this arrangement. Based on their own decision can be regarded as an indication of a high level of commitment to the company and faith in its future.

Overall personnel turnover in 2009 was 26% (13%) in consequence of the adjustment measures in production.

### Proactive reporting

Faced with the need to estimate more precisely the number of employees needed for a month's production in different business cycles, HR reporting has been developed to reflect the variety of adaptation measures. From now on Componenta will be using two figures to illustrate the number of personnel: headcount and full-time equivalent (FTE) on duty, the former figure representing the number of job contracts, and the latter describing the number of full working days actually performed, from which all holidays, leave, working time schemes and temporary lay-offs, and absenteeism have been deducted.

PERSONNEL WITH CONTRACT VS. IN DUTY, FTE





ESSENTIAL ABOUT CAREER ROTATION AND PROMOTION

At Componenta we encourage our people to develop by giving them challenges, trusting their judgement and allocating responsibilities. Learning by doing and gaining experience through career rotation are recognized to be the most critical ways to develop the needed competencies, business understanding and knowledge transfer in the niche industrial sector.

Componenta talent reviews take place once a year to create a thorough understanding of the talent situation in respect of business development objectives and to take the necessary actions. Opportunities for career advancement are offered to those who have the determination and the potential to develop their capabilities. Promotion is based exclusively on competence, insight, performance and potential.

Securing the talent pipeline

The Group continued to develop its operations and way to operate during 2009, with the objective of becoming more customer process driven and equipped for sustainable growth.

Investment in engineering resources continued across the Group aligned with engineering strategy and supporting the establishment of engineering centers in each country. In sales resource base was strengthened following the new customer segmentation.

Special attention was also paid in resourcing to production in areas where we will be implementing new generation technologies, anticipate faster growth or where we are moving into areas of new capabilities that require highly qualified employees.

To secure the availability of aluminum process and production capability, special re-employment agreements were made in Turkey with the employees of the Manisa aluminium foundry who were forced to make redundant at the end of 2008 due to the lack of adequate adaptation instruments. In the second half of 2009, Componenta was able to fulfill this promise and re-employ 65 employees on temporary contracts, due to the positive developments in the aluminium business and its order book.

One of the risk related to human resources and competitiveness will be scarce educational pipeline and limited availability of in-depth-specialist in the future, e.g. in the metallurgy. Based on this acknowledgement, in 2009 we continued the acquire of specialists for critical technology areas externally, too.

The Group continued its intake of graduates and trainees during the year. Through this we are preparing ourselves in the face of emerging evidence of a growing “talent gap” – shown by a decreasing interest in manufacturing industry in the coming years – when the demand for key skills has been forecasted to exceed the available supply. By offering students traineeships and work practice periods and participating in recruitment events at universities and colleges, we are also building up our image in labour markets as an employer and in-



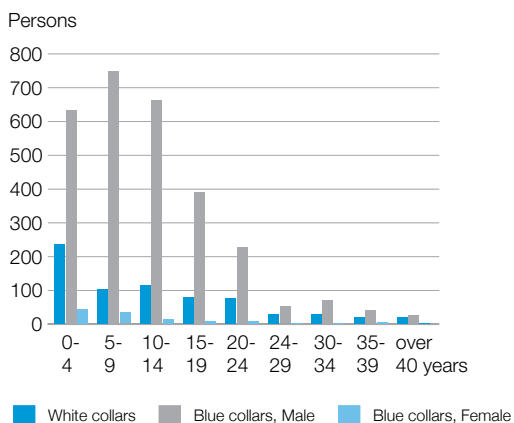
creasing awareness of our company brand. Despite the recession, the trade unions and other employee representatives have taken a positive attitude towards traineeship programs and recruitment of graduates, since they benefit society and the company as a whole.

The International Traineeship Program launched by Componenta in 2008 continued throughout 2009 with the international stage of the program. Altogether 25 university students were selected for the tailored program that is based on mentoring, during which they gained cross-functional and international experience in their home country and abroad. Componenta has already recruited 15 of them, while five trainees continued their studies with an agreement to do their master's degree thesis at the company. Componenta launched the second International Traineeship Program at the beginning of 2010.

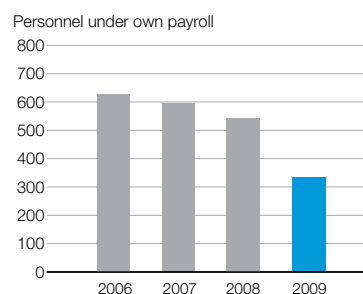
### Creating understanding of existing and needed resources

To create a thorough understanding of the talent situation in relation to the business development objectives and to take the necessary actions, all units and Group functions carried out a review of management and key resources. Special attention was given this year to identifying individual potential at an early stage of the career and to measures for successor planning. The outcomes of the resource reviews were utilized in the internal job rotation already at the beginning of 2010, when a new operational model was introduced in the Group.

EMPLOYMENT YEARS



RECRUITMENTS OF PERSONNEL



# Creating understanding and strengthening engagement

*Componenta is a performance driven company, where everybody shares responsibility for making things happen in line with mutually agreed targets and with a high service mindset. Creating engagement and leading high performance in a challenging business cycle and while respecting employee expectations is one of the most critical challenges in human resource management for Componenta as elsewhere.*

## ESSENTIAL ABOUT PERFORMANCE MANAGEMENT

Componenta is a performance driven company, where the acknowledgement of clear roles and responsibilities together with clear target setting on individual level are regarded as critical success factors for the business. Assessment of success in individual performance and target setting takes place at least once a year in development discussions.

Componenta operates in an international, competitive market. To ensure the attraction, retention and motivation of employees, we employ salary and compensation systems, which are internally fair, consistent and comprehensible, and externally market competitive. Componenta also participates in external studies on compensation.

At Componenta pay and performance are closely linked together. In addition to the base salary, Componenta recognizes that fringe benefits, performance based incentives and other secondary benefits are compensation instruments for positions where these form a critical element in the compensation package for corresponding benchmark position, within any country.

## Communicating the direction for the company and allocating responsibilities

To build a platform of mutual understanding for the measures needed to enhance performance and productivity, Componenta management has actively communicated to employees and shared openly and regularly with them about Componenta's strategy, business objectives and financial situation throughout 2009. The President and CEO has met employees and employee representatives in quarterly meetings in each country, as well as communicating through scheduled webcasts the actual and forecast figures for the business. In each country, local management has organized regular meetings for discussion, in addition to their normal management and communication procedures.

To set the focus for management and the organization and to ensure maximum understanding of the most critical tasks and performance drivers during the needed adaptation, four Group level task forces were established. The task forces for operations and cost efficiency, cash flow, internal sourcing and new sales were cross-functional, overlapping themes, involving people from all countries and all levels of operations. Responsibility for deploying the task forces was allocated effectively to the organisation and achievement of targets was measured through mutually agreed key performance indicators (KPIs).



### One Componenta way to operate

Our way to operate is based on a lean organization and clear responsibilities, and these are continuously being evaluated and developed.

During 2009 strong focus was given to further development of One Componenta processes and way to operate. Group-wide internal sourcing team with representatives of all countries focused on identifying best available internal sources to serve our customers.

Customer responsibilities at customer interface were further developed by dedicating persons to limited amount of customers. The engineering way to operate was clarified by forming engineering centres to boost the development of engineering excellency and creation of value adding solutions for the customers. At the beginning of 2010 the business units were restructured in accordance with the new operational structure, which is lean and flexible ensuring operational speed and personal responsibility, with a strong focus on results.

### Clear roles and responsibilities with target setting

The recognition of clear roles and responsibilities, coupled with specific target setting at an individual level, are regarded as critical factors in achieving outstanding performance. The job descriptions and main tasks for individual positions are reviewed once a year in target setting and development discussions, and must always be reviewed when making appointments, to ensure mutual understanding of the core responsibilities of a position.

Assessment of past performance is in the form of an open dialogue based on mutual trust and a willingness to progress. The target is that the manager receives feedback about his leadership capabilities and work as a manager from the team member.

Work to improve the practices relating to evaluation and target setting discussions at all levels in the organisation continued in 2009 based on the findings of the Componenta Climate Survey. One of the main findings was that persons who participate in an evaluation and target setting discussion with their manager are the most committed and motivated employees. All white collar employees are in-



involved in the development discussion process and production supervisors will join the process in 2010.

### Competitive compensation

Our salary and compensation systems are fair, consistent and comprehensible, and competitive. Systems for evaluating positions and compensation are in place for both blue and white collar workers. These systems comprise descriptions of roles and responsibilities and the differentiating factors between them, externally benchmarked or determined salary structures, and specifications for incorporating individual competences and experience in the salary.

The salary and compensation review process takes place annually. The principles for annual salary adjustments and merit increases and their size are agreed at the beginning of this process, based on an understanding of the competitiveness of the salaries, contractual salary increases, and recommendations from national organizations for inflation adjustments or other economic factors. Each manager is

responsible, within the framework of the company policy and process, for proposing the remuneration for their subordinates, taking into account the local market, area of responsibility, individual performance, skills and potential for development.

However, when setting the level for merit increases and evaluating the overall effect on salaries at company level, one of the most critical factors is Componenta's capacity to improve its productivity and performance in competitive markets.

In 2009, when the Group was carrying out measures to reduce costs and other adjustments. As a general rule salaries were not increased. The only exceptions were increases based on contractual obligations.

### Sharing company success

In addition to the base salary, Componenta recognizes that fringe benefits, performance based incentives and other secondary benefits are compensation instruments for positions where these form a critical element in the compensation package for corresponding benchmark positions, within a country or group.

The company has short- and long-term incentive systems for management and key employee positions. The reward from short-term incentive schemes is based on meeting financial and individual targets set for the year, while the reward from long-term incentive schemes is based on the long-term financial performance of the company.

The pay of production employees is linked to performance at all Componenta units, using different methods in accordance with local collective agreements. The process entails regular appraisal sessions between superior and employee.

The personnel at Componenta's production units are entitled to a bonus linked to developments in productivity. In the Netherlands, Componenta B.V. has a profit sharing scheme in which all employees participate, where bonuses depend on the profitability of invested capital. In 2009 the company agreed with the Dutch Works Coun-

cil to convert the profit sharing and bonus allowance for employees into holiday leave.

### Recognition of commitment

The company also realizes that, however important remuneration is for each employee, it is not compensation on its own that will motivate personnel.

Non-monetary rewards include awards for years of service and for outstanding performance. The Group gave awards for outstanding performance for the first time in 2009, based on meeting the short-term targets for the year. Prizes were given for excellent performance in new sales and in reducing working capital, with additional awards for the most cost efficient business unit and the project making the best progress. The Group will continue to give awards for outstanding performance in 2010.

As a general rule, the benefits given to full-time employees are also given to temporary and part-time employees. Legislation in Sweden and in Finland does not permit companies to give benefits only to full-time employees.

In Turkey as well, there is no difference based on the form of employment in the benefits employees receive. In the Netherlands, however, only full-time employees receive certain additional benefits relating to compensation, insurance and healthcare.



## The power of consultation



A works council is a cooperation body within a company and it has the task of promoting the interests of both the company and its employees. In the Netherlands, a works council is compulsory for any company that employs more than 50 people.

At Componenta B.V., the Works Council has 13 members. The Council mirrors the work floor where competent and dedicated people work, and its members represent different sectors. For the management it is of great importance that the representatives know what goes on at the work floor, but also carry out the necessary measures.

The Works Council normally meets six times a year, but in 2009 the Council has been consulted far more often, due to the economic crisis. According to the company and the employee representatives, the atmosphere at Council meetings has always been cordial, and both parties have aimed at a constructive and open (but no less critical) exchange of ideas. The difficult task was to negotiate the measures needed to make the consequences of the crisis as acceptable as possible to both the company and the employees.

After the initial confusion and disbelief at the intensity and scope of the recession - "Is this really happening to us?" - ,the par-

ties recovered their composure. The Works Council and management had to make some tough decisions together regarding reductions in working hours and contract workers. Emotions tended to dominate as the proposed adaptation measures affected employees in many ways.

"During the past year we have shown a great deal of flexibility," say **Etienne Cordeel** and **Wim Senden**, secretary and chairman of the Works Council. "Our aim was to pay careful attention to each new proposal, to question the sense of actions, to cooperate, to search for new solutions – sometimes finding something, sometimes not– but above all to listen to all parties, the management and those we represent."

"Looking back we can see that we have taken the right measures, enabling us to limit the damage to our company and preserve maximum employment for our employees," says **Patrick Steensels**, Senior Vice President, Operations, the Netherlands. "The past year has shown us that especially in times of crisis, the cooperation between the Works Council and management is necessary for decisive action."

# Learning throughout career

*Continuous development of expertise – in-house for specific areas of competence throughout career – is decisive for Componenta's success. All Componenta team members, regardless of their position, should be conscious of the need to upgrade continuously their skills and knowledge.*

## ESSENTIAL ABOUT SKILLS DEVELOPMENT

Taking into consideration the challenges of our industrial sector and further increasing competition, one of the key issues in the future will be to the speed of development of skills and capabilities to be competitive and meet demanding needs of customers.

One Componenta way of working and development of corporate wide common processes strengthen the global mindset of our key personnel needed when cooperating with global customers.

Learning is part of the Componenta's culture. We are open to new ideas and to change, and are willing to develop.

To safeguard the development of critical skills and knowledge across the company, Componenta has development processes and it organizes formal training and development sessions for crucial areas of competence. It is the responsibility of each manager to be aware of the skills and knowledge needed in each position, to analyze and openly discuss with their team members the training needs and their career expectations, and to create learning opportunities.

## Boosting skills needed on the job

During 2009 we focused on developing the skills and knowledge related to production technologies and the foundry process, aiming to ensure the development of multi-skilled employees. Training was organized in all countries as part of the adaptation measures and in some cases it was held during the temporary lay-offs on a voluntary basis. Participation in the training programmes was extremely high. For example at Componenta Pietarsaari in Finland, participation in the programme by foundry employees was 100%. The topics covered by the programme included foundry process, customer service, quality, safety and first aid, and wellbeing at work.

In Finland we continued our own training programme VALAJAT (Founders) that leads to a vocational diploma in foundry work. In Sweden Componenta applied for and received monetary support from the European Social Fund (ESF) to finance education for maintaining the employability of employees.

In addition to professional training, in the Netherlands a special focus was on wellbeing and life balance coaching. Those entering retirement were given coaching to help them understand the changes they face in their lives; the issues discussed were related to the physical, mental, relational, financial and judicial changes in their lives. In the area of safety, altogether 150 employees from the maintenance, quality, engineering and production departments participated in theoretical and practical training towards a nationally recognized diploma in safety (VAPRO).





Training in Turkey has been related to quality ,total productive maintenance (TPM), fire and fire defence, truck certificate, product development for new projects, and various on-the-job training for newcomers.

### Beyond today's strengths

To the highest possible compatibility between the skills, knowledge, attributes and behaviours of employees and future competitiveness, we started competency definition discussions and related gap analysis in the areas of leadership, sales and engineering in 2009. Closely aligned with the Group's strategy and way of operating, mutually agreed strategic and functional competencies will have a critical importance when enhancing performance, making selection and career rotation decisions, and developing personnel. The work will be finalized at the beginning of 2010.

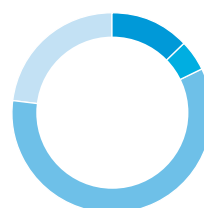
Changes in the business environment continuously challenge the performance of our managers and leaders and their capabilities to lead. Componenta's Group level management program, Componenta Core, provides viewpoints, theory, world class thinking and a discussion platform for 30 key employees each year to grow in and into their roles as manager and leader. Integrated with business operations, the program has shown its value in the form of value-adding group works and by providing a springboard for cross-functional and cross-border team work and the One Componenta culture.

The development of management teams also continued in 2009, giving participants an understanding of group dynamics, of their own role and strengths, and of areas needing development as a team member and as individuals. Componenta Conduct, the management team development process, also created unified processes and practices for management team work across the Group.

Componenta Compact, the first level management program, is coordinated by each country separately, and aims to provide participants with leadership skills. In Finland, Compact has been realized

in form of tailored apprenticeship in cooperation with Finnish training company. One to two supervisors from each production unit in Finland took part in this program, which consisted of joint contact teaching, concentrating on leadership and management topics in production, as well as on-the-job learning in their own unit, guided by a mentor. At the end of the program, participants received a specialist vocational qualification in technology.

### EDUCATIONAL BACKGROUND



- University degree 13% (12%)
- Polytechnic or college degree 5% (4%)
- High school or vocational school 59% (58%)
- Basic education 23% (25%)

# Health and safety go hand in hand

*At Componenta, the safety and health of employees are linked together. Employees are expected and encouraged to care for their own health and safety and for that of their colleagues, while the company provides a safe and healthy workplace for its employees. Employer and employees work together through the health and safety committees at the business units and through Group-level project to improve health and safety. Each employee is responsible for following the safety rules and practices, and should care not only for his/her own safety and wellbeing but also for that of their colleagues.*

## ESSENTIAL ABOUT SAFETY AND WELLBEING

Componenta provides a working environment that protects the health and welfare of employees in accordance with standards of safety. Our own employees are covered by the company's occupational healthcare services. The same practise is required from the personnel leasing companies.

Pro-activeness in safety and wellbeing combined with closely following up related key performance indicators in daily management ensure that our employees are able to work in a safe and supportive environment.

Employees are encouraged to look after their wellbeing in various ways, and the company supports the wellbeing activities of its employees. Social events are organized to increase team spirit and motivation. Suggestions for improvement are welcome and will be given serious consideration.

## Making a safe workplace

At Componenta, pro-activeness is considered a prerequisite for ensuring safety and wellbeing. Our Turkish units are certified according to OHSAS 18001, the Occupational Health and Safety management System, helping to manage occupational health and safety risks in a systematic manner, and carry out risk analyses and tasks related to any work accidents. During the year all Componenta business units continued to make regular risk analyses to avoid accidents. In 2009 the number of accidents resulting in absenteeism or sick leave decreased by 56% (in 2008 the decrease was 6%), in parallel with the reduction in working hours.

All the business units continuously monitor and improve employee safety in accordance with the terms of their certification. The Turkish business units arranged regular health and safety training for all employees, every three to six months in 2009. In Sweden safety tours of the plants are made four times a year and all employees received instruction in how to report near accidents so as to learn from these and prevent possible accidents from re-occurring. In the Netherlands a project to improve safety awareness that started in 2008 continued in 2009.

Safety and health related issues at the workplace are regularly discussed by the safety committees, which have both employer and



employee representatives. The committees meet regularly, and additional meetings can be called quickly if needed, to analyse work accidents, close calls and risks that have occurred, to determine safety plans for individual units including action to improve safety instructions, training or technical measures. In the Dutch units in 2009, the work of the safety committees focused mostly on reducing exposure to carbon monoxide and silica dust, and included technical measures and medical examinations for employees.

### Occupational health

Employees are covered by occupational healthcare in all Componenta countries, and pro-activeness forms a cornerstone in occupational health care plans. Regular physical examinations were conducted in 2009, either by external healthcare providers or by the company's own doctors. In Turkey, for example, physical examinations are conducted on a yearly basis and they include hearing, sight and X-ray tests.

The company also looks after the health and safety of employees through various forms of insurance, including health, business travel and accident insurance. The insurance cover provided varies slightly in accordance with local legislation in each country.

Componenta units have utilized the results of the personnel satisfaction survey to ensure and improve the wellbeing of their employees. They offer activities to support physical and mental fitness ranging from support for various sporting activities to family gatherings.

In Finland, we have prepared a comprehensive review of the current situation in the occupational health care and its service provides. Actions will follow in 2010. The aim of the occupational health care at Componenta is to support on high quality the prevention and maintenance of the personnel's ability to work and wellbeing throughout their career, and thus to decrease absenteeism due to sickness and prolong careers.



### Greater safety awareness

In 2008 Componenta started a project in the Netherlands to reduce the number of accidents. In 2009 the focus was on improving safety awareness through education. In charge of the project was **Johan Mackus**, who is responsible for environment and safety related matters in the Dutch foundries.

The project started with internal training for all employees on safety and environmental issues, such as legal requirements, hazardous goods and catastrophes. An external course in safety was also arranged for supervisors and maintenance personnel. The course involved several assignments and a theoretical exam, and at the end of the programme the participants received a national certificate.

The Dutch units employ people from different nationalities. "They often do not have a good knowledge of the Dutch language, and difficulties in communication have been identified as one of the main causes of accidents," states Johan Mackus. Componenta has created video instruction material on safety and the environment in three languages, to ensure that employees receive the necessary instructions in a language they understand.



# Discrimination is not tolerated

*Componenta complies with and respects local labour laws and contractual agreements. International agreements on human rights and equality are integrated into the Group's policies and way to operate. Therefore no discrimination for reason of origin, nationality, religion, race, gender or age is tolerated. These principles are to be respected everywhere and under all circumstances. In 2009 there were no reported incidents of discrimination at any Componenta units.*

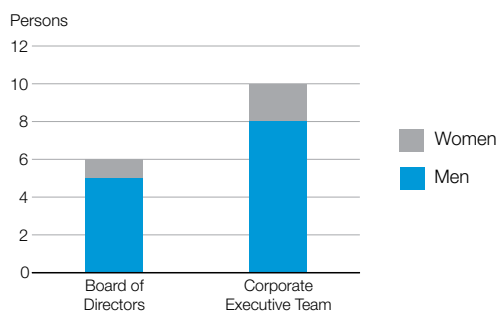
Componenta monitors compliance with related legislation and its own principles. All employment issues such as the selection of new employees, compensation, promotion etc. are based solely on performance and capacities. No consideration is given to a candidate's origin, nationality, religion, race, gender or age.

These non-discrimination principles are highlighted in equality plans that are drawn up locally. For example, in 2009 an equality day was held at the Främmestad machine shop. One outcome from this day is that an updated equality plan will be implemented in 2010. Training in equality and human rights issues was also organized in Främmestad in 2009.

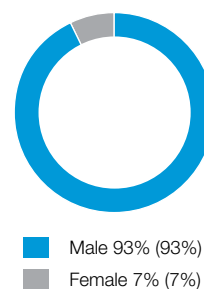
Just as Componenta does not tolerate any discrimination based on an employee's origin, nationality, religion, race, gender or age, so the Group does not accept or use compulsory or forced labour. Componenta operates in countries where issues relating to human rights and equality as well as to forced and compulsory labour are mostly well covered by local legislation, and the Group's policies augment national legislation to ensure that these issues are handled to the same standard at all units.

Componenta respects its employees' freedom of association and the right to collective bargaining. 100% of the personnel in Finland, Sweden and the Netherlands are covered by collective bargaining schemes. In Turkey, where white-collar employees are not included in collective bargaining agreements, these agreements cover 87% of the personnel.

MEN AND WOMEN ON MANAGEMENT BOARD 2009



GENDER DISTRIBUTION



## Everyone returned to work after employment training in Pietarsaari

In 2009 Componenta Pietarsaari, in cooperation with the Centre for Economic Development, Transport and the Environment and the Central Ostrobothnia Adult Education Centre, arranged training for its employees during their lay-offs. The target group was the company's 150 foundry workers, and they were each offered 10 days' training.

The reasons behind this training were not only the need to adapt our operations, but also the growing need for competencies and diverse skills. The personnel were involved in planning the courses. The training was planned for six different groups, and the topics covered included health and safety at work, first aid, customer service, quality and coping with the workload, in addition to training in vocational skills.

All of those who participated in the training found employment afterwards. Nearly all were employed by Componenta, and only two moved to another employer. The new competencies and better grasp of wider issues given by the training have clearly improved the ability and the desire of employees to develop matters constructively. The participants gave the training a good grade.

This tailored training and its success has aroused quite a bit of interest, especially in Western Finland. Many companies and schools



inquired about our employment training, and training has been presented for example at a seminar arranged by the Centre for Economic Development, Transport and the Environment in April.

## Wide-ranging employment training in the Netherlands

During the shortened working time and temporary lay-offs in the Netherlands, we provided extensive training for our people.

"We started with individual interviews with all employees, where we filled in a form for use as an instrument to identify the kind of training needed," explains **Theo Hendrikx**. "After that we drew up a training plan for the whole company."

The courses included leadership for middle management, language courses in Dutch, English and German, first aid, foundry technology and internal technical courses (how to make a core or a mould). Other topics included IT and finance, ergonomics, issues related to wellbeing and labour law, safety for operators in the industry (VAPRO) as well as courses on SAP, Word and Excel.

The VAPRO safety in the industry course was a new one for the organization. In total 150 employees from the maintenance, quality, engineering and production departments participated in the training over an eight month period. The course aims to increase safety awareness and reduce accidents in the company. The training consisted of two parts, one theoretical and the other practical, with many assignments. Participants also carried out practical activities relating to the working conditions in the foundry. At the end of the course the participants received a nationally recognized diploma.

The labour union monitors the implementation and success of the education plans. "All in all our employees were positive about



the training efforts, although some of them found it difficult. The VAPRO course especially was not easy," says Theo Hendrikx.

The part-time lay off scheme ends in May 2010, and employees return to work full-time.

## ”Plenty of variety and much to learn”



”I graduated as an engineer in 1999 and went to work as foreman for machining gear housings at a new industrial drive factory in Karkkila. It was my first permanent job and the first step in a career that has offered plenty of variety. My job description included everything possible, from purchasing to developing procedures and the work of a foreman. I also continued my studies at the Helsinki University of Technology (HUT) to upgrade to a master’s degree in engineering.

A couple of years later the factory was sold, and I transferred to Componenta’s new customer product centre in Helsinki. My job involved calculating tenders for machining and developing these systems, forming the operating procedures, going round our machine shops in Finland and Sweden and providing technical support for sales. By far the best aspect of this job was working daily with the Group’s casting and machining experts. I learnt more in just a few years about machining and casting engineering than I ever did in school!

After I completed my master’s degree and Componenta purchased the De Globe foundries in the Netherlands in 2004, I joined the integration team, where my job was to form a separate business unit from the machining sub-contracting network in western Europe. The Dutch are a very open and friendly people, and I managed to adapt to new country and surroundings without any real problems. My work included travelling almost weekly to visit subcontractors and customers in western Europe, and the biggest lessons I learnt were in international cooperation between different cultures. At the same time I continued my studies on a further qualification at HUT’s commercial law department.

After a couple of years in the Netherlands, it was time to return to Finland where I became Business Unit Director of the Pori and

Nisamo machine shops. My first job was to integrate the units, after which we were in the midst of the biggest boom in the history of the market, and running the unit was largely a question of managing capacity. I enjoyed my time at Nisamo: everyone in the small unit knew everyone else there, and since the unit sells highly specialized machining expertise, as Business Unit Director I was also much involved in sales activities. After two years or so the integration was completed, and so was the work for my licentiate’s degree. For my thesis I studied the contractual risks in Componenta’s sales and sourcing contracts.

After this I spent almost a year seeing how things look from the customer’s viewpoint. I rejoined the Group at the beginning of 2009, first on the internal sourcing team and then as Development Director, Machine shops. I was also appointed Business Unit Director of the Främmestad machine shop, so I spend my weeks in Sweden. You can’t help enjoying the positive, relaxed way of working and living of the Swedes! My most important task is to help Främmestad survive the worst slump in its history. This has also been an excellent place to find out what daily collaboration with the customer is like, as the major truck manufacturers have very systematic methods for assessing the processes of suppliers and their delivery capabilities, and these also force the supplier to continuous development.

While continuing as director of the Främmestad machine shop, another new phase is opening up in my career path as I started as Vice President, Machining technology development and member of the Group’s extended corporate executive team in February 2010. Broadly speaking, as Group’s machining expert I help prepare the Group’s machining investments and production strategies. Time will show what else my job actually involves, but I am sure it will provide plenty of variety and much to learn, as there has been so far”, tells VP, Machining Technology Development, and member of the Extended Corporate Executive Team **Juha Alhonoja**.

## Making Componenta better known at career fairs



Componenta attends regularly careers fairs at universities and colleges in Turkey, Finland, the Netherlands, Sweden and Belgium to meet students of technology and economics. Even in the economic recession it is important to maintain and promote employer image for future professionals.

In November 2009 Componenta attended career fair at Middle East Technical University in Ankara, Turkey. ”The students were very interested in our company and asked many questions to learn about Componenta and our career opportunities”, tells HR Manager **Evren Çeşmeci**. ”Some of them had already heard about our International Traineeship Program from their friends and seemed very eager to join next time.”

”We believe that these kinds of recruitment events are very useful for us, as we are able to introduce our name, to increase the awareness about us among the students, social institutions and, from HR point of view, especially among the young potentials.”

## Job rotation along component supply chain

Engineering capabilities are of strategic importance to Componenta. The company's goal is to have its own experts involved in customer product development projects right from the start. The Group has reinforced its engineering organization and built up its engineering know-how during 2009. One way to achieve this is job rotation, and Production Engineer **Lasse Modenius** is one of those involved in this.

"The aim is to progress from being a production engineer, first becoming a process engineer and finally an advanced engineer, developing wide-ranging competencies in both the casting and the machining processes," says Lasse. "For me, the first step is to familiarize myself with production at the Karkkila foundry, with a very hands-on approach. So far, I have been placing cores, working on the moulding line and mixing sand. Learning by doing is a very effective method for an engineer, since decisions made in the engineering phase have an impact on production in many ways. While working on the production line, you come face-to-face with engineering decisions, and it is easy to notice good solutions. In the best case, you also get ideas about other, possibly better ways to do things."

In addition to on-the-job learning, Lasse is monitoring the efficiency of production and looking for ways to make further improvements. After the summer, Lasse will start to focus on solving problems related to products already in production and on reducing the number of rejects. After the new year the plan is for Lasse to move on to the next stage in the component supply chain and start working in one of the Group's machine shops.



"The objective is to obtain a good overall picture of the whole casting and machining process from an engineering point of view, so that in future I will have enough information to present to customers in meetings, instead of having to say: 'I don't know for sure but will find out'," says Lasse. "We can then create added value for customers and at the same time improve our own operations by taking production related aspects into account already in the engineering phase. Rationalizing operations right from the engineering process can give major cost savings in production, if we do everything right from the very beginning."

Lasse first came to Componenta in the first International Traineeship Program 2008 – 2009, when he worked at two engineering centres, in Helsinki and in Orhangazi.

## "Exchange part was very interesting"



**Atacan Ergin** from Turkey is one of the trainees who participated in Componenta's first International Traineeship Program in 2008 - 2009. He was very eager to work in a casting company, since his major in metallurgical and material engineering is related to this sector. "These kind of programs are not held very frequently, and I was very interested in the exchange part," says Atacan. "The company had locations not only in Finland and Sweden - and I was already interested in the Northern cultures and countries - but also in Turkey! That was a really nice coincidence for me."

Atacan spent the first summer of his traineeship in Orhangazi, Turkey in product development and the second summer in Karkkila, Finland in production development and quality tasks. The cultural differences and language barrier posed some challenges for Atacan: "Although colleagues in the office speak English, my job involved working with people on the shop floor, where English is

rarely spoken. So I wanted to learn some Finnish, and anyway, I was interested in the Finnish language even before this." After working with colleagues in both Finland and Turkey, he feels that Finns and Turks could learn a lot from each other.

"I obtained some valuable input for my bachelor thesis from Componenta," says Atacan, "and after I finished my bachelor degree, I wanted to continue with a master program, preferably in Sweden or Finland." After the program, Atacan has studied at Kungliga Tekniska Högskolan in Stockholm and was able to learn some Swedish. In the autumn of 2010 he will start his studies for a master's degree in engineering at Tampere University of Technology and will move to Tampere, Finland.

During summer 2010, Atacan will work at Componenta Pietarsaari. He is involved in two projects, one for transferring products from Pietarsaari to Orhangazi and the other for developing the melting practice at the Pietarsaari foundry. Pietarsaari is starting to focus on new products, and this also increases the need for the specific grades of iron required. This in turn means that the use of the melting furnaces and the whole melting process has to be improved, while ensuring that the production of existing products continues with the same quality as before. "I would like to be as useful as I can in these projects and gain more experience," says Atacan, "and in the future I'm hoping to do more for Componenta as well as trying to learn more Finnish and Swedish."

# GRI CONTENT INDEX

CODE	GRI STANDARD DISCLOSURE ITEMS	PERFORMANCE INDICATOR	EXTENT OF REPORTING	CONTENT AND PAGE IN THE REPORT	COMMENTS
<b>1. Strategy and Analysis</b>					
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1.2	Description of key impacts, risks, and opportunities		Disclosed	Sustainability at Componenta, p. 6-7 Componenta's business operations and business environment, p. 4-5 Most important achievements and main projects in 2009, p. 15	
<b>2. Organizational Profile</b>					
2.1-2.10	Organizational Profile		Disclosed	Componenta in brief, p. 2-3 Awards, p. 41	
<b>3. Report Parameters</b>					
3.1-3.11; 3.13	Report Profile and Reporting Principles		Disclosed	Reporting principles, inside front and back covers	
3.12	GRI Content Index		Disclosed	GRI content index, p. 62-65	
<b>4. Governance, Commitments &amp; Engagement</b>					
<b>Governance</b>					
4.1-4.10	Governance		Disclosed	Componenta in brief; Administration and management, p. 3	More details of the company's corporate governance in the Annual Report 2009; Corporate Governance Statement, p. 24-27
<b>Commitments to External Initiatives</b>					
4.11	Precautionary approach		Disclosed	Responsibility for component's environmental impacts during its life cycle, p. 12-14	
4.12	External charters		Disclosed	Energy efficiency agreements, p. 40	Industry initiatives to improve energy efficiency of foundries in Finland and the Netherlands
4.13	Memberships in associations		Disclosed	Stakeholder analysis; Society, authorities and surrounding areas, p. 11	Componenta is a member in many organizations related to its business
<b>Stakeholder Engagement</b>					
4.14.-4.17	Stakeholder Engagement		Disclosed	Stakeholder analysis, p. 8-11	
<b>5. Disclosure on Management Approach and Performance Indicators</b>					
<b>Economic Responsibility</b>					
	Management Approach		Disclosed	Componenta in brief; Administration and management, Risk management, p. 3 Sustainability p. 6	
<b>Economic performance</b>					
EC1	Economic value generated and distributed	CORE	Disclosed	Added value to stakeholders, p. 20	
EC3	Coverage of the organization's defined benefit plan obligations	CORE	Disclosed	Financial Statement 2009; <a href="http://www.componenta.com/reports">http://www.componenta.com/reports</a>	Described in the Notes to the Consolidated Financial Statements, Note 26 Pension obligations, p. 50
EC4	Significant financial assistance received from government	CORE	Disclosed	Contributions, p. 18-19	
<b>Environmental Responsibility</b>					
	Management Approach		Disclosed	Sustainability at Componenta, p. 6-7 Environmental responsibility, p. 23 Environmental management systems and permits, p. 26-27	



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	Performance Indicators:				
	<b>Materials</b>				
EN1	Materials used by weight or volume	CORE	Disclosed	Use of raw materials, p. 30 Environmental balance sheet, p. 31	
EN2	Percentage of materials used that are recycled input materials	CORE	Disclosed	Use of raw materials, p. 30 Environmental balance sheet, p. 31	
	<b>Energy</b>				
EN3	Direct energy consumption by primary energy source	CORE	Disclosed	Energy consumption, p. 32-33 Environmental balance sheet, p. 31	
EN4	Indirect energy consumption by primary source	CORE	Disclosed	Energy consumption, p. 32-33 Environmental balance sheet, p. 31	
EN6	Initiatives to provide energy-efficient products and services	ADD	Disclosed	Responsibility for component's environmental impacts during its lifecycle, p. 12-13	
EN7	Initiatives to reduce indirect energy consumption and reductions achieved	ADD	Disclosed partially	Aiming at 9% energy savings 2008-2016, p. 40	Energy efficiency initiatives described
	<b>Water</b>				
EN8	Total water withdrawal by source	CORE	Disclosed	Environmental balance sheet, p. 31	
	<b>Emissions, Effluents and Waste</b>				
EN16	Total direct and indirect greenhouse gas emissions	CORE	Disclosed partially	Emissions, p. 35	Carbon dioxide emissions are not regarded as one of the most significant environmental aspect compared to the other environmental aspects of production
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved	CORE	Disclosed partially	Responsibility for component's environmental impacts during its lifecycle, p. 12-13	
EN20	Significant emissions to air	CORE	Disclosed	Emissions, p. 34-35 Environmental balance sheet, p. 31	Particle emissions and VOC emissions
EN21	Total weight of waste by type and disposal method	CORE	Disclosed	Waste and recycling, p. 36-37 Environmental balance sheet, p. 31	
EN22	Total weight of waste by type and disposal method	CORE	Disclosed	Waste and recycling, p. 36-37 Environmental balance sheet, p. 31	
EN23	Total number and volume of significant spills	CORE	Disclosed	Environmental risks, p. 28	
	<b>Products and Services</b>				
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation	CORE	Disclosed	Responsibility for component's environmental impacts during its life cycle, p. 12-13	Cases p. 14
	<b>Compliance</b>				
EN28	Fines and sanctions for non-compliance with environmental laws and regulations	CORE	Disclosed	Environmental management and permits, p. 27 Environmental risks, p. 28	
	<b>Transport</b>				
EN29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce	ADD	Disclosed	Responsibility for component's environmental impacts during its lifecycle, p. 13	
	<b>Overall</b>				
EN30	Total environmental protection expenditures and investments by type	ADD	Disclosed	Environmental costs and investments, p. 29	

# GRI CONTENT INDEX

CODE	GRI STANDARD DISCLOSURE ITEMS	PERFORMANCE INDICATOR	EXTENT OF REPORTING	CONTENT AND PAGE IN THE REPORT	COMMENTS
<b>Social Responsibility</b>					
<b>Labor Practices &amp; Decent Work</b>					
	Management Approach		Disclosed	Sustainability at Componenta, p. 6-7 Social responsibility, p. 43-45	
	Performance Indicators:				
<b>Employment</b>					
LA1	Total workforce by employment type, employment contract, and region	CORE	Disclosed	Social responsibility, p. 43-45	
LA2	Total number and rate of employee turnover by age group, gender, and region	CORE	Disclosed	Social responsibility, p. 44-45; 47	
LA3	Benefits provided to full-time employee that are not provided to temporary or part-time employees	ADD	Disclosed	Performance and pay, p. 52	Benefits for full-time employees are also given to temporary and part-time employees
<b>Labor/Management Relations</b>					
LA4	Percentage of employees covered by collective bargaining agreements	CORE	Disclosed	Equality and human rights, p.58	
<b>Occupational Health and Safety</b>					
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	Disclosed	Safety and wellbeing, p. 56-57	
LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region	CORE	Disclosed	Social responsibility, p. 43 Safety and wellbeing, p. 56-57	
LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases	CORE	Disclosed partially	Safety and wellbeing, p. 56-57	Occupational health care procedures described
LA9	Health and safety topics covered in formal agreements with trade unions	ADD	Disclosed	Safety and wellbeing, p. 56-57	
<b>Training and Education</b>					
LA10	Average training hours per employee	CORE	Disclosed partially	Skills and development, p. 54-55	Trainings and programs described
LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	ADD	Disclosed	Skills and development, p. 54-55 Resource planning and management, p. 48-49	Case, p. 58
LA12	Percentage of employees receiving regular performance and career development reviews	ADD	Disclosed	Resource planning and management, p. 48 Performance and pay, p. 51-52	
<b>Diversity and Equal Opportunity</b>					
LA13	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity	CORE	Disclosed	Equality and human rights, p. 58	

CODE	GRI STANDARD DISCLOSURE ITEMS	PERFORMANCE INDICATOR	EXTENT OF REPORTING	CONTENT AND PAGE IN THE REPORT	COMMENTS
<b>Human Rights</b>					
	Management Approach		Disclosed	Stakeholder analysis; Suppliers and subcontractors, p. 10-11 Social responsibility, p. 43 Equality and human rights, p. 58	
	Performance Indicators:				
<b>Investment and Procurement Practices</b>					
HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken	CORE	Disclosed partially	Stakeholder analysis: Suppliers and subcontractors, p. 10-11	Group purchasing policy and Code of conduct for purchasing Supplier requirements described
<b>Diversity and Equal Opportunity</b>					
HR4	Total number of incidents of discrimination and actions taken	CORE	Disclosed	Social responsibility, p. 45 Equality and human rights, p. 58	
HR7	Measures to eliminate forced or compulsory labour	CORE	Disclosed partially	Equality and human rights, p. 58	Group policies described
<b>Society</b>					
	Management Approach		Disclosed	Stakeholder analysis; Suppliers and subcontractors, p. 10-11	
	Performance Indicators:				
<b>Community</b>					
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	Disclosed partially	Contributions, p. 18	Donations and sponsoring
<b>Corruption</b>					
SO2	Business units analysed for risks related to corruption	CORE	Disclosed	Stakeholder analysis: Suppliers and subcontractors, p. 10-11	Group purchasing policy and Code of conduct for purchasing personnel
SO3	Anticorruption policies and procedures	CORE	Disclosed partially	Stakeholder analysis: Suppliers and subcontractors, p. 10-11	Group purchasing policy and Code of conduct for purchasing personnel
SO4	Actions taken in response to incidents of corruption	ADD	Disclosed	Stakeholder analysis: Suppliers and subcontractors, p. 10-11	
<b>Product responsibility</b>					
	Management Approach		Disclosed	Responsibility for component's environmental impacts during its lifecycle, p. 12-13	
	Performance Indicators:				
<b>Customer Health and Safety</b>					
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	Disclosed	Responsibility for component's environmental impacts during its lifecycle, p. 12-13	Case studies, p. 39-40



### Independent third-party check of GRI Guidelines Application Level

A third-party GRI Application Level check conducted by a corporate responsibility specialist, Tofuture Oy has confirmed Componenta's self-declaration that the Sustainability Report 2009 meets the requirements for GRI's Application Level B. Adherence to GRI indicators is illustrated and explained by a GRI index in pages 62-65.

## 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.

### Automatic moulding

A moulding system controlled by machine. An automatic moulding line 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.

### CNC machine

Computerized numerically controlled machine.

### 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 hand (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.

### **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).

### **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.

## CONTACTS

The economic, environmental and social responsibility issues in this Sustainability Report are supplemented by the information published in our Annual Report 2009 and on our website at [www.componenta.com](http://www.componenta.com).

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