COMPONENTA







Heikki Lehtonen President and CFO

Environmental action has an overall impact in many different ways

Componenta's business is supplying components and total solutions made up from these. We create added value for customers by designing with them a product that they need. We make an effective (cast) solution for the future today – we are Casting Future Solutions. Our goal is to be a preferred partner of our customers, which requires continuous development in all areas of our operations. At the same time we take into account the expectations of all our stakeholders, requiring economic, social and environmental responsibility in our operations. The Group's values form the basis for responsible operations.

In accordance with our environmental policy, we are committed to the continuous improvement of our operations and through this to reduce the environmental impact of our production processes. Taking into account the environmental impact starts right

in the design stage for products. Effective design can reduce the amount of material used and result in a product that is easier to manufacture and requires fewer work stages. Careful design can also affect the use of a product and its ease of maintenance.

The raw material for the cast components is 80% recycled material. The most important auxiliary material is sand, which is recycled many times in the process before it ends up for reuse or as waste. A large part of the spent sand from the Group's foundries is used in Finland as covering and structural material at land-fill sites and in the Netherlands all the spent sand is utilized, for example in concrete structures.

Dust and noise emissions from our production units declined significantly during 2004. At the modernized foundry in Karkkila these emissions have been cut to just a fraction of their previous levels. Noise emis-

sions at the Globe foundries have decreased so much that they can also operate at night.

All Componenta's production units have environmental management systems conforming to ISO 14001 standards, apart from three of the Group's machine shops and the Globe foundries, where construction of a system is underway. At the same time we are upgrading Globe's quality system to bring it in line with the requirements of the automotive industry's ISO/TS 16949 stand-

Environmental action continues at Componenta in accordance with the goals of the environmental policy. By taking into account the environmental impact, we are responding to the expectations of our stakeholders, and at the same time raising the efficiency of our operations and ensuring that we remain competitive in a challenging market.

This is Componenta's second environmental report and it brings together information about production volumes at the Group's foundries, machine shops and forges in Finland, the Netherlands and Sweden, and about the raw materials used to make the products and the emissions and waste from production in 2002, 2003 and 2004.

The figures for the foundries of the Dutch company De Globe, which was acquired in March 2004, are only given for 2004.

The figures in the report have been obtained as a rule in accordance with the general instructions given in the Finnish Accounting Act for recording environmental issues. The figures given are unaudited.

The environmental report is published in Finnish and English. In addition to the Internet report there is also a printable pdf version.

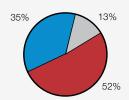
Componenta monitors and reports on the environmental impact of its operations regularly and publishes the figures once a year in the environmental report. The next report will be published in spring 2006.

Contents

Environmental action has an overall impact in many different ways
Componenta in brief4
Indicators of economic responsibility
Corporate strategy5
Environmental and quality policy5
Componenta's production operations and the environmental load it imposes6
Environmental costs7
Energy consumption7
Energy analysis as part of production planning8
Use of raw materials9
Dust and VOC emissions9
Noise
Waste and recycling11
Wastewater12
Transport
Packaging
High-risk situations
Stakeholders13
Environmental permits
Environment management systems14
Glossarv of this report

Componenta in brief

Sales by business group

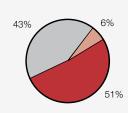


Cast and Other Components

De Globe

■ Other Business

Sales by market area



Nordic Countries

☐ Other European Countries

Other Countries

Indicators of economic responsibility

MEUR	2002	2003	IRFS 2004
Net sales	180.8	177.8	316.0
Operating profit	7.0	0.1	25.7
Operating profit excluding one-time items	2.8	8.1	12.5
Financial income and expenses	-9.1	-7.6	-7.9
Result after financial items	-2.1	-7.5	17.9
Result after financial items excluding one-time items	-6.3	0.5	4.6
Result for the financial year	1.0	-4.5	15.6
Earnings per share (EUR)	0.11	-0.47	1.62
Dividend per share (EUR)	0.10	0.00	0.50
Order book 31 Dec.	24.9	25.1	59.2
Share of exports and foreign activities, %	72.0	71.0	81.4
Net interest bearing debt, preferred capital note in debt	145	125	142
Net interest bearing debt, preferred capital note in equity	117	99	118
Equity ratio, %	18.2	17.8	20.6
Equity ratio, % preferred capital note in equity	31.4	31.1	29.5
Wages and salaries	50.0	47.5	72.1
Personnel 31 Dec.	1,616	1,565	2,213
Investments in non-current assets	9.8	1.6	35.1

Componenta is a metal sector group of companies with international operations. Componenta supplies cast, machined and surface-treated, ready-to-install components and total solutions made up from these to its customers, who are companies in the heavy truck, machine building and off-road, and power and transmission industries. Many of these customers operate in global markets and the components supplied by Componenta are often strategic parts of their products.

A third of the Group's sales are in Scandinavia, 40% in Central Europe, 20% in Finland and the rest in other countries, of which the USA is the largest single country.

Componenta generates added value for its customers through close R&D partnership. Componenta's customer service has been concentrated in Customer Product Centers in Finland, Sweden and the Netherlands. These contain expertise in customer relations management, logistics, product project management and R&D. Operating in this way makes effective use of the group's specialized production units, efficient supply chains and production process management, enabling JIT deliveries direct to the customer's assembly line.

Componenta has production units in Finland, the Netherlands and Sweden. The Group has a total of six foundries, with four in Finland: Componenta Karkkila, Compo-

nenta Pori, Componenta Pietarsaari and Componenta Suomivalimo (in Iisalmi). In the Netherlands the Group has two foundries, Globe Weert and Globe Heerlen, which has two separate production lines: Globe Heerlen Furan (former Globe Belfeld) and Globe Heerlen HWS (former Globe Hoensbroek). The Group has seven machine shops, four in Finland: Componenta Nisamo, Componenta Pori, Componenta Pietarsaari and Componenta Pistons; and three in Sweden: Componenta Albin, Componenta Främmestad and Componenta Åmål. Also in Sweden - in Virsbo. Smediebacken and Kolsva - are the Group's three forges which operate under the name Componenta Wirsbo. Componenta's head office is in Helsinki.

Componenta had net sales in 2004 of EUR 316 million and employed 2,200 people. Some 45% of personnel work in Finland, 27% in the Netherlands and 28% in Sweden. Office personnel accounted for 17% of personnel at the end of 2004 and shop floor personnel for 83%.

Componenta's shares are quoted on the main list of the Helsinki Exchanges. At the end of 2004 Componenta had 1,145 shareholders.

Corporate strategy

Componenta's mission is **Casting Future Solutions**

We supply competitive, value adding cast component solutions to customers in the heavy truck, power and transmission, machine building and off-road industries. Our operations are based on specialized production units and efficient supply chains.

Componenta's strategic goal is to be the preferred engineering co-operation partner of customers in cast components.

Bv 2006

- Most of our business is based on engineering co-operation and solution busi-
- Our internal and external supply chains perform effectively
- We have significantly improved our profitability
- We have divested non-core/underperforming businesses
- We ensure that our people are highly skilled and committed

Financial targets

- Return on investment (ROI) to be between 10 and 20 per cent over the economical cycle
- Profitable organic growth based on adding value by increasing share of engineering and customers outsourcing operations
- Equity ratio on the level of 40 per cent
- Dividend 30 50 per cent of result.

Values

Componenta's values are openness, honesty and human orientation. These values are reflected in our daily operations in the follow-

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

Corporate governance and management

Componenta applies the Corporate Governance recommendations for public listed companies which came into force on 1 July 2004. The Group's Corporate Governance principles are given on its website at www. componenta.com and in the printed and website versions of the 2004 annual report.

Daily operations at Componenta are governed by set policies, such as the quality, environmental and human resources policies. We improve our operational and management processes through continuous improvement (CI).

Environmental and quality policy

We manufacture under environmentally acceptable conditions and according to customer specifications products, which are subsequently delivered on time. Each employee is responsible in his/her daily work for quality and for adherence to environmental requirements.

Each business unit defines its own quality and environmental policies according to this corporate policy and to the requirements of the applied standards. Each unit must also have a quality management system certified by an external organisation. Depending upon the customer requirement, the quality management system complies with standard ISO 9001 or ISO/TS 16949. All business units must have an approved environmental management system according to standard ISO 14001.

We promote awareness of both customer and legal requirements throughout the organisation. In addition we monitor customer satisfaction and manage improvements when necessary.

We maintain the management system, promoting compliance to documented quality and environmental procedures, taking responsibility and commitment for quality, for environmental aspects and for continuous improvement of the system.

We direct the development work, the aim of which is to reduce the process variations and to adjust the process according to the product characteristics.

When establishing and reviewing its objectives and targets, each business units must take into account the following environmental aspects:

- reduction of the consumption of energy and raw materials
- reduction of particle and VOC emissions
- reduction of external ambient noise levels around each unit
- sorting of waste and reduction of the quantity of non-recyclable waste material

We ensure that each business unit has the necessary resources to maintain competitiveness and develop the manufacturing processes. All investments are based upon the use of 'Best Available Technology' whilst also taking the economic and environmental aspects into full consideration. Evaluation of environmental impacts is requirement for approval of major investments.

Componenta's production operations and the environmental load it imposes

Production of cast components takes place in specialized foundries. The company uses the latest technology in the moulding of the components and core production. Sand is used in making the moulds and cores and in moulding. The raw material for the castings is melted in an electric or cupola furnace, using mainly recycled scrap metal. Small series and products made in large series are cast on the automated moulding line and the largest items are made with hand moulding. Cleaning of castings is partly automated.

In the foundries the environmental load arises from:

- the use of energy to melt the recycled scrap and pig iron
- the spent sand from the sand circulation system for casting moulds made with the one-time mould process
- dust waste extracted by the filtering equipment in the work phases that generate dust
- VOC (volatile organic compounds) emissions from the chemicals used in painting and in the manufacture of cores
- Noise, for example in the handling of scrap

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

At the machine shops environmental load arises from

• oils and chemicals; the cutting fluids used in machining and the resulting cutting fluid waste (other chemicals are also used incl. liquid gas)

Forged components are manufactured on largely automated production lines.

At the forges environmental load arises from

- use of energy
- noise

Componenta has taken steps to protect the environment in its production process. For more details go to www.componenta. com/environment.

Environment balance sheet

Environment balance sneet			
	2002	2003	2004
PRODUCTION TONS			
Foundries	58,000	55,422	122,142
Machine shops	24,621	27,603	32,708
Forges	17,172	17,422	19,789
MAIN RAW MATERIALS			
Steel blanks, t (forges)	20,306	22,789	25,299
Metal scrap, t (foundries)	46,380	45,812	96,305
Pig iron, t (foundries)	12,196	11,746	32,470
Sand, t (foundries)	20,324	20,616	42,287
Cutting fluids, t (machine shops)	83	75	95
ENERGY CONSUMPTION			
Electricity, MWh	188,800	182,339	263,529
District heat, MWh	38,895	38,136	41,737
Cokes, t	-	-	6,137
Natural gas, m ³	-	-	2,726,281
Oil, t	315	273	310
Liquid gas, t	947	870	981
WATER CONSUMPTION, m ³	154,936	151,679	226,821
EMISSION INTO AIR			
Particle emissions, t	56	45	68
Use of amines & solvents (VOCs), t	208	155	299
WASTE			
Wastewater, m ³	113,455	104,702	125,884
Waste dust, t	6,156	5,149	3,916
Sand, slag etc., t	27,486	27,618	71,573
Unsorted waste, t	687	589	1,385
Hazardous waste, t	928	938	1,066
Metal scrap, t	11,032	12,193	11,570
Waste wood, t	170	175	666
Waste paper, cardboard etc., t	262	522	306
Other sorted waste, t	345	239	640
*) 2004 including Do Globo's figures			

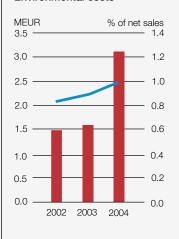
^{*) 2004} including De Globe's figures

Environmental costs

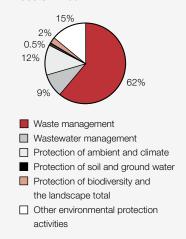
Componenta Group's environmental costs in 2004 totalled EUR 3.1 million (EUR 1.6 million in 2003), with Globe accounting for EUR 1.3 million of this. Waste management was the biggest item, accounting for 62% (43%) of these costs. Other environmental protection activities, such as the company's own environmental management costs and waste taxes, were the second largest item, 15% (27%). Protection of ambient air and climate, such as the running costs for filter equipment, accounted for 12% (18%) of environmental costs and waste water management for 9% (11%). Protection of biodiversity and the landscape accounted for 2% (0%) of the Group's environmental costs and protection of the soil and groundwater for 0.5% (1%).

Environmental investments in 2004 totalled EUR 0.7 million. The largest investments were at the Globe Heerlen, Iisalmi and Karkkila foundries, where the dust extraction equipment was converted into modern dry dust extraction plants, which have dust emissions that are only a fraction of those from the old equipment. Technical improvements, including noise reduction, were also made at the Karkkila and Pori foundries in Finland and the Weert and Heerlen foundries in the Netherlands. Whenever the Group makes investments it takes into account their environmental implications.

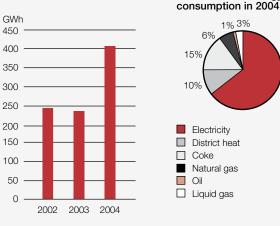
Environmental costs



Distribution of environmental costs in 2004



Total energy consumption



Energy consumption

The foundries consume 85% of the energy used by the Group. The melting of the raw material in particular consumes much energy, since the temperature of the molten iron is raised to more than 1,500 degrees.

A considerable amount of energy is also spent on heating the incoming air in the dust extraction systems. The casting moulds into which the molten metal is poured are made from sand. The sand contains much fine-grained dust that has to be removed at different stages in the process via dust extraction plants.

Other places where energy is used at the foundries are mainly the machines and

equipment, heat treatment, heating, air conditioning, lighting and internal transporta-

Most of the energy used by Componenta is obtained from electricity. Coke is used in melting in the cupola furnace at the Globe Heerlen foundry. Melting at the other foundries takes place in electric furnaces. Liquid gas is mainly used for keeping casting equipment hot and for preheating. Natural gas is used for heating Globe's foundry premises.

Foundries

Energy consumption at the foundries per tonne produced declined some 15% from

2003. The main cause for the improvement is because the 2004 figures include those for Globe. The more efficient use of energy at the Globe foundries is due to differences in the casting systems. The Globe casting systems have a smaller proportion of runners and feeders, so a larger proportion of the molten metal goes straight to the end product and the relative energy consumption is smaller. The difference in climate means that heating the Globe foundries and the incoming air for the dust extraction plants consumes less energy than similar operations in Finland. Melting in the cupola furnace at the Heerlen foundry is a continuous process and consumes less energy per

Distribution of energy

65%

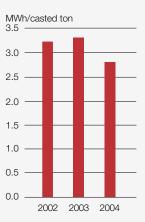
molten tonne than electric furnaces.

The transfer of production from the Alvesta foundry to Karkkila had a major impact on energy consumption. It improves the utilization ratio considerably for the Karkkila foundry, so that fixed costs, such as heating for the holding furnace and for heating the buildings, is divided among greater output. This reduces energy consumption per tonne produced considerably.

During 2004, energy reviews were carried out at Suomivalimo in Iisalmi and at the machine shop building in Pietarsaari, which passed into Componenta's ownership. The energy review at Karkkila was updated to bring it in line with the changes in production there. Energy reviews and analyses of existing energy flows based on these have now been carried out at all the foundry units in Finland. The measurements and documentation for the reviews started in 2004 will continue in 2005 concerning winter measurements. The analyses place areas with savings potentials in order of priority and their results are utilized in future investments.

During 2004 a new energy-friendly dust extraction plant was introduced at the Iisalmi foundry. It has such effective dust extraction capabilities that the warm output air can be fed back into the production area. No new air is needed for the factory area, which gives considerable savings especially in winter. Similar equipment is in use in the

Energy consumption in foundries



fettling shop at the Globe Weert foundry.

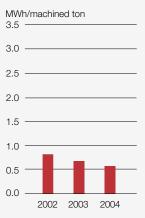
The production line at the Belfeld foundry was transferred at the beginning of 2005 to Heerlen beside the Hoensbroek foundry. The production lines at the foundry – operating under the new name of Globe Heerlen – share a common cupola smelting furnace. It is calculated that relative energy consumption will further improve during 2005.

Machine shops

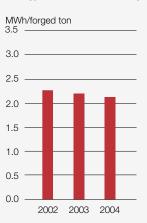
The machine shops account for 5% of Componenta's energy consumption. Most of this energy is consumed by machine tools and in heating and air-conditioning for buildings.

Energy consumption per tonne of output at the machine shops declined 12% from 2003. The biggest reason for the relative decrease was the increase in production. The costs for heating buildings and other fixed energy costs were divided among greater production volumes.

Energy consumption in machine shops



Energy consumption in forges



Energy analysis as part of production planning

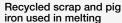
One of the key environmental goals of Componenta is to reduce energy consumption. Industrial energy analyses have been used at nearly all of Componenta's production plants in Finland to investigate the energy consumption of buildings and production processes as well as opportunities for improving energy efficiency. The energy analyses have promoted the development and introduction of operating models that help make energy efficiency an established part of the Group's operations. The energy analyses have revealed many small-scale measures to be implemented immediately, the repayment term of which has been short. When investments in production are prepared and approved, attention is always paid to their energy-related and environmental impacts.

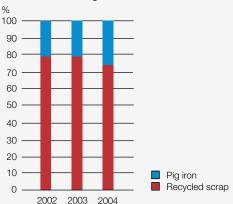
Key objects of energy efficiency-improvement: ventilation and compressed air

Over 90 per cent of the energy consumed by Componenta is electricity. In 2004, the Group's Finnish production plants consumed 131 GWh of electricity. The plants consume nearly the same amount of electricity in an hour as two electrically heated single-family houses in a year.

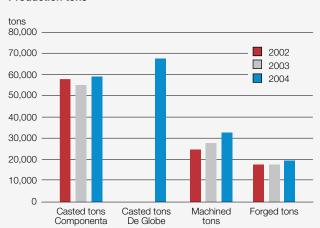
At the production plants, ventilation and compressed air are the key objects in improving energy efficiency. Optimization of these functions requires good maintenance practices for the equipment, proper controls, appropriate use as well as automation. For example, the centralized real estate monitoring system introduced at the Componenta Karkkila foundry and the heat recovery equipment installed in connection with the ventilation equipment reduced the annual heating costs by one fifth. At the same time, it was possible to reduce environmentally hazardous emissions and improve working conditions. In Karkkila, the process heat originating from the melting and reprocessing of iron is utilized in the heating of production facilities as well as in the drying and preheating of the iron refuse to be used as raw-material.

The first energy analysis for Componenta was carried out as early as 1995, at which time the cooperation partner was the Energy Department of the Ministry of Trade and Industry. In the past years Electrowatt-Ekono Oy has been responsible for the practical implementation of our energy analyses. The energy analyses are updated as needed, but at least every five years. It is essential to optimize energy consumption already during production planning. In conjunction with the energy analysis, it has been created a tool for Componenta for updating the profitability calculations concerning the objects of energy-efficiency improvement indicated by the analyses, with regard to production, energy consumption and prices.

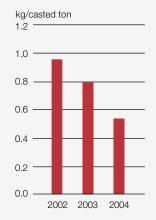




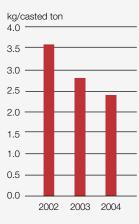
Production tons



Particle emissions



Amines and solvents (VOCs)



Forges

The forges account for 10% of Componenta's energy consumption. Most of their energy is consumed in heating the blanks to forging temperature.

Energy consumption per tonne of output at the forges declined 4% from 2003. Production switched from hammer to pressing line. On the pressing line the burrs are cut while the product is still hot and heat treatment takes place immediately after this. This means the product does not have to be re-heated, which uses less energy.

Use of raw materials

Componenta's foundries make efficient use of recycled raw materials. Most of the raw material used in melting is sorted recycled scrap from the engineering industry. Pig iron is added to obtain the right metallurgical properties. Various metal additives are also added (such as graphite, ferro silicon and copper) to adjust the chemical composition to the required level.

The foundries melt almost all the runners and feeders produced in their own processes. The runners and feeders guide the molten metal into the actual product in the mould. The runners and feeders are removed from the products in the finishing process and returned for melting. Some of the rejects from the Globe Heerlen Furan production line are the only waste that cannot be melted in the company's own smelting furnaces, because of their size. They are sold for reuse to other foundries.

During 2004, the availability of recycled scrap was poor, due to the state of the global market. Shiploads of recycled scrap were transported from Europe to the growing market in China and what was left was not enough to meet the needs of European foundries. For this reason the foundries had to use more pig iron in melting than in 2003. Despite this, almost 80% of the foundries' raw material is recycled material.

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

The number of steel blanks used in forging per tonne produced declined by some 2% from 2003. This reduction was due to the smaller amount of forging burrs. In forging the product is formed into the desired shape by hammering and the resulting burrs have to be removed. More raw material is then used per tonne produced.

The raw material used in the machine shops is mainly cast components from the Group's foundries.

Despite the difficulties in obtaining recycled scrap, Componenta's goal in 2005 is to use the maximum amount of recycled scrap.

Dust and VOC emissions

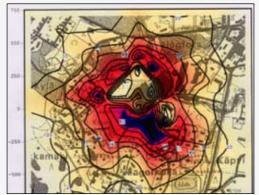
The biggest emission from the casting process is dust. Moulds and cores made from sand are used in casting. The sand is recycled continuously in the process and its grain size gets smaller and smaller as the re-

sult of mechanical wear. The sand then gives off dust and the dust has to be extracted at several points in the process. The dust is fed to the dust extraction plant where it is separated from the air flow and the air is conducted outside. Even the most modern dust extraction plants are not able to remove the very finest dust and some of the dust escapes into the outside air. There are also differences in the separating capabilities of the dust extraction plants and methods in use.

The VOC (volatile organic compounds) emissions from the foundry process arise from the solvents used in painting products, from the alcohol-based thinners used in coating and from the amines used in hardening the cores. Componenta's production units have mainly switched to water-based paints, but some products still have to be coated with solvent-based paints because of the customer's production process.

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

Dust emissions of the Karkkila foundry before and after the production expansion project





The amount of dust emissions per tonne produced declined at the foundries by 33% from 2003. One reason for this is because the dust emissions for the Globe foundries are included in the 2004 figures. The amount of dust emitted is extremely small thanks to the current dust extraction plants, with less than one kilogram of dust entering the environment for each tonne produced.

During 2004 the wet dust extraction plants at the Iisalmi and Karkkila foundries were replaced with modern dry dust extraction units, where the dust emissions are only a fraction of those from the wet plants. The investments made will have a full impact during 2005.

In January 2004 a new dry dust extraction plant was introduced at the Heerlen smelting plant to process again the air coming from the wet extraction unit that precedes it in the cupola melting plant. The new dry extraction plant has a capacity of 1 mg/m³. The wet plant's capacity was only 150 mg/m³. This investment has reduced the amount of dust emitted to the air from the cupola furnace to a fraction of the previous level.

The expansion of production at Karkkila in 2004 did not increase the amount of dust. Thanks to the more effective dust extraction plants, the amount of dust has decreased close to the foundry. In the picture above the figure on the left shows the daily dust emissions before the changes and the figure on the right shows the situation after the changes. Dust volumes have declined significantly since the start up of the new foundry in the autumn of 2004.

The transfer of the production of the Belfeld foundry to Heerlen will result in a reduction in dust emissions during 2005.

VOC emissions, from the use of amines and solvents at the foundries, declined 15% per tonne produced from the previous year. The proportion of water-based painting has further increased.

The moulds for the furan production line at the Globe Heerlen foundry and the moulds made from furan sand at the Compnenta foundry in Iisalmi are coated before casting to obtain a sufficiently good surface quality and to prevent the metal

from penetrating the sand. An alcohol solvent has to be used for coating since there is little time on the automated production line for it to dry. The alcohol evaporating from the coating is burnt at the Heerlen foundry and in hand moulding at Iisalmi, and only some 30% of it is emitted as gas to the outside air.

The amine gas used in the production of cores at the Globe foundries is fed to an acid treatment, which binds the amines to the acid and only 5% is emitted as gas to the air. The acid amine solution used in the treatment is sent to a treatment plant in Germany where the acid and amine are separated for reuse.

In 2004, to reduce the smells from VOC emissions close to the foundry, the height of the extraction chimney from the casting and cooling line at the Heerlen foundry was raised until 25 metres.

During 2005 the project is continuing at Heerlen to reduce VOC emissions and smells, with the aim of replacing the cold box binders used in the production of cores with a more environmentally friendly substance.

Noise

Several Componenta production units are situated close to residential areas, so noise can be a problem for the local environment. These units pay particular attention to noise abatement. We monitor and measure the level of noise caused by our production units in the areas close to the plants. The main causes of noise are the handling of raw materials at the foundries, the forging process at the forges, and air-conditioning. Of

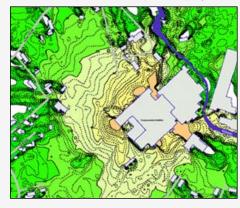
course, transporting products and raw materials also causes noise.

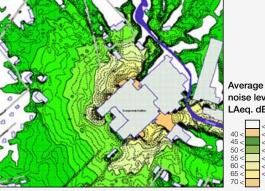
During 2004 several changes were made at the Globe Weert and Heerlen foundries that make it possible for them to operate at night. The cooling equipment at the smelting plant in Weert was replaced and the new equipment is much quieter than the old.

In June a noise barrier was built at the Pori foundry to reduce local noise.

In connection with the expansion of pro-

Noise levels of the Karkkila foundry before and after the production expansion project

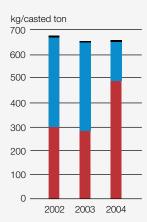




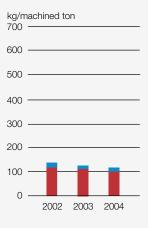
noise levels LAeq. dB



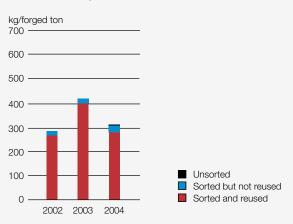
Waste of the foundries



Waste of the machine shops



Waste of the forges



duction at the Karkkila foundry, a thorough noise survey was carried out in 2004. This resulted in the enclosure of several sources of noise and the building of noise barriers. In the picture (page 10, below) are shown the noise levels before and after the changes. Although production volumes have grown considerably, the noise level has been reduced significantly. It is also remarkable that the revamped foundry produces the output of two production plants, so the overall situation has improved very much indeed.

Waste and recycling

The biggest waste items are spent sand and dust. Spent sand is the sand that needs to be removed from the sand process because fresh sand is added, to maintain the quality

of the sand. Some 2% of new sand and binding agents are added to the sand that returns from the casting process, so 98% of the sand is continuously recycled. Even so, the process produces a large amount of spent sand.

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

Another waste item at the foundries is slag. Slag is impurities (sand etc.) that rise to the surface of the molten metal and are removed before casting. The other waste at the foundries is normal industrial waste, and most of this is sorted for reuse. Hazardous

waste is produced mainly from the lubrication oils, the painting process and from processing amine gases.

The machine shops produce normal industrial waste and machine chips. Hazardous waste is produced by the lubrication oils for machinery, by the cutting fluids used in machining and by painting processes.

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

Foundries

The total amount of waste per tonne produced at the Componenta and Globe foundries increased 0.5% from 2003. At the Karkkila foundry a moulding line was started up with a larger mould size, which

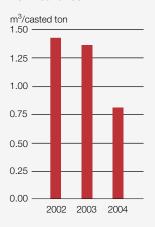
means that the proportion of spent sand per tonne produced has increased. The amount of dust extracted from the process as waste has also increased.

The Globe Heerlen Furan and Globe Weert foundries operate reprocessing plants for the moulding sand. After processing the moulding sand can be used in the production of cores, which correspondingly reduces the need for new sand and the amount of spent sand.

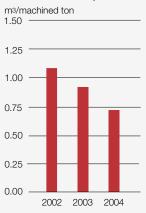
The proportion of waste at the foundries that is sorted and sent for reuse increased significantly from 2003. Most of the sand and dust is utilized. The spent sand and dust from the Pietarsaari foundry is stored for use in the construction of a new mixed waste landfill site and for covering the existing site in the neighbouring town. The spent sand and milling dust from the Pori foundry is stored for the construction of new industrial landfill sites. The spent sand has also been used in the foundations for a driver training track in Pori. The furan sand from the Iisalmi foundry is used as covering material at the local landfill site.

Almost all the waste from the Globe foundries is sent for reuse. The smelting plant's dust sludge separated from the cupola furnace, for example, is used in the production of concrete columns. Spent sand is used in concrete structures. Metal is separated from slag and the slag is then used in covering material mixtures. Only fire-resistant material and unsorted waste is sent to the landfill site.

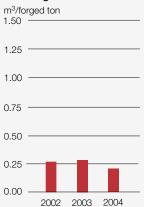
Water to the wastewater plant from foundries



Water to the wastewater plant from machine shops



Water to the wastewater plant from foraes



Machine shops

The total amount of waste per tonne produced at the machine shops declined in 2004 from 2003. The biggest waste item at the machine shops is machining chips. In 2004 they were sent to the smelting plants of steel manufacturers. During 2004 tests were made in compressing the machining shavings to form briquettes. It is planned to melt the briquettes in the Group's foundries. The melting tests were very successful and the decision has been taken to invest in briquetting equipment which will be introduced in Pietarsaari during 2005. The machining shavings from the Pietarsaari machine shop will be briquetted and in future will be melted at the Pietarsaari foundry. The briquetting process also separates the cutting fluid from the shavings and after

cleaning this can also be reused in the Group's machining operations. Almost all the machine shop waste is sorted.

Forges

The total amount of waste per tonne produced at the forges declined in 2004 from 2003. The biggest waste item at the forges is forging burrs, which are sent to the smelting plants at steel works. The volume of these declined significantly from 2003. Almost all forge waste is sorted.

Wastewater

At the foundries and forges water is used for cooling, as an additive in sand at the foundries and in cutting fluids and painting processes at the machine shops.

The amount of wastewater declined in

2004 from 2003. The Globe Weert foundry, Karkkila foundry, Pori foundry and the Kolsva forge take the cooling water used in their process from rivers. The water circulates in a closed system and is then returned at a slightly higher temperature to the river. so no wastewater is produced. Much water is also used to dampen the sand at the foundries. This evaporates during the casting process and does not end up in the municipal sewage system.

Transport

Ready products are supplied to customers mainly by transport companies chosen by the customer in accordance with their own contracts. Componenta arranges transport for some products. The transport companies we use have quality and environmental

management systems. The required costefficiency also means the shortest routes possible. All the partners we work with are of such a size that they do not need to have empty vehicles on any journeys.

SKAL Itä-Suomi, the regional association of Finnish Transport and Logistics SKAL for eastern Finland, chose Componenta Suomivalimo for its "2004 Transport Customer of the Year" award. Commenting on their decision, the association mentioned that the entire delivery chain at the foundry functions well. Goods are loaded and unloaded without delay. The foundry area is also laid out so that trucks can move there unhindered and quickly.

Some 50% of the raw material deliveries are of recycled scrap. Deliveries of recycled scrap to the foundries are always with a full load, eliminating excess traffic. Transport is arranged on a regional basis, eliminating the need for long distance deliveries.

The other major raw material transported is pig iron. This is transported to Finland in shiploads of 1,000 - 4,000 tonnes.

Other raw materials are brought in containers or by truck. We also aim at full loads of raw materials.

We do not normally use air transport, and rail is only used in special circumstances.

Packaging

The packaging material for products is either recyclable pallets and pallet collars owned by the customer or metal racks. The Group's packaging material is recyclable EUR pallets and EUR pallet collars. These are also used in traffic between the Group's production units.

In raw material packaging we aim to use the largest possible size of packaging. Metal additives, for example, come in 1,000 kg large sacks, and paints in 200 litre barrels or larger containers. We insist that raw material suppliers use EUR pallets.

Componenta is a member of PYR Ltd, the environmental register of the packaging sector in Finland.

High-risk situations

There were a few high-risk situations in our production units in 2004 that could have had an impact on the environment. All the situations were well managed and their environmental impact was insignificant.

A transport ladle burst at the Pietarsaari foundry and the molten metal was spilt on the floor. It did not cause a fire and no one was injured. At the Suomivalimo foundry, a spark that originated in the dust extraction system set a dust extraction pipe on fire and the hot pipe then set alight the adjacent building. The damage was small and no one was injured.

There was a small fire at the Alvesta foundry in Sweden when hot iron falling from the holding furnace for the molten metal set on fire objects on the foundry floor including two fork-lift trucks. The material damage was small and no one was injured. A small fire also occurred at the forge in Kolsva, Sweden, when a hot axle pin fell into oil and set it on fire. The fire was contained quickly and no one was injured.

During the autumn there were disruptions on two days at the dust extraction

plant at the Heerlen cupola furnace. Production had to be restricted and more dust than normal was emitted into the environment. An explosion occurred at the Heerlen foundry during installation work in the holidays and one person was injured. A fork-lift truck used to transport the molten metal caught fire at the Weert foundry.

Molten iron is continuously processed at the foundries and so they are well prepared for accidents there. Emergency plans as required by the environmental management systems are in place at all the foundries. The emergency plan for the Pietarsaari foundry and machine shop were revised in the summer of 2004.

Stakeholders

Componenta's stakeholders are not only the customers, personnel and shareholders but also suppliers, subcontractors, public authorities, the neighbours of the production units etc. The different stakeholder groups have different expectations concerning environmental issues.

Many customers require us to have an environmental management system. The automotive industry maintains 'black' and 'grey' lists of chemicals. End products supplied to them must not contain any chemicals on the black list and it is necessary to look continuously for more environmentally friendly alternatives to using them in the production process. Use of substances on the grey list should also be avoided. We continually check that we meet the requirements of the black and grey lists. We have, for example, succeeded in meeting the strict require-

ments of the automotive industry concerning lead.

We primarily choose raw material suppliers that have environmental management systems in use.

Componenta's Pietarsaari foundry participates each year in a survey of air quality in the Pietarsaari area, in which air quality is monitored continuously at two measuring points. The latest annual report from the survey states that most of the dust in the air over the town originates from road traffic, either directly from exhaust fumes or raised by traffic from the road surface. The dust content in the air is highest in the spring after the snow has melted, when traffic and the wind raise into the air the ground grit and the road material ground by tyre studs.

People living close to the foundries have had a good opportunity to have a say now, when the foundries have renewed their environmental permits. Everyone has been entitled to make objections which the environmental authorities have taken into account when making their decisions about environmental permits. For example, no objections were made at all at the Globe foundries in the Netherlands and only one was made in Pietarsaari.

Regional authorities in the area close to the foundries have also made statements during the process for renewing the permits, and these have been taken into account when environmental authorities have made their decisions.

The Group's production units report the results of surveys and monitoring as defined in the environmental permits each year to

the environmental authorities.

Little things can be important for the environment. As part of the continuous improvement scheme, for example at Componenta Främmestad 233 personnel initiatives on environmental issues were made in 2004. Personnel participates actively in developing operations. Teams hold regular meetings to decide on the priority for measures to be carried out. For example regulating the contents of cutting fluids and instructions on packaging to reduce the amount of transport were measures carried out in 2004 that came form the improvement initiative scheme. The large number of proposals shows the commitment of personnel to environmental issues and taking the environment into account in daily operations.

Environmental permits

The operations of foundries and forges are such that they require an environmental permit. The Pietarsaari foundry obtained a new permit at the end of 2004 and the Globe Weert foundry in the spring of 2004. Globe Heerlen, ie the former Hoensbroek foundry and the Belfeld production line that was moved there in December 2004, obtained its joint environmental permit in January 2005.

The environmental permits for the Pori, Karkkila and Iisalmi foundries are currently being considered and the decisions are expected soon. An environmental impact assessment (EIA) was carried out in connection with the expansion of production at the Karkkila foundry. This made an exten-

The Virsbo and Smedjebacken forges have current permits and a new permit is being applied for in Kohlsva during the spring of 2005.

The environmental permits for the foundries are such that they govern development relating to the environment. The new permits contain numerous requirements that develop environmental issues at the production units far into the future. New requirements at the foundries in the Netherlands, for example, are to measure and minimize unpleasant smells.

In connection with the termination of production at the Alvesta foundry in Sweden, a soil survey is being carried out concerning earlier operations there. Production operations during the period when Componenta owned the property have not caused a load on the soil.

Environment management systems

In accordance with the Group's environmental policy, each production unit should have an environmental management system conforming to ISO 14001 standards. Building of the systems continued during 2004 and the Wirsbo foundry obtained its certificate in the spring of 2004. The following production units have certified environmental management systems:

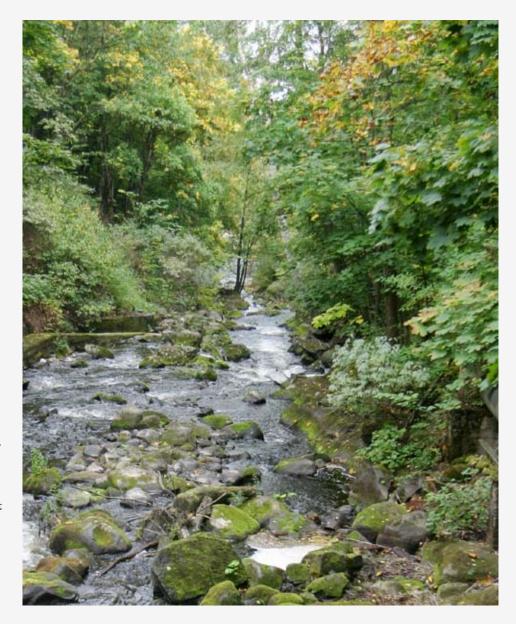
Componenta Albin Componenta Främmestad Componenta Karkkila Componenta Pietarsaari Componenta Pori Componenta Suomivalimo

Projects to build environmental management systems have started at Componenta Pistons and Componenta Nisamo. Quality and environmental management systems are being built simultaneously at both units. The goal is for the systems to be ready at the beginning of 2006.

Construction of the system at Componenta Åmål has reached the point that certification should be possible towards the end of 2005.

Building of the joint environmental management system for the Globe foundries has started, with the goal of completing it by the end of 2005. It is planned to obtain certification for the Globe environmental system in the summer of 2006. At the same time the Globe quality system is being upgraded to meet the requirements of the automotive industry's ISO/TS 16949 standard.

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



Glossary of this report

Cast iron

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

Chip

Metal chips, machining waste material.

Coating

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

Holding furnace

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

Machining

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

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.

Mould

Mould formed by moulding from moulding sand for casting a product. The moulding sand 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 in which a casting pattern is used to make a mould in the moulding sand into which the molten metal is poured.

Recycled scrap

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

Remelting

Melting in the smelting furnace of runners and feeders, burrs, reject castings or machining chips.

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.

Sand core

A core made of sand and adhesives used for making hollow interior parts and complex shapes for castings. The core is put between the mould halves made from moulding sand and it disintegrates during casting and when the mould is compressed and mixes with the moulding sand.

Smelting furnace

The furnace in which smelting takes place. Source of energy electricity (= electric furnace) or coke (= cupola furnace). In the electric furnace smelting 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.

Surface treatment

Protects material from damage, such as corrosion. Primer and powder coating.

VOC

Volatile organic compounds.



COMPONENTA CORPORATION

Nuijamiestentie 3 C

FI-00400 Helsinki, Finland

Telephone +358 10 403 00 • Telefax +358 10 403 2721

www.componenta.com