



HEIDENHAIN



Environmental Declaration 2011

Report on Safety and
Environmental Protection

May 2011

Foreword

Certain principles for business success guide DR. JOHANNES HEIDENHAIN GmbH:

- Attentive Service to the Customer
- Highest Achievable Quality
- Continuous Improvement

It is exactly these three principles that are the basis of the prominence of our products among the vanguard. As an innovative company, however, we have always been aware of the need to constantly consider the protection of the environment while accomplishing our operational tasks. We have recognized that with a new perspective combining the interests of an environmentally sound and effective corporate management, ecology and economy need not be in contradiction to each other. For this reason, the organization of operational environmental protection has attained a high priority in our company. The protection of the environment is anchored as an important goal in our company principles and is described in more detail in an independent environmental policy.

Modern, safe and environmentally friendly technology in the production of technically leading products in combination with stability, closeness to the customer and practice-orientation form the foundation for our work. As a private company we are integrally bound into the values and standards of our society. We derive from these bonds our responsibility for employees and the environment as well as our involvement in societal, public and cultural areas.

Traunreut, March 1, 2011

Michael Grimm
Managing Director,
Finance and Internal Services

As an industrial enterprise with a broad range of tasks we share a special responsibility for the safety and health of our employees and the preservation of the natural bases of our lives. Our management system obligates all employees of the company in their various professions to actively engage their abilities, knowledge and efforts in safety and environmental protection.

**The protection of our
environment and the safety
of our employees are two
of the company's most
vital objectives**

A management system that since 1996 has been certified according to the world standard ISO 14001 and validated by the European Eco-Management and Audit Scheme (EMAS) serves in the realization of this enterprise.

The objectives of this management system are the continuous improvement of occupational safety and environmental protection—even to levels beyond the legal requirements. To reach these objectives we inspect operational structures and, if necessary, redesign them. Our efforts are focused on the efficiency and transparency of occupational safety and environmental protection in the company.

Josef Konhäuser
Environmental Protection Officer

The results of operational and environmental objectives and internal audits serve the Managing Directors as the basis for evaluating the status of occupational safety and environmental protection in the company. This ensures compliance with our company goals. This Report on Safety and Environmental Protection has been read and approved by the Managing Directors.

This Report addresses our industrial partners, public authorities and the public at large in order to provide them insight into occupational safety and environmental protection at HEIDENHAIN.

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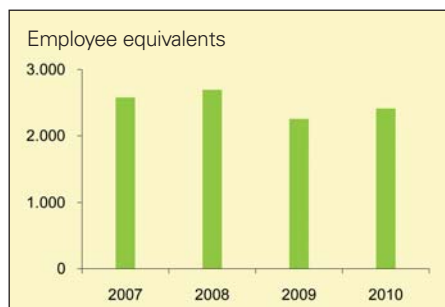
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The Company

DR. JOHANNES HEIDENHAIN GmbH develops and manufactures linear and angle encoders, rotary encoders, digital readouts, and numerical controls for demanding positioning tasks.

HEIDENHAIN products are used primarily in high-precision machine tools as well as in plants for the production and processing of electronic components.



Historic milestones

1889

The mechanic Wilhelm Heidenhain founds a metal etching shop in Berlin. In the course of the following decades it becomes the largest metal etching company in Europe.

1923

Dr. Johannes Heidenhain joins his father's company.

1928

The first great step: HEIDENHAIN develops the lead-sulfide copying process (METALLUR), which makes it possible for the first time to exactly reproduce a master graduation.

1948

New start with the founding of the DR. JOHANNES HEIDENHAIN GmbH, Traunreut

1950

A pioneer achievement: The DIADUR process—extremely robust precision graduations can be produced by copying.

1961

Manufacture of the first photoelectrically scanned linear and angular encoders.

1968

The venture into the electronic age begins. Digital readouts from HEIDENHAIN simplify the operation of conventional machine tools.

1976

HEIDENHAIN builds its first numerical controls for machine tools.

1987

Application of the interferential scanning principle with solid measuring standards permits measuring steps as small as one nanometer.

2004

The iTNC 530 contouring control, with digital drive control and the smarT.NC alternative operating mode, controls up to 13 axes.



With the exception of the nearby production hall H11, the production facilities of DR. JOHANNES HEIDENHAIN GmbH lie in the city center of Traunreut. The total area of the company comprises approximately 125 000 square meters.

Of this, approximately

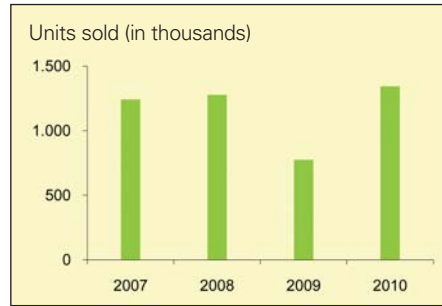
- 45 % is occupied by buildings,
- 33 % are streets, paths and other treated surfaces, and
- 22 % consists of green space.

The company is organized in three divisions:

- Products and Markets
- Research, Development and Production
- Finance and Internal Services

Its products, which are characterized by high quality, long life cycles, and recyclability, have become an inherent part of the machine tool and electronics industries.

In 2010, the Traunreut facility sold over 1.3 million units and over three million small parts. The overall output quantity is the quantity of products sold including packaging and amounted to about 3 100 tons in 2010. A shift in the product mix can result in differences between the overall output quantity and number of units sold.



HEIDENHAIN employs modern production methods that are constantly being adapted to the state of the art.

They essentially comprise the following:

- Basic mechanical machining of glass and metal
- Manufacture of precision optical graduations
- Assembly of printed circuit boards
- Assembly of components and products

This also includes the following environmental processes:

- Mechanical machining of metal and glass parts of unit housings and scale carriers with ultra-filtration of the cooling lubricants
- Galvanic and chemical surface processing of optical glass and steel carriers with pH-neutralization of rinse and waste waters,
- Manual and automatic surface cleaning of semi-finished and finished goods with fast solvents
- Manual surface-finishing by painting the front plates of contouring controls
- Generation of electricity and heat in the gas-powered combined heat and power plant with central and local furnaces
- Handling, storage and transportation of hazardous materials and waste requiring special supervision

A small part of these processes takes place in facilities requiring authorization according to the Federal Emission Protection Law of Germany and, in facilities for handling substances hazardous to water, according to the Water Resources Act. The emissions and wastewater discharge are tested regularly, and lie far below the currently required limit values.

	Location data			
	2007	2008	2009	2010
Employee equivalents in terms of annual average	2 579	2 693	2 255	2 410
Area of premises in square meters (x 10.8 sq ft)	125 000	125 000	125 000	125 000
Units sold	1 242 655	1 278 675	774 454	1 343 727
Overall output in t	–	4 098	2 051	3 143

Occupational Safety and Environmental Protection Policy

In our company, occupational safety and environmental protection are important parts of corporate policy. We are aware that, in spite of our efforts, our activities are not without effect on the safety and health of our employees and the environment. This thought shall infuse our corporate philosophy, together with the other HEIDENHAIN principles, the pursuit of safe production and the continuous improvement of our products.

Occupational safety and environmental protection are important parts of corporate policy

The Managing Directors have appointed an officer who is responsible for implementing our safety and environmental protection policy. The officer is to ensure that compliance with our safety and environmental policy is secured at all levels in the company. Our Guidelines for Occupational Safety and Environmental Protection provide a model and serve as the basis for all of our decisions within the framework of the occupational safety and environmental protection management system.

Our Ten Guidelines for Industrial Safety and Environmental Protection

- 1. HEIDENHAIN strives to continuously improve occupational and environmental protection in regard to the safety and health of its employees and the protection of the environment.*
- 2. HEIDENHAIN wants a higher level of safety and environmental protection standards than is required by legal regulations.*
- 3. HEIDENHAIN aims to eliminate sources of pollution and danger to employees, starting with the conception phase of products and manufacturing procedures.*
- 4. HEIDENHAIN is committed to constantly adapting its safety facilities and organizational measures to the current state of the art.*
- 5. HEIDENHAIN inspects, monitors and evaluates the effects of company activities on the safety and health of employees and the environment.*
- 6. HEIDENHAIN ensures implementation of occupational safety and environmental protection policy by the management system both in technical and in organizational regard.*
- 7. HEIDENHAIN trains and informs its employees to advance awareness of safety and the environment within and outside the company.*
- 8. HEIDENHAIN also informs and motivates its contractual partners to safety and environmentally conscious thought and actions.*
- 9. HEIDENHAIN endeavors to ensure a flawless flow of information with governmental authorities in the context of a cooperative effort.*
- 10. HEIDENHAIN informs its customers and the public regarding the safety, health and environmental aspects of our company and its products.*

Occupational Safety and Environmental Protection Management System

The occupational safety and environmental management system of DR. JOHANNES HEIDENHAIN GmbH is a component of an integrated management system in which environmental, safety and health protection aspects are respected in addition to quality.

The integrated management system seizes upon the fundamental objectives of company policy and implements them as practical procedures. A manual with descriptions of the processes provides employees with detailed information on regulatory documents and governs operational procedures and responsibilities. This ensures the implementation of the company principles toward quality, safety, health and environmental protection.

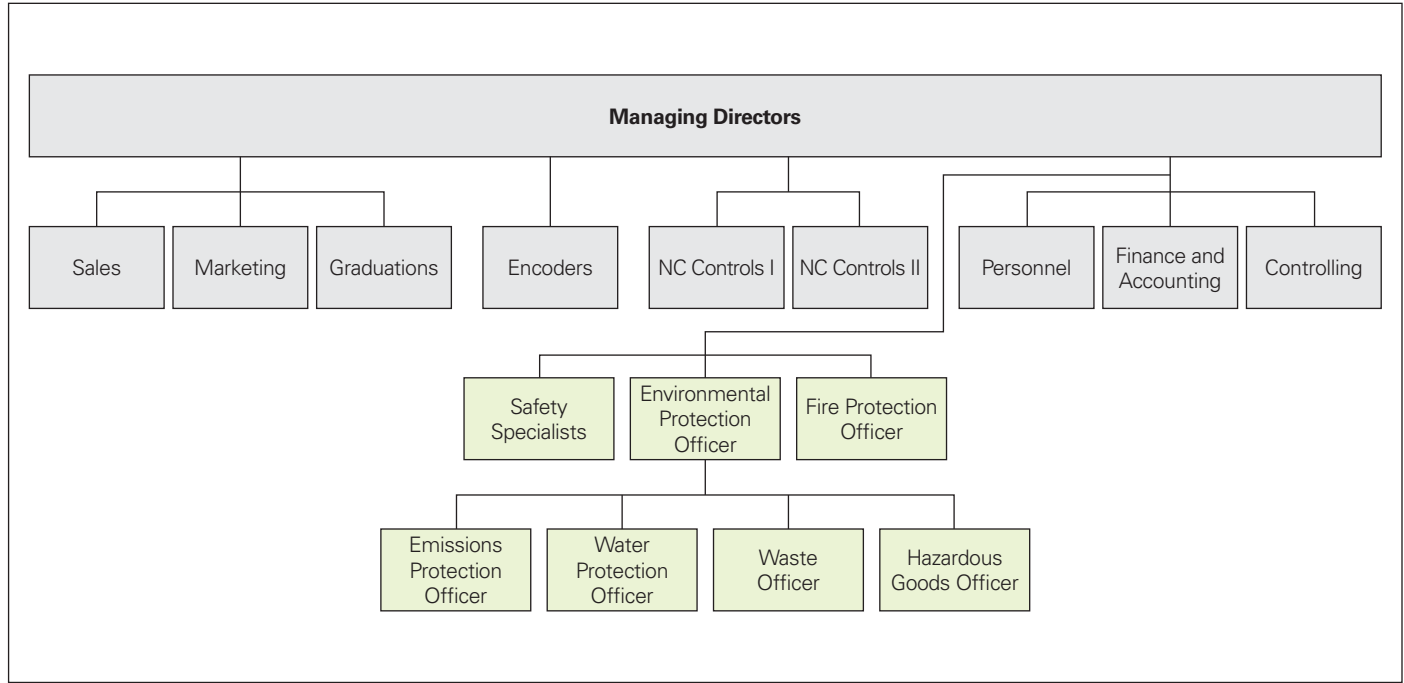
The goal of occupational and environmental management is to plan, execute, and monitor measures for preserving our environment in accordance with current laws, ordinances and regulations as well as the environmental policy and environmental goals of our company. The legal requirements constitute a minimum requirement in this regard.

This system is designed to ensure compliance with legal regulations regarding occupational safety and environmental protection

We ascertain specific environmental and safety aspects for our products and processes and measure the respective effects by means of numerical indicators. These indicators form the basis for the formulation of occupational safety and environmental protection objectives.

The capability, appropriateness and efficaciousness of the management system are evaluated through the regular examination of these indicators. This is intended to ensure the continuous improvement process for reducing our environmental impact.

Internal safety and environmental protection audits in the various departments are conducted at regular intervals to monitor the management system. In addition to specifically trained auditors, the responsible executives as well as the company doctor and the works council participate in this monitoring. The fulfillment of all requirements of the ISO 14001 environmental standard and the European Eco-Management and Audit Scheme (EMAS) were spot-checked. Any deviations found were documented, remedial measures were agreed upon, and the deviations were corrected within the agreed time.



Impact on the Environment

During evaluation of substantial environmental influences, the environmental aspects of raw materials and supplies, waste, energy, emissions and water/soil are considered with respect to the company processes. The division of effects into low impact, moderate impact and high impact is based not only on material consumption and energy consumption, but also the use of environmentally relevant facilities or approximations to legal limit values in regard to the possibility of exerting influence. The company processes are

assessed both for normal operating procedure as well as for the possible occurrence of operational interruptions. We are aware that increased resource consumption and growing quantities of waste cause pollution to land and air, that detrimental emissions likewise contribute to air pollution as well as summer smog and the greenhouse effect, that growing energy and water consumption accelerates shortages of resources and that higher wastewater loads contribute decisively to land and water pollution.

The processes are evaluated for possible impact on safety and the environment

	Substantial environmental effects				
	Raw materials and supplies	Waste	Energy	Emissions	Water/Soil
Research and development	●	●	●	●	●
Production and assembly	● ●	● ●	● ●	● ●	● ● ●
Shipping, supply & logistics	●	●	●	●	●
Energy & media supply	● ●		●	● ●	●
Products & services	●	●			

● Low impact ● ● Moderate impact ● ● ● High impact

Increasingly stringent requirements on the accuracy of our products are associated with higher quality requirements for the manufacturing environments and production methods, and these have been responsible for increases in energy and resource consumption in recent years.

Temperature-controlled production areas, which have long been required for the manufacture of graduations, are progressively required for the assembly of products and components as well. To ensure comparability of environmental data over long periods, we calculate them per

unit produced. This enables us to acquire simplified information on flows of environmental materials and energy, depending on the volume of production, and obtain meaningful figures even if production quantities fluctuate.

			Input/output balance per unit produced			
			2007	2008	2009	2010
Input	Energy	kWh	46	47	71	47
	Water	dm ³	88	83	102	80
Output	Sewage	dm ³	64	63	69	57
	Waste	kg	2.0	2.0	1.8	1.7
	Emissions (CO ₂)	kg	2.6	2.7	4.9	2.7

Energy

The following are the primary sources of energy for the company:

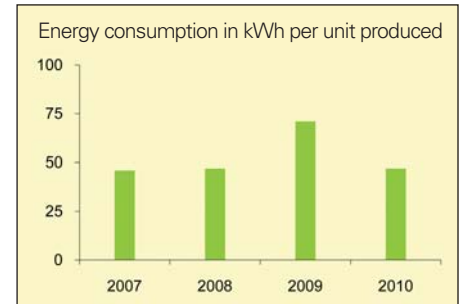
- Natural gas for combined heat and power plant and heating furnaces
- Heating oil for heating furnaces
- Electrical power for plants and equipment

The company's combined heat and power plant (CHP) is powered by natural gas and serves to generate heat and electrical current according to the principle of cogeneration. The CHP generates approximately one-tenth of the total required energy supply. The remaining electrical power required is supplied from an external, national provider with a portion of approx. 24 % of renewable energy.

In addition to power generation, the plant also serves for heat generation. The heat produced is used for central heating and covers nearly half the heating requirements of the company. The rest of the required heating energy is provided by one central and several local heating furnaces, most of which are supplied with natural gas by the regional provider Erdgas Südbayern. In addition, the company is connected to the district heating network of the city of Traunreut. The heat is mainly generated in an environmentally friendly biomass cogeneration plant from the incineration of wood chips and waste wood with a portion of approx. 85 % of renewable energy.

The increase in energy consumption in recent years has been caused mainly by the construction of new buildings with energy-consuming manufacturing methods and with ventilation and air conditioning plants. With new construction, however, low energy consumption in the operation of the buildings is already taken into account in the planning stage. Heat recovery plants for the ventilation technology, for example, are standard. Heating, ventilation and air-conditioning systems are operated in compliance with the Energy Conservation Act. Of the overall energy consumption, the portion of renewable energy is about 22 %.

In the area of energy there is admittedly further potential for improvement. For this purpose we are focusing on the one hand on environment-friendly technology and on the other on the development of a comprehensive energy management system with the goal of ascertaining the energy flow of all buildings. This will enable us to better monitor our environmental impact and discern weak spots more specifically.



The global crisis in the metal and electronics industry in 2009 caused a significant decrease in orders received. It was not possible to cut the energy consumption to the same extent as production was reduced so that the relative energy consumption per unit sold was noticeably higher.

		Energy consumption			
		2007	2008	2009	2010
Electrical energy	GWh	39.1	39.8	35.8	43.2
Heat energy	GWh	18.3	20.0	19.0	19.9
Total energy consumption	GWh	57.4	59.8	54.8	63.1
Energy consumption per unit produced	kWh	46	47	71	47
Energy efficiency per kilogram of unit	kWh	–	14	27	20

Impact on the Environment

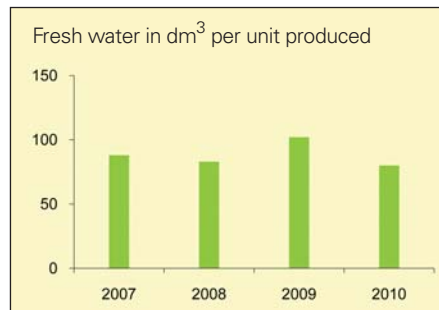
Water/Soil

The required fresh water is drawn exclusively from the network of the Traunreut city public water service. Rainwater from new construction is returned in soakaway pits to natural circulation. In 2010, approximately 107 000 cubic meters of fresh water were consumed and approximately 77 000 cubic meters accumulated as production wastewater and sanitary sewage. The difference between fresh water consumption and wastewater production is due to evaporation from cooling towers and air humidifiers. Sanitary sewage is calculated from a mean accumulation per employee of about 8 cubic meters per year.

Before being discharged into the public sewers, a part of the production waste is pretreated in these processing facilities:

- Grease interceptors for the cafeteria
- Oil/water separators for product washing rooms and the parking garage
- Ultra-filtration plant for wastewater from mechanical production and
- Flow neutralization plant for wastewater from graduation production

The interceptor systems are operated according to legal requirements. The ultra-filtration plant serves for heavy-metal removal and oil separation, in which used cooling lubricants and wastewater from a purification plant are treated. The continuous-flow neutralization system treats and monitors the pH value of the untreated wastewater from graduation production. Due to the legal requirements of the Water Resources Act, legal notification is required for ultra-filtration water treatment. For other wastewater systems, it is required simply to comply with the requirements of the municipal drainage regulation.



The discharged concentrations are checked annually by the externally accredited environmental laboratory Agrolab. For this purpose, the wastewater load from the significant main points of accumulation of buildings E90 and E92 is monitored. The majority of the results is significantly below the legally specified limit values. Both the organic load and the nitrogen and phosphorous load have significantly smaller concentrations than household raw effluent. Other substances that are hazardous to water were likewise found only in very small amounts, which means that this wastewater is biologically quite degradable.

In order to protect soil and water from hazardous pollution, sites suspected to be contaminated are examined for hazardous substances and are remediated according to the specifications of the Bundes-Bodenschutzgesetzes (German Federal Soil Protection Act).

		Wastewater quantity			
		2007	2008	2009	2010
Production wastewater	m ³	59300	58500	40000	57700
Sanitary wastewater	m ³	20600	21500	13500*	19300
Evaporation from cooling towers/ air humidifiers	m ³	29600	25800	25200	30200
Total freshwater consumption	m ³	109500	105800	78700	107200
Fresh water consumption per unit produced	dm ³	88	83	102	80
Fresh water consumption per kilogram of unit	dm ³	–	26	38	34

* Due to reduced production activities in 2009, a sanitary wastewater consumption of 6 cubic meters per employee was calculated.

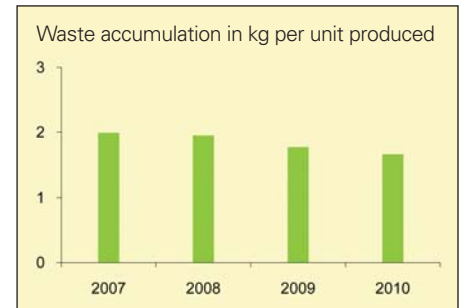
Waste

The primary quantities of waste from the company are:

- Metal from the metalworking department
- Glass from the graduation production department
- Used paper from offices and cardboard from packages
- Normal accumulation of commercial waste similar to household waste
- Various hazardous wastes, such as coolant lubricant and solvent/water mixtures

Thanks to a consistent and effective policy of waste separation, HEIDENHAIN is able to forward over 90% of its waste to material recycling and energy recovery.

Most of the accumulated waste is disposed of through the regional waste management facility EHG Recycling. Accumulated hazardous waste is disposed of through the hazardous waste management facility GSB Sonderabfall-Entsorgung Bayern GmbH. All waste is placed in intermediate storage, transported, and then recycled or properly disposed of in accordance with the requirements of the Recycling Management and Waste Avoidance and Management Act, including the hazardous goods regulations.



	Waste statistics				
	2007	2008	2009	2010	
Construction waste	t	83	87	30	63
Grease interceptors	t	67	50	53	43
Gardening waste	t	36	38	29	47
Glass	t	195	222	79	231
Household-like commercial waste	t	288	244	181	187
Wood	t	130	144	84	106
Cafeteria waste	t	16	18	12	17
Plastic	t	52	58	36	42
Metal	t	1 055	1 041	491	903
Paper	t	248	283	151	206
Electronics	t	65	80	63	78
Hazardous waste	t	238	224	165	312
Total waste accumulation	t	2 473	2 489	1 374	2 235
Waste accumulation per unit produced	kg	1.99	1.95	1.77	1.66
Waste accumulation per kilogram of unit	kg	–	0.61	0.67	0.71

Impact on the Environment

Emissions

Environmental emissions into the atmosphere are generated in the company primarily through

- combustion processes in the company's own combined heat and power plant (CHP),
- gas and oil combustion in the central and local heating furnaces, and
- chemical surface treatment of components and devices as for example in painting and cleaning processes.

The combustion processes in the combined heat and power plant and in gas-fed furnaces introduce primarily carbon dioxide (CO₂) emissions into the air. These are the result of 18 GWh of primary energy consumption of natural gas and heating oil. The carbon monoxide (CO) and nitrogen oxide (NO_x) content of the flue gas is regularly inspected and lies significantly below the legally required limit values. Sulfur dioxide (SO₂) emissions are generated in very small quantities in some instances by local oil-fed heating furnaces in rented buildings. Indirect environmental effects from electrical current consumption emissions, district heating, and passenger and freight traffic are at present not taken into account.

Emission of volatile organic compounds (VOC) is due primarily to the cleaning of semi-finished and finished goods at various facilities and workplaces. The cleaning agents used are mainly alcohols and acetone. VOC discharge is predominantly in building E90, which is subject to special requirements through the 31st provision of the Federal Emission Protection Law. However, painting of the products also requires the use of solvents. Compared to the previous years, emission discharge of solvents has decreased slightly in spite of increased production figures.



Due to the legal requirements of the Federal Emission Protection Law, foreign emissions of the combined heat and power plant and the air discharge from building E90 must be regularly monitored. The recurring measurements are checked by the externally accredited environmental laboratory InfraServ. The results are significantly below the legally specified limit values.

Odor, dust and noise emissions are produced only in small quantities.

		Emission discharge			
		2007	2008	2009	2010
Volatile organic compounds (VOC)	t	18.7	18.2	8.1	15.7
VOC discharge per unit produced	g	15	14	10	12
Carbon dioxide CO₂*	t	3200	3500	3800	3600
CO₂ emitted per unit produced	kg	2.6	2.7	4.9	2.7
CO₂ emitted per unit produced	kg	–	0.85	1.85	1.15

* Direct CO₂ emissions from consumption of natural gas and heating oil

Manufacturing Consumables

The company uses diverse auxiliary materials in manufacturing. Materials affecting the environment are listed below:

- Solvents for cleaning semi-finished and finished products
- Cooling lubricants for machining metal and glass
- Acids and bases for chemical processing of graduations
- Paints and coating liquids for product surface finishing

Solvents serve primarily for cleaning the surfaces of semi-finished and finished products. Besides the small amount that gets into the wastewater during rinsing processes, approximately half of the used solvents are disposed of as hazardous waste. The rest is discharged into the ambient air. The effort toward increasing the accuracy of the graduations of our measuring devices also places ever increasing demands on surface cleanliness. The consumption was kept relatively constant despite the frequent changing of the cleaning vats.

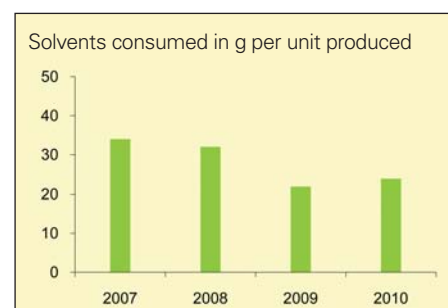
Cooling lubricants are used for machining metal materials and glass for manufacturing graduations. In the continuing effort to reduce waste quantities, various measures are being examined for increasing the service life of cooling lubricants in metal and glass machining.

Acids and bases are used primarily in the manufacture of graduations. Here the surfaces of graduations in our measuring systems are processed by galvanic and chemical methods. The substances, some of which are hazardous to human health, are handled predominantly in closed systems and under supervision of the ambient air.

Paint is now required only for surface finishing of our controls' housings. In recent years, however, we were increasingly able to do without painting thanks to the use of stainless steel housings. Now the quantities consumed are no longer appreciable.

Chlorofluorocarbons (CFCs) still exist in closed climatic cycles. Normal operation of air conditioning systems causes leakage of very small amounts, which are replaced accordingly. We continue to work toward the reduction of these cooling media and persist in the on-going conversion of all air conditioners to environmentally sound cooling media.

Steel, aluminum, sheet glass and electronics are the most important materials used to manufacture our products. The material efficiency is monitored and evaluated on the basis of the respective waste quantities produced.



		Manufacturing consumables			
		2007	2008	2009	2010
Solvents	t	42.6	40.9	17.3	32.7
Solvents per unit produced	g	34	32	22	24
Cooling lubricant concentrate	t	22.2	23.9	16.5	25.1
Cooling lubricant concentrate per unit produced	g	18	17	21	19
Acids and bases	t	18.4	17.2	10.0	16.5
Acids and bases per unit produced	g	15	13	13	12

Industrial Safety

Occupational Safety

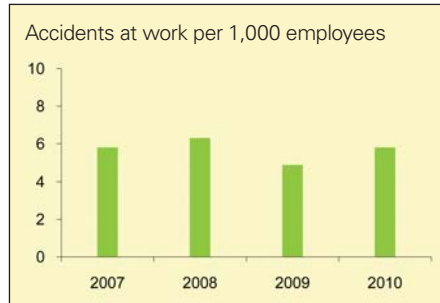
There are two kinds of accidents involving personal injury:

- Accidents at work on the company premises
- Work-related travel accidents

Most of such accidents are from tripping, slipping and falling while moving within the company premises. But also cuts and lacerations from handling sharp objects such as metalworking tools are quite frequent.

Work-related travel accidents usually occur when commuting to and from work. In the winter, freezing rain increases the danger of falling when walking on concrete or asphalt. Traffic accidents with cars, bicycles and on foot occur particularly frequently at this time of year.

In 2010, 14 work accidents subject to registration that occurred on the company premises caused a period of incapacity of more than three calendar days. In relation to the total number of employees, this is a quota of 5.8 accidents at work per thousand employees. The number and severity of accidents, however, is significantly lower



than the figures published by the Employer's Liability Insurance Association for the energy, textile and electronics sectors. Because most accidents at work are caused by behavioral errors, very great value is placed on employee training. The employees are regularly instructed by their supervisors about the dangers inherent in their duties and the measures required for effective prevention. Opportunities for advanced training on the topic of occupational safety are offered in an internal training program and are taken advantage of according to the areas of danger to the employees.

In order to ensure the safety and health of all of our employees, their work conditions, including the associated hazards and burdens, are evaluated systematically and regularly. All requirements for occupational safety, such as for plant and operational safety, are regularly examined on the basis of appropriate internal audits. If necessary, measures for improvement are initiated. The Trade Supervisory Office and the Employer's Liability Insurance Association found no significant objections during their examinations last year.

The safety and environmental committee meets regularly in order to further the internal communication of safety specialists, the company doctor, and the works council with the representatives of the various technical divisions. The committee members discuss occupational and environmental safety issues and, together, specify required measures for improvement.

	Work accidents subject to registration*			
	2007	2008	2009	2010
Accidents at work	15	17	11	14
Accidents incurred while working for the company or commuting to and from work	5	6	6	6
Total number of work-related accidents	20	23	17	20
Accidents at work per 1000 employees**	5.8	6.3	4.9	5.8

* Work accidents that caused a period of incapacity of more than three calendar days

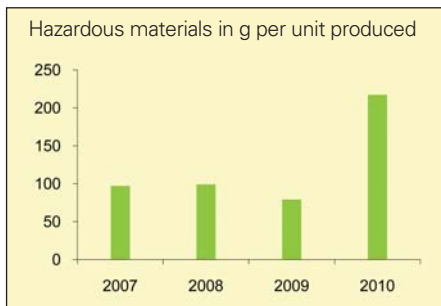
** Accidents at work not including those that occurred during business travel or while commuting

Hazardous Materials

Primary sources of hazardous materials in the company:

- Class 3 flammable liquids
- Class 4.1 flammable solids
- Class 6.1 poisonous substances
- Class 8 caustic substances

In 2010, approximately 292 metric tons of hazardous substances were transported in compliance with the German hazardous materials regulations and the corresponding European agreement. With respect to production figures, last year we were able to reduce the amount of hazardous materials transported.



Class 3 hazardous materials (flammable liquids) include the solvent-water mixture used in the company primarily to clean the surfaces of semi-finished and finished goods.

Class 4.1 hazardous materials (flammable solids) include waste from coating processes, adhesive residue from assembly areas and soiled cellulose cloths from cleaning activities.

Class 6.1 hazardous materials (poisonous substances) are primarily abrasive slurry from glass machining, polluted rinse water and various poisonous acids from graduation manufacturing.

Class 8 hazardous materials (caustic substances) comprise various acid- and base-contaminated wastes, also from graduation manufacture.

Class 9 hazardous materials consist since 2010 of the cooling lubricant waste from metalworking and graduation production, because it is classified as a water-polluting substance.

Empty pressure containers of Class 2 (gases) are declared as residue and shipped in compliance with the safety rules for the regulations of small quantities, and are not contained in the total quantity.

The hazardous substances are filled or packed into approved transportation containers and declared and loaded according to the currently valid regulations. The hazardous goods shippers are given the transportation papers with declarations of acceptance and accident procedures sheets. Rental containers holding dangerous residue are also handed over. The supplier provides the required transportation papers.

Packaging processes and loading are supervised by the company's risk prevention officer with the aid of a checklist. Employees whose tasks involve hazardous materials regularly receive specific training. No accidents with hazardous materials were registered in 2010.

		Hazardous materials transportation			
		2007	2008	2009	2010
Class 3 hazardous materials (flammable liquids)	t	79	81	38	74
Class 4.1 hazardous materials (flammable solids)	t	9	9	5	7
Class 6.1 hazardous materials (poisonous substances)	t	9	10	3	5
Class 8 hazardous materials (caustic substances)	t	23	26	15	28
Class 9 hazardous materials (various substances)	t	–	–	–	178
Total hazardous material	t	120	126	61	292
Hazardous material per unit produced	g	97	99	79	217

Industrial Safety

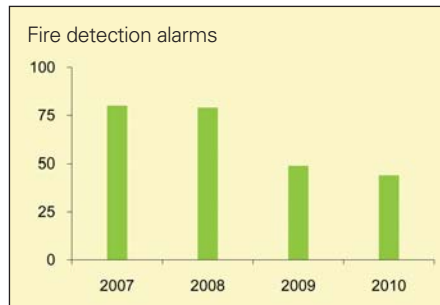
Fire Protection

Operational fire protection is divided into

- fire prevention and
- fire defense.

Preventive fire protection is affected primarily by the constructive design of the company buildings. The building regulations of the individual federal states are to be respected. The company considers fire protection equipment such as fire alarms, fire extinguishers and smoke and heat removal systems to be crucially important early in the planning stage of new construction.

In order to ensure fast and precise fire alarms, a central fire alarm system is in constant readiness. If a fire alarm is triggered, an internal mobile initial response force is alarmed in addition to the Plant Security group. Due to changes in construction, the number of fire detectors has risen slightly since last year to 8444.



In 2010 there were in total 44 fire detector alarms, 17 of which were nonspurious.

Nonspurious alarms are usually caused by handling errors, poor information exchange during necessary electrical system shutdowns, undisclosed work with hot materials, but also from cooking in the break rooms.

The local fire department had to be called once in 2010 due to water damage. In the newer buildings, the employees are informed of a fire alarm over an electronic public address system. In older buildings, fire alarms are indicated by sirens.

Automatic fire extinguishing systems are installed in the company buildings, as are wall hydrants and sufficient portable fire extinguishers. A sufficient hydrant network is available on the company grounds for an ample fire water supply.

In order to further improve our operational fire protection, employees are continuously being trained as fire protection assistants. It is their task on the one hand to operate a fire extinguisher in case of fire, and on the other to support executives and in particular the fire safety engineers in the area of preventive fire protection.

	Fire Protection			
	2007	2008	2009	2010
Fire detectors	7584	7826	8174	8444
Fire detection alarms	80	79	49	44
Fire extinguishing systems	8	9	9	10
Fire extinguishers	827	857	877	871
Wall hydrants	141	137	129	121
Fire department hydrants	8	8	8	8

Occupational Safety and Environmental Protection Program

To ensure an efficient implementation of the environmental policy defined for our company, we devise and continue to develop environmental goals with dedicated environmental programs. This occurs under the continuous influence of the results and experiences of the annual eco-audit.

Environmental programs include measures in all areas of operational environmental protection that, in the context of a process of continuous progress, aim toward the reduction of our environmental impact.

Implementing an environmental program requires the prior approval of the General Managers. It must be possible to integrate the environmental programs into the company's environmental policy. The use of the technologically best possible processes and methods shall ensure the continuous improvement of environmental protection.

The environmental programs comply with all legal regulations, but should also exceed their requirements inasmuch as is economically justifiable.

Environmental programs describe measures to reduce environmental impact

	Goal	Measures	Date
Energy efficiency	Improve the energy efficiency of technical facilities for buildings	Thanks to the reconstruction of two compressors in the compressed air center, their waste heat will in future be used for heating purposes. The planned heat recovery is expected to provide heating savings of approx. 600 000 kWh per year.	2011
Environmental protection	Reduction of paint consumption by 50 %	The front panels of contouring controls are painted to protect the surface. No painting is required if the front panels are made of stainless steel. The present share of front panels made of stainless steel is to be increased so that paint consumption can be reduced by one half.	2012
	Improvement in the handling of cooling lubricant waste	An additional processing facility for metal chips similar to the one on the central site will be built with the construction of the new production building H12 in Hochreit. The additional processing facility will obviate any transportation of metal chips from the Hochreit site to the existing facility at the central site. In addition, cooling lubricant waste is to be stored centrally in the proximity of the respective processing facilities for metal chips in order to prevent unnecessary hazardous material transport within the company.	2011
Safety and environment	Improvement of the environmental influences and safety through the new buildings H12 and E98	The use of safe and environment-friendly facilities according to the best of the available state of the art will ensure the reduction of influences on the environment and the continuous improvement of the general safety and health of employees in the new production buildings H12 and the training building E98. An example here is the heat recovery technology in the indoor air-treatment facilities of the production building H12 with annual savings in heat consumption of approx. 1 300 000 kWh.	2011/ 2012
health promotion	Improvement of ergonomics in offices	Group training will be introduced as part of the company's operational health promotion policy in order to optimize the ergonomic aspects of office workstation design.	2011

Results of Occupational Safety and Environmental Protection Objectives

The measures of the environmental programs from last year were implemented in most instances and resulted in improvement in reducing environmental load from our products and production processes.

They have helped us to reach a high standard that forms the basis for our continued efforts towards even greater environmental compatibility in our products and production methods. The results of the environmental program from last year demonstrate our efforts to continue a permanent improvement process toward environmental impacts at our Traunreut site.

**We have attained
a high standard in
environmental protection**

The qualitative or quantitative improvements of environmental effects are shown in the environmental data in the annual reports.

The Managing Directors annually examine the environmental programs and the corresponding quantities and deadlines in the context of the inspection results and the effectiveness of environmental goals and, inasmuch as is necessary, redefine them.

	Goal	Result
Environmental protection	Reduction of the cooling-lubricant consumption on machining centers in metalworking by approx. 50 %.	As a pilot project, the carry-over of cooling lubricant due to chip extraction on a rotary indexing table in metalworking should be reduced by installing a catch basin with a backwash pump. The company successfully completed the project on the rotary indexing table machine. Due to the conditions specific to the rotary indexing table machine and the many new construction projects, for now the company will refrain from equipping further machines with such equipment.
Fire protection	Improvement of emergency planning in the company	The number of fire protection assistants has been increased to over 100 persons. The company fire protection assistants can be further qualified to evacuation assistants so that they can help in case of danger or in a disaster situation and to ensure controlled and rapid evacuation of the buildings. They were able to practice their skills successfully by participating in an evacuation exercise of building E95.
Other non-quantified department goals		
Climate protection		The consumption of solvents is to be further reduced, for example by doing without the manual intermediate cleaning of semi-finished products through optimized preceding process steps. In the comparison of 2008 to 2010 the consumption of solvents per production quantity was reduced by about one fourth.
Occupational safety		Various tests of substitutes for auxiliary materials that are more environmentally-friendly and less harmful to health, for example due to changes of the legal regulations for a substance now classified as toxic by the manufacturer. Because of the high requirements on the quality of the processes and the system stability, as yet the company has not been able to release a replacement substance. The goal will continue to be pursued in 2011. Further reduction of the manual handling of adhesives during the assembly of devices, for example by improving the facilities with respect to gluing processes. The growing degree of automation in production made it possible to further reduce manual handling of adhesives. The goal will continue to be pursued in the coming years.

Statement by the Environmental Verifier

The signatory, *Dipl.-Ing. Ulrich Wegner*, EMAS environmental verifier of the **TÜV SÜD Umweltgutachter GmbH**, with the registration number DE-V-0045, accredited or approved for sector 26.5 (NACE code), confirms having assessed whether the site meets all requirements of Regulation (EC) No. 1221/2009 of the European Parliament and of the Council of 25 November 2009 on the voluntary participation by organizations in a Community eco-management and audit scheme (EMAS) as stated in the updated Environmental Declaration of the organization

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with the registration number *D-155-00010*.

With the signature of this Declaration it is confirmed that

- the expert assessment and validation occurred completely in accordance with the requirements of Regulation (EC) No. 1221/2009,
- the result of the expert assessment and validation confirms that there is no evidence of any non-compliance with the applicable environmental regulations,
- the data and information contained in the updated Environmental Declaration of the site present a reliable, plausible and truthful picture of all local activities within the area stated in the Declaration.

This Declaration is not equivalent to an EMAS registration. The EMAS registration can only be performed by an authorized body as per Regulation (EC) No. 1221/2009. This Declaration may not be used as the sole basis for public information.

Munich, April 11, 2011



Ulrich Wegner
Environmental Verifier



DR. JOHANNES HEIDENHAIN GmbH has been validated in accordance with the European Eco-Management & Audit Scheme (EMAS) since August 21, 1996.



DR. JOHANNES HEIDENHAIN GmbH has been certified in accordance with the international environmental management standard ISO 14001 since July 31, 1996, and with the quality management standard ISO 9001 since 1993.

HEIDENHAIN

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