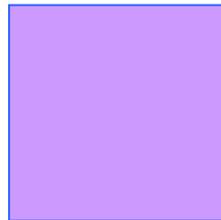
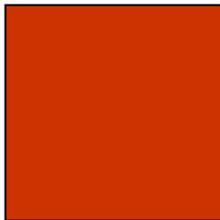
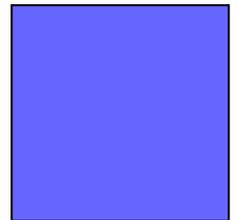
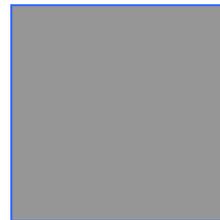
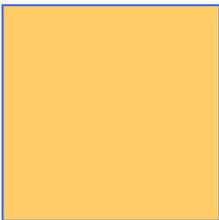


Environmental Statement 2018 / 2019



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Content Impressum



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Current state of the environmental statement:

January 2018

Current Index of the environmental statement:

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Welcome

Foreword

The field of environmental protection has extended the way of thinking and acting of a company. In addition to economical (e.g. economy, liquidity, efficiency/productivity, competitiveness) and social goals (e.g. job satisfaction, motivation, human job conditions, job retention and creation), ecological goals like conservation of raw materials and the sustainable protection of our natural livelihood and quality of life have become more and more important.

The comparison of these objectives and reality results in tasks and challenges at every level and in every department of a company.

Our environmental efforts are supposed to achieve the following significant goals:

- *to support the environmental knowledge and awareness of the employees,*
- *to serve the assessment and evaluation of possible consequences of innovation,*
- *to monitor and evaluate the environmental effect of business activity,*
- *to start activities to avoid/minimalize negative environmental effects,*
- *to optimise the use of resources,*
- *to activate reports and inspections of environmental effects,*
- *to meet the economic policy and goals of the company by ensuring corresponding activities and corrections,*
- *to take precautions for an emergency,*
- *communication and dialogue with the general public,*
- *to encourage our suppliers to use environmental systems, too.*

With regard to the current initial position of companies and considering economic and social goals, the mentioned values require a long-term process. Especially the limits of feasibility and reasonableness must not remain unnoticed during this process because they influence decisions of an environmental company directly.

Welcome

Foreword

Our environmental statement directed to our customers and suppliers, the interested public, our employees, as well as authorities and organisations. In this way, we hope for a constructive dialogue with you. Not only is the public effect important for us. Our management system is also supposed to

Contribute to the optimisation of business aims (e.g. reduction of rejects, energy consumption and waste).

We are looking forward to your suggestions and comments!

Herscheid, February 2018

Otto Bauckhage GmbH & Co. KG

Heike Schäfer

Managing director

The company **Us**

The Otto Bauckhage GmbH & Co KG was founded in 1960 by Mr. Otto Bauckhage in Herscheid / North Rhine Westphalia, Germany. Today our company employs 40 employees and is primarily established in the field of stamping technology. We see ourselves as a competent and reliable partner with a maximum of flexibility and performance.

Customers

Our company supplies the automotive industry, the electrical industry, as well as the bolt and nut industry.

Range of products

The manufacture includes precision stamped parts made of metal. They are constructed as defined by our customers, e.g. in the form of drawings or constructive cooperation with us. Our product range includes:

- Stamped bent parts
- Stamped embossed parts
- Deep drawn parts
- Tension discs
- Washers, especially for combination screws and nuts
- Special parts and hand samples, low / medium / high volume series

The maximum diameter of parts is currently 200 mm.

Materials

Steel strip and non-ferrous metals in the thickness range of 0,30 mm - 6,00 mm, such as

- Stahl (St and DC qualities)
- Heat-treatable and spring steel (carbon steel)
- Stainless steels (i.e. 1.4301)
- Aluminium
- Brass
- Bronze

The company Us

Factory equipment

- Automatic punching presses with 300 to 3200 kN press power
- Knee lever presses with 1500 to 2000 kN press power
- Hydraulic presses with 250 to 800 kN press power

Tool manufacturing / construction

- Economical manufacturing of stamping parts by an efficient tool construction
- comprehensive contract services in product development and production
- An own tool shop and prototyping

We develop and manufacture tools in our tool shop as well as with the help of qualified external partners.

Testing systems

- Opto – electronical testing systems for a 100 % part inspection
- Mechanical testing systems for a 100 % part inspection

In some cases, the complexity of production processes and logistic aspects can lead to unsystematically deviations. Those cases cannot be avoided under current technical conditions. For that reason, the manufacturing process is completed by manual or automatically sorting, in order to reduce the amount of parts with deviations or foreign parts.

Education

Our medium-sized company has been an established training company for several decades. Education and training is a guarantor of high performance and quality for our team. Our future and standards can only be ensured by a qualified training.

Social activities

The social engagement of our company relates in particular to local facilities with the focus on youth development and social education. For that reason, we traditionally donate our complete budget for Christmas presents and a partial amount of other presents to local institutions every year.

The company **Us**

Barrel finishing / heat treatment / surface treatment

These processing's are made externally and in cooperation with established specialised companies.

Effect of external processing on our products (examples)

Barrel finishing

Barrel finishing is a chemical-mechanical process for a parallel cleaning, deburring and surface finishing. The parts to be processed are put into a container, together with abrasive grits (chips) and water. Within the container, they are moved relatively towards each other. The effect is a grinding movement. In many cases, a compound (machine fluid) is added, in order to support the cleaning and deburring process chemically. Abrasion of Metal, grinding pattern and surface roughness primarily depend on composition and dimension of the chips, while the cleaning and degreasing effect is primarily influenced by the compounds.

Barrel finishing is an ablative process. Therefore, edge fillets and geometry changes have to be expected. If the cleaning is only based on the chemical effect of the cleaning fluid (i.e. no added grinding parts), the procedure corresponds to the process of drum cleaning. Grinding effluents content gross, fine and finest particles of the grinding tools and the processed parts. Besides, oils, fats and tenside are in the effluent.

The mentioned working processes are closed water circulations. Therefore, the bounded substances (oil, metal abrasion etc.) can be filtered out and disposed as special waste. Compounds are recovered proportionately and re-circulated. This completely closed water circulation cares for a minimal use of drinking water.

Galvanic treatments

Modern companies, particularly in the area of automotive industry, already have initialised extensive environmental measures. Especially legal requirements have a decisive influence here. While selecting suppliers in the field of galvanic treatments, we are very critical and do allow only suppliers who can prove a distinctive environmental awareness.

Where

Location Herscheid

Official name:	District Herscheid Herscheid is located within a hilly landscape of the Sauerland at the edge of the Rhenish Slate Mountains. The town belongs to the Märkischer Kreis district and the neighbouring cities are Werdohl (north), Plettenberg (east), Meinerzhagen-Valbert (south) and Lüdenscheid (west). In the south of the district the mountain Nordhelle is located within the natural reserve Ebbe Mountains. The Verse dam and the Fürwigge dam are west of Herscheid, the Oester dam east. Slightly outside the centre of the town, the Bruch stream flow, which has its source at the natural reserve „On the red vent“.
Traffic connection:	The district of Herscheid is characterised by a good traffic connection compared to other cities and districts of the Sauerland. From the north on the A45 highway, the distance between the highway exit „Lüdenscheid Süd“ and the city of Herscheid is about 7 km, from the south (highway exit Meinerzhagen) the distance is about 11 km.
Postal code	58849
Area code:	0 23 57
District:	Märkischer Kreis
Administrative district:	Arnsberg
State:	North Rhine- Westphalia
Population:	Number of inhabitants according to the official statistics: 7.217 (State: December 31 2015)
Inhabitants per sq km:	121
Geographical Location:	Latitude north 51° 10' 50,38" Longitude east 7° 44' 43,97"
Area:	58,91 sq km
Forest area:	34,31 sq km
Agrarian area:	19,32 sq km
Water areas:	0,24 sq km
Streets, paths, places:	0,195 sq km
Highest point above sea level:	663 m (Nordhelle)
Lowest point above sea level:	250 m (Schwarze Ahe)

Sources: - District Herscheid (2015-12-31)

- Official number of inhabitants. Land office for information and technology North Rhine- Westphalia

Our location **Where**

Company name:	Otto Bauckhage GmbH & Co. KG
Address:	Müggenbrucher Weg 51 58849 Herscheid
Traffic connection:	At the eastern edge of Herscheid, directly at the road section between Herscheid and Plettenberg.
Construction:	Mainly single-storey (partly two-storey at the area of the office wing). About 60% of the building is of solid structure, otherwise hall and lightweight construction.
Company size (rebuilt):	4.600 m ² Company area 530 m ² covered surface 5.672 m ² sealed and green area – 1.620 m ² of it are sealed surface.
Energy supply:	Energy supply by the Mark- E (Enervie - Group) Warmth supply by heating oil and Air- Heat Pump
Water:	Supply from the Fürwigge / Verse dam
Materials processed:	Ca. 8.300 tonnes/year. They are divided as follows: 98% Steel (unalloyed und micro-alloyed cold and warm strip) Carbon steel (C- materials) Stainless steel 2 % non-ferrous metal, e.g. bronze, brass
Additives and working materials:	No chlorinated oils and greases of several chemical composition (dependant on the specific task).

What kinds of waste result?

Metallic (Steel-) Scrap:	Ca. 3.500 tonnes/year
Commercial waste (such as household waste):	Disposal in the course of communal waste disposal.
Released emissions:	Except the emissions from wrath supply, no additional emissions are released.
Special waste:	Separation of materials like paper/cardboard and oily materials. The disposal is made by specialist companies.
Cleaning clothes (wipes):	Exclusively reusable wipes (external cleaning).
Oil / Oil recovery:	Oils are bonded by special cover. Partially, oil recovery is made by filtering the caught oils.

Environmental policy

Environment

Our company- specific principles are the basement of our environmental policy. This is an integral part of company policy and is derived from company principles. Concrete environmental goals exist in order to protect the entitlement of a company, with regard to a continuous improvement of operational environmental protection. To meet those requirements, the best technologies are used in consideration of economic viability.

The compliance with legal rules is expected to be the minimum standard and therefore obligatory.

Primarily, environmental policy is based on the following operational principles:

The employee

For the implementation of environmental policy, the participation of all employees is necessary. Therefore, all employees are informed and trained comprehensively and are integrated in the concept of environmental protection. In order to ensure a continuous improvement of environmental performance, every employee gets the opportunity to make own proposals concerning this topic and submit it to the management.

As a result, among other things, the following principles can be derived:

- Separation of waste (reusable material)
- Economical and reasonable dealing with additives and operating materials
- Reduction of noise which could evoke social conflicts with the neighborhood
- Reduction of energy and water waste

The environmental effects

All operations and procedures, as well as new products and operating materials are assessed before, with regard to their environmental relevance. The effects on the surrounding area are elevated regularly and reduced to a minimum. Resources are used economically and processed as completely as possible with the minimum of energy.

As a result, among other things, the following principles can be derived:

- Acquisition of products which pose only a low or even no risk to human and environmental health at all.
- Economical and reasonable use of additives and operating materials, especially fossil materials like oils, lubricants etc.
- Reduction of noise
- Reduction of energy and water waste

Environmental policy

Environment

Provisions in case of operational disruptions

All necessary and possible steps are taken to provide the effects of malfunctions on the environment as well as possible. The competent departments and emergency forces are included in the development of concepts.

According to this, following principles can be derived:

- Communication with the local institutions, i.e. commune and fire brigade
- Development and updating of a hazardous substance register
- A comprehensive fire protection concept

Monitoring

The compliance with the environmental policy is checked and evaluated by the management

According to this, following principles can be derived:

- Communication with the employees, the customers and the suppliers
- Involvement of environmental measures and their effects in the existing quality management system

Our contracting partners

We make sure that all contracting partners who are working on our premises (i.e. electricians, fitters, forwarders etc.) do use the same environmental standards as our own employees.

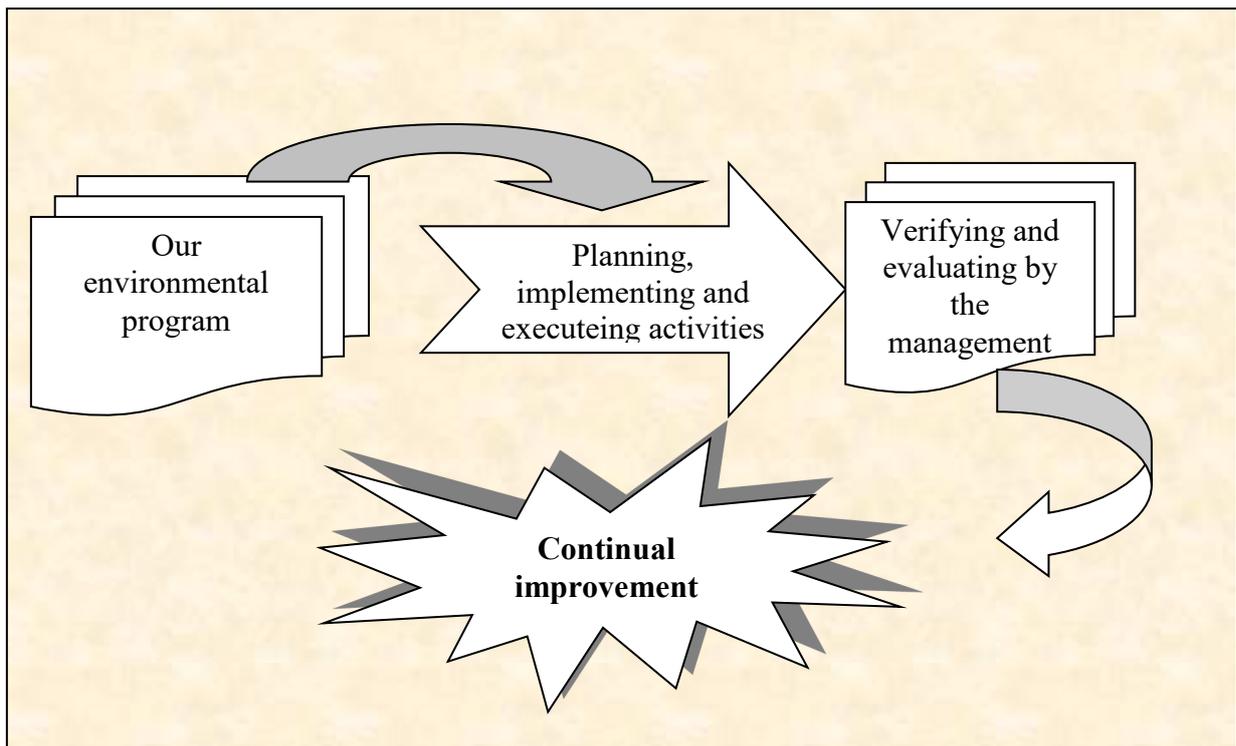
According to this, following principles can be derived:

- Selection of suppliers according to their basic attitude towards environment
- Instruction of external staff

- ⇒ Far-reaching and sustainable protection of the environment on the basis of legal and official regulations and other standards and norms is a basic goal of the Otto Bauckhage GmbH & Co. KG and all its activities. This goal is equivalent to other company objectives like labour protection, customer orientation, quality management and efficiency.
- ⇒ Environmental protection by the employees is a basic requirement and is therefore supported.
- ⇒ Planning and operating of the industrial plants and procedures meet legal regulations, as well as norms and technical standards. Within the economic framework, the Otto Bauckhage GmbH & Co. KG uses exactly that method, which offers the highest measure of sustainable environmental care.
- ⇒ Our suppliers are also requested to ensure environmental protection and possibly meet the regulations and instructions.
- ⇒ Environmental protection is a basic management responsibility. Environmentally-aware behaviour serves as a model.
- ⇒ Damaging events and violations of the existing environmental requirements are thoroughly explored. Measures are taken immediately, in order to prevent cases of recurrence.
- ⇒ Our suppliers are selected with regard to their products and services which are supposed to present a minimal risk for the environment.
- ⇒ The prevention of waste by using reusable packaging.

Environmental program

All activities within a company are associated with the use of natural or man-made resources. Therefore it is possible to produce new or necessary things. We are anxious to keep those consumptions as low as possible by our activities. So that economic advantages may result an addition to ecological advantages.



Activities Environment

Material consumption

Already in the course of participation in constructing new products, tools and machines, our company pays attention to a sparing use of resources.

The focus is on durability and an above-average functional reliability of constructions. In order to achieve this, we are verifying ways to reduce the use of raw materials, additives and operating materials already in the planning phase.

Other activities

Definition:	Parameter, i.e.:
Reduce consumption of fossil fuels (heating oil) with regard to the premises to be heated, i.e. by heat recovery	Litre consumption per m ³ of room
Economical use of lubricants during the production of our products	Oil consumption per ton of processed material
Noise reduction at the outdoor area with the help of noise barriers or planting	Directly measurable in db
Reduction of energy consumption for lighting by the installation of time or motion activated systems	Directly measurable in kwh
Responsible use of water	Water consumption in m ³
Reduction of losses in industrial compressed air systems, i.e. by the elimination of leakages	Directly measurable in kwh
Eco-friendly winter road clearance	Consumption of salt and granulate
Improvement of energy utilisation by reducing the proportion of reactive current	Supplier specification
Use of electronic communication technologies, i.e. e-mail. Information does not have to be distributed in paper format any more.	Paper consumption

Monitoring Environment

Quality management system

Already the currently replicable QM regulation IATF 16949 defines standards, which explicitly require our company to implement measures regarding environmental management. The orientation on the current QM handbook, as well as the integration of environmental management into our operational processes, stand as a model for the fulfilment of a longstanding commitment to the protection of our environment. The efficiency improvement of the whole management system is a logical result of the activities.

Within the required and planned internal QM- audits, we already consider environmentally relevant questions. For example, we verify possibilities to implement legal regulations responsibly (i.e. the provision of a hazardous substances register, separation of waste, safety inspections etc.).

The personell which is employed is appropriately trained. Training in environmental management are also mandatory.

Topics like IMDS, REACH or RoHS are no foreign words for us and they are given particular attention within our company, as well as in cooperation with our suppliers and customers.

Summary

Although we are currently not considering to be certified in accordance with an environmental standard like ISO 14001, we exceed our measures and requirements of ISO 9001 and IATF 16949.

We are very optimistic that, with the help of our presentations and environmental report, we could show you that we are well aware of the term "environmental management" and all its requirements and challenges. Our constant drive is to adapt our management system according to the current circumstances.

Thank you for interest in our environmental report.