

The logo for TSB druckt. features the letters 'TSB' in a large, bold, black serif font. Below the 'B', the word 'druckt.' is written in a smaller, black, lowercase sans-serif font. The entire logo is contained within a thin black rectangular border.

TSB
druckt.

First environmental statement 2011 of Bagel Roto Offset GmbH & Co. KG

Location: Kirchweg, 06721 Meineweh, Germany

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Preface

PROXIMITY TO OUR CUSTOMERS INNOVATIVE APPROACH SUSTAINABILITY

This document is the first environmental statement of Bagel Roto Offset GmbH & Co. KG.



Dr. Udo Bogner
Managing director



Markus Permesang
Managing director



Hans Jürgen Böhm
Environmental
Manager

Since 1801, the name of Bagel has been closely related to the development of the printing industry. Over seven generations, the family who owns it has developed the Bagel group from its very first beginnings to the group of successful companies it comprises today.

In 1962 the Mönchengladbach-Neuwerk location was established in line with the latest constructional and technical findings. Then, in 1974, the gravure print shop, Tiefdruck Schwann-Bagel GmbH & Co. KG, abbreviated to TSB, was set up. Today it stands out as one of the most advanced and highest-performing of printing plants in Europe which remain independent of publishing houses. In 1993 we made a commitment to contribute towards the reconstruction of the new Federal Lands of Germany by setting up a reel-fed offset print shop in the Sachsen-Anhalt-Süd industrial park. Since 14 September 2005, this company has operated under the name „Bagel Roto-Offset GmbH & Co. KG“.

The gravure print shop, Bruckmann Tiefdruck GmbH & Co. KG of Oberschleißheim, joined the Group in 1999. All three locations, which are legally independent companies, have decided to implement an environmental management system in line with the Eco Management and Audit Scheme (EMAS). The intention is that economic and ecological factors are addressed together and prepare the ground for further development at all sites in line with our three guiding principles, i.e.,



Organisation

Bagel Roto Offset GmbH & Co. KG is a Heatset offset print shop with a headcount of 120. Each year we use 50,000 tons of paper to produce high circulation promotional literature, magazines and catalogues.

The print shop is conveniently located in an industrial area close to the A9 motorway near Naumburg. There are public transport stops close to the print shop. The undeveloped plot of land between Kirchweg and the motorway is available for further extension. It is currently rented out and therefore not considered in this statement.

In the vicinity of the print shop, other industrial business can be found; however there are residential buildings just a few hundred metres away.

The print shop is basically made up of

- prepress (image processing, printing plate copying)
- printing area including paper reel supply for printing presses and related equipment (trimming lines, log stackers, palletising equipment)
- shop including power and material supply and disposal

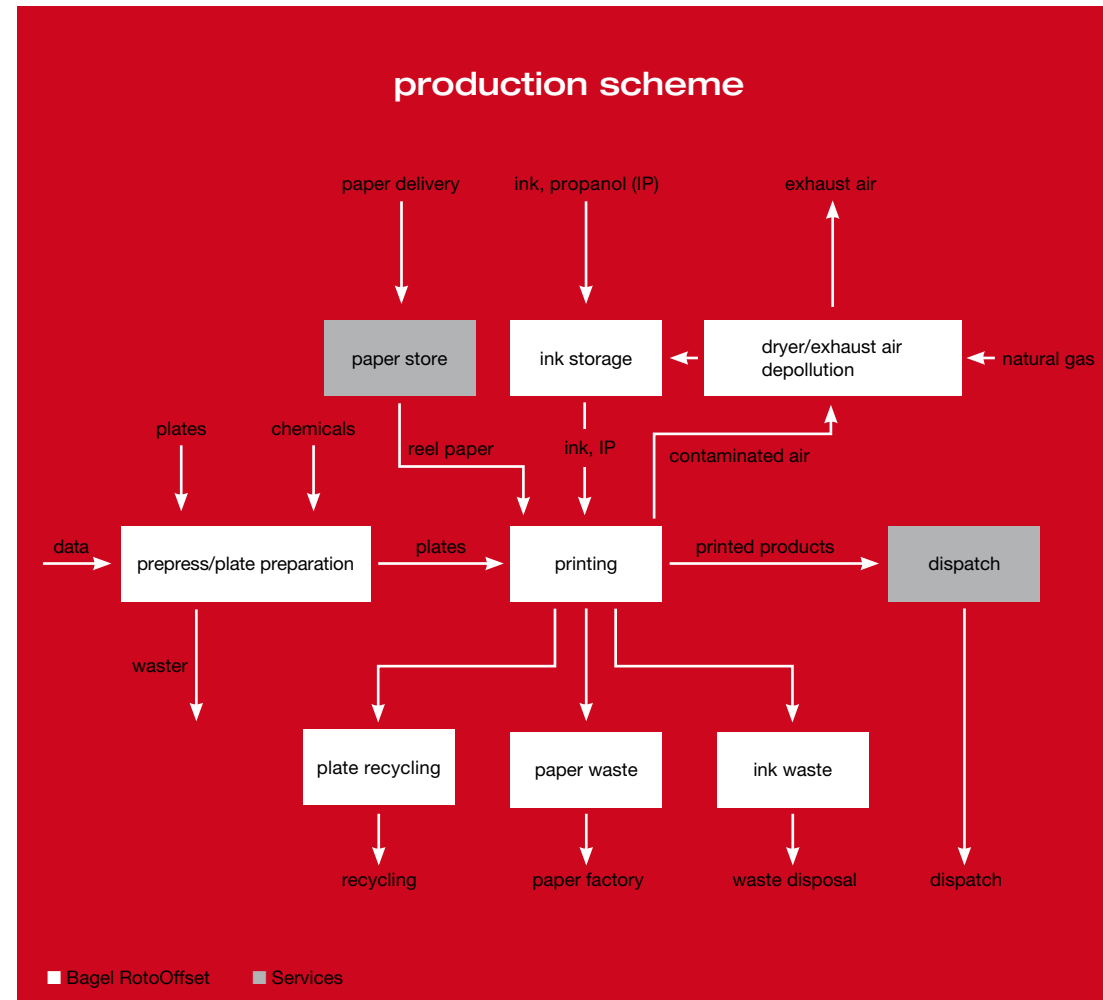
The shop also includes a small administration area. The equipment must be approved in line with the Federal Immission Control Act. It is de-scribed in appendix no. 5.1, column 1 of the 4th Regulation on the Federal Immission Control Act, which covers plants which exceed certain solvent quantities when printing web material. The provisions on compliance with emission limit values are based on German TA Luft (technical instructions on air quality control), TA Lärm (technical instructions on noise abate-ment), as well as the 31st Regulation on the Federal Immission Control Act.



Activities, Products

Bagel Roto Offset GmbH & Co. KG prints high-quality, high-circulation catalogues, magazines and promotional literature. The print run per job can vary between 20,000 to several million copies.

The following production scheme serves as an overview. The major units are described below.



Activities, Products

Prepress

Our customers supply the documents they wish to have printed in an electronic format, mostly as PDF files. They are delivered to pre-printing by data transmission. Here special software is used to convert the electronic files into printing plates and these are scanned to activate an imagesetter.

The raw printing plates used for this purpose consist of an aluminium supporting plate with an anodized surface and a full surface emulsion. They are processed using a laser imagesetter. After that, the emulsion outside the image areas which has been exposed to the laser and therefore destroyed is washed out using a chemical processor. Thermal post-treatment ensures that the printing plates are conditioned to be able to print large volumes.

For two-side printing, 8 printing plates are required, i.e., four for each side of the web. Four process colours are used in printing: black, cyan, magenta and yellow. These process colours are computer-generated based on the pages designed and supplied by the customer.

To complete a print job, the finished printing plates are folded, sorted into a plate cart and transported to the printing press. On average, the division produces some 600 plates per week.

The environmental and security aspects of the prepress stage include the following

- secure operation of equipment
- economical use and safe handling of chemicals
- recycling or disposal of used chemicals
- proper maintenance and repair of all equipment, including related safety equipment, e.g., monitoring or catch trays
- regular inspection of the process to make sure any environmental impact resulting from chemicals or electrical power is minimized

The offset process is a flat printing process. It is based on the principle that ink (greasy) and water repel one another. Printing is made using a flat printing plate where areas to be printed or not to be printed are neither raised (relief printing) nor recessed (gravure printing).

Activities, Products

Printing

After installing the exposed printing plates (form) onto the impression rollers of the printing unit, printing can start at a speed of up to 15 m/s. The paper, which is provided on an endless reel, runs through the 4 printing towers with a total of 8 printing units (four colour machine). The printing units are made up of plate and rubber blanket cylinders, as well as one dampening and one inking unit each. First, the impression roller comes into contact with the dampening unit, and then with the inking unit. During this process, the printing plate is covered with a damp film so that unprinted areas will repel the ink when in the inking unit. This is based on the principle that water and oil repel each other. It is an indirect printing method, i.e., the print image is correctly adjusted on the printing plate and is then transferred to the rubber blanket to be side-inverted and then printed onto the paper web in the correct orientation.

Once the paper web has been printed on both sides, the colour is still damp and has to be fixed in a dryer. The ink dries at approx. 180 °C to 280 °C web temperature, as the mineral oil contained in the ink evaporates. The oil is used to operate the dryer. After that, the paper web is guided through a cooling roll unit where the paper is cooled down to 20 °C – 30 °C. Next the paper runs through a silicon system where a water/silicon blend is applied. This remoistens the paper and ensures the surface is scratch-resistant during the following processing steps.

Now the paper web is guided into the folder unit where the printed web is trimmed in a longitudinal direction and the sections are laid one over the other using turning bars. The stacked sections are fed



Activities, Products

Printing

to the former, where the first longitudinal fold is produced. Then the section is cross-cut. The first cross fold is produced in the connected folder unit and, upon request, a third fold can also be produced. In addition to folding, the product can also be glued or stitched.

Inline finished products are trimmed on three sides, stacked, strapped and placed onto pallets upon request in the disposal unit of the printing press and wrapped in protective foil. Semi-inline finished products are stacked, palletized and transported to be processed in other factories.

The environmental and security aspects of the printing stage include the following:

- safe handling of equipment and materials
- efficient energy use
- efficient use of paper and ink as well as the minimization of spoilage
- regular maintenance and repair of machines, as well as regular control of functionality of safety equipment
- due to the high flammability of paper, fire precautions are important



Activities, Products

Workshop

In addition to mechanical and electric workshops, this division ensures the supply of resources to operational units, e.g. compressed air, power, water and natural gas. This means that all the energy, auxiliary energy and consumables needed to operate all the production and auxiliary equipment such as printing presses, processing units, compressors, air conditioning systems, water treatment plants for production and cooling equipment are provided from here. The responsibility for the repair, maintenance and troubleshooting for all the production equipment, supply and disposal, conveyors, hoists and other equipment is of major importance to avoid downtime. In addition, the division is responsible for controlling and monitoring functions, carrying out testing based on regulations, producing test documentation as well as the practical handling of waste disposal and verification of proper disposal.

Printing presses consume a great deal of power, and particularly dryers installed downstream of the printing equipment consume large amounts of energy. For economic reasons, installed dryers are very hard to replace with more advanced designs. Therefore, the acquisition of new machines must be thoroughly evaluated so as to make future production more energyefficient while saving resources. The oil contained in the ink which evaporates in the dryer is oxidized (combusted) inside the dryer and emitted using natural gas. Additional energy is consumed by two boilers. These boilers are required to occasionally heat the production halls. Usually the energy fed back from the dryer

after the combustion process is sufficient to ensure enough heating power. The two boilers are subject to the 1st Federal Immission Control Act (performance of < 10 MW), i.e., the emissions of these systems are regularly checked by a chimney sweep.

In addition, compressed air should be considered. Produced using electricity, it is one of the most expensive types of energy. Minimizing leakages and the use of advanced systems can lead to a reduction in consumption.

The environmental and security aspects of the workshop include the following:

- equipment security
- ensuring that approved emission limits for the dryers and operational noise emissions are complied with
- monitoring of ink and isopropanol storage
- safe operation of the chemicals warehouse
- efficient use of energy and raw materials

Generally the workshop is the most important area in ensuring that the printing operations are safe and energy-efficient and meet the legal regulations.

Environmental policy and environment management system

We are aware of our responsibility towards our employees, customers, contract partners, the local community and the environment. In the light of our equipment and our resource consumption, we are particularly committed to making every effort to ensure that our company runs safely and uses resources sparingly.

Our environmental policy, as well as a management system designed to respond to these challenges help us reach our goals. Our corporate policy has been implemented at the top level of management.



Environmental policy and environment management system

Environmental policy

- We are fully committed to the protection of our employees and of the environment because of our sense of responsibility. We promote awareness of health, safety and environmental matters at all levels of our company.
- Our corporate policy is based on sustainability objectives wherever this is feasible and economically reasonable. To us, sustainability means meeting general economic, ecological and social standards.
- We are committed to making our production safer, more environmentally compatible and more efficient. When new processes, activities or products are to be implemented, we always analyse, assess and evaluate their impact on the environment beforehand.
- We encourage our suppliers and customers to introduce environmental and occupational health and safety management systems. We very much welcome these objectives being given high priority. We ensure that third parties working on our premises comply with our environmental protection and occupational health and safety standards.
- We are committed to meeting all the legal norms and we cooperate with the competent authorities.

- We take measures to avoid causing an impact on health or the environment at our location or in the local area and we agree these measures with the competent authorities. In doing so, we place particular importance on equipment safety so as to minimise potential risks.

This leads to the following activities (among others):

- we continuously improve our environmental protection measures, which go beyond meeting the legal environmental standards
- our staff is actively involved in our environmental protection measures
- we are committed to saving resources
- we are committed to avoiding emissions and reducing waste as far as possible
- we handle hazardous materials with care
- we are committed to avoiding environmental impacts
- our suppliers and contract partners are involved in our activities
- we maintain cooperative relationships with the authorities
- we are committed to checking and assessing our environmental impact on a regular basis.

Environmental protection organisation: management system

Continuous improvement

The management system is designed to ensure the continuous improvement of our company's environmental compatibility. A range of tools are used for this purpose, including operational organisation, process organisation, communication, control loops for monitoring and correction in the event of deviations from specifications.

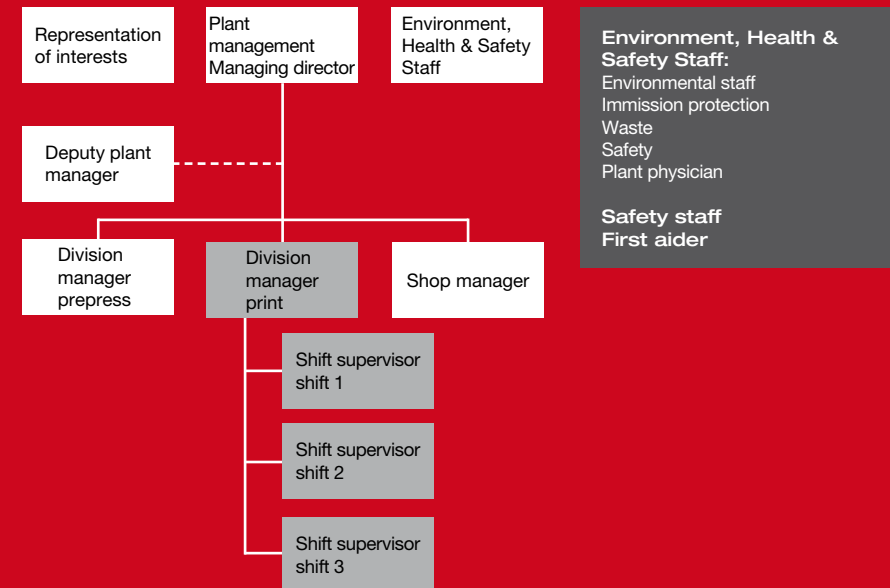
Environmental protection organisation: management system

Operational organisation

The operational organisation can be illustrated using a chart in which the accountability and responsibility for plants are defined. The technical management team is responsible for the environmental management system and the environment staff takes care of maintaining the management system. His/her reports and the environment and occupational health and safety staff support these activities.

Organisation chart for Bagel RotoOffset

Responsibilities for environmental protection/occupational health and safety as per para-graph 52a BImSchG (Federal Immission Control Act), paragraph 53 KrW/AbfG (Cycle Waste Management Act) and paragraph 13 ArbSchG (Act on Occupational Safety and Health)



■ Plant subject to approval

Environmental protection organisation: management system

Operational control

The required controls are defined in the environmental management manual. Based on process and environmental instructions, processes are described relating to such matters as waste, hazardous goods, hazardous materials, emergency management or handling substances which are hazardous to water. The emergency plans cover dealing with accidents, failures or incidents which may impact the environment. The instruction contents must be checked and adjusted on a regular basis or in the event of any operational changes.

Environmental protection organisation: management system

Emergency management

Each plant must implement measures to ensure plant safety and the protection of employees, the local area and the environment in line with its hazard potential.

So far no failures have occurred which have had a durable impact on the environment. We want this situation to continue and, in the event of an accident, we want to make sure that action is taken quickly. We therefore have contingency plans which have been agreed with the authorities.

Fire protection measures have been taken and mobile and/or stationary extinguishers and hydrants are available in all areas. To provide an enhanced water supply to the fire brigade, an additional fire water pond was created and water is being collected in cisterns. Within the framework of our training plan, employees are regularly instructed on handling fire extinguishers.

Our chemicals warehouse is a sensitive area and nobody works in that area on a permanent basis. It is regularly monitored using internal controls. Furthermore, the tanks are accommodated in catch trays, so that no substances can penetrate into the ground or the ground water. The area is monitored using automatic fire detectors which are connected to an automatic alarm system. The alarm informs both our staff and the fire brigade located right next to the print shop. The reception of the fire brigade and transfer to the location of the fire is organized. All

reasonable measures have been implemented to ensure plant safety. To us, plant safety has the top priority. In addition to the measures already mentioned for protecting people and the environment, production availability is of major importance to us and our customers.

We are not aware of any situation resulting in site pollution due to material escaping into the soil or water at this location.

Environmental protection organisation: management system

Communication

In order to be able to sustainably anchor our regulations in our plant and to ensure employee awareness, these regulations are communicated in various ways. For internal communication, regular instruction notices, bulletins, our environmental statement, the internet and intranet are used. The works council supports our management system and is actively involved through the plant manager as well as the committees for environment and health and safety at work. All managers, the works council and employees are encouraged to suggest ideas and improvements. We are aware that there is still a long way to go and that there is potential for further improvement.

For external communications, we use our internet platform, our environmental statement, written communications with our customers and suppliers and our local community. In addition, we maintain relationships with the authorities and employer's liability insurance.

Environmental protection organisation: management system

Verification of the management system

To make sure that the regulations described are complied with and implemented, annual audits of the management system and company are undertaken. This includes compliance with statutory provisions and requirements based on EMAS. The management system is evaluated based on compiled KPIs, a comparison of their development over time and the derived environmental aspects. The audit results as well as details of KPI development are provided to the plant management team to form the basis for further improvements in management as well as system verification by the plant management team.

The system follows the PDCA cycle (i.e., plan, do, check, act)
„Diagram by Karn G. Bulsuk (<http://www.bulsuk.com>)“



Environmental aspects and performance

Environmental aspects

The environmental aspects of the company are considered and evaluated holistically. The objective of the management system is, among other things, to limit the environmental impact of our activities to a minimum. The objectives developed and included in our environment programme should therefore always consider those topics which, based on our evaluation, have a relevant impact on the environment. „Relevant impact“ and „high relevance for the environment“ are very elastic concepts which can be interpreted differently. For instance, „relevance for the environment“ includes both a global and a local perspective.

To evaluate our relevant environmental aspects, we therefore use a system which enables environmental relevance and improvement potential to be easily demonstrated. It is based on quantities, consideration for environmental aspects and their evaluation criteria as well as a related evaluation scheme. Potential improvement approaches and feasibility studies are also taken into consideration. The process is in line with the so-called „BUWAL“ (Federal Office of the Environment, Forestry and Landscape) approach and is based on environmental KPIs from 2010.

Other environmental aspects to evaluate may result from discussions with customers, the local community, the authorities, our employees and the management team.

We evaluate these aspects in order to find out the potential for improving our environmental performance or limiting our environmental impact, sometimes even by simple measures. We are committed to identifying objectives and developing activities for our environmental programme for the areas shown in the following table, which have medium to high environmental relevance and feature medium to high feasibility.

When it comes to indirect environmental aspects, our influence is limited. We have identified important aspects and we intend to protect the environment beyond the limits of our premises and to this end we intend to work in close cooperation with our major suppliers. The objective is to improve environmental performance throughout our production chain.

Environmental aspects and performance

Environmental aspects

Environmental relevance	high	Land occupancy (sealed natural ground) Solvent emissions (other pollutant emissions into the air)	Pollutant emissions due to energy consumption Resource efficiency (paper, ink) Fire protection measures (environmental risk due to fire)	Supplier evaluation, share of suppliers with environmental management system (purchasing, suppliers)
	medium	Equipment to deal with substances hazardous to water, pollutant accumulation in the soil Pollutant emissions due to traffic	Resource efficiency (other)	Training of staff, awareness raising amongst staff
	low	Odor emissions (solvent smells) Noise emissions Evacuation of waste (waste except paper waste) Water Contaminated soils		
		low	medium	high
IMPACT/improvement potential				

The table gives an overview of the environmental aspects identified so far and how we have graded their relevance. The environmental aspects identified are revised and adjusted as necessary on a regular basis.

Environmental aspects and performance

Description of major environmental aspects

The top line of the table shows the environmental aspects which we have evaluated to be important.

Equipment to deal with substances hazardous to water

We work with substances hazardous to water, i.e., ink or chemicals used for the electroplating stage. These substances bear a potential risk to soil and water. However we have already implemented a number of measures in this area so that we feel there is only limited potential for further improvements.

Land occupancy/sealed natural ground

Sealed natural ground and the relationship between the built-up area and non- built-up area is an aspect which has high relevance for the environment. As our premises are limited in size but have grown continuously over the past few years, the share of non-built-up area has steadily reduced to 61%. Currently there is a relatively large undeveloped plot of land, which is separated from our premises by a road. It is currently rented out and therefore not considered in this context.

Supplier evaluation

To us, our suppliers are another major environmental aspect, as they provide us with all our raw materials. In this area, we see the possibility of working together with our suppliers to improve environmental protection and sustainability so as to achieve lasting improvements. As a first step, we ask our suppliers to share their opinions so we can

build them into our regulations, which are then communicated to our suppliers.

Resources

In print shops, power, paper and ink always play an important role and are therefore always a major ecological aspect due to their high consumption and in economic terms due to their high cost. As is often the case, working ecologically is equivalent to working economically.

Paper and ink are part of our environmental programme. To dry ink, natural gas is needed. All of our developments in this area seek to reduce further the quantity of natural gas needed as a ratio of the quantity of dried product. With regard to the printing presses, we have identified the potential to limit natural gas consumption and this has been incorporated into our current environmental programme as a project. The quantities consumed are monitored on a regular basis so as to enable the early detection of any increase in consumption. What is more, our printing presses consume a lot of electrical power.

In order to boost conservation and the efficient use of resources, data is collected on a regular basis and compared over time. That way, deviations can be identified quickly and corrective action can be taken early on. Benchmarking with competitors helps us to determine our position.

Environmental aspects and performance

Description of major environmental aspects

Fire protection measures

Resources such as paper and ink in print shops always represent a high fire risk, which from our perspective has high environmental relevance. In addition, the water supply at our production site is not sufficient to reach the minimum quantities defined by the fire brigade. To cope with this situation, a fire water pond was created to serve the fire brigade in case of need. In this area, we see some potential for improvement and we are committed to implementing measures aiming at reducing the risk of fire and its potential impact. In this context, we will be conducting training courses.

Emissions

During the process of drying the ink, emissions are produced which also represent a relevant environmental aspect. In this area, we are constantly working to implement improvements as described above. The approved limit values are based on TA Luft (technical instructions on air quality control) as well as the 31st Regulation of the Federal Immission Control Act. We comply with the limit values (carbon: 20 mg/m³, nitric oxides, carbon monoxide: 100 mg/m³, dust: 3 mg/m³), which must be reported to the authorities on a regular basis. Furthermore, the 31st Regulation of the Federal Immission Control Act provides a maximum diffuse emission of 30% of the solvents used. The balance for 2010 was calculated by an engineering office to be a total of 16 %, thus placing us far below these values.

In terms of noise emissions, we also fall below the approved limit

values. To date, our local community has not complained about noise emissions, and the immission guide values at relevant measurement points are 60 dB (A) during the day and 45 dB (A) at night.

Heatset offset can be easily smelled when exhaust air cleaning plants, i.e., dryers, do not work well or are poorly maintained. Our plants work perfectly and to date we have received no complaints from the local community about bad smells.

With regard to transport, we are currently unable to identify any alternative to receiving deliveries by truck as there is no railway or waterway connection.

Qualifications

The qualifications and expertise of our staff ensure that our operations take place safely and in a way which is compatible with the environment. We are constantly working to raise awareness and enhance knowledge. For this purpose, we have developed a training schedule, defining who must provide/attend what training course.

Statutory provisions

Compliance with statutory provisions forms the basis for reducing environmental impacts. For this purpose, a legal register was set up and considered in terms of compliance with statutory requirements. We

Environmental aspects and performance

Description of major environmental aspects

continuously track any amendments to provisions in a variety of ways, for instance a revision service notifies us of any revised provisions and we also receive information from trade magazines, associations and the authorities. Our goal is to always comply with new requirements in good time. In addition, we provide regular legal training for our environmental staff and have our inhouse database to monitor audit obligations and these measures also help us meet the statutory provisions.

Environmental aspects and performance

Environmental performance

Over the years, we have constantly implemented new measures to enhance our environmental performance. Some examples include:

Heat recovery

Waste process heat is recovered from exhaust systems using heat exchangers and either fed back to the heating system or used to heat boiler feed water. The heat from waste air from the compressed air compressor stations is used to heat the paper warehouse.

Rainwater use

Rainwater from the roofs is collected in large cisterns and can be used as feed water for cooling equipment (cooling tower feed water).

In order to show our environmental performance, we have compiled the most important corporate data in the following overview. The data available from the previous year was insufficient and the effort involved in collecting it at this stage would have been unreasonable. From this point onwards, the data will continued to be compiled and compared in the environmental statements for years to come.

Data is gathered on an annual basis and is used for our evaluation with a view to reducing our environmental impact and making more efficient our use of raw materials. The indicated values are absolute values. The core indicators are relative values related to the product output.

Environmental aspects and performance

Environmental data 2010

Facts and figures

	2010	Unit
Paper and ink		
Paper used	37744	tons
Ink used, including additives	1633	tons
Total solvent input, calculated as per 31st Regulation of the Federal Immission Control Act	811	tons
Total product output	34586	tons
Material efficiency, input/output (paper + ink input/product output)	1.14	tons/tons
Energy consumption		
Electrical power	11639	MWh
Natural gas	10679	MWh
Total energy consumption	22318	MWh
	thereof renewables	2095 MWh
Specific total energy consumption (quantity/product output)	0.645	MWh/tons
	Specific consumption of renewable energy (quantity/product output)	0.061 MWh/tons
Water balance		
Total water (town water, rain water)	21424	tons
Specific water consumption (quantity/product output)	0.619	tons/tons
Total waste water	11611	tons
Evaporation	9813	tons

Environmental aspects and performance

Environmental data 2010

Facts and figures

	2010	Unit
Greenhouse gas emissions (CO₂ equivalent)		
Emissions (natural gas, coolant)	2510	tons
Specific total greenhouse gas emissions (total greenhouse gas/total product output)	0.07	tons/tons

(Coolant emissions 2010 = 0 kg (no leaks, no refills))

Emissions		
Sulphur dioxide	0.08	tons
Specific total SO ₂ emission (quantity/product output)	0.002	kg/tons
Nitric oxides	3.326	tons
Specific total NO _x emission (quantity/product output)	0.10	kg/tons
Dust	0.06	tons
Specific total PM emission (quantity/product output)	0.002	kg/tons
Printing solvents (total)	134	tons
Specific total solvent emissions from printing operations (quantity/product output)	3.875	kg/tons

Waste		
Total waste	5188	tons
Specific waste sum (total waste/total product output)	0.15	tons/tons
Waste by disposal method		
Waste recycling	5106	tons
Waste disposal	82	tons

Environmental aspects and performance

Environmental data 2010

Facts and figures

	2010	Unit
Abfälle		
Waste type	5188	tons
Non-hazardous waste	5157	tons
Specific non-hazardous waste (quantity/total product output)	149.11	kg/tons
Hazardous waste	31	tons
Specific hazardous waste (quantity/total product output)	0.90	kg/tons
Major waste fraction		
Waste paper	4791	tons
Specific waste paper (quantity/total product output)	0.14	tons/tons
Cardboard boxes and packaging material	270	tons
Specific cardboard boxes and packaging material waste (quantity/total product output)	7.81	kg/tons
Aluminium printing plates	43	tons
Specific waste, printing plates (quantity/total product output)	1.24	kg/tons
Biologic diversity		
Land	30054	m ²
Sealed with buildings and factory access roads	18200	m ²
Specific sealed land (sealed land/total product output)	0.53	m ² /tons

Conversion factors based on GEMIS 4.2

Environmental aspects and performance

Environmental objectives

Our environmental objectives are developed based on a range of approaches. Firstly, the relevant environmental aspects previously mentioned define the direction of environmental objectives and implementation measures to be developed. In doing so, we are committed to always incorporating at least one goal into our environment programme which has high environmental relevance or potential impact.

On the other hand, our environmental policy allows us to derive other objectives which then need to be mapped in our environmental programme.

Environmental aspects and performance

Environmental programme 2011 – 2013

Activity fields	Objective	Quantification	Measures, programme	Deadline
Resource efficiency	Energy savings of the new printing press as compared with previous models. Comparison of 2010 and 2012	- 50 %	Replacement of two printing presses by a higher performance press	2013-02-01
Resource efficiency	Savings in the amount of ink per m ² of printed surface, reference period 2010/2011	- 3 %	Modified ink, reducing its penetration of the paper	2012-02-01
Compliance with legal provisions, employee protection	Improvement of fire prevention	–	Review of escape and rescue plans, danger prevention plan, discussion/exercise with the fire brigade	2012-04-01
Waste minimization	Reduction in spoilage from 8.8% to 7.5% in the reference period 2010/2011	- 1.3 percentage points	Paper project, staff qualification	2012-02-01
Training, qualification, raising of awareness	Enhancement of health and safety at work at all levels	–	Additional training/environmental operating instructions and training as per training plan	2011-12-31
Supplier development	Identification of the current status of supplier involvement into environment management	–	Survey and data collection among suppliers	2012-02-01

The staff responsible for implementing these items have been defined, and the required budget is available. The environmental programme is a regular item on the agenda of our environment/employee committee meetings. At these meetings, an update on the current status is provided and new issues are discussed. Each year, the implementation quota is evaluated and an explanation is provided for any projects which have not been implemented.

Getting involved

Do you have any questions concerning environmental protection at BRO?

Do you need a printed copy of the statement?

Would you want to learn more about BRO?

Would you want to learn more about Bagel Group?

Would you want to learn more about the printing industry?

Would you want to learn more about professional training in printing and media?

We are happy to talk to you. Please contact:
Hans Jürgen Böhm, Environmental Manager,
hans-juergen.boehm@tsb.de

Information about Bagel Roto Offset
is available on the internet at www.bagel-roto-offset.de

Information about Bagel Group is available
on the internet at www.bagel.de

Information about the printing industry and environmental protection in the printing industry, as well as professional training is available from the German Printing and Media Industries Federation at
www.bvdm-online.de
www.medientechnologe.org

Validation

STATEMENT BY THE ENVIRONMENTAL VERIFIER ON ASSESSMENT AND VALIDATION ACTIVITIES

I, the undersigned, Dr. Andreas Riss, EMAS environmental verifier, registered under the number DE-V-0115, accredited or approved for the area (NACE Code) 18.1, confirm that I have assessed whether the site as stated in the environmental statement of Bagel Roto Off-set GmbH & Co. KG complies with all the requirements of Regulation (EC) no. 1221/2009 of the European Parliament and Council dated 25 November 2009 regarding the voluntary participation by organisations in a Community eco-management and audit scheme.

In signing this statement, I declare that

- the assessment and validation fully comply with the requirements of Regulation (EC) no. 1221/2009
- the results of the assessment and validation confirm that there is no evidence for non-compliance with the applicable environmental regulations
- the data and information contained in the environmental statement 2010 for the location is a reliable, plausible and true picture of all the activities at the location within the area defined in the environmental statement

This statement is not equivalent to an EMAS registration. EMAS registration may only be issued by a competent office as per Regulation (EC) no. 1221/2009. This statement must not be used as the independent basis for public information.

The environmental statement has been verified and declared valid.

Dr. Andreas Riss
Environmental verifier

Certificate issued by the Chamber of Industry and Commerce

Certificate of Registration



EMAS
VERIFIED
ENVIRONMENTAL
MANAGEMENT

Bagel Roto Offset GmbH & Co. KG
Site:
Kirchweg 1
06721 Meineloh

Registration-No.: DE-157-00126

Date of first registration
20th December 2011

This certificate is valid until
30th December 2014

This organisation has established an environmental management system according to EU-Regulation Nr. 1221/2009 and EN ISO 14001:2004 section 4 to promote the continual improvement of environmental performance, publishes an environmental statement, has the environmental management system verified and the environmental statement validated by a verifier, is registered under EMAS and therefore is entitled to use the EMAS-Logo.

**IHK**
Industrie- und Handelskammer
Halle - Dessau

Halle (Saale), 30th January 2012

President  Carola Schaar	Chief Executive Officer  Dr. Thomas Brockmeier
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