Environmental Statement

Report Environmental Protection and Safety

Location Bien Hoa 2015
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**ENVIRONMENTAL PROTECTION BIEN HOA 2015**

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A Message from the Partners

Ladies and Gentleman,

with its INA, LuK and FAG brands, Schaeffler is a global technology leader in the automotive supplier industry for all renowned manufacturers as well as for customers from many other industrial sectors.

A successful family-owned company, Schaeffler’s thinking and actions have a long-term orientation and thus focus on durable success taking all aspects of global activities into account.

Schaeffler has set long-term ambitious goals with regard to innovative power, product quality, process quality and delivery reliability as well as a growth trend that secures large investments for successful innovations. At the same time, we have traditionally placed great emphasis on combining economic success with responsible actions for our customers as well as the environment and our employees.

 Worldwide compliance with the code of conduct for responsible and fair business and company management are part of our company principles and goals, as are environmental protection and occupational safety.

Schaeffler incorporates environmental protection in all processes: from development to purchasing to manufacturing to disposal. Energy, water and materials are used sparingly and carefully. Waste is avoided by returning materials to the production cycle whenever possible or by recycling them.

An essential tradition of our family-owned company is to place great importance on the responsibility we have for our employees, who guarantee the success of our company. Global compliance with high standards as well
as recurring workstation analyses ensure the highest possible level of workplace safety for all employees. We are convinced that – against the background of our global responsibility – working, integrated environmental protection and occupational safety management represents an important contribution to our company’s sustainability.

Our responsibility also includes providing innovative products to handle key problems of the future as well as developing and offering solutions that help reduce pollutant emissions in automobiles and increase the energy efficiency of vehicles and machines.

This report on environmental protection and occupational safety documents the fact that Schaeffler successfully combines efficiency and environmental compatibility with the integration of social factors both inside and outside of the company.
Foreword by the CEO

We believe that there is only one environment and that this environment is global...

Schaeffler unites its three great well-known brands INA, FAG and LuK under one roof. With more than 82,000 employees at over 180 locations worldwide we manufacture components and systems for the automotive industry and sixty other industrial sectors.

Our commitment to active environmental protection and occupational safety has been firmly established in our company’s management principles from the very beginning. One of the first of these principles states, “Exemplary actions based on clearly defined ethical values determine our success.” It goes on to say: “We assume responsibility for our environment.” Meeting this requirement means recognizing risks, analyzing and evaluating facts and making the right decisions for a particular situation. We established a group-wide environmental protection and occupational safety policy years ago to serve as guidelines for our actions. These guidelines are evaluated regularly and basic ideas are adjusted to match ever changing requirements.

What is special about our environmental protection and occupational safety management system compared to many other companies is its worldwide implementation at the same high standard. We do not make a distinction between our plants in Germany, other countries in Europe, the United States, Asia or other manufacturing sites. We believe that there is only one environment and that this environment is global and worth protecting everywhere. The same applies when it comes to evaluating our employees’ workplace environment. Here, we make no compromises in maintaining high standards, true to our conviction that safety must have top priority – worldwide. We began more than ten years ago to validate all plants to EMAS environmental protection regulations and to have them certified to ISO 14001. In 2010, we reached this ambitious goal for all of our 80 production sites worldwide.

Our commitment to environmental protection has gained recognition by our customers as well as political leaders. We have received the Ford Motor Company’s World Award for Environmental Leadership Worldwide multiple times. Receiving the Environmental Medal of the State of Bavaria, The European EMAS Award as well as the EcoGlobe in 2010 and 2011 serve as both a confirmation for our policy and a motivation to continue on our course.

President and CEO Schaeffler AG
Schaeffler AG

Schaeffler with its INA, LuK and FAG product brands develops and manufactures precision products for everything that moves – in machines, equipment, vehicles and in aviation and aerospace.

Schaeffler is one of the world’s leading rolling bearing manufacturers and a renowned supplier to the automotive industry. In 2014, this globally active group of companies, which is headquartered in Herzogenaurach, Germany, generated sales of around 12.1 billion Euros. With over 82,000 employees, Schaeffler is one of Germany’s and Europe’s largest family-owned industrial companies.

With 180 locations in over 50 countries, Schaeffler has a global network of manufacturing sites, research and development facilities, distributors, engineering offices and training centers. Customer proximity is important for developing market-specific products and fast service. All Schaeffler plants worldwide work according to the most stringent quality and environmental standards, and these plants have been certified to international standards. Through its “Code of Conduct” Schaeffler has committed itself to maintaining high social and ethical standards.

Our Divisions

Automotive
The automotive industry is our main group of customers and represents 60 percent of sales. For this industry, Schaeffler is a recognized development partner with systems expertise for the entire power train – i.e. engine, transmission, chassis and accessory drives in passenger cars and commercial vehicles. Schaeffler offers a wide range of products that ranges from energy-efficient solutions for classic powertrains with internal combustion engines to products for hybrid vehicles to Components for electromobility. Precision products made by INA, LuK and FAG help vehicles use less energy and emit fewer emissions without reducing driving comfort, safety and fun. Our customers world-wide include all renowned automobile manufacturers and suppliers.

Our Automotive Aftermarket provides replacement parts in OE quality as well as comprehensive services to distributors and independent repair shops around the globe. It helps promote qualifications and expertise in brands and products and provides marketing support.
Industrial

Through its global organization and application support teams close to the market, our Industrial Division supplies rolling and sliding bearing solutions, linear and direct drive technology in the INA and FAG brands for around 60 industrial sectors. Its products include more than 225,000 items, ranging from miniature bearings only a few millimeters in size, such as those used in dental drills, to large-size bearings with an outside diameter of several meters for wind turbines. The Industrial Division’s renowned “Aviation and Aerospace” group designs high-precision bearings for airplanes, helicopters and rocket engines such as the ones used in the Airbus A 380 and Boeing’s 787 Dreamliner. Special applications with high-precision bearings, e.g. in medical engineering, complete our product range.

Schaeffler’s Industrial Aftermarket (IAM) handles the replacement parts and service business for end customers and distributors. IAM is a strong partner and offers its customers innovative products and services that significantly improve the service life and performance of production facilities. In addition to a comprehensive range of rolling bearing products, the IAM portfolio ranges from mechanical assembly tools to intelligent online monitoring systems, from service training courses to fully customized maintenance solutions.
Success Factors

Besides being close to the customer anywhere in the world, our strong employee focus and having sustainable management, other important success factors include innovative power and creativity. Around 6,000 employees develop new products, technologies, processes and methods at 40 R&D locations to provide market-oriented solutions. With more than 1,800 patent applications and over 18,000 patents and patent applications currently in effect, Schaeffler is one of the innovation leaders in manufacturing. Our primary development locations in Germany are in Herzogenaurach, Schweinfurt and Bühl, all of which are linked to other development centers in Europe, Asia and North and South America.

Growth through key trends
Foresight as well as long-term thinking and actions are what characterize our company. Schaeffler identifies key trends at an early stage, invests in the research and development of new, future-oriented products, defines new technology standards and prepares these standards for volume production. In the areas of efficiency increase and CO₂ reduction, renewable energies, mechatronics and e-mobility, Schaeffler offers a wide range of innovative products such as rolling bearings with optimized friction and performance, electromechanical components, rolling bearings with integrated functions and direct drives.

The highly varied activities of the Automotive and Industrial Divisions with regard to electric mobility are concentrated in our “E-Mobility System House.” Our wide range of products already offers a multitude of solutions, ranging from sensor bottom brackets for electric bikes to start-stop systems and hybrid clutches all the way down to electric drives.

Our Brands

INA
Founded in 1946 by brothers and Ph.D. holders Wilhelm Schaeffler and Georg Schaeffler in Herzogenaurach, this brand has become a global player as a rolling bearing manufacturer and automotive supplier. The INA brand primarily includes rolling bearings, linear systems and engine components. The success of this company with headquarters in Herzogenaurach began in 1949 when Georg Schaeffler developed the needle roller and cage assembly – an ingenious invention that helped needle roller bearings achieve their international breakthrough. In 1952, an INA-made needle roller bearing replaced the previously used plain bearings in VW Beetle transmissions and represented the beginning of an “automotive career.” Today, there are hardly any passenger cars without INA engine and transmission components. Cam phasers and hydraulic bucket tappets ensure higher performance, reduced consumption, fewer emissions and more driving comfort in modern engines.

The high quality and reliability of its rolling bearings, engine components and linear technology products have made Schaeffler a sought-after and reliable partner for numerous industrial customers.
FAG

The FAG brand and the rolling bearing industry are inseparably linked. In 1883 Friedrich Fischer designed a ball mill in Schweinfurt that allowed him for the first time to produce high-precision steel balls in large quantities by machine. This invention is generally considered the historical beginning of the rolling bearing industry, which started its triumphant road to success in Schweinfurt. Ever since, FAG (Fischer Aktiengesellschaft) rolling bearings – a registered trademark since 1905 – have been synonymous with first-class products and expertise.

Since its acquisition by INA-Holding Schaeffler KG in 2001, FAG has been an important part of the Schaeffler Group. Whether it is high-precision bearings for aviation and aerospace, sensor wheel bearings in passenger cars or large bearings with an outside diameter of more than four meters for wind turbines, FAG products are the first choice for all aviation and aerospace, manufacturing and automotive customers. FAG’s range of products and services is the perfect complement for the INA brand.

LuK

In the Schaeffler Group, LuK is the company that focuses exclusively on the automotive industry. LuK was cofounded by the Schaeffler brothers in Bühl in 1965 and immediately took the technological lead in the market with its first innovative product, a diaphragm spring clutch. The LuK Group has been fully owned by Schaeffler since 1999. A number of groundbreaking products followed, such as the self-adjusting clutch for dual mass flywheels and the dry dual clutch. Innovation and technological leadership are important company pillars. Today, one out of four cars world-wide has a LuK clutch.

LuK works closely with its customers to find solutions for tomorrow’s automotive world. Examples include dual clutch transmissions and components for continuously variable transmissions, products that provide added safety and comfort and fewer emissions.
Schaeffler is continuing the social responsibility of all of its companies and regards this as an essential requirement for continued corporate success. The Schaeffler Code of Conduct is based on the principles of the “Global Compact”, “The Global Sullivan Principles of Corporate Social Responsibility” and the standards of “Social Accountability International”. The basic principles described here constitute a minimum standard for us and do not affect country-specific additions that are based on the relevant cultural circumstances.

Human Rights
We undertake to observe the internationally proclaimed human rights in our sphere of influence.

Forced Labor
We will not engage in or associate ourselves with any form of forced labor.

Child Labor
We will not engage in or associate ourselves with child labor in our operations.

Discrimination and Respect of Others
We mean to provide a workplace free of discrimination and harassment on the basis of gender, race, skin color, religious beliefs, age, national origin, handicap, or sexual orientation. Employees deserve each other’s respect.

Compensation and Working Hours
We recognize workers’ needs for adequate remuneration and observe the legally guaranteed minimum wages in the respective labor market. We observe the rules that apply to working hours in all of our operations.

Relationship with Employees and Employee Representatives
We respect our employees’ voluntary freedom of association. Independent of this, we also enable our employees to express their interests directly to management on a continual basis.

Work-Life Balance
We are a family-owned enterprise. With our family-friendly arrangements and provisions we strive to enhance the satisfaction and motivation of our employees and hence increase the performance of the Group.

Health and Safety
We mean to provide a safe and healthy working environment that meets or exceeds applicable standards for occupational health and safety. We will take steps to prevent injuries and occupational illnesses caused by workplace conditions.

Workforce Development
We see the development of our employees as an essential investment in the future of our company. We also value the development of social and technical expertise.

Environmental Responsibility
We maintain an environmental management system at all production sites worldwide and continuously improve on this system. The minimum requirement is that local environmental protection laws and the specifications of the Schaeffler Group’s environmental protection system be observed. We collaborate with our business partners and suppliers in meeting our environmental responsibilities.
Conflict of Interests, Gifts and Attempted Bribery
We will not accept gifts or payments or hold (company) investments which could lead to a conflict of interests. In particular, neither bribes nor any other illegal payments may be offered, made or accepted.

Suppliers
We encourage, where practicable, our suppliers to introduce and implement similar principles of social responsibility within their companies.

Responsibility
We believe each of our employees has an individual responsibility to follow this Code of Conduct and encourage coworkers to abide by it as well. Management is responsible for enforcing principles that become part of our rules or policies.
Global Environmental Protection

Over the past decade, Schaeffler has successfully established an environmental management system that we can be proud of. All manufacturing sites have been certified to ISO 14001 and also to the more stringent European Eco-Management and Audit Scheme (EMAS).

The Group’s non-European locations, e.g. in the United States, Brazil, China, India and Korea, have also successfully passed inspection based on EMAS.

The certificates and environmental statements as well as the Schaeffler environmental policy are available on the Internet.

With the validation and certification of its manufacturing sites, Schaeffler has been leading the way in environmental protection. The company has received several awards for this commitment, including the Bavarian Environmental Medal and has been awarded Ford Motor Company’s “Recognition of Achievement, Environmental Leadership” award three times.

Schaeffler’s commitment to environmental protection was recognized on a global scale when the company was presented with the EMAS Award in 2005.

All of Schaeffler’s manufacturing sites have an environmental protection coordinator. At each location, the plant manager is responsible for ensuring environmental compliance.

The “Competence Center for Safety and Environmental Protection” and its competence groups both plan and coordinate the strategic orientation of the management system and provide support on environmental protection issues to all Schaeffler Group locations worldwide.
Schaeffler Environmental Protection and Occupational Safety Policy

Occupational safety and environmental protection are part of our management principles. We create and maintain a safe working environment that promotes the health and performance of our employees and embrace environmental responsibility to secure our company’s continued existence and success.

The following principles apply to all Group locations worldwide. We are firmly committed to our employees, to society and to future generations.

Efficient Occupational Safety and Environmental Management
We embrace and continuously improve our occupational safety and environmental protection system. We develop forward-looking strategies and work with our business partners to implement these strategies. We perform regular checks to determine how well our specifications have been implemented and how successful our management system is in all divisions.

A Safe and Employee-Friendly Workplace
We believe that all work-related injuries and illnesses can be prevented. Highly motivated employees and executives support our efforts to provide a zero-accident workplace. We give equal consideration to the protection of our employees and contractors. That is why we base the design of new workstations and work processes on the latest scientific findings and place great importance on the ergonomic design of workstations.

Reliable Actions
We are committed to complying with all legislation and specifications regarding occupational safety and environmental protection. We act responsibly in accordance with our own regulations, which often go above and beyond applicable laws. We plan, purchase, operate and maintain our machines and facilities using a strategy that helps prevent potential hazards and minimize risks and business disruptions. Our actions and decisions are based on state-of-the-art technology.

Minimal Environmental Impact and Environmentally Friendly Products
We take every effort to prevent environmental impacts in all of our activities. This includes our efforts to generate as little waste, wastewater, noise and other emissions as possible. We use resources and energy sparingly. We produce environmentally friendly products by taking into consideration a product’s entire lifecycle.

Responsible Employees
We regularly provide information and training to our employees and business partners to ensure they have the skills and expertise necessary to carry out their work safely and to minimize environmental impacts in all company departments.

Preventive Measures
We take comprehensive measures to protect our employees from health hazards and prevent damage to the environment. Comprehensive and effective emergency measures are in place at all locations to ensure that our employees and visitors receive adequate care in the event of injury.

Open Communication
We conduct an intensive and trusted dialog with interested parties. We provide information about our occupational safety and environmental protection measures as well as the impact each of our locations has on the environment.

President and CEO Schaeffler AG
Environmental Communication

The company’s intranet provides comprehensive information: contact persons, databases, a waste guide and much more. This information is made available to all employees worldwide.

Company newsletters and notices are also used to inform employees.

Regular Conferences
Environmental protection conferences held every year allow participants to exchange information and coordinate goals and actions. These conferences last several days and are attended by the environmental protection coordinators from all locations. Since environmental protection conferences were first introduced, cooperation and coordination (e.g. for planning environmentally relevant facilities) between all locations have improved tremendously.

Global Regulations: Plant Standards and Procedures
All actions relevant for the environment, such as the approval of indirect materials or the specification of substances prohibited for use in products and packaging, are regulated globally by special plant standards. In this way, Schaeffler ensures that hazardous materials are used only if there are no other alternatives.

Safety rules and regulations also apply to contractors working in Schaeffler plants. A document detailing all safety-related requirements has been prepared for contractors working on the plant premises. Contractors may not enter the premises to perform their work unless they have agreed in writing to comply with these requirements.

Regular Internal and External Audits
The level and progress of the company’s environmental protection are also monitored by regular internal audits at all manufacturing sites as well as external audits by an independent environmental verifier. These audits are planned and coordinated at company headquarters and carried out by the Schaeffler auditor pool.

All locations receive an audit report that includes details of the current status and recommendations for improvement.

Due dates and responsibilities are defined for all relevant measures.
Maria-Elisabeth Schaeffler receives 2011 EcoGlobe Person of the Year Award

The EcoGlobe Institute of the University of Duisberg-Essen has awarded the 2011 EcoGlobe Person of the Year Award to Maria-Elisabeth Schaeffler. The prize was awarded in honor of Mrs. Schaeffler’s entrepreneurial achievements and cultural and social commitment as a company partner, Vice Chairperson of the Schaeffler AG Supervisory Board as well as a member of the Supervisory Board at Continental AG.

“Her keen sense of what is good for the company’s employees and with great selfdiscipline, has allowed Maria-Elisabeth Schaeffler to build a business that has a highly remarkable corporate culture and great economic success,” the selection committee said in its statement. The strategic principles to which Maria-Elisabeth Schaeffler has oriented the company are characterized by high social, environmental and quality standards. She has molded the group into a modern, global and successful family-owned business and given it a very sound strategic direction.”

The committee especially stressed Schaeffler’s activities in the fields of sustainability technologies, including the optimization of tracking systems for solar plants, the development of wave energy converters for the utilization of ocean power and drivetrain solutions for wind turbines as well as the company’s dedication to electric mobility and its contribution to reducing fuel consumption in internal combustion engines.

At the awards ceremony Maria-Elisabeth Schaeffler said, “It is my great pleasure to accept the EcoGlobe Person of the Year Award. I regard it not only as recognition of what I have done in the 15 years since my husband passed away, but also a confirmation and appreciation of Schaeffler’s great technological achievements.”

The EcoGlobe, initiated in 2007, is the mobility industry’s first international environmental award. Under the patronage of Environmental Minister Norbert Röttgen, it is sponsored by DEVK Versicherungen and ACV Automobil-Club Verkehr in cooperation with the EcoGlobe Institute Duisburg-Essen and awarded by an independent blue-ribbon committee consisting of experts from the fields of science, politics, business and culture.
Environmental pollution and the depletion of resources can largely be attributed to the increased consumption of products. We must change our way of thinking and insist on environmentally friendly products that use fewer resources and minimize the strain on the environment. Our “Integrated Product Policy (IPP)” addresses this idea and aims to promote environmentally friendly products.

Schaeffler – Always One Step Ahead
This isn’t a new idea for Schaeffler; we have embraced this idea for many years. We accepted the challenge to design environmentally friendly products a long time ago. What is new is the methods and tools used to achieve this goal. How can we utilize previously untapped potential to improve the ecobalance of a product over its entire lifecycle?

New Inroads
One way to make environmentally friendly products is to increase the efficiency of the material and energy used, thus reducing environmental impacts. We continuously evaluate and design all material and energy flows, from the time they enter the company to the time they leave as products or residual materials.

Comprehensive Data Management
The company’s own environmental data coordinator handles inputs and outputs of material and energy flows for all processes and products at the respective plant. Material flow analyses help further integrate environmental management into the company’s corporate units, such as Logistics, Manufacturing and Financial Controlling. Existing processes and technologies are questioned thoroughly, and additional opportunities for improving processes are recognized and put into practice.

Information Networks
Environmental impacts occur even when resources are extracted. To make products even more environmentally friendly, Schaeffler stays in close contact with its suppliers and customers. A shared network is used to record and analyze environmental information along the entire product chain. The insights gained allow new solutions to be recognized for environmentally friendly products and sustainable development.

Recycling
We try to ensure that manufactured components are recycled at the end of a vehicle’s service life. This is why LuK and INA are founding members of the PartsLife recycling system.
Social Responsibility

Environmental experts around the world agree that the global environmental problems of our time can only be solved if both economic and social factors are considered. On the one hand, only economically healthy companies pursue long-term environmental protection activities, and from a social standpoint people who are starving or suffering social injustice cannot be motivated to become active in protecting the environment. The “principle of sustainable development” is based on these assumptions.

In line with the company philosophy of accepting new challenges, Schaeffler has tackled the concept of sustainability. Generally, sustainability is not seen as an additional job to be completed but as an idea that offers new opportunities since it links problems that were previously treated separately. A view that integrates economic, ecological and social issues allows new solutions to be found and thus contributes to the sustainability of a company and of society as a whole.

Although a lot has been said about sustainability and social responsibility, not a great deal has been done. The examples below show that things are different at Schaeffler:

Health as a Social Factor
Preventive occupational health and safety represents an essential social component at Schaeffler. We confront this responsibility by implementing numerous measures and projects. Preventive medical check-ups, workstation inspections and medical workplace consultations, reintegration support after long illnesses and fast medical help in emergencies are only some of the many services our Medical Services team provides. We also offer a wide range of company sports groups.

Apprenticeships and Professional Training for Future Needs
With around 3,000 apprentices worldwide and high-quality vocational training, Schaeffler has a role model function. Schaeffler employees can make use of a comprehensive range of continuing professional training courses to keep their skill sets up to date or for their personal development.

Retirees are Still Part of It All
Even after our employees retire, they have a number of opportunities to stay in touch with their company. Social security, justice and consideration, training and company pension plans aren’t just empty phrases. The Group does its part to benefit society, putting it on the right track in its efforts to achieve sustainability.

Social security, justice and consideration, health protection, educational opportunities and company pension schemes are not just hollow phrases at Schaeffler. Our company expresses its solidarity with society, putting us on the right track to sustainability.
Introducing the Location in Viet Nam

Where Schaeffler Viet Nam
Bien Hoa plant is located in Amata Industrial Zone, Long Binh Ward, Bien Hoa City, Dong Nai Province, Viet Nam. It is 30 kilometers West North of Ho Chi Minh City. The Amata Industrial Zone is 7 square kilometers big and over 100 companies are in operation. Therefore, location has the favorable circumstance with city and industrial water supply, wastewater discharge, electricity supply, waste disposal.

Sanitary waste from Bien Hoa Plant is connected with a sewage system of the industrial zone, it is treated and discharged to the Dong Nai River after a final treatment.

Schaeffler Viet Nam started with sales office in Ho Chi Minh City in 2006; then, in 2007 Bien Hoa Plant was established. Investment to machines, facilities and buildings has been continuously made since its foundation and the location cover approximately 7,200 m² (Land) and 6,400 m² (sealed surface) now. The number of employees is 187 people at the end of 2014 including two sales offices.

To accomplish the goals for the best quality of products and to give the well organized response to our customers, we established ISO/TS 16949 system in 2013 for the first time. And it has been maintaining up to now.
The scope of business of Bien Hoa Plant is manufacturing and sales of Tapered Roller Bearing (TRB) and Radial Insert Ball Bearing (RIBB).

TRB
- Applications: Transmission, Gear-boxes, Wheel hubs
- Product Range: Outer Diameter 40 mm – 170 mm

RIBB
- Applications: Agricultural Machinery, Conveyors, Industrial Fans
- Product Range: Outer Diameter 27 mm – 110 mm

The site’s manufacturing processes start with grinding machine, then TRB component parts are assembled together; For RIBB range, inner ring and outer ring are black oxidized by Sodium Nitrate before being assembled together. At assembly processes, plastic sealing components are added. As final process, products are inspected and packed before providing to our customers.

Each process has its environmental aspect such as energy, waste offensive outdoor as described in the chart.

Environmental Management System
Environmental Management System (EMS) was established in 2011, which was focused on reduction and limitation environmental impact/aspect.

Plant Manager takes full responsibility for EMS at Bien Hoa Plant and cascades down to E&S Coordinator and Management Board.
Environmental Impacts

We established the Environmental Impact Assessment procedure to identify Environmental Impacts/Aspects which came from each process at Bien Hoa Plant.

The environmental aspects are evaluated with **impact** (to the environment) and **effort** (to reduce or limit); which ones have high impact and low effort will be set priority as **grade A**, and vice versa, the ones have low impact and high effort will be set priority as **grade C**.

Base on result of the Environmental Impact Assessment, we can set properly targets and programs to monitor and limit our impacts to the Environment.

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<td>Priority</td>
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<td>_ B</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Air Emissions
Solvent for washing purpose is considered as air emission (even we cannot be found any relevant regulations form the legal requirements). Therefore, we carry out measurement once a year to make sure that there is no pollution put out to the air. Beside that, we try to wash with pressure from 1.5 bars to 3 bars to reduce this risk.

Base on Environmental Commitment with government in December, 2014, we also consider CO$_2$, SO$_2$, NO, outside of the Plant. We ask the legitimate supplier to measure these indicators twice a year and compare with Vietnamese Standard.

Water protection
With current leased plant, sewage and rainwater are separated discharge systems. Rainwater directly goes down to the rainwater pipe system and come to the river. Wastewater, which originates from domestic and canteen be collected and treated primarily by pretreatment tank, then it goes to wastewater treatment plant of Bien Hoa Industrial Zone.

For centralization facilities which use liquid hazard substances, we make concrete wall surrounding facilities - it's acting as secondary container when leakage or spill.

Waste management
Generated waste at our site is collected separately. Waste are separated to three kinds: Sanitary waste, Recycled waste and Hazardous waste.

Sanitary waste which does not come from production processes, such as canteen ..., cannot be recycled. Sanitary waste is transferred to a urban environment company for grounding.

Recycled waste such as: empty cans, drums, container, waste paper, and packing material..., is sold to a recycling company.

Hazardous waste is sent to a supplier for treatment as legal requirement. Hazardous waste includes grinding sludge, contaminated rags, chemical waste, wastewater, fluorescent tubes, batteries... The quantity and classification of these Hazardous waste is controlled strictly and reported to Environmental Department every 6 months.

Usage of Natural Resources and Raw Materials (Water, Electric Energy, Gas, Fuels, etc...)

Raw materials
The supply of materials to Bien Hoa Plant mainly consists of steel components, plastic resin, electricity, oil and grease, chemicals, water, auxiliary materials, packaging materials. We are constantly monitoring the consumption of resources for the purpose of continuous rationalization.

Electricity
Electricity is supplied by Bien Hoa Power Company. The electricity source in Vietnam is almost produced by hydroelectric power.

Currently, we have just monitored electricity consumption for whole Bien Hoa Plant, but not separating for each machine or facility. We are going to set up electricity meter devices to get data for an energy saving program in 2015.

Noise
Bien Hoa Plant is located in Industrial Zone; thus, it is under limitation of our government. And, there has been no complaint from neighbor companies.

Wastewater management
Wastewater from manufacturing process is considered as hazardous waste; hence, all wastewater is collected and disposed by external disposal company that is a legal one.

In addition, each machine, which use liquid hazard substances, have a drip stray to collect wastewater for disposal.
Chemicals
All used chemicals at Bien Hoa Plant were released by Headquarter; we could minimize environmental impact accordingly.

Water consumption
With current manufacturing processes, we need a little water consumption, and water has just been added to compensate for evaporation.

So water consumption is used for domestic purpose and floor cleaning, and we have just collected and monitored water consumption data every month.

Prevention of soil contamination
Shopfloor ground was coated with waterproof paint to make sure hazard substances do not effect to the ground.

In Aug 2014, we coated surrounding concrete wall of hazard waste storage with waterproof paint to preventing soil contamination. On the road nearby hazard waste storage area, we took out asphalt contaminated ground and replaced it with concrete.

On the other hand, before Bien Hoa Plant is a green land due to the fact that there were no companies using it before.
Indirect Environmental Impacts

Packing materials
When we receive materials for manufacturing, lots of packing materials are considered as recyclable waste. Currently, we sell it to a company for recycling or reusing.

Employee transportation
CO₂ emission from Bien Hoa Plant by transportation is depending on the type of vehicles driven by employees.

Almost an employees are going to work by private motorbike with short distance (around 7 km to 10 km).

Company provide a bus (with 30 seats) and 2 cars (with 7 seats) to pick up employees from Ho Chi Minh City to Bien Hoa Plant (30 km) every working day.

Environmental performance of contractors, sub contractors and suppliers
When contractors come to work at Bien Hoa Plant, they shall be checked and monitored by E&S Coordinator and contact person to prevent any accident or harm to employees’ health and environment.
We also focus on Risk of Occupational Health and Safety as well as Environmental Impact, therefore we established Risk Assessment procedure to manage and reduce the Risk level which was found at Bien Hoa Plant.

Risk Assessment is carried out with five steps: Scope definition, Risk identification, Risk evaluation, Define countermeasures and Verifying effectiveness. The risks are evaluated by Likelihood of occurrence and Severity of injury. The risks take from 9 to 20 points (red area) must have countermeasures, ones take from 6 to 8 points (yellow area) should have countermeasures, and the last ones (green area) should be monitored as matrix the following matrix.

Corrective actions of risk assessment are checked effectiveness by safety team. Status of risk assessment are reported to the management board in management review.

In Sep. 2013, we carried out the first risk assessment for Bien Hoa Plant. And Risk Assessment will be updated every year or whenever installing new processes/machines. The table below is a result of Risk Assessment updated in December 2014.

<table>
<thead>
<tr>
<th>Class.</th>
<th>Process</th>
<th>Risk identified</th>
<th>Corrective action required</th>
<th>Risk Assessment Avg.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Before</td>
<td>After</td>
</tr>
<tr>
<td>A</td>
<td>RIBB Grinding</td>
<td>8 4</td>
<td>6.14</td>
<td>4.43</td>
</tr>
<tr>
<td>B</td>
<td>TRB Grinding</td>
<td>21 17</td>
<td>8.63</td>
<td>4.38</td>
</tr>
<tr>
<td>C</td>
<td>RIBB Assembly</td>
<td>10 5</td>
<td>5.30</td>
<td>3.40</td>
</tr>
<tr>
<td>D</td>
<td>TRB Assembly</td>
<td>3 3</td>
<td>7.00</td>
<td>3.00</td>
</tr>
<tr>
<td>E</td>
<td>Logistics (Warehouse &amp; Incoming)</td>
<td>5 5</td>
<td>5.60</td>
<td>3.80</td>
</tr>
<tr>
<td>F</td>
<td>Maintenance (Workshop &amp; Supply)</td>
<td>13 11</td>
<td>7.25</td>
<td>4.83</td>
</tr>
<tr>
<td>G</td>
<td>Area for Quality (Lab, Inspection area)</td>
<td>7 4</td>
<td>4.8</td>
<td>3.8</td>
</tr>
<tr>
<td>H</td>
<td>Others</td>
<td>3 3</td>
<td>7.67</td>
<td>5.33</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>70 52</td>
<td>6.55</td>
<td>4.11</td>
</tr>
</tbody>
</table>

When we do the countermeasures, we can reduce the average risk level from 6.55 points to 4.11 points.
With the risks were monitored and limited, we had zero occupational accident in 2014. We will try to keep this target for the future.

**FIRE PROTECTION**

**Plant fire brigade**
At Bien Hoa Plant, we have a fire response team with 25 members, and they come from various functions. They self-check the fire fighting and alarm systems every month.

**Fire-fighting equipment**
The fire fighting equipments are installed by Bien Hoa Industrial zone. And Bien Hoa plant has to maintain them. It includes control-panels, fire-hydrants ect.,....

**Training and exercises**
Every year, fire response team members are trained by Fire Police. To make sure the fire response team always available for emergency cases, practice courses are held at least twice a year for fire response team.

We hold the fire fighting drill for all employees at least once a year.

Beside that, on the Vietnamese fire prevention national day, we send our fire response team to join Fire Fighting competition – it was held by Bien Hoa Fire Police to gather all factories located within Bien Hoa city.

**Fire water retaining basin**
Bien Hoa plant has two Fire water retaining basins, and each contains 100 m³ water.

**PLANT SECURITY**

Bien Hoa Plant is located in the industrial zone, therefore the security of Amata industrial zone will take care outside security.

We installed a camera system at each corner, main gate and warehouse. The cameras are connected to the guardhouse to monitor any break-in.

**Assess control**
All visitors must be registered at the main gate before they get into the Bien Hoa Plant. They will receive a visitor badge and wear it all the time during staying at plant. For Schaeffler Group employees who come from foreign countries, the visitors’ information must be sent to our security coordinator at least one day before. Visitors’ information are recorded.

The restricted area, which need permission is measuring room. The access control system is installed so that employees use their employees card to get in. The data are recorded too.

Security guards come from an external source, and they were received special training before coming to the plant for working. At the first working day, they will receive the security instructions by the Security Coordinator.
Contractor management
All contractors must register working plan before they come to work at plant. At the first working day, contractors’ employees are instructed plant’s regulations.

All equipments, machines, materials which are brought in and taken out, must be registered at the security gate.

To make sure that there are not hazard risks, which caused by contractors, they must get permit from E&S Coordinator when they carry out hot or hazardous work.

Emergency plans and management
We have a contract with hospital to make sure our employees are priority treated if accident happened. Besides, we set up an Emergency Response team, thus they can carry out first aid.

Health and Safety

Working environmental measurement
Based on legal requirement, working environment is measured every year. The environmental factors are measured: noise, dust, microclimate, light, oil mist and vapors. The measurement is taken by external institute.

Medical services to our employees
Based on legal requirements, we provide annual health check for all employees once a year, and occupational health check for employees who work at noise zone twice a year. Because we do not set up the clinic inside the plant, so any health check are done by external vendors.

For urgent cases, we have a contract with Thong Nhat Hospital (around 15 minutes far) for priority treatment. In addition, we provide clinic insurance 24/24 hours, therefore employees can use it any time within Vietnam.

E&S Special training
All employees are received E&S training base on a legal requirement every year (Training content and training hours are defined in this regulation).

Employees who carry out special tasks such as driving forklift truck, welding, operate central facility, etc..., they get special trainings to make sure that they have enough knowledge to handle special tasks.
Social aspects

Charity
Every year we set up a charity program, it concerns children – next generation.

2013: we set up 2 library for primary schools.

2014: we gave essential commodities and solar water heating machine for Thien Phuoc social sponsor centers.

Trade union activities
Swim, dance and football: we hold the courses to help our employees have more relaxing time and improve their health.

Football championship: we hold it for male employees, until now it has been 3rd season.

Master Chefs: we hold an event to celebrate Vietnamese’s women day, until now it has been 2nd season.

Gifts for employees at Tet holidays, Mid Autumn ...
ENVIRONMENTAL INDICATORS
## Key Indicators according EMAS III

**AMATA PLANT**

| Database | Absolute | Relative |  |  |  |  |
|----------|----------|----------|  |  |  |  |
|          | 2012     | 2013     | 2014 | 2012 | 2013 | 2014 |
| Added value in Mio. Euro [Mio] | | 3 | 2 | 3 | | |
| **General Data** | | 196 | 181 | 187 | 218.4 | 296.3 | 187.1 [m²/Mio €] |
| Size of property [m²] | 7,200 | 7,200 | 7,200 | | |
| Total sealed surface [m²] | 6,000 | 6,000 | 6,000 | 2,184 | 2,963 | 1,871 [m²/Mio €] |
| Biodiversity [%] | 89 | 89 | 89 | | |

### Input

- **Water** [m³] | 15,431 | 5,096 | 5,535 | 5,267 | 2,359 | 1,618 [m³/Mio €] |

- **Electricity Σ [kWh]** | 2,171,165 | 2,329,037 | 2,409,968 | 740,012 | 1,078,258 | 704,669 [kWh/Mio €] |

  - **Amount of electricity from renewable energy (only external supply) [kWh]** | 703,457 | 754,608 | 780,830 | 240,088 | 349,356 | 228,313 [kWh/Mio €] |
  - **Anteil Eigenerzeugung (konventionell) [kWh]** | 0 | 0 | 0 | 0 | 0 | 0 [kWh/Mio €] |
  - **Amount of electricity generated inhouse from renewable energy [kWh]** | 0 | 0 | 0 | 0 | 0 | 0 [kWh/Mio €] |
  - **Percentage of renewable energy with regard to overall consumption [%]** | 32 | 32 | 32 | | |

- **Natural gas [kWh]** | 0 | 0 | 0 | 0 | 0 | 0 [kWh/Mio €] |

  - **Amount from renewable energies [kWh]** | 0 | 0 | 0 | 0 | 0 | 0 [kWh/Mio €] |
  - **Percentage of renewable energies [%]** | 0 | 0 | 0 | | |

- **Light fuel oil [l]** | 0 | 0 | 0 | 0 | 0 | 0 [l/Mio €] |

  - **Amount from renewable energies [l]** | 0 | 0 | 0 | 0 | 0 | 0 [l/Mio €] |
  - **Percentage of renewable energies [%]** | 0 | 0 | 0 | | |

### Fuels for internal logistics

- **Diesel [l]** | 0 | 0 | 0 | 0 | 0 | 0 [l/Mio €] |

  - **Amount from renewable energies [l]** | 0 | 0 | 0 | 0 | 0 | 0 [l/Mio €] |
  - **Percentage of renewable energies [%]** | 0 | 0 | 0 | | |

- **Gasoline [l]** | 0 | 0 | 0 | 0 | 0 | 0 [l/Mio €] |

  - **Amount from renewable energies [l]** | 0 | 0 | 0 | 0 | 0 | 0 [l/Mio €] |
  - **Percentage of renewable energies [%]** | 0 | 0 | 0 | | |

- **District heating [kWh]** | 0 | 0 | 0 | 0 | 0 | 0 [kWh/Mio €] |

  - **Amount from renewable energies [kWh]** | 0 | 0 | 0 | 0 | 0 | 0 [kWh/Mio €] |
  - **Percentage of renewable energies [%]** | 0 | 0 | 0 | | |

- **Propane/LPG [kg]** | 0 | 0 | 0 | 0 | 0 | 0 [kg/Mio €] |

- **Metanol [kg]** | 0 | 0 | 0 | 0 | 0 | 0 [kg/Mio €] |

### Energy input ∑ [kWh]

- **Amount of renewable energy with regard to total energy input [kWh]** | 703,457 | 754,608 | 780,830 | 240,088 | 349,356 | 228,313 [kWh/Mio €] |

  - **Percentage of renewable energy with regard to total energy input [%]** | 32 | 32 | 32 | | |
### Absolute Relative

<table>
<thead>
<tr>
<th>Database</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emulsion concentrates</strong></td>
<td>[kg]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5,890</td>
<td>3,610</td>
<td>4,750</td>
<td>2,010</td>
<td>1,671</td>
<td>1,389</td>
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<tr>
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<td>[kg]</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>21,568</td>
<td>20,302</td>
<td>16,246</td>
<td>7,361</td>
<td>9,399</td>
<td>4,750</td>
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<td><strong>Solvent - VOC</strong></td>
<td>[kg]</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Solvent - non VOC</strong></td>
<td>[kg]</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Metal raw materials</strong></td>
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</tr>
<tr>
<td></td>
<td>4,087</td>
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<td>8,855</td>
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<td><strong>Metal semi finished products</strong></td>
<td>[kg]</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
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<td>0</td>
<td>0</td>
<td>0</td>
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</tr>
<tr>
<td><strong>Other raw materials</strong></td>
<td>[kg]</td>
<td></td>
<td></td>
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<td></td>
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<td>0</td>
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</tr>
<tr>
<td><strong>Output</strong></td>
<td>[t]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Waste Σ</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>non hazardous waste Σ</strong></td>
<td>[t]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>108</td>
<td>99</td>
<td>107</td>
<td>36,98</td>
<td>46,06</td>
<td>31,35</td>
</tr>
<tr>
<td></td>
<td>24</td>
<td>15</td>
<td>12</td>
<td>8,21</td>
<td>7,13</td>
<td>3,49</td>
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<td><strong>domestic waste</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td></td>
<td>34</td>
<td>47</td>
<td>70</td>
<td>11,74</td>
<td>21,59</td>
<td>20,54</td>
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<tr>
<td><strong>waste oil</strong></td>
<td>[t]</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>26</td>
<td>14</td>
<td>3</td>
<td>8,83</td>
<td>6,70</td>
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<td><strong>hazardous waste Σ</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td>40,72</td>
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<td><strong>Scrap (ferrous + non-ferrous) Σ</strong></td>
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<td></td>
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<td></td>
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</tr>
<tr>
<td></td>
<td>17</td>
<td>25</td>
<td>32</td>
<td>6</td>
<td>12</td>
<td>9,45</td>
</tr>
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<td><strong>CO2-equivalents Σ</strong></td>
<td>[t]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>944</td>
<td>1,001</td>
<td>1,036</td>
<td>322</td>
<td>464</td>
<td>303</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>CO2-emissions from combustion</strong></td>
<td>[t]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>processes at this site</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>CO2-emissions from electricity</strong></td>
<td>[t]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>obtained from external sources</td>
<td>934</td>
<td>1,001</td>
<td>1,036</td>
<td>319</td>
<td>464</td>
<td>303</td>
</tr>
<tr>
<td><strong>CO2-emission factor per kWh</strong></td>
<td>[g/kWh]</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>electricity obtained from external</td>
<td>430</td>
<td>430</td>
<td>430</td>
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<td></td>
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</tr>
<tr>
<td>sources</td>
<td></td>
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</tr>
<tr>
<td><strong>CO2-emissions from district</strong></td>
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<td></td>
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<td>heating obtained from external</td>
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</tr>
<tr>
<td><strong>CO2-equivalent from the</strong></td>
<td>[kg]</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>refrigerant agent amounts</td>
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<td>0</td>
<td>3,379</td>
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<tr>
<td>refilled due to leakages</td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>SO2-emissions from combustion</strong></td>
<td>[kg]</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>processes at the site</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>NOx-emissions from combustion</strong></td>
<td>[kg]</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>processes at the site</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Particulate matter emissions Σ</strong></td>
<td>[kg]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0</td>
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<td>0</td>
<td>0</td>
<td>0</td>
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</tr>
<tr>
<td><strong>VOC-emissions</strong></td>
<td>[kg]</td>
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<td></td>
<td></td>
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<tr>
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<td>0</td>
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<td>0</td>
</tr>
</tbody>
</table>

* In relation to added value

Sources for evaluation of emission factors are the ProBas data bank (http://www.probas.umweltbundesamt.de) status: September 22nd, 2011 as well as the GEMIS 4.8 data bank (http://www.oeko.de/service/gemis).
**Input**

**Water | Electricity**

**Water**

In 2012, because supply-water-pipeline was broken, we lost around 10,000 m³. It started to leak from Feb to Sep 2012. Normally water consumption is around 300 m³/month, but at that time water consumption was doubled and was around 700 m³/month. Especially, on Sep 2012 water consumption was 8,100 m³. Therefore, we have to check water supply pipeline every month to make sure there’s no leakage.

<table>
<thead>
<tr>
<th>[m³]</th>
<th>Water</th>
<th>[m³/Mio €]</th>
</tr>
</thead>
<tbody>
<tr>
<td>20,000</td>
<td></td>
<td>6,250</td>
</tr>
<tr>
<td>15,000</td>
<td></td>
<td>5,000</td>
</tr>
<tr>
<td>10,000</td>
<td></td>
<td>3,750</td>
</tr>
<tr>
<td>5,000</td>
<td></td>
<td>2,500</td>
</tr>
<tr>
<td>0</td>
<td></td>
<td>1,250</td>
</tr>
</tbody>
</table>

Electricity in kWh and information on installed capacity

In 2013, we installed one coating line for RIBB product range, so it increased electricity consumption.

<table>
<thead>
<tr>
<th>[MWh]</th>
<th>Electricity</th>
<th>[MWh/Mio €]</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,500</td>
<td></td>
<td>1,200</td>
</tr>
<tr>
<td>2,000</td>
<td></td>
<td>1,000</td>
</tr>
<tr>
<td>1,500</td>
<td></td>
<td>800</td>
</tr>
<tr>
<td>1,000</td>
<td></td>
<td>600</td>
</tr>
<tr>
<td>500</td>
<td></td>
<td>400</td>
</tr>
<tr>
<td>0</td>
<td></td>
<td>200</td>
</tr>
</tbody>
</table>

Environmental Indicators
Input
Cooling lubricants

Emulsion concentrates in ton
The emulsion system is circulated system; thus cooling lubricants are re-filled every month.

<table>
<thead>
<tr>
<th>[t]</th>
<th>Emulsion concentrates [t/Mio €]</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>15</td>
</tr>
<tr>
<td>20</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
</tr>
</tbody>
</table>

2012 2013 2014

Processing oils in tons
In 2012 and 2013, we were re-filled processing oil system.

For Cooling lubricants, from 2012 we started control cooling lubricants, and we use the vacuum hoses to take back lubricants at drip tray of machine.

<table>
<thead>
<tr>
<th>[t]</th>
<th>Processing oils [t/Mio €]</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>10</td>
</tr>
<tr>
<td>20</td>
<td>8</td>
</tr>
<tr>
<td>15</td>
<td>6</td>
</tr>
<tr>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

2012 2013 2014

Metal raw materials in tons
Metal raw material are increased when production credit are increased.

<table>
<thead>
<tr>
<th>[t]</th>
<th>Metal raw materials [t/Mio €]</th>
</tr>
</thead>
<tbody>
<tr>
<td>10,000</td>
<td>3,000</td>
</tr>
<tr>
<td>7,500</td>
<td>2,250</td>
</tr>
<tr>
<td>5,000</td>
<td>1,500</td>
</tr>
<tr>
<td>2,500</td>
<td>750</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

2012 2013 2014
### Output

#### Waste

**Hazardous waste in tons**

In 2012, maintenance function installed valves at the emulsion system, it helped to recycle emulsion and reduced hazardous wastewater.

In 2014, we stated run new black oxidizing process, therefore the hazard waste was increased.

---

**Non-hazardous waste in tons**

In 2012, we started to replace iron pallets with wood pallets.

---

**Scrap in tons**

In 2013, we had to rework some orders, that why scrap rate was increased too much.

In 2014 we decided to sell non-conformity materials to reduce inventory, therefore quantity of scrap was increased.
**Output**

**Emissions**

CO₂ emissions from Electricity obtained from external sources in tons

CO₂ emission is increased as the same result with electricity consumption because we do not have renewable electricity.

<table>
<thead>
<tr>
<th>[t]</th>
<th>CO₂ emissions</th>
<th>[t/Mio €]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.100</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>900</td>
<td>800</td>
<td></td>
</tr>
<tr>
<td>700</td>
<td>600</td>
<td></td>
</tr>
<tr>
<td>500</td>
<td>400</td>
<td></td>
</tr>
<tr>
<td>300</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

---

CO₂ equivalent in metric tons from the coolant amounts refilled due to leaks

In 2012, we refilled 3 kg of gas for cooling media.
Goals and Programs

<table>
<thead>
<tr>
<th>Environmental goals</th>
<th>Environmental programs</th>
<th>Completed?</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste management</td>
<td>» Waste separation</td>
<td>✓</td>
<td>» Buy trolley for recycled waste</td>
</tr>
<tr>
<td>Improvement of employees Awareness</td>
<td>» E&amp;S Training for all employees</td>
<td>✓</td>
<td>» Production basic training</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>» E&amp;S Annual training</td>
</tr>
<tr>
<td>Zero Accident</td>
<td>» Risk assessment</td>
<td>/</td>
<td>» Implementation rate of corrective action: more than 80 %</td>
</tr>
<tr>
<td>Prevention fire</td>
<td>» Fire fighting drill</td>
<td>✓</td>
<td>» Drill are done</td>
</tr>
<tr>
<td></td>
<td>» Fire fighting training for Emergency Respond Team</td>
<td></td>
<td>» Training completed.</td>
</tr>
</tbody>
</table>

✓ Goal has been achieved. ✓ Part of goal has been achieved. Additional actions planned. / Goal not achieved.
## Targets

<table>
<thead>
<tr>
<th>Environmental goals</th>
<th>Environmental programs</th>
<th>Responsible</th>
<th>Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improvement of employees Awareness</td>
<td>E&amp;S training: 8 hours/employees, ISO 14001 and OHSAS 18001 awareness training: 2 hours/employees, E&amp;S special training: 4 hours for each employee.</td>
<td>E&amp;S Coordinator</td>
<td>2015</td>
</tr>
<tr>
<td>Zero Accident</td>
<td>100 % update Risk Assessment, 100 % carry out self-check every month, 100 % supply PPE for employees</td>
<td>E&amp;S Coordinator</td>
<td>2015</td>
</tr>
<tr>
<td>Prevention fire</td>
<td>Self check, Fire fighting drill, Fire fighting training and practice, First Aid training</td>
<td>Emergency Response Team leader</td>
<td>2015</td>
</tr>
<tr>
<td>Reduce hazard waste</td>
<td>Set up pressing machine for emulsion system, Reduce 5 % grinding slug</td>
<td>E&amp;S Coordinator</td>
<td>2015</td>
</tr>
<tr>
<td>Reduce hazard waste</td>
<td>Set up 100 % measurement devices at centralization facility, Reduce 2 % energy consumption</td>
<td>Energy Coordinator</td>
<td>2015</td>
</tr>
<tr>
<td>Reduce Water Consumption</td>
<td>Replace all old valves in toilet, Monitor water consumption</td>
<td></td>
<td>2015</td>
</tr>
</tbody>
</table>
Survey

VALIDATION

Dr.-Ing. Reiner Beer, with EMAS environmental verifier registration number DE-V-0007, accredited or licensed for the scope 25 and 29.32 (NACE Code), declares to have surveyed the site

Schaeffler Viet Nam Co. Ltd
Bien Hoa Plant
Amata Industrial Zone – Long Binh Ward
Bien Hoa City, Dong Nai Province
Viet Nam


By signing this report, I declare, that this report is written following the requirements of EMAS-regulation, Annex IV B for an environmental statement.

Done at Bieh Hoa, on 27th of February 2015

Dr.-Ing. Reiner Beer
Environmental Verifier

The next consolidated (entire) Environmental Statement will be submitted for validation in February 2018 at the latest.

In the years between, an annual update of the Environmental Statement will be compiled for validation by the environmental verifier.
Questions about environmental Protection at the location:
Schaeffler Viet Nam Co. Ltd.

Ngo, Cao Bao
3B Street, Amata Industrial Park
Bien Hoa City, Dong Nai Province, Viet Nam

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Questions about environmental protection by Schaeffler:

Norbert Hörauf
Industriestraße 1-3
91074 Herzogenaurach


Moreover, the report contains information about issues pertaining to occupational safety, plant security and fire protection as well as general information on social benefits provided by the company and this location.