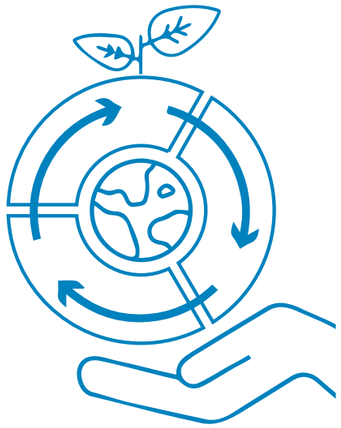
2021

The Sustainability Report for BILSTEIN GROUP companies

BILSTEIN GROUP

December 2021, Version 1.0

Marc T. Oehler
Chief Executive
and shareholder
BILSTEIN GROUP



Dear colleagues,

Sustainability, climate neutrality, reducing carbon emissions, renewable energies, greater use of hydrogen – all of these terms are increasingly defining our everyday lives, both at home and at work.

Climate protection affects us all – and it's not just about meeting the ambitious goals of the European Union (EU) and German federal government. Protecting the environment, avoiding a huge increase in global warming and using resources efficiently – these are all issues that surely everyone can agree are critical to the future of our planet. But what does it mean for a cold-rolled strip company like the BILSTEIN GROUP? For some time now we've employed various approaches to reduce our CO_2 emissions in production; but we've also started thinking on a bigger scale.

This Sustainability Report aims to give you an overview of the critical issues we're currently focusing on at the BILSTEIN GROUP. But no matter what we do, the biggest chunk of cold-rolled strip's carbon footprint still comes from iron and steel production. And that's exactly why, in spring 2021, we took a stake in the newly founded Swedish steel manufacturer H2 Green Steel. Starting in 2024/25, H2 Green Steel will be the first company worldwide to supply steel produced exclusively by carbon-neutral means, and is therefore the ideal partner for us and our customers, who are increasingly requesting steel grades from low-CO_2 production.

Of course, we're also in close dialog with our long-standing raw materials suppliers; these conversations have led, for example, to the deployment of Salzgitter hot-rolled strip in BILSTEIN production, which – through the use of existing electric arc furnace capabilities – results in significantly lower CO_2 emissions than steel produced via the conventional blast furnace route. The BILSTEIN GROUP wants to and will be the *No. 1* partner for our customers when it comes to implementing climate-friendly steel supply chains.

Kind regards, Marc T. Oehler

Management Board resolution of May 17, 2021 on sustainability and climate neutrality in the BILSTEIN GROUP:

The BILSTEIN GROUP Management Board hereby resolves that, by **2035**, the (German) companies in the BILSTEIN GROUP will make their production, logistics and administrative processes carbon-neutral-provided that sufficient carbon-neutral (renewable) energy sources are available by then (i.e. electricity/hydrogen as a substitute for fuel gas).

Furthermore, by 2035, depending on the availability of raw materials and customer expectations, the BILSTEIN GROUP commits to transition a large proportion of its raw material procurement to steel grades that have either been produced in a way that is carbon-neutral or that results in a significant reduction in CO_2 emissions compared with today.

Contents

"Going green" for a better future!

Sustainability is not just a trend. The need for environmentally conscious and resource-efficient practices came to the attention of politics, industry and society some time ago. And sustainability is also a key element of the BILSTEIN GROUP's strategic path forward and a guiding principle for the company's management team.

Michael Ullrich,
Chief Technology Officer

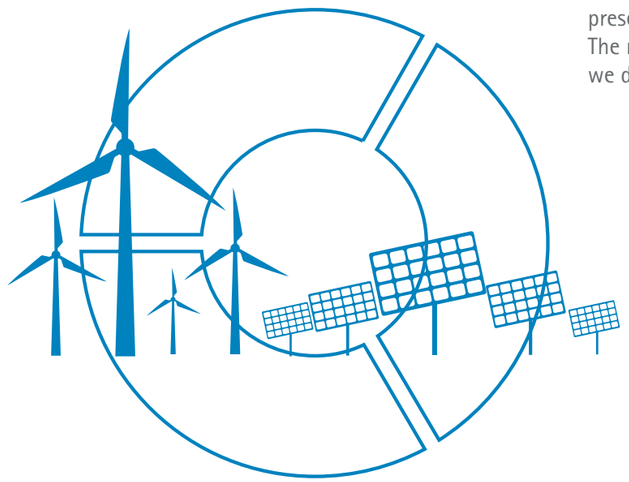
Sustainability is an integral part of our strategy – and in light of the automotive sector's goal to achieve carbon neutrality, reducing CO_2 emissions is a particular priority. In our processes, CO_2 is emitted during the combustion of natural gas. But there are specific projects underway to replace this fossil fuel with green hydrogen. Furthermore, with each new investment, we place great value on ensuring energy efficiency through the use of the latest technologies. This includes recovering waste heat – for example, from our annealing processes – and converting it into electricity. But the biggest driver of our carbon footprint remains our raw material, where we do not have any direct influence over carbon emissions. So, we are also supporting our current suppliers to take steps toward climate neutrality. We've also invested in the construction of a "green" steelworks in Sweden – H2 Green Steel. In just a few years' time, this will give us our first and (for now) only opportunity to procure steel in a 100% $_{carbon}$-neutral way. It therefore marks an important step in safeguarding our competitiveness and the future viability of the company. After all, if we are unable to make our production sustainable and resource-efficient in the long run, we will simply be cut out from important customer structures.

Dimitar Yotsov,
Director, Processes and IT

The importance of sustainability has grown exponentially in our industry; after all, the steel industry is one of the biggest emitters of greenhouse gases. At the same time, steel will always be an important raw material. That's why we're getting involved in projects like the carbon-neutral steel plant in Sweden, H2 Green Steel. To allow us to tackle the challenges of the future, we have to be extremely innovative in this area. Sustainability also affects how we structure our systems and processes. At the end of the day, the term goes beyond ecological aspects like protecting the environment and conserving resources. Our approach is to make our organization as sustainable and modern as possible, i.e. not just functional, but process and network-driven. We want to use cutting-edge digital solutions to bring our work environment into the future. To do this, we're taking a close look at current trends in remote working, and we're in the process of drawing up a road map for the BILSTEIN GROUP. In IT, too, it's about setting up structures that safeguard the sustainable growth of the BILSTEIN GROUP.

Dr. Bernhard Gräwe
Director, Hot-Rolled Strip Procurement

Sustainability and climate neutrality are becoming compulsory for the BILSTEIN GROUP across the entire supply chain, from suppliers to customers, and they are therefore of existential importance for us.
Our customers are increasingly defining mandatory sustainability requirements, and they're getting stricter. If we fail to implement the relevant goals, we will have no basis for future business models. Even established business models will also cease to be viable. So, the issue of sustainability remains critical, right down to the procurement of raw materials. This is why all our suppliers have issued a "Vision Map" for achieving carbon-neutral steel production by 2050 at the latest.



Bernd Grumme
Director, Sales

Sustainability is a key success factor; without it, the BILSTEIN GROUP's products will not find acceptance on the market in the required volumes – now or in the future. It's critical that we demonstrate success in different segments. And this issue is on all of our customers' agendas, too. Above all, reducing CO_2 emissions is a priority. Auto suppliers in particular want to know that we're being proactive when it comes to sustainability. Our involvement in H2 Green Steel is being very well received in this respect: customers across all sectors support our investment and are already expressing interest in receiving deliveries from the new plant. Green steel is currently on everyone's minds; but there is still a reluctance to pay more for it. I believe that will change.
I think the political and social discussion around conserving resources will continue to gain momentum, and ultimately clarify that we have no other choice but to spend more money to preserve our planet for future generations.
The road there may be long and difficult – but we don't have any other option.

Company profile

The BILSTEIN GROUP develops cold-rolled strip solutions for customers worldwide, meeting the needs of the market as a full-service provider with a complete range of products. Its expertise is the result of a rich 110-year company history. Its close relationships with customers and employees, commitment to the highest quality standards and extensive know-how are particularly noteworthy, while its entrepreneurial mindset is innovative and focused firmly on the future. This is evident in the company's increasingly highly automated and digitalized manufacturing activities, which result in resource-efficient production processes and above-average levels of process reliability and product quality.

The BILSTEIN portfolio encompasses a range of specialist products and services for customers in the automotive and mobility industry. The BILSTEIN ZE ranges meet particularly high demands in terms of component strength, which goes hand in hand with weight and cost benefits. BILSTEIN steel is used to make components such as transmission parts, fuel pressure regulators, seat rails, airbag housings, needle roller bearings, deep-drawn and fine-blanked parts, clutch plates, and much more.

HUGO VOGELSANG offers specialty cold-strip products for customers in the sawing and cutting industry, including high-grade and tempered steel. Thanks to innovative control systems, the products comply with extremely tight tolerances. Products can be individually tempered in line with customer requirements and adapted specifically to the application in question.

Among other things, HUGO VOGELSANG steel is used to make circular saw blades, chainsaw links, band and gang saws, doctor blades, knitting needles, knives, hand tools and spring elements.

Based in the western Czech Republic, in Králův Dvůr, the cold-rolled strip manufacturer BILSTEIN CEE is the BILSTEIN GROUP's base in Eastern Europe. Its broad portfolio includes soft iron grades, micro-alloys and carbon steel grades. The company site is also home to a hardening and tempering plant for strip steel.

BILSTEIN COLD ROLLED STEEL started operating in the USA in 2017, serving customers across North and Central America from its location in Bowling Green, Kentucky. The core of the company's setup is a state-of-the-art wide-strip rolling mill. BILSTEIN COLD ROLLED STEEL caters to the needs of the international automotive and tooling industry, as well as other sectors.

1911 BILSTEIN Foundation

1969 BILSTEIN Commissioning of the tandem rolling mill

1996 HUGO VOGELSANG Acquisition

2001 INAC 30% stake

2003 C. VOGELSANG and SHEARLINE STEEL STRIP Acquisition

2005 KWW (now BILSTEIN CEE) Acquisition

2008 ARMCO do Brasil New stake

2009 BILSTEIN NORTH AMERICA Foundation

2010 BILSTEIN TRADING (SHANGHAI) Foundation

2011 BILSTEIN GROUP 100-year anniversary

2013 BILSTEIN COLD ROLLED STEEL Foundation

2014 C. VOGELSANG and BILSTEIN Merger

2015 BILSTEIN CEE Renaming

2017 BILSTEIN COLD ROLLED STEEL Opening

2019/2020 BILSTEIN Commissioning of the wide-strip rolling mill

Calculating our carbon footprint: How much CO_2 is in one ton of steel?

Steel production is extremely energy-intensive. To reduce what is still a large carbon footprint per ton of cold-rolled strip, the BILSTEIN GROUP is taking a number of steps and measures.

Most of the CO_2 emissions from cold-rolled strip occur during the production of steel from iron ore. In a blast furnace, iron ore is smelted with coke – i.e. almost pure carbon – to make pig iron, which contains up to four percent carbon. As it is further processed into crude steel, this carbon is burned off in a downstream converter via refining. The high energy requirements, use of coke and the refining process all add up – on average, producing one ton of steel currently results in between 2.3 and 2.7 tons of CO_2 emissions. On the whole, the steel industry is responsible for around seven percent of global carbon dioxide emissions, and for around 30 percent of industrial CO_2 emissions.

GLOBAL WARMING POTENTIAL FOR ONE TON (1 T) OF AVERAGE ENERGY-INTENSIVE COLD-ROLLED STRIP PRODUCED BY BILSTEIN GMBH & CO. KG, CONTAINING 19.2% SECONDARY MATERIALS:

Raw material supply:	2,488 kg	CO_2 equivalent
Manufacturing: (production process at BILSTEIN GmbH & Co. KG)	74 kg	CO_2 equivalent
Transport to waste treatment facility:	8 kg	CO_2 equivalent
Total:	2,570 kg	CO_2 equivalent

Based on carbon footprint quantification as per ISO 14067

Assumptions were made to include transport to the waste treatment facility (C2) in the calculations. Supplier transport (A2) to production sites and recycling processes (C3) were not accounted for in this quantification. As set out by the standard (clause 6.3.4.1), credits and deductions for a subsequent product system (D) were calculated and specified in the table above, but were not included in the final declared product carbon footprint (PCF) value. The data evaluated here is based on GaBi version 2020.2. The model used to model the data is based on the foreground data provided by BILSTEIN GmbH & Co. KG. This information was used to produce the carbon footprint report for the life cycle assessment (LCA) screening of average cold-rolled strip products made by BILSTEIN GmbH & Co. KG. When evaluating the carbon footprint of the different categories, GaBi version 2020.2 takes into account four (4) different greenhouse gas emissions (biotic, fossil, land use, flights). The characterization of these emissions is based on the specifications in the IPCC Assessment Report 5 and breaks down emissions into the following categories: Global warming potential (GWP) 100, Flight only takes into account carbon dioxide; GWP 100, Biotic and GWP 100, Land use account for carbon dioxide and methane; while for GWP 100, Fossil, 248 different greenhouse gases are evaluated. These range from sulfur hexafluoride, which has 23,500 times the global warming potential of carbon dioxide, to butanol, which by comparison only has 90% of the global warming potential of carbon dioxide.

More information

The underlying carbon footprint model was produced using version 2020.02 of the life cycle assessment software, as part of carbon footprint quantification. The life cycle modules (A1, A3, C2, D) were declared pursuant to EN 15804.

Declared unit: 1 ton of average energy-intensive cold-rolled strip containing 19.2% secondary materials
System limit: From scales to plant exit
Data collection: Data was collected between July 2018 and June 2019

GLOBAL WARMING POTENTIAL BROKEN DOWN BY LIFE CYCLE MODULES AND CATEGORIES:

	A1: Raw material supply	A3: Production	C2: Transport to waste treatment facility	Total for product system	D: Outside the system limit
Global warming potential (GWP 100 years, biotic)					
[kg CO_2 equivalent]	0.00	0.00	0.00	0.00	0.00
Relative contribution*	0.0%	0.0%	0.0%	0.0%	
Global warming potential (GWP 100 years, fossil)					
[kg CO_2 equivalent]	2,487.28	73.5	8.14	2,568.92	-1,187.79
Relative contribution*	96.8%	2.9%	0.3%	100%	
Global warming potential (GWP 100 years, land use)					
[kg CO_2 equivalent]	1.04	< 0.01	0.04	1.09	0.21
Relative contribution*	0%	0%	0%	0%	
Global warming potential (GWP 100 years, flights)					
[kg CO_2 equivalent]	< 0.01	< 0.01	< 0.01	< 0.01	0.00
Relative contribution*	0%	0%	0%	0%	
Total per module					
[kg CO_2 equivalent]	2,488.32	73.5	8.18		
Relative contribution*	97%	2.7%	0.3%		

Total: **2,570** kg CO_2 equivalent

* with regard to the total PCF value

Key figures in 2020: Energy and water use in plants

For some time now, as part of an ongoing environmental and energy management initiative, the BILSTEIN GROUP has been exploring various approaches to reducing CO_2 emissions and water use in its production, logistics and administrative processes.

CONSUMPTION AND KEY FIGURES IN 2018, 2019 AND 2020

	2018		2019		2020	
	BILSTEIN	HUGO VOGELSANG	BILSTEIN	HUGO VOGELSANG	BILSTEIN	HUGO VOGELSANG
Electricity (in GWh)	51	26	47	23	46	20
Natural gas (in GWh)	133	49	115	44	104	37
Heat recovery (in GWh)	2		3		4	
Groundwater (in m^3)	1,886,330	43,460	1,626,560	39,180	1,525,150	34,220
Mains water (in m^3)	12,893	5,209	10,194	5,248	6,857	5,288
Waste water (in m^3)	28,230	14,750	22,620	16,360	18,050	15,170

Did you know?

The proportion of renewable energy in the electricity mix at the BILSTEIN GROUP's German sites was almost

48 %

in 2020.

Certifications

BILSTEIN GROUP companies are continuously working to improve their quality, environmental and safety management systems. These are subject to ongoing review and certification by third parties, in accordance with international standards.

BILSTEIN CEE
ISO 14001:2015
Valid from **16 April 2021**
Valid to **15 April 2024**

BILSTEIN + BILSTEIN SERVICE
ISO 14001:2015 | ISO 50001:2011
Valid from **23 June 2021**
Valid to **13 December 2022**

HUGO VOGELSANG
ISO 14001:2015 | ISO 50001:2011
Valid from **23 June 2021**
Valid to **13 December 2022**

BILSTEIN CEE
ISO 9001:2015
Valid from **9 June 2021**
Valid to **8 June 2024**

HUGO VOGELSANG
ISO 9001:2015
Valid from **28 January 2021**
Valid to **27 January 2024**

HUGO VOGELSANG
IATF 16949:2016
Valid from **28 January 2021**
Valid to **27 January 2024**

BILSTEIN CEE
IATF 16949:2016
Valid from **26 May 2021**
Valid to **25 May 2024**

BILSTEIN + BILSTEIN SERVICE
ISO 9001:2015
Valid from **18 November 2020**
Valid to **17 November 2023**

BILSTEIN + BILSTEIN SERVICE
IATF 16949:2016
Valid from **18 November 2020**
Valid to **17 November 2023**

To view all the BILSTEIN GROUP's current certifications, visit www.bilstein-gruppe.de/downloads/ or

CLICK HERE

Sustainable Procurement & Investment

The BILSTEIN GROUP is committed to conserving resources and energy, making strategic decisions that aim to align the BILSTEIN GROUP's value creation with the demand for CO_2 neutrality and the transition to electric mobility. Both processes and procurement of materials are subject to these high standards.
To enable it to supply climate-neutral steel in the near future, the BILSTEIN GROUP is investing in the innovative steelmaker H2 Green Steel in Sweden, as well as participating in pioneering green energy programs such as "Future RuH2r".

Sustainable materials procurement

High quality, sustainability and compliance with ethical principles – the BILSTEIN GROUP aspires to and applies these standards both in its own company and throughout the supply chain.

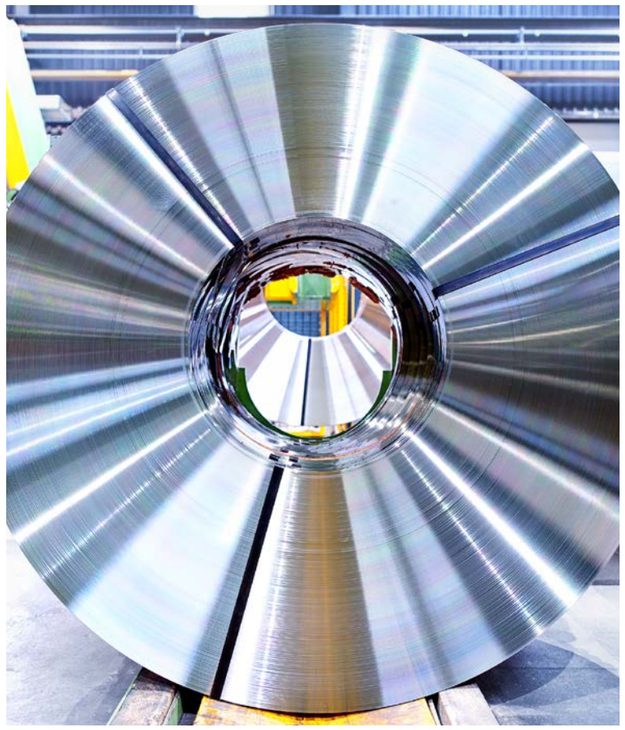
As one of the world's leading cold-rolled strip providers, with a number of production and service locations across the globe, the companies of the BILSTEIN GROUP are fully aware of their responsibilities when it comes to complying with international rules and standards, and are guided by ethical business principles when shaping their company policies.

And BILSTEIN GROUP companies also judge their suppliers by the same measure. All our suppliers must commit to upholding the BILSTEIN GROUP's high standards when it comes to complying with quality, environmental management and hazardous substance requirements.

- Quality management, certified to ISO 9001 and IATF 16949
- Environmental management system, certified to ISO 14001 or EMAS
- Energy management system, certified to ISO 50001 and/or energy audit pursuant to Section 8 of the German Act on Energy Services and other Energy Efficiency Measures
- Occupational health and safety management system, certified to ISO 45001 or OHSAS 18001

RoHS II Suppliers must ensure their products comply with the EU's Restriction of Hazardous Substances Directive II, i.e. ensure they do not contain high concentrations of certain substances listed in the RoHS.

REACH Suppliers must confirm that they understand and comply with the EU's REACH regulation ([EG] No. 1907/2006).



Questionnaire for suppliers, manufacturers and retailers

In addition to a code of conduct for suppliers, the BILSTEIN GROUP regularly reviews the environmental policies and certification of manufacturers and retailers, who provide information on their quality management and any concrete steps they're taking to educe their environmental footprint.
The 14 questions they are asked relate to areas such as resource use in production, energy efficiency and occupational health and safety management in their company.

Code of conduct for suppliers and business partners

The comprehensive code of conduct for suppliers comprises 11 points. As well as ensuring compliance with applicable laws and regulations and the protection of employee rights, it encompasses a wide range of ethical obligations such as respecting and protecting human rights, and anti-discrimination.

Like our own internal code of conduct, this code also forbids fraud, unfair competition through corruption, and money laundering.

I. Compliance with applicable laws and regulations
II. Respecting and protecting human rights
III. Anti-discrimination and employee rights
IV. Offering and granting benefits; conflicts of interest
V. Fair competition
VI. Money laundering/money of suspicious origin
VII. Data protection and confidentiality
VIII. Environmental protection
IX. International trade
X. Supply chain
XI. Product safety

CSR/sustainability requirements for suppliers

The BILSTEIN GROUP's corporate social responsibility (CSR) and sustainability requirements for suppliers cover the following:

- Avoidance of child labor and underage workers
- Wages and benefits
- Working hours
- Avoidance of modern slavery (i.e. slavery, exploitation and forced or compulsory labor)
- Freedom of association
- Harassment and discrimination
- Health and safety
- Avoidance of corruption, bribery and extortion
- Privacy and data protection
- Fair competition and antitrust law
- Avoidance of conflicts of interest
- Environmental policies for suppliers

General Terms and Conditions of Sale and Delivery

The BILSTEIN GROUP's General Terms and Conditions of Business also include sale and delivery conditions that list compliance requirements for suppliers.

You can find the General Terms and Conditions of Sale and Delivery here: www.bilstein-gruppe.de/downloads/

CLICK HERE

H2 Green Steel: Green steel on green land

With the goal of being able to supply climate-neutral steel in the near future, the BILSTEIN GROUP has invested in the new and pioneering Swedish steelmaker H2 Green Steel (H2GS). The strategic partnership with the startup is a critical component of the group's plans to become climate neutral. After all, sourcing carbon-neutral hot strip is crucial to producing cold-rolled strip with a low carbon footprint.

Who exactly is behind H2 Green Steel?

The initial investors include a number of companies and individuals, from strategic and technology partners to long-term investors with a focus on green impact, sustainability and Industry 4.0. Investors include Altor Fund V, Ane & Robert Maersk Uggla, BILSTEIN GROUP, EIT InnoEnergy, Exor, FAM, IMAS Foundation, Kingspan, Marcegaglia, Mercedes-Benz AG, Scania, SMS Group, Stena Metall Finans, Cristina Stenbeck, Daniel Ek and Vargas.

CO_2 emissions are a key driver of climate change. So, reducing these emissions is becoming extremely important in steel production and processing. The global steel industry is one of the world's largest emitters of carbon dioxide, accounting for around seven percent of global CO_2 emissions. As a result, demand for "green" steel is growing quickly. "Climate change affects us all. The faster the steel industry, one of the biggest emitters of greenhouse gases, makes progress here, the better it is for everyone," underlines Chief Executive Marc T. Oehler. "Ambitious projects like H2 Green Steel are helping accelerate the transformation of the steel industry. That's exactly why the BILSTEIN GROUP invested in it in spring 2021." News of the BILSTEIN GROUP's investment in the new Swedish steelmaker was officially announced on March 4, 2021, and was extremely well received by customers.

Through the strategic partnership with the newly established Swedish steelmaker, the BILSTEIN GROUP is continuing its focus on the environmental core of its strategy; the company wants to be in a position to offer its customers carbon-neutral steel grades from as early as 2024/25. This will also considerably expand the benchmark for raw materials.

Green steel: an enormous challenge

"Our involvement in H2 Green Steel shows that, even in challenging times, we are still committed to procuring the raw materials of the future – and not just from conventional steelmakers," explains Managing Director Bernd Grumme. At present, nearly all steel manufacturers are looking at ways to reduce their CO_2 emissions. Approaches include replacing conventional blast furnace methods with electric steelworks and substituting carbon or natural gas with hydrogen. So of course, the BILSTEIN GROUP is also supporting its existing partners on the supplier side in their efforts to reduce the carbon footprint of steel manufacturing and offer green steel. Traditional steelmakers are currently facing huge challenges in this respect.

What makes the new steelmaker H2 Green Steel so attractive? Location, location, location: in the Boden-Luleå, Norrbotten region of Northern Sweden, where the steelwork is being built, wind energy and hydropower are in plentiful supply. This means steel can be produced using entirely renewable energy sources, as the steelwork is being built on what is more or less a green field site so completely new concepts can be explored. The team behind H2 Green Steel is approaching the build with fresh, innovative ideas, from electricity generation, to digitalization, to the steel production processes themselves. This means the entire infrastructure can be designed with carbon neutrality top of mind as there's no need to worry about existing systems and structures.

H2 Green Steel: a flagship project

The Swedish startup is setting the benchmark for the paradigm shift in the steel industry by guaranteeing steel produced using up to 100 percent carbon-neutral methods. The company aims to start production in 2024 and reach an annual production capacity of five million tons of high-quality green steel by 2030.

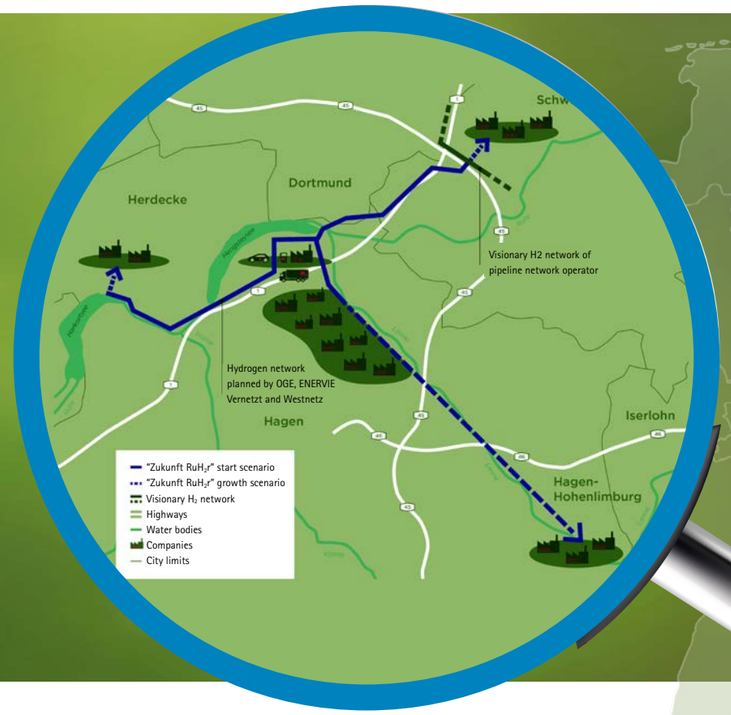
As a strategic partner and customer, the BILSTEIN GROUP has been involved since the inception of the project back in February 2021. This gives the company the opportunity to help determine which material grades should be manufactured – namely those that are important to the BILSTEIN GROUP and its customers. In regular meetings, the BILSTEIN GROUP communicates its requirements and shares its expertise and experience from the steel and auto industries, securing a fixed production quota in its role as a strategic partner. The BILSTEIN GROUP is also represented on the Investor Advisory Board.

Paving the way to 100% carbon-neutral steel

For some time now, the BILSTEIN GROUP has also been pursuing various technologies to help it reduce CO_2 emissions in its production process, and with some notable successes. So, there is a realistic chance of supplying exclusively carbon-neutral cold-rolled strip from 2030/35 onward. "Our strategic partnership with H2 Green Steel is our chance to be the first company in the industry that is really in a position to exclusively supply carbon-neutral steel," explains Michael Ullrich.

Hydrogen initiative: Green energy for Lennetal

A key factor in achieving carbon-neutral steel production is the use of green energy. As part of the "Future RuH_2r" project, five local companies and three grid operators have teamed up to build a high-performance hydrogen infrastructure. It's an important task, not least because Lenne river valley is home to an industry for which zero-emissions energy is critical.



Lennetal has been the center of the cold-rolled strip industry for more than 200 years; both the BILSTEIN GROUP and its competitor C.D. Wälzholz are among the world-leading firms based here. Now, together with two other manufacturing companies – thyssenkrupp Hohenlimburg and Kabel Premium Pulp & Paper – as well as the service provider H2 Green Power & Logistics, as part of "Future RuH_2r", these companies are tackling the challenge of how to develop a local hydrogen cluster for the area between the Ruhr industrial region and Sauerland, with the aim of eventually connecting it to a nationwide hydrogen network.

Zero CO_2: demand for green steel grows

"Our main focus right now is on carbon free steel," emphasizes Managing Director Michael Ullrich. "We've already gotten some very clear specifications from our automotive customers, like how many kilos of CO_2 may be emitted in the production of a ton of steel as of 2030 and 2039, if we are to continue to supply to them." In setting these standards, automakers are implementing the requirements laid out by the European Union and the German government as part of the climate protection program; and some are even going a lot further.

Substituting natural gas with hydrogen

The main CO_2 emitter in hot industries is fuel gas, which is used in any step where material is annealed and needs to be softened for processing. At the moment, companies based in Lennetal mainly use natural gas to generate heat in their production processes. But, technically, it is already possible to operate the natural gas burners in the batch annealing plants at the BILSTEIN GROUP with hydrogen, with some small modifications – allowing natural gas, with its high CO_2 emissions, to be substituted by a more carbon-neutral medium.

"Together with the pipeline network operator Open Grid Europe GmbH (OGE) and the grid operators ENERVIE Vernetzt and Westnetz, we came up with the idea of joining forces and officially petitioning the regional government with our hydrogen requirements," explains Michael Ullrich. The companies have requested that Lennetal connects to the pipeline that will be built between Rotterdam and Duisburg, providing thyssenkrupp Steel and HKM with green hydrogen and enabling steel to be made without coal.

Lennetal is home to an industry facing overwhelming demand for "zero CO_2" – one that will struggle to continue production in Germany long term without hydrogen. It's also essential that government policies support the transition to sustainable energy sources to enable German industry to remain competitive around the globe. "If we want industry to have a viable, successful future here in Lennetal, we have to be able to connect to a hydrogen supply grid. This is the only way we can make our production processes green," explains Michael Ullrich.

The numbers setting out how much hydrogen is needed are now with the relevant authorities as part of the petition. Meanwhile, Westnetz, the potential network operator, is drawing up a detailed business plan that asks some important questions: what will it cost to bring a hydrogen pipeline to Lennetal? What infrastructure and technology are needed? Could existing pipes be used? Cost efficiency is the decisive factor: it's no help to anyone if the hydrogen ends up costing 10 euros per kilowatt hour.

Outlook: a hydrogen network for Lennetal

"I'm certain that Lennetal will get a hydrogen pipeline," says Michael Ullrich, confidently. "First, this initiative has shown me that it's actually relatively easy to convert a natural gas network into a hydrogen one. Second, hydrogen production will only get cheaper in the long run, so will eventually prevail as an energy source." It may just take a while until that happens. Realistically, the technological challenges likely won't be mastered and the relevant permits and approvals signed off until 2030. And in many places, there are still reservations around hydrogen pipelines; natural gas is still much more widely accepted.

"There is no denying that all the stakeholders are ready and willing," says Michael Ullrich, summarizing his overall impression of the work done by the hydrogen cluster as part of "Future RuH_2r". "Not just because of their economic interests and the need to ensure the continued viability of each company, but also because we take climate protection extremely seriously."

Project: "Future RuH_2r" visionary hydrogen network

Source: FNB Gas e. V.

Conducting business sustainably

Investment decisions can have a sustainable impact from both an environmental and economic standpoint. The BILSTEIN GROUP is focusing its attention on conserving resources and improving energy efficiency – and in turn, is safeguarding the future of both the company and the planet.

The BILSTEIN GROUP's strategic investments in recent years are proof that sustainability and profitability aren't at odds with one another, but can actually go hand in hand. With targeted investments such as the new wide-strip rolling mill and the establishment of BILSTEIN COLD ROLLED STEEL in the USA, the company's plants all employ cutting-edge technology that is optimally designed for energy and resource efficiency – and that is more productive as a result.

A firm focus on sustainability

Whether annealing, rolling or shearing – the BILSTEIN GROUP is turning to energy-efficient systems for all its plants. Integrating the resulting process heat into a cycle and making it reusable is another key aspect. This means the halls that house the rolling mills no longer require heating independently because a heat exchange system utilizes the plant's waste heat. Furthermore, the heat produced in batch annealing is fed back into the process via an organic Rankine cycle (ORC) plant (see page 27), which leads to a significant reduction in CO_2 emissions. The solution truly represents a pioneering undertaking by the BILSTEIN GROUP. But even if these measures allow the company to cut energy costs in the long run, these kinds of investment decisions are primarily a matter of principle: "Anyone making these kinds of investments based on economic factors alone would likely go for something different. That goes for almost everything that we're doing. Until now, natural gas and electricity have been too cheap in Germany to justify a change in strategy," says Managing Director Michael Ullrich. "We're doing this based on our beliefs and priorities as a business – because we want to leave a green legacy. At the end of the day, I also have kids and I like living on this planet."

Investing in innovations

"Our investment strategy for the future is about aligning the value creation of the BILSTEIN GROUP with the shift toward electric mobility and the demand for carbon neutrality," explains Michael Ullrich. To this end, the BILSTEIN GROUP is looking at deepening parts of the added value chain, at new technologies, new materials – there are plenty of innovative ideas in the pipeline. The aim is to optimally support the transition underway in the auto industry toward electric mobility. "BILSTEIN cold-rolled strip will continue just as it is now. But we'll grow and expand our portfolio with new processes and products. We're also looking at different technologies, like using hydrogen and fuel cells," says Michael Ullrich.

What are the sustainability goals of the BILSTEIN GROUP companies?

- To reduce any avoidable environmental pollution caused by our production processes and employees
- To minimize unnecessary use of resources
- To continue to improve sustainability in all areas
- To implement yearly defined actions, incl. those from the energy management system in accordance with ISO 50001

How is the BILSTEIN GROUP helping to achieve these goals?

- Sustainable procurement
- Applying innovative processes and methods for conserving resources
- Refurbishing energy systems
- Implementing new technologies

Every small action counts:

- Reducing waste and scrap
- Lowering energy use by switching things off when not in use (lights, heating, air conditioning and ventilation systems)
- Eliminating pressurized air leaks
- Ensuring the workplace is clean and tidy to reduce hazards for workers and the environment
- Employee suggestions on how to reduce our environmental impact
- Waste separation for recycling purposes

Deploying electric trucks

Electric trucks will soon be used for the short journeys between BILSTEIN GROUP locations in Hagen, in place of traditional diesel vehicles. The transition is an effective way to reduce both CO_2 emissions and noise pollution at the same time. After all, noise pollution can have a negative impact for both people and the environment. The noise emitted by an electric truck driving at 30 km/h is only half that of a truck with a combustion engine, as demonstrated in special tests carried out on BILSTEIN GROUP premises. Additionally, projections showed that switching to electric trucks even just for short journeys (between the Weinhof and Berchum locations) would reduce greenhouse gas emissions by almost 105 tons each year in comparison to vehicles with combustion engines.

Products & Processes

In recent years, Hagen-Hohenlimburg has become home to one of the most cutting-edge plants for cold-rolled strip solutions worldwide. It employs state-of-the-art technologies that further reduce resource consumption and CO_2 emissions, and is continuously expanding on these. The BILSTEIN GROUP is investing both in the development of environmentally and economically optimized production and manufacturing processes and in innovative products.

Driving technology and sustainability through innovation

Achieving more resource-efficient production with innovative technology: the BILSTEIN GROUP is investing both in the development of pioneering production methods and in new cold-rolled strip grades that include environmentally and economically superior alternatives to traditional electric steel strip.

TWIP 900

Working with new, innovative primary materials is also leading to a paradigm shift in process design. The TWIP 900 steel concept is, broadly speaking, nothing new – but it represents a true milestone on the path to making a material like this available through cold rolling and batch annealing, with maximum process reliability. Based on the existing alloy concept, the desired properties would be achievable exclusively via continuous annealing. This steel concept allows BILSTEIN GROUP customers to take new approaches to complex product design challenges, and is particularly interesting in the context of the current lightweight engineering and electric mobility trends.

High-speed laser cutting with BILCUT®

BILCUT® is a high-speed laser cutting procedure for manufacturing shaped blanks for the automotive industry. Laser cutting steel has been around for some time – but the key difference here is the high cutting speeds. To develop this new procedure, the BILSTEIN GROUP joined forces with the Fraunhofer Institute for Laser Technology ILT in Aachen, Germany.

In collaboration with a plant engineer, a 1:1 scale prototype is currently being developed based on the patented technology. The BILSTEIN GROUP plans to use it in its own production as soon as it is proven in practice. The new technology is expected to be ready for production in 2023.

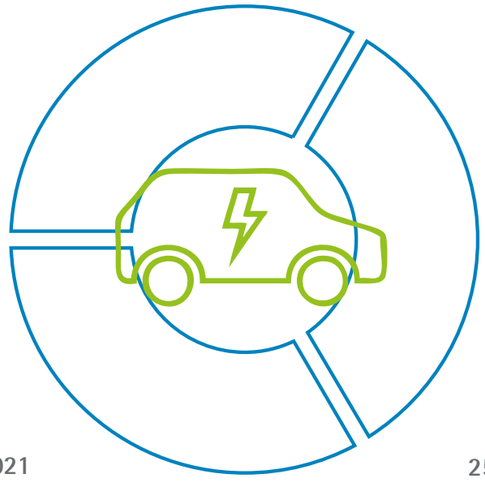
Sustainable technology...
The laser-cutting procedure is actually the first of its kind worldwide, and it puts the BILSTEIN GROUP in a position to make shaped blank production extremely resource-efficient through the optimization of the cutting process. Thanks to the flexibility of the laser-cutting head, many more shaped blanks can be made from a single sheet of steel than would be possible with a conventional die cutter. This in turn means less scrap. Furthermore, a laser machine like this is much smaller, meaning the entire production process generates significantly less CO_2 emissions than the traditional die cutters that are currently used around the world.

... for the electric vehicles of the future
The BILSTEIN GROUP is investing in new BILCUT® technology so it can better support manufacturers of shaped blanks, particularly when it comes to the switch to electric mobility. The result is that the technology is sustainable in two ways: through its more efficient use of resources, and in how it will aid the development of electric vehicles.

Refreshingly different: Supermod®, Ultramod® and Extramod®

The BILSTEIN GROUP's innovative mild steel grades with special electromagnetic properties make a great alternative or addition to the use of traditional electric steel strip. Supermod®, Ultramod® and Extramod® already possess good electromagnetic properties at the point of delivery, which enables components to be manufactured straight away without any additional annealing necessary. This makes them both environmentally and economically superior to high-alloy electric steel strip.

Supermod®, Ultramod® and Extramod® meet the definition of a DC04 grade on all key points, in accordance with the requirements of EN 10139 and EN 10140. And as a result, they close the gap between cold-rolled strip and aluminum-silicon alloy electric strip. The material is suitable for a variety of applications in electrical engineering, including electric mobility.



Innovative wide-strip rolling concept: High grades with fewer resources

In recent years, Hagen-Hohenlimburg has become home to one of the most cutting-edge plants for cold-rolled strip solutions in the world. The BILSTEIN GROUP has invested in new machinery at the site, including a fully automated annealing furnace, a wide reversing mill, a wide slitting line and – with a view to reducing its environmental and energy footprint – a technology that reduces CO_2 emissions.

"With our new wide-strip rolling concept, since April 2020 we've been operating one of the most modern reversing mills in the entire cold-rolled mill industry – actually, it's the most modern mill there is," says Marc T. Oehler, happily. "And this allows us to reduce our resource consumption throughout the entire process chain." That's because the new four-high reversing mill can process coils with a width of up to 1,350 mm, without the need for any additional cutting of the primary material (wide strip). As a result, fewer individual coils need to be annealed, rolled, temper rolled, annealed again and then transported to shearing.

Raising the bar in Hagen-Hohenlimburg

The world's first fully automated annealing furnace, which is in operation at BILSTEIN, is setting new international standards in terms of process reliability and product quality. The expansion and modernization, which was carried out in three stages, also took into account environmental considerations: an organic Rankine cycle (ORC) system means any waste heat produced during batch annealing can be fed back into the process, significantly reducing overall CO_2 emissions (also see page 27).

A key aspect in ensuring that both the annealing furnace and the OCR system could operate fully automatically was process control. The innovative solution for independent energy recovery and power generation was developed in house because it is the first of its kind worldwide.

Connecting value chains

BILSTEIN has achieved a very high degree of automation with the new rolling concept, which in turn opens up exciting new opportunities in digitalization. In future, a wide variety of data will become available across all processes. This means value chains can be connected and woven together – including those of customers. "This was another reason we made a conscious decision to invest in new machinery across the process chain. And it's definitely something unique in the midsize cold-rolled strip industry," explains Marc T. Oehler.

Heat recovery: systematically reducing CO_2

Lots of processes and production stages result in waste heat. To ensure this excess energy isn't simply blasted out of chimneys, starting in 2012 the BILSTEIN GROUP has continuously implemented a comprehensive heat recovery system.

When it came to putting the innovative wide-strip rolling concept into action, energy efficiency and returning waste heat to the process cycle were a focus from the very beginning. Now, a complex heat recovery system is helping significantly reduce the carbon footprint.

Pioneering ORC plant

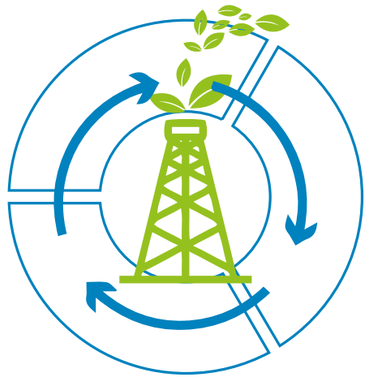
One genuinely outstanding solution developed by the BILSTEIN GROUP is the integration of an organic Rankine cycle (ORC) plant into the annealing process. The system was awarded the KlimaExpo.NRW enrivonmental program certificate in 2016.

At the heart of the ORC plant is a thermal oil cycle. Here, thermal oil absorbs the waste heat that is emitted when the material cools during the annealing process. In the cascade stage of the ORC plant, when the material and thermal oil are still hot enough, electricity is produced via a steam expansion engine with a generator hooked up to it. This electricity is used to improve the efficiency of the annealing plant, i.e. it is used directly in the annealing process, which means significantly less natural gas is required. Thanks to the ORC system, a new, fully automated batch annealing system and an annealing line modernized in 2019 can be operated with a much lower carbon footprint. Specifically, it results in 306 kg less CO_2 per batch for each annealing campaign, i.e. when the steel is heated to 400–700°C, depending on the type of material, and then cooled down. For several thousand annealing campaigns per year on 32 annealing bases, this equates to a huge reduction in greenhouse gas emissions. And the ORC plant is designed so that further annealing bases can be connected to it. →

Innovation that makes a statement

With the integration of an ORC system, the BILSTEIN GROUP has developed and implemented a truly unique concept that is the first of its kind in the world. Its development was supported by the German Ministry for the Environment's ecological innovation program, which took great interest in the pioneering project as part of its climate strategy. After all, a system like this can be implemented anywhere that generates industrial process heat.

On November 13, 2018, a high-ranking delegation of officials from the German federal government, representatives from the Ministries of Economics and for the Environment, and from the Federal Environment Agency in Hagen-Hohenlimburg, came to see the technology up close for themselves.



Facts and figures: heat recovery using the ORC system

The ORC plant ...

➔ generates at least 160 kWh of electricity per annealing campaign. The system itself requires around 30 kWh of this electrical energy, while 130 kWh is used to make the automatic annealing machines more efficient. 160 kWh of electricity is enough energy to boil nearly 1,600 liters of water, wash 200 loads of laundry at 60°C, or keep 160 LED light bulbs on for around 140 hours.

➔ generates 1,152 kWh of thermal energy per annealing campaign, which is used to heat the building via an in-plant heat network.

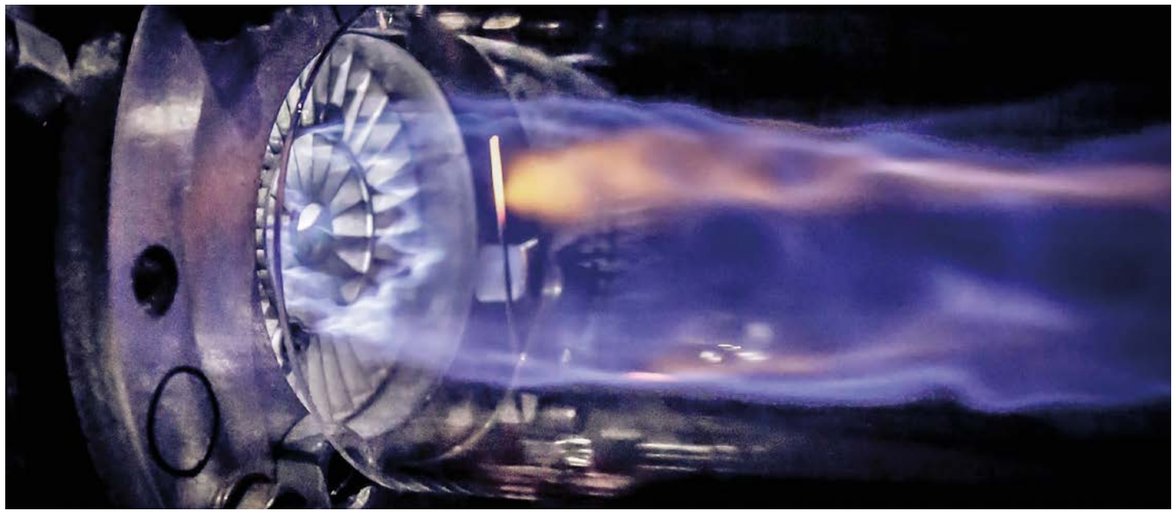
➔ A sophisticated heat recovery system

Once, over the course of the cooling process, the material is no longer hot enough to be fed into the thermal oil cycle and the engine/generator, the annealing plant switches in a second step to a water cycle. Here, thermal energy is extracted from the waste heat via a conventional heat exchanger. In fact, this water cycle is the backbone of the BILSTEIN GROUP's entire heat recovery system. As part of the rolling concept, one large centralized heat recovery system and an in-plant heat network were constructed and have been continuously expanded since 2012. In addition to the ORC system, a number of other plants and components where process heat occurs are connected to this water cycle. Waste heat flows into the system from a total of 32 annealing bases in the two annealing plants, as well as the air compressors of the new rolling mill.

This energy is then used to heat several production halls, warehouses, a joinery and dispatch. The process heat is also used to bring the water-oil mixture in the emulsion plants in the new wide-strip rolling mill and the tandem mill up to the required operating temperature: the rolling plant uses a cooling fluid that, paradoxically, must be heated and kept at a constant temperature of around 50°C. As a result, natural gas is only used when no waste heat is available.

Reducing natural gas use to a minimum

The wide-strip rolling mill is one of the only plants at BILSTEIN to use natural gas, outside of annealing. To operate as energy efficiently as possible, the rolls have a self-contained cooling system: the waste heat from electric motors, converters, pumps and other units that need to be cooled is used to preheat the fresh air flowing into the hall via a water-to-air heat exchanger. (Air needs to be fed in from outside as steam and air are discharged during the rolling process.) To prevent the hall from cooling down and having to be heated, warm air flows in.



Kueppers Solutions GmbH

What drives us: the goal to always get better

Besides the new heat recovery system, the BILSTEIN GROUP is working on a number of other innovative measures to help to further reduce CO_2 emissions.

A novel combustion technology in annealing hoods aims to help mix air and natural gas more effectively in the preheating of the combustion air supply. First, this makes the burners more environmentally friendly as it further reduces nitrogen oxide emissions. Second, it boosts heat recovery in the annealing hoods and, as a result, makes the process of preheating air more energy efficient. In turn, this helps cut gas consumption and carbon emissions. The BILSTEIN GROUP was already exploiting the most advanced technology currently available with its previous burners. So, the new combustion technology is a key opportunity to make improvements. While this new combustion technology may still be in its early stages, the results so far are extremely promising.

Kueppers Solutions GmbH

The new burner technology is the result of 3D printing.

Developing new combustion technology

The burners' innovative design has been made possible by the huge advances in 3D printing technology; there is no other manufacturing process that can replicate its complexity.
The BILSTEIN GROUP worked with the burner manufacturer Kueppers Solutions GmbH to test a prototype in the annealing plant, in a pilot project spanning several months. The results were so impressive in terms of process reliability that an entire annealing hood was fitted with the new burners.

EMPLOYEES & SOCIETY

Sustainability includes acting and behaving in a way that is aligned with our values in the wider context of our responsibility to society. As an international group, BILSTEIN GROUP companies not only comply with all national and international laws; they also attach huge importance to ethical business principles. The BILSTEIN GROUP requires both its own companies and all suppliers and partners to comply with the relevant code of conduct. And for a family-owned business like the BILSTEIN GROUP, fair and value-driven behavior includes lifting up and supporting people in the company and the local region.

	BILSTEIN SERVICE	BILSTEIN	HUGO VOGELSANG	Total in Germany	BILSTEIN CEE	SHEARLINE STEEL STRIP	BILSTEIN COLD ROLLED STEEL	BILSTEIN TRADING (SHANGHAI)	Total outside Germany	Total
Employees	305	605	231	1,141	144	25	87	9	265	1,406
of which office staff	223	80	23	326	41	10	35	9	95	421
of which operational staff	82	525	208	815	103	15	52		170	985

Data correct as at June 30, 2021

Honest and fair: our compliance management system

With around 1,200 customers located across every continent, all BILSTEIN GROUP companies commit to upholding international laws and regulations as well as a binding code of ethical business principles.

As one of the world's leading cold-rolled strip manufacturers with production sites in multiple countries, the BILSTEIN GROUP is conscious of its responsibility to comply with international regulations and standards. BILSTEIN GROUP companies act in accordance with all applicable national laws and regulations, as well as legal and ethical specificities, guidelines and principles in the countries in which they operate. And suppliers and partners are expected to do so as well.

Furthermore, when shaping its company policies, the BILSTEIN GROUP is guided by robust ethical business principles. The aim is to ensure employees, business partners and customers are all treated in an honest, fair, sustainable and safe way, based on clearly defined corporate ethics. To support compliance with these ethical guidelines, the BILSTEIN GROUP has developed a code of conduct that is applicable worldwide and incorporates all of its core values. The code serves as a guide for all shareholders, advisory board members, members of management boards, directors and employees of all BILSTEIN GROUP companies on how to treat each other and their partners across the globe. As ambassadors of the BILSTEIN GROUP, it is critical that all their actions are aligned with this clearly defined company philosophy.

Code of conduct

The code consists of 16 sections and includes definitions of general principles and rules of conduct, as well as guidelines for respecting and safeguarding human and employee rights. You can learn more about the BILSTEIN GROUP's compliance management system on the group website:

www.bilstein-gruppe.de/cms/wp-content/uploads/2016/12/CMS_BILSTEIN_GROUP_2017.pdf

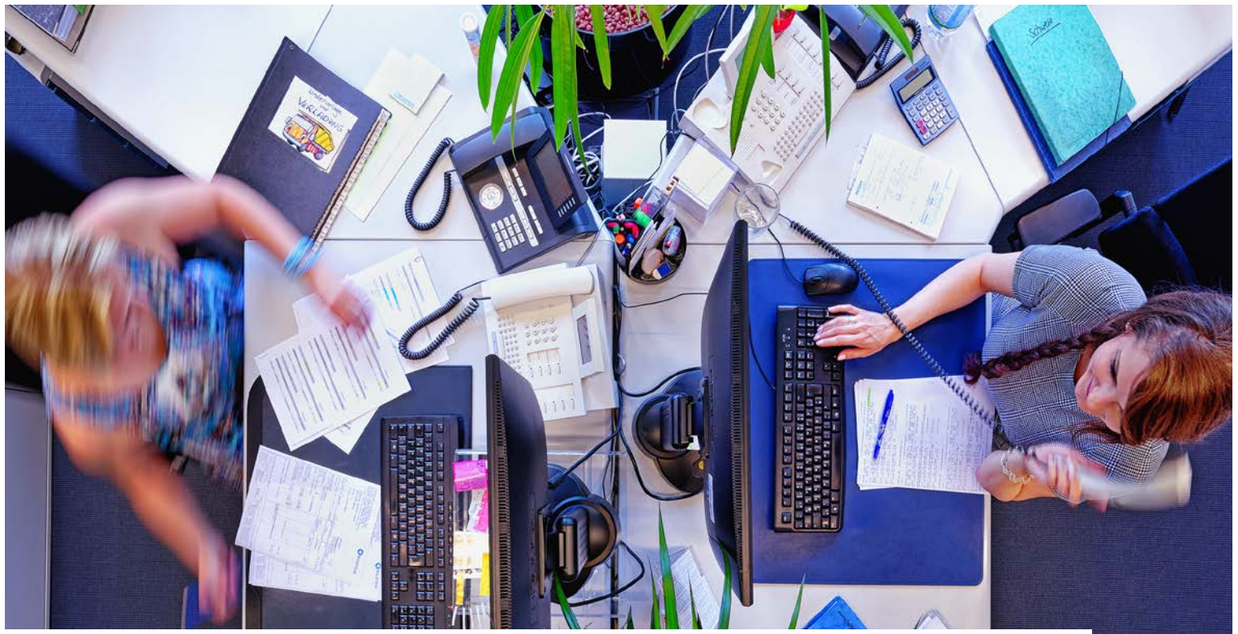
CLICK HERE

Anti-corruption guide

Besides the code of conduct, another pillar of the BILSTEIN GROUP's compliance management system is the anti-corruption guide, which serves to help prevent and actively combat any form of corruption or bribery. BILSTEIN GROUP companies do not tolerate any form of corrupt behavior and see it as their duty to actively promote fair competition. Additionally, corruption is a criminal offense in Germany, as any decisions made for corrupt reasons can have damaging effects on public welfare, the economy and individual companies. Using a traffic light system, the aim is to reduce the risk of any such infringements of the law to an absolute minimum. The processes and rules set out in the guide are binding for all employees of the BILSTEIN GROUP and provide guidance on how to deal with gifts.

Guide to antitrust law

This guide is intended as a code of conduct to help employees comply with company values and identify any infringements of antitrust law. All BILSTEIN GROUP employees share responsibility for implementing these guidelines in their interactions with customers, coworkers, shareholders and the general public. The guide to antitrust law is the third pillar of the BILSTEIN GROUP's compliance management system.



Work & Family

Balancing work and family is an enormous challenge faced by many workers every day. The BILSTEIN GROUP supports its workforce to the best of its ability in this area, as it recognizes that its employees' mental and physical health is a valuable asset that is worth protecting.

BUK Familienservice

In collaboration with the organization BUK Familienservice, the BILSTEIN GROUP provides independent and external professional services for all employees at its German locations to help with challenging or stressful life events and situations. The services have been available since January 2019 via phone hotlines, video consultations, email and one-on-one discussions.

1. Childcare

Personalized advice on childcare options and formats, including parental leave and benefits, childcare costs, support with contractual queries, and much more.

2. Nationwide services during school breaks

Selection and research of certified options for regular or short-term childcare, connecting with babysitters and au pairs, homework support or emergency childcare, BUK summer camp, etc.

3. Care for dependents

Personalized support for caring for dependents, including care availability, types and levels of care, costs and grants, organizing care, connecting with nationwide support or care services, communications and liaison, and much more.

4. External employee support

Health management through confidential advice and support on topics like work, career, personal life, mental health and addiction. Expert service for HR managers, connections to additional support services, and much more.

Family-friendly – it's in our DNA

The BILSTEIN GROUP recognizes that the well-being of its workforce isn't just about what happens in the workplace. After all, employees are first and foremost human beings. Thanks to its services in this area, the BILSTEIN GROUP has been designated a "Family-friendly company".

Work and family

- Advice on parental leave and returning to work
- Flexible working hours
- Kid-friendly workspaces for emergency childcare situations
- Financial support for childcare (in cooperation with the Märchenwald and other KITA Hegemann gGmbH daycare centers)
- Holiday activities and programs for children of employees
- Collective agreement on remote working
- The opportunity for administrative staff to bring their dogs to work

Internal, personalized support

- Family care: support with organizing care for dependents
- Rapid financial aid, particularly for family emergencies
- Support with addiction and money problems

Employee events

- Family festivals
- Meet-ups for retirees
- Anniversary parties
- Christmas tree programs

Extras

- Funds for family occasions based on the Social Affairs Act (effective since 01.01.2015)
- Funds for social issues
- Benefits in the event of loss of life
- Discounts on Schlossspiele Hohenlimburg performances and sports events

Staying active together

- Various company sports clubs and teams

External events

- Girls/boys/parents day + Management AG
- Company visits for school classes
- Participation in Tec Days
- Presence at various training and career fairs
- Participation in Summer School
- Participation in apprentice speed-dating events hosted by the South-Westphalian Chamber of Commerce to Hagen
- Range of career information days and internships

Culture, identification and diversity

In Germany, the average length of employment at the company is more than 15 years, which is significantly above the statistical average of around 10 years.

What's more, the BILSTEIN GROUP has a presence on nearly all continents across the globe. Around 20% of its workforce is based outside Germany. Altogether, BILSTEIN GROUP employees represent more than 50 nations, along with all their different cultures and values. This diversity is also reflected in employee promotion and development.

Excellent prospects

The BILSTEIN GROUP is committed to building and developing its employees' skills and has provided high-quality training for many years, as confirmed by the "Outstanding Achievements in Vocational Training" seal it has received multiple times. The certificate, which is awarded by Ertragswerkstatt GmbH, is based on the results of an anonymous survey among apprentices and current training figures at the company; it provides proof of the company's commitment to vocational training, the high satisfaction rate among apprentices, and apprentices' positive assessment of the training program since 2013.

Promoting community

Fighting blood cancer together

Providing help where help is needed: following an employee illness, the BILSTEIN GROUP organized donor drives at the employee meetings of BILSTEIN, HUGO VOGELSANG and BILSTEIN SERVICE in Germany in 2018. Around 100 employees responded to the call to action and registered as new stem cell donors.

Regional support and sponsorships

For the BILSTEIN GROUP, supporting the local region and its people is hugely important, and taking responsibility and promoting the local culture, economy and community are a matter of course. And Lennetal, its residents and BILSTEIN GROUP employees all reap the benefits.

The BILSTEIN GROUP's support of the Hohenlimburg e.V. canoe club (KCH) is just one example of what engaging with the local community looks like. Other sports clubs, including SV Hohenlimburg 1910 (soccer) and Phoenix Hagen (basketball), also receive regular sponsorships from the BILSTEIN GROUP, which aims to support local clubs and, in particular, youth work. The Technological Advancement of South-Westphalia association, of which the BILSTEIN GROUP is a member, provides services to get school students excited about technology and careers in the sector, and in doing so is helping nurture the next generation of technical specialists in our region.

Regular donations to local schools, as well as support for the local volunteer fire fighters through financial contributions and (free) use of the company's premises for training exercises, also have a positive impact on the region, as do grants to Hagen's open-air museum.

Health and safety

Our health is our most valuable asset, which is why the BILSTEIN GROUP goes to great lengths to ensure its employees get through their working day without any accidents or injuries. For example, highly automated processes boost workplace safety and protect workers against the risk of serious injury. But the company doesn't stop there – it considers the small details too.

PPE

Every production employee receives personal protective equipment (PPE) from the BILSTEIN GROUP. This includes:

- Safety goggles
- Hearing protection
- Safety shoes
- Cut- and chemical-resistant gloves and forearm cuffs
- Lumbar support belts
- Protective face masks (FFP3)

Eyewear service: keeping perspective

Whether it's safety goggles, special glasses for screen work or hearing protection: every four to six weeks, BILSTEIN and HUGO VOGELSANG host an "Eyewear service" on site so that every employee has the opportunity access it. A team from Optik Lang ensures the needs of each individual are met, and the BILSTEIN GROUP covers the majority of the cost of each new piece of eyewear or protective hearing equipment.

Safety Days

Workplace safety is of great importance across the entire BILSTEIN GROUP. The company's Safety Days provide plenty for employees to discover, explore and, above all, learn. These regular events aim to remind workers about the importance of health and safety and ensure it stays top of mind. To allow as many employees as possible to take part in the events, production is paused for the duration.

Forklift awareness days: take the right action – safely

As part of the B.SAFE workplace safety program, the heavy forklift traffic in the BILSTEIN GROUP's plants is frequently the subject of workshop discussions. Forklift awareness days held at all plants help remind operators and other employees on the factory floor of the potential hazards and risks.

Prevention

Over the last few years, occupational safety has evolved from a focus on simply avoiding accidents to more comprehensive prevention. This is now the responsibility of the HSEQ department, which is the result of a merger between the Quality Management (QM) and Health, Safety and Environment (HSE) teams, both of which use management systems certified to ISO 9001, ISO 5001 and ISO 14001.

ISO 45001: Certified – and safe!

Introduced in 2018, ISO 45001 is the first global standard for workplace safety. It brings together workplace safety and company health management under one umbrella, with a focus on preventive protection for employees and close involvement of management.

In recent years, Peter Uhrík, Chief Executive of BILSTEIN CEE, and his team in the Czech Republic have really dedicated themselves to improving workplace safety, resulting in the company recording "zero accidents" for the first time in 2018. What could be a better time to get certified? "We're proud that we now have an official certification for an issue that's so close to our hearts. Now everyone can see how seriously we take workplace safety," says Peter Uhrík.

Health incentive program

- Health check
- B2Run:
  Registration fee and T-shirt are paid for by BILSTEIN, with HSEQ staff running a team booth on site to provide support and encouragement.
- Fit@Work

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