



Technology Metals | Advanced Ceramics

# Sustainability Report Update 2014

# Statement by the Board

We see sustainability as one of the basic preconditions for maintaining a successful future. What that means to us is satisfying present-day needs without negatively impacting possibilities and resources for future generations. Our goal is to combine financial growth and successful long-term business activities with ecofriendly and socially responsible actions.

In our role as a leading manufacturer of powders and components made from technology metals and advanced ceramics, we make a crucial contribution to life today and tomorrow through our innovative products and applications. They make it possible to develop increasingly high-performance end products that are an essential part of daily life, making everyday activities easier for people all around the world. We are acutely aware of the responsibility that comes with this.

With this in mind, we further enhanced and expanded our commitment to sustainability in the 2014 fiscal year, as in the past, even as we faced a tough overall economic situation. We have also put sustainability front and center in our working relationships with stakeholders – investors, customers, partners, suppliers, and employees. Extensive compliance guidelines, training activities, and effective management systems create awareness of opportunities and risks and put all areas of our company to the test time and again when it comes to sustainability. But that isn't all; these activities also help us to develop effective improvement programs.

This update provides an overview of the focal points of our sustainability activities in the 2014 fiscal year. We have continued the activities described in detail in the 2012 report, and we plan to proceed with them in the future as well. We are committed to pursuing our goal of being a sustainable company consistently. Further reports will follow on an ongoing basis.

**Dr. Andreas Meier**

President and CEO

on behalf of the Executive Board of the H.C. Starck Group

# Strategy

H.C. Starck's goal is to leverage advanced technologies and products as well as innovative and sustainable solutions to maintain a successful future. With this in mind, we are committed to be a good corporate citizen and support our customers in shaping a sustainable future.

In our role as a leading global provider of refractory technology metals and advanced ceramics, we produce important materials for the high-tech industry, thereby contributing to social and economic change. In 2014, we had 2,678 employees at 15 state-of-the-art production sites in Europe, North America, and Asia and at our international sales offices and the company's headquarters in Munich, Germany.

## **New organizational structure for sustainable business success**

Effective as of early 2014, our company is divided into five divisions, which conduct their business with a large degree of autonomy. Within the Tungsten Powders Division, we process tungsten ores and scrap to produce a large number of metal compounds and powders, while the Tantalum/Niobium Powders Division converts tantalum and niobium ores and secondary materials into a broad range of customer-specific powders. The Surface Technology and Ceramic Powders Division produces a wide range of materials for thermal spray applications, including carbides, oxides, pure metals and alloys as well as ceramic powder. In the Fabricated Products (FPR) Division, we produce customer-specific structural elements and components made from technology metals, and the Ceramics (CER) Division makes components out of advanced ceramics. Our operational business is supported by group functions and service functions. The new organizational structure is the product of an organizational analysis for which our managers took a survey in 2013, answering questions on a wide array of topics that included the strengths and weaknesses of the previous organizational structure. The result was to split our activities among five divisions, since this structure provides optimum support for our growth plans and meets criteria such as focusing on the market and customers, clear responsibilities, and mapping out the entire value chain.

## **Strengthening the global production network**

Over the past three years, we have significantly ramped up our presence in Asia in particular, founding a joint venture with a local partner in China and another company in Vietnam. Both joint ventures have seen further successful development since 2014. H.C. Starck Jiangwu Tungsten Specialties successfully launched production activities at midyear and currently has more than 100 employees in China, which is by far the largest market for tungsten. Thanks to the outstanding quality of our products, this joint venture has now become established and has good positioning in the Chinese market.

The other joint venture, Nui Phao H.C. Starck Tungsten Chemicals Manufacturing, which was founded in Vietnam in 2013, is also developing quite well. The company has been doing business as a legally independent entity since July 2014. Existing production facilities were expanded and further facilities built up over the course of the year. In addition, 16 employees from Vietnam were given the opportunity to attend several-week workshops at our main plant in Goslar, learning skills in everything from analysis to equipment operation and process engineering. Plans call for production of the expanded product range to go online in a phased approach in 2015.

# Organization and Systems

## **Dependable management systems**

We focus on the safety, health, and protection of people and the environment in the handling of our products across the entire product life-cycle. As a company with a highly developed sense of social responsibility, we comply with all legal rules and regulations as well as industry and environmental standards worldwide and constantly strive to improve them.

We are aided in these activities by our efficient management systems, an integrated sustainability structure and binding guidelines that apply to all employees and encompass our entire value chain. We hold ourselves to the very highest standards of quality and safety. We bear a great deal of responsibility toward the people who live near our production sites, which is why we strive for the greatest possible transparency and engage in dialogue with all stakeholders.

Customer satisfaction forms the basis for our sustainable business success. To meet our customers' expectations with regard to our products and other services on an ongoing basis, we have implemented management systems within our company. These systems, which are based on international standards, extend across all areas at H.C. Starck. Proper compliance with these standards is verified by an external auditing body in an annual matrix certification process. In 2014, as in past years, our management systems underwent group-wide matrix certification under the international ISO 9001, ISO 14001, ISO 50001, and OHSAS 18001 standards, with recertification audits by external auditing firm SGS.

## **Continuous improvement**

We are always working to improve our processes and boost our efficiency with the management systems described above. To do this, we utilize various continuous improvement techniques, such as lean manufacturing and Six Sigma, and we provide our employees with continuing and professional education in corresponding certification courses and programs.

In addition, we have established an in-house "Clean Factory Training Academy" in Germany. Six training modules impart knowledge regarding techniques used to achieve continuous improvement. Employees can seek out specific options offered as part of the training academy to obtain continuing and professional education in their fields. Doing so they can identify potential for improvement in their day-to-day work and take appropriate actions to contribute to the company's success and to the sustainability of our activities.

Employee improvement suggestions have been granted a number of awards and distinctions. For example, our plant in Newton, Massachusetts (U.S.A.), was selected from among hundreds of candidates and named one of IndustryWeek's best plants in 2013. Our Fabricated Products Division also received aircraft manufacturer Boeing's Silver Performance Excellence Award in 2013 and 2014. This award is given to suppliers who have achieved outstanding performance with regard to quality and on-time performance for a 12 month period of time.

## **Lab performance, put to the test**

Our main lab in Goslar has been participating in regular "round robin" testing since 2003. In the process, testing institution Exova Toulouse puts the quality of the lab and its measuring procedures to the test. Good results on tests like these are crucial in a number of contexts, such as obtaining important government approvals, including authorization to conduct measurements for the aviation industry. Our lab was recertified again in these tests in 2014, even achieving significant improvements over previous years. All of the measurements were given the grade values of "Good" and "Very Good" for quality – the second highest and highest ranks, respectively, in the German grading system.

# Product Innovation and Quality



Research and development (R&D) is an important instrument for our sustainable development as a company. More than 90 R&D employees and 60 application technicians work on continuous development of new materials and applications including collaborating with our customers to continuously improve our production processes and to optimize cost structures and product quality. At the same time, we have ongoing further development and evolution of existing recycling technologies along with the development of new ones, plus expanding our recycling expertise to include new secondary materials.

## **Tantalum paste that can be printed for use with ultrathin capacitors**

For many years, H.C. Starck has been a market leader in special tantalum powders for production of extremely small capacitors with high capacity. These items are what made the trend toward increasingly flat electronic devices, such as smartphones, tablet PCs, ultrabooks, and wearable electronics possible in the first place, because ultra-flat design is a crucial success factor in products like these. That same design feature also poses technological challenges, since capacitors have to be able to store more and more energy in tiny amounts of space. Previously, the height of the anodes limited the height of the tantalum capacitors and, in turn, that of the end devices. But thanks to a new development from H.C. Starck, now this height can be reduced even further: Our tantalum paste is stencil-printed onto a thin tantalum foil. This allows the production of ultra-flat anodes, with which the height of the tantalum capacitors can be reduced to less than 0.3 millimeters. As a result, the tantalum paste unlocks new approaches to design for consumer electronics, including smartphones, tablets, and ultrabooks, and for high-performance applications such as medical technology.

## **Additive manufacturing: a market of the future with boundless potential**

In late 2014, we signed a development agreement in the additive manufacturing segment with Rapid Prototype and Manufacturing (rp+m), an American company that specializes in 3D printing. The agreement encompasses the development of innovative products made from technology metals using 3D printing production methods, also known as additive manufacturing. The cooperation between the companies will benefit from both partners' proven strengths: H.C. Starck has decades of experience working with technology metals, while rp+m is a leading provider in the field of additive manufacturing. The two companies plan to work together now to develop new alloys, components, and production technologies with the aid of machines and systems from the additive manufacturing segment. For example, 3D printing can be used to produce molybdenum or tungsten components for medical imaging equipment more efficiently and with greater accuracy than conventional methods. It is also possible to develop prototypes up to the point of series production within just a very short time.

### **Small cause, big effect**

Color pigments used in industrial applications have to exhibit high opacity and hiding power, weather resistance, and saturation over a long period. In the past, these properties were typically achieved through the use of inorganic pigments containing high levels of cadmium or lead, which makes them highly toxic. Organic pigments have little opacity and hiding power and low saturation, so they are not very suitable for industrial use, especially at high temperatures. In this area, we supply forward-looking, healthier alternatives, producing a special kind of niobium pentoxide ( $\text{Nb}_2\text{O}_5$ ) that industrial firms can use to produce, for example, non-toxic yellow pigments with the necessary properties.

### **For the power of touch**

Almost all modern mobile electronic devices use touch screen panels. Companies across a broad spectrum of industries have successfully harnessed the power of touch for a wide variety of applications. The essential benefits provided by touch technology remain unmatched: it is a faster technology with reduced production cost, devices without an extra keyboard are more compact and handy, durable and easy to clean and use. For the production of Touch Screen Panel (TSP) applications for mobile device displays, H.C. Starck offers customized sputter targets from molybdenum (Mo) and molybdenum alloys such as molybdenum-tungsten (MoW), molybdenum-niobium (MoNb) and DynaMo alloys, our newest family of molybdenum-based alloys.

H.C. Starck's molybdenum alloys have excellent corrosion resistance properties, essential for advanced automotive, mobile communication and industrial applications. H.C. Starck's core competency materials, such as molybdenum (Mo), niobium (Nb), tantalum (Ta) and tungsten (W), and extensive processing knowhow, enables us to manufacture products with a high level of consistency that enables our customers to produce thin film devices that can meet the stringent requirements of the electronic industry.

# Compliance and Raw Materials Procurement



One key element of our sustainable business practices is securing our supply of raw materials for the long term. Two of the metals we process, tantalum and tungsten, are ranked as “conflict minerals.” Procurement and processing of these materials is subject to strict political regulations, and pricing and availability are highly volatile. Despite these challenges, we are uncompromising in our stance: We stand unconditionally for ethically acceptable, forward-looking and responsible procurement of raw materials.

## **Transparently sourced raw materials**

In 2014, we continued our efforts revolving around secure procurement of raw materials from conflict-free sources. We have intensified our cooperation with the independent Conflict-Free Sourcing Initiative (CFSI), which coordinates and further develops the implementation of the worldwide Conflict Free Smelter Program (CFSP). In mid-2014 we also joined the ITRI Tin Supply Chain Initiative (iTSCi), which develops and implements a due diligence system for ensuring that raw materials can be tracked and traced from the mine to the smelter. The iTSCi traceability system uses specially numbered tags that allow companies to check and trace the origin and full commercial history of the raw material they purchase in detail. This means the iTSCi system compiles extensive information on production and sale of individual batches of raw materials – both of which are prerequisites for successful participation in the CFS program.

We are also a founding member and member of the board of the Tungsten Industry Conflict Minerals Council (Ti-CMC), an independent, recognized association of representatives of the tungsten industry. Together with the CFSI, the Ti-CMC has developed a certification program for transparent procurement of tungsten raw materials that has been in force since 2013.

## **Support for preparation of EU legislation**

In 2013, the European Union announced plans to pass a law of its own to regulate compliance with the duty of care in procurement of raw materials by responsible importers of tin, tantalum, and tungsten whose ores and gold come from areas of conflict and high-risk regions. As one of the leading processors of tungsten and tantalum ores, we welcome the EU’s efforts and share the goal of the draft EU regulation on “conflict materials,” whose objective is to make raw materials procurement responsible, transparent, and sustainable. To ensure that the planned legislation is effective and pragmatic and is compatible with existing regulatory mechanisms such as the Dodd-Frank Act, we met with decision makers in Brussels and Berlin several times in 2014 to discuss the issue, supplying our extensive experience with procuring these raw materials as part of the preparatory work leading up to the planned EU legislation.

# Conservation of Resources through Consistent Recycling



Some of our 15 production sites are located in untouched natural landscapes, while some are in major industrial zones. Responsible manufacturing in this environment is associated with a variety of challenges. We take our responsibilities very seriously and have put in place environmental and energy management systems according to ISO 14001 and ISO 50001. We assess our environmental impact regularly, set environmental goals for ourselves annually, and plan and implement tailored environmental programs to achieve these targets.

## **Recycling in all areas of our business activities**

Consistent recycling across all areas of our business activities is an integral element of our sustainability strategy. This means that we not only process ore concentrates, but also recycle secondary materials in order to ensure that we have a secure supply of conflict-free raw materials and to conserve primary resources. We use innovative methods of recycling to process growing quantities of production residue, slag, and scrap into high-quality technology metals capable of delivering high performance.

We are also constantly at work on improving our products and processes in order to reduce possible risks and impacts on the environment, safety, and the health of employees and those living in close proximity to our plants. To do this, we boost energy efficiency at our sites and minimize all potential risks associated with production. We gather information on specific key performance indicators as we monitor our environmental, health, and safety policies and further develop these on an ongoing basis.

## **Strengthening recycling know-how in industry and throughout society**

We share our recycling expertise with other companies and organizations for the good of our whole society. For example, we are a member of the Raw Materials Knowledge and Innovation Community (KIC), an international resource network that aims to ensure that there is a secure supply of valuable raw materials for the industrial sector in Europe. In all, 116 European universities, research centers, and companies from 22 countries are involved in the network. In particular, we plan to work together with three other companies to significantly expand training, research, and innovations in the field of recycling and securing raw materials in the Harz area, near our main plant in Goslar (Germany).

We are also one of 13 founding members of Recycling-Cluster wirtschaftsstrategischer Metalle Niedersachsen e.V. (REWIMET), a network of companies, institutions involved in the scientific and research sectors, regional bodies, and other institutions. The goal is to develop recycling strategies and technologies for metals that are of strategic business and economic importance in order to reuse these raw materials from waste products after they have been first produced.

# Employees



## **Competing for the best people**

A safe work environment and the health of our employees are top priorities at our company. Our goal is to further develop as a socially responsible employer and offer attractive development opportunities for our diverse workforce. As a company in the specialty chemicals sector, we compete with others worldwide for skilled workers with top qualifications. As a result, one of the key components of our personnel strategy is earning employees' loyalty to the company as early as possible, something we do by providing vocational training programs for those looking to become certified skilled workers as well as internships and positions for students writing thesis projects or dissertations. We have fully overhauled the HR section of our company website in order to provide optimum support for our recruiting activities. Starting in the fall of 2014, our new information section all about working at H.C. Starck is available online at [http://www.hcstarck.com/en/people/hc\\_starck\\_an\\_employer\\_of\\_choice.html](http://www.hcstarck.com/en/people/hc_starck_an_employer_of_choice.html).

## **Promoting vocational training and continuing and professional education**

We owe our success to our employees. With that in mind, we support their personal and professional development. In 2014, as in previous years, we once again offered our employees a broad range of internal and external continuing and professional education options. At our Laufenburg site, for example, we continued the qualification initiative we had launched the year before, giving production and maintenance employees the opportunity to earn certification as chemical technicians or chemical production specialists. These programs are based on a wealth of know-how: The 51 participating employees will complete at least 750 hours of theory and practice by 2016, all while also completing their work shifts

## **Continuous improvement in occupational safety**

Occupational safety is a top priority at H.C. Starck – our goal is zero accidents. At the same time, the employees who work at our sites act in compliance with the legal requirements and guidelines of the specific country where they work. Targeted occupational safety activities are intended to minimize the risk of accidents and prevent work-related illnesses. This starts with the design of workstations and reviewing working materials and equipment and continues through to safety training for all employees.

In 2014, as in the past, we conducted regular safety training activities at all sites. These efforts were successful, as the many awards, distinctions, and certifications we have received show. Our site in Taicang, China, received a certificate for standardizing occupational safety from the occupational safety administration in Suzhou in January 2014.

In February 2014, the H.C. Starck site in Euclid, Ohio (USA), received the Evolution in Manufacturing Award from Smart Business Magazine for the fourth time in a row. No other manufacturing company in the area has garnered this award in four consecutive years.

### **Preventing occupational accidents**

We try to completely prevent all occupational accidents through intensive employee training activities and further development of occupational safety management structures and policies within the entire H.C. Starck Group. These measures have borne fruit. For example, our Euclid site made a new record in February 2014 for 1.5 million hours of work without an accident – that's 1,334 days.

In addition, we have further developed our activities aimed at promoting health in everyday working life at all sites in Germany. Examples include our Health Week at the Laufenburg site, a program consisting of a wide range of activities to raise awareness of health among our employees.

### **Helping to strike a balance between work and family**

Compatibility between work and family life is also part of our sustainability efforts focusing on our employees. At our Goslar site, for example, we have been a member of non-profit association Bassgeigenflöhe e.V. since early 2014. This organization offers childcare for the employees of its now eight member companies. Our membership is aimed at helping our employees strike an optimum balance between work time and childcare. The organization was founded in fall 2013 by seven companies based in Goslar with the aim of creating a family-friendly working environment and a good business climate for their employees.

# Society



## **Strong performance in the area of corporate social responsibility**

In 2014, we were once again involved in a large number of projects in an effort to take on a socially active role, especially in the places where we are engaged in production activities and other work. These activities focused on supporting young people during their education and training, fostering dialogue between the business sector, the research sector and academia, and society at large, and our own commitment to social causes. For example, our plant in Map Ta Phut, Thailand, received two awards for implementing an exemplary safety and environmental protection program within the company in early 2014. This distinction marked the seventh time in a row that we had received the Green Star Award, and now, for the first time, we also received a Gold Star Award in recognition of this outstanding achievement.

Our employees in Map Ta Phut also planted about 500 mangrove seedlings along the bay shore in Paknam Prasae, eastern Thailand, in May 2014. Mangroves thrive in saltwater, sticking up out of the water under flood conditions. Protecting mangroves can help to maintain coastal areas as breeding grounds for aquatic animals and fight global warming. These activities also boost team spirit among H.C. Starck employees. Many employees' family members pitched in to help.

## **Cultivating next-generation talent in the sciences**

In the summer of 2014, our plant in Goslar was visited by 16 students from several academic secondary schools in the state of Lower Saxony during a preparatory seminar for the selection rounds for the 2015 Chemistry Olympiad, in Azerbaijan. The seminar, now in its 13th year, is organized by Clausthal University of Technology. In addition to the theoretical program at the university, it also involves tours of local industrial firms.

Ever since its 75th anniversary, in 1995, H.C. Starck has been granting the H.C. Starck Doctoral Award, which carries 5,000 euros in prize money, in support of young scientists working in the fields of solid-state chemistry and materials research. The award is highly regarded in the industrial and research sectors and in academia. Some of the winners from past years are now among Germany's leading solid-state chemists. The 2014 H.C. Starck Doctoral Award for Solid-State Chemistry and Materials Research went to Pascal Hartmann of the University of Giessen and Michael Schöneich of the University of Dresden, whose fundamental research has paved the way for further research work. The awards ceremony was held in Dresden on September 16, at the lecture symposium of the German Chemical Society (GDCh) division of solid-state chemistry and materials research.

### **Sparking interest in vocational training in technical tracks early on**

We view vocational training as another important part of our development as a company. We offer high-quality vocational training programs in various disciplines for committed, team-oriented young people. We try to win over young people and get them excited about our company early on at all our sites all over the world. For example, our Goslar site held a three-day informational event for students of one eleventh-grade class at the Ratsgymnasium, an academic secondary school in Goslar, in March 2014. March 27 marked Girls' Day and Boys' Day – also known as Future Day – throughout Germany, an initiative aimed at teaching young people aged 12 and over about job profiles in STEM (science, technology, engineering, and mathematics) fields. H.C. Starck was involved in this career-oriented day of activities at its Selb, Laufenburg, and Goslar sites, where 55 students in all got to take a look at the technical and scientific vocational training tracks the company offers. And in September, 29 recent graduates started their vocational training programs at our German sites. In the United States, we sponsored the ASM Materials Camp in Newton, Massachusetts, for the second time in a row. The five-day event featured workshops and lab testing activities, all geared toward giving teachers knowledge of materials science regarding metals, ceramics, and composite materials as well as polymers.

# Facts and Figures

Business Data		2012	2013	2014
Sales	EUR million	862.9	703.9	785.9
Production quantity	t	38,640	37,501	41,759
Research and development expenses	Percent of sales	2.52	3.00	2.80

Employee Statistics		2012	2013	2014
Employees (full time equivalent)	Number	2,954	2,834	2,678
Female	Number (%)	558 (18.9)	541 (19.1)	497 (18.6)
Temporary	Number (%)	208 (7.0)	312 (11.0)	245 (9.1)
Female, temporary	Number (%)	30 (14.4)	64 (20.5)	48 (19.6)
Germany: state-certified trainees (commercial/industrial) <sup>1</sup>	Number	136 (26/110)	128 (24/104)	122 (14/108)
Employees below 20 years	Number (%)	7 (0.2)	14 (0.5)	26 (0.9)
21–30 years	Number (%)	469 (15.9)	446 (15.7)	547 (18.6)
31–40 years	Number (%)	652 (22.1)	636 (22.4)	718 (24.5)
41–50 years	Number (%)	907 (30.7)	865 (30.5)	817 (27.8)
51–60 years	Number (%)	806 (27.3)	760 (26.8)	726 (24.7)
61–70 years	Number (%)	110 (3.7)	110 (3.9)	100 (3.4)
Not specified	Number (%)	3 (0.1)	3 (0.1)	2 (0.1)
Days away from work (DAW)	Number	494	593	662
Accident rate (employees per million working hours)	MAQ	3.13	4.06	7.08
Severity rate	USQ	97	120	96
Fatal accidents	Number	0	0	0
Regular occupational health checkups	Number	2,545	1,872	2,988
Number of first aid training sessions	Number	258	214	388

Environmental Statistics		2012	2013	2014
Total amount of wastewater	m <sup>3</sup>	2,302,198	2,279,680	2,130,628
Inorganic salts in wastewater runoff	t	11,781	12,052	8,011
Total metals in wastewater runoff	t	9	8	12
Waste total	t	42,654	49,535	57,172 <sup>2</sup>
Total non-hazardous waste	t	33,335	37,106	45,971
Total hazardous waste	t	9,319	12,429	11,201
Recycling rate (in-house waste)	%	39	43	24
Total electricity	GJ	831,374	805,055	838,884
Carbon dioxide (CO <sub>2</sub> ), indirect <sup>3</sup>	t	138,008	133,639	139,255
Total natural gas and fuel oil <sup>4</sup>	GJ	904,735	922,948	910,562
Carbon dioxide (CO <sub>2</sub> ), direct	t	51,944	52,955	51,351
Total steam	GJ	348,614	399,811	304,020
Total water (drinking, cooling, industrial, and deionized water)	m <sup>3</sup>	5,008,392	4,856,520	4,019,306
Total technical gases <sup>5</sup>	m <sup>3</sup>	27,637,298	25,217,987	25,151,999
Air emissions: dust	t	13	15	710 <sup>6</sup>
Total greenhouse gases <sup>7</sup>	t	60,081	52,955	51,351

1 Number of state-certified trainees at Goslar, Laufenburg, Selb, and Hermsdorf sites. Selb and Goslar offer commercial traineeships.

2 Reason for the increase: construction commissioning of new production sites.

3 Definition: electricity => 0.166 t CO<sub>2</sub>/GJ => 597.6 g/kWh

(0.166 = factor defined by German Federal Environmental Agency (UBA) in 2005).

4 Definition: natural gas => 0.057 t CO<sub>2</sub>/GJ; fuel oil => 0.074 t CO<sub>2</sub>/GJ.

5 Gases: argon, nitrogen (N<sub>2</sub>), hydrogen (H<sub>2</sub>), and others (especially oxygen [O<sub>2</sub>]).

6 Reason for the increase: incorrect adjustment of a filter system; the setting has been corrected.

7 Total greenhouse gases: methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), perfluorocarbons (PFC), fluorocarbons containing halogens (HFC) and sulfur hexafluorides (SF<sub>6</sub>) + CO<sub>2</sub> direct

# Excerpt of GRI Reporting

Strategy and Analysis		
1.1	Statement by the Board	Report 2012: p. 1, Update 2013: p. 2
1.2	Key impacts, risks, opportunities	Report 2012: p. 6–7, Update 2013: p. 2–3
Organizational Profile		
2.1	Name of organization	H.C. Starck GmbH
2.2	Brands, products, services	Report 2012: p. 2–4, Update 2013: p. 3
2.3, 2.4, 2.5, 2.7, 2.8	Operational structure, headquarters, countries, markets, scale	Report 2012: p. 2–3, 8–9, 20
2.6	Ownership and legal form	Opus Investment S.à.r.l. is the parent company of the group. The company is owned by The Carlyle Group and Advent International.
2.10	Awards	Please visit our GRI Index online. <sup>8</sup>
Report Parameters: please visit the detailed GRI Index online for information regarding indicators 3.1–3.10.		
Governance, Commitments, and Engagement: please see pages 6–9 and GRI Index online for further information regarding indicators 4.1–4.14.		

Economic Performance Indicators		
MA	Management approach	Report 2012: p. 10–11, Update 2013: p. 5
EC 1	Economic value directly generated	Report 2012: p. 20, Update 2013: p. 10
EC 4, 5, 7, 8	Financial assistance from government, wage ratios, local hiring, infrastructure investments	Please visit our GRI Index online. <sup>8</sup>
Environmental Performance Indicators		
MA	Management approach	Report 2012: p. 14–15, Update 2013: p. 7
EN 3, 4, 8, 16, 22, 23, 24	Direct and indirect energy consumption, water withdrawal, greenhouse gas emissions, weight of waste, significant spills, waste	Report 2012: p. 20, Update 2013: p. 10
EN 18, 26	Initiatives to reduce GHG emissions, initiatives to mitigate environmental impacts	Report 2012: p. 14–15, Update 2013: p. 7
EN 20	NO <sub>x</sub> , SO <sub>x</sub> and other air emissions	Please visit our GRI Index online. <sup>8</sup>
EN 28	Fines and sanctions	Please visit our GRI Index online. <sup>8</sup>
Social Performance Indicators		
Working Conditions		
MA	Management approach	Report 2012: p. 16–17, Update 2013: p. 8
LA 1	Workforce by employment type	Report 2012: p. 20, Update 2013: p. 10
LA 5	Minimum notice period(s)	Please visit our GRI Index online. <sup>8</sup>
LA 7, 8	Rates of injury, number of work-related fatalities, programs on health and safety	Report 2012: p. 17, 20, Update 2013: p. 10 and GRI Index online <sup>8</sup>
LA 13, 14	Employees according to indicators of diversity, relationship between men's and women's salaries	Report 2012: p. 20, Update 2013: p. 10 and GRI Index online <sup>8</sup>
Human Rights		
MA	Management approach	Report 2012: p. 10–11, Update 2013: p. 6
HR 3, 4, 6, 7	Training on human rights, incidents of discrimination, child labor, forced labor	Please visit our GRI Index online. <sup>8</sup>

<sup>8</sup> [www.hcstarck.com/GRI\\_index](http://www.hcstarck.com/GRI_index)

Society		
MA	Management approach	Report 2012: p. 10–11, 18–19, Update 2013: p. 5, 8
SO 1	Programs to assess impacts on communities	Each of our sites is engaged in social projects. See Report 2012: p. 18–19, Update 2013: p. 8
SO 2, 5	Anti-corruption, public policy positions and lobbying	Please visit our GRI Index online. <sup>8</sup>
SO 7, 8	Anti-competitive behavior, anti-trust, monopoly practices, non-compliance	No incidents registered during reporting period.
Product Responsibility		
MA	Management approach	Report 2012: p. 12–13, Update 2013: p. 5
PR 1	Assessment of health and safety impacts	Please visit our GRI Index online. <sup>8</sup>
PR 3	Product and service information	Material Safety Data Sheets: <a href="http://www.hcstarck.com/en/products/products_a-z.html">www.hcstarck.com/en/products/products_a-z.html</a>
PR 5, 6, 8	Customer satisfaction, marketing standards, customer privacy	Please visit our GRI Index online. <sup>8</sup>

<sup>8</sup> [www.hcstarck.com/GRI\\_index](http://www.hcstarck.com/GRI_index)

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