

ABB is sure to be involved

Where the global steel industry is concerned, ABB is busy and there's been no let-up over the past 30 years. The company's **Bernd Sachweh*** expects interest to remain high despite ongoing challenges.

1. How are things going at ABB? Is the steel industry keeping you busy?

The steel industry feels as hectic now as it has at any time in the last 30 years. While there are undoubtedly ongoing challenges, we expect interest from customers eager to invest in new technologies to remain high for the rest of 2019.

2. What is your view on the current state of the global steel industry?

There are problematic issues, not least overcapacity, largely as a result of China's huge investment in steel production in the past two decades. More recently, we are also experiencing rapid expansion in the US as a result of import tariffs and remarkable investment. The industry has been hugely affected by concerns for the environment and the need to reduce resource usage – challenges that require a constant stream of innovation. Wherever there are technological developments, ABB is sure to be involved and we are constantly updating our offering in line with market needs.

3. In which sector of the steel industry does ABB mostly conduct its business?

ABB in Metals is principally a technology business, offering products, services and end-to-end solutions that improve productivity, quality, safety and cost-efficiency in iron, steel, aluminium and other metals production processes. We serve the entire industry from material handling to processing, with a particular focus on rolling and processing lines. In addition, our ABB Minerals colleagues are highly active in the primary and raw materials sectors.

4. Where in the world are you busiest at present?

Our fastest growth area is definitely the

US, but in terms of total volume, Europe. However, we maintain a footprint wherever the industry is located in the world, so Asia, Latin America and India are also important.



5. Can you discuss any major steel contracts you are currently working on?

Early next year, we will deliver our ArcSave® electromagnetic stirrer to voestalpine's Kapfenberg plant, helping optimise output and lower environmental impact. We also have several orders for complete electrification and control in rolling and processing including a substantial project for modernisation of a European tandem cold rolling mill for a global steelmaker. Looking strategically, we are focusing on global corporations, aligning our solutions to customer needs and working towards long-term collaborations.

6. Where does ABB stand on the aluminium versus steel argument?

ABB technologies support both aluminium and steel producers, enabling them to optimise performance and produce high

quality products as efficiently as possible. When it comes to selecting raw materials for any specific purpose, manufacturers are best qualified to make those kinds of decisions.

7. What are your views on Industry 4.0 and steelmaking?

We're trying to steer a path through all the Industry 4.0 hype and offer customers tangible solutions to real challenges that they can implement without delay and within budget. We are well-positioned to develop such solutions due to our process expertise. Our digital offerings include solutions to monitor processes and assets, using the data gathered to visualise, analyse and predict operations to optimise resource utilisation-assets, manpower, raw materials and utilities. We also offer digital solutions that use advanced data analytics to unlock higher levels of end-product quality.

When the need arises, we are able to join forces with premier IT partners to develop digital solutions including Microsoft for our enterprise-grade cloud infrastructure and IBM for industrial artificial intelligence solutions, not to mention the smaller companies with niche digital competencies that we can leverage for the benefit of our customers.

8. "...any hint of doubt when it comes to predictions of climate doom is evidence of greed, stupidity, moral turpitude or psychological derangement." This is a quote from Bret Stephens writing in The Wall Street Journal. Do you sympathise with his view?

Of course, it's clear that climate change is real. ABB is committed to providing a portfolio of products, solutions and services that optimise the use of resources and reduce environmental impact.

* Head of ABB in Metals

9. In your dealings with steel producers, are you finding that they are looking to companies like ABB to offer them solutions in terms of energy efficiency and sustainability?

We are constantly working with customers to facilitate the most efficient methods of production flow. ABB offers the world's most efficient drives and market-leading automation and control systems which form the basis of process-specific solutions tailored to metals industry needs. In primary metals our ArcSave electromagnetic stirrer helps reduce EAF electrical energy consumption by up to 5% and lowers process additions and consumables usage while improving productivity, and ABB Ability™ Performance Optimisation for steel melt shops helps to retain heat within the steel production process by using digital tools for heat loss prediction, ladle and crane tracking and crane job forecasting and scheduling.

10. How quickly has the steel industry responded to 'green politics' in terms of making the production process more environmentally friendly?

The industry has responded pretty rapidly to the challenges posed by sustainability, reduced CO₂ emissions and environmental issues more broadly. Some regions – such as the Nordic countries – are responding more quickly than others, and ABB's own digital solutions are offering customers new and powerful ways to minimise environmental impact. However, I think it will be at least three to five years before we start to see completely carbon neutral production processes.

11. Where does ABB lead the field in terms of steel production technology?

Principally in metallurgy products, where we are at the forefront of developing electromagnetic stirring solutions. Aside from ArcSave, we have the FC Mold, with its simultaneous braking and stirring in the mold, which can work together with digital products such as ABB Ability™ Optimold Monitor and ABB Ability™ Optimold Control to close the loop in continuous casting, provide real-time, automated control and unlock higher levels of optimisation.

12. How do you view ABB's development over the short-to-medium term?

We expect to see continued demand for our solutions for the good reason that we focus on our customers, listen closely to them and react rapidly to their needs.

13. China dominates global crude steel production. How should the industry react to this situation?

Politically, world governments have various options open, in terms of controlling the supply of, and demand for Chinese steel, but there is a limit to what the industry can do while steel production remains a valuable revenue stream and source of employment in China.

14. What is ABB's experience of the Chinese steel industry?

Generally, highly positive. China has been the leading market for ABB in Metals for at least the last two decades and we have developed an excellent local metals organisation with a deep understanding of the Chinese market. We have recently completed a deal to supply end-to-end electrification and automation for Ningbo Baoxin's high-quality, ultra-thin stainless steel strip production line in Zhejiang province, eastern China.

15. Where do you see most innovation in terms of production technologies?

In terms of reducing environmental impact and improving efficiency, I see a lot of innovation in the primary sector – for example, our own solutions such as ArcSave and ABB Ability™ Performance Optimisation for steel melt shop. On the downstream side, we are seeing innovation focused around improving the quality of the steel product, for example, the trend away from crude steel towards stainless and silicone grades. In response to this we're working on digital solutions that apply process-specific analytics to improve quality, yield and productivity in rolling and processing. On a plant and enterprise level there is great potential for further optimisation with increased integration, visualisation and analytics, for which we have developed ABB Ability™ Data Analytics Platform for metals.

16. How optimistic are you for the global steel industry going forward?

The steel industry is not going away, and consumption seems highly likely to grow for the foreseeable future. There are certain areas with greater potential for growth than

others. For example, India currently has a very low per capita level of consumption. In the short-to-medium term, it is hard to see how the industry will overcome the overcapacity issue until there is some consolidation of the industry in China.

17. What exhibitions and conferences will ABB be attending over the next six months?

We have just ended a busy events season for 2019 with a visit to Aluminium USA and the next six months are reasonably quiet. In 2020, we plan to join a number of major events around the world such as AISTECH, TMS, ECCO and Aluminium Düsseldorf.



18. Apart from strong coffee, what keeps you awake at night?

I still thrive on coming up with solutions to meet our customers' needs. Travel too is a sleep-killer – it sometimes feels like I have no night-time at all!

19. If you possessed a superpower, how would you use it to improve the global steel industry?

Given that the global metals and mining industries are probably the world's biggest consumers of energy, I'd direct my superpowers at finding quick, simple and affordable ways of neutralising our environmental impact. ■