



Ready for the digital transformation in manufacturing: Bosch and IHK offer Industry 4.0 qualification

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First Germany-wide vocational training program geared to this new skill-set

- ▶ A qualified workforce is essential for companies' transition to Industry 4.0
- ▶ First group of associates earns credentials as Industry 4.0 specialists
- ▶ Christoph Kübel: "We're preparing our associates for tomorrow's working world."

Stuttgart, Germany. Industry 4.0 has arrived on the factory scene, changing the working world and the demands placed on workers. Germany's federal statistics bureau says the domestic manufacturing industry alone employs more than eight million people. However, a recent study by Bitkom and TÜV-Verband found that only just under two-thirds of these companies offer their workforces training courses relating to digitalization.

Bosch has joined forces with the Stuttgart Region Chamber of Industry and Commerce (IHK) and other science and industry partners to develop a certification course called Fachkraft für Industrie 4.0 (IHK), or Industry 4.0 specialist, and launch a pilot program. The first nationwide IHK training course to cater to skilled workers, it brings technicians up to speed with the requirements of connected manufacturing. Technologies that enable Industry 4.0 applications figure prominently on the syllabus, as do agile working methods. "You have to understand the connected world before you can shape it. We're preparing our associates for tomorrow's working world, and thus setting the stage for successful Industry 4.0 adoption. The new Industry 4.0 specialist qualification will help hone Germany's competitive edge," says Christoph Kübel, the director of industrial relations at Bosch.

The first 12 participants from the Bosch plant at Stuttgart-Feuerbach have completed this course of vocational training. Starting in 2019, various IHK member bodies will offer courses nationwide that are open to all companies.

Industry 4.0 specialists to shape connected manufacturing

This new certification course caters to skilled workers with job experience in manufacturing and logistics. There are no formal entry requirements. The course consists of five modules totaling 104 hours. Theory and practice are given equal emphasis. Participants learn about connected business models in manufacturing: What technologies are out there? How is data transferred? How do logistics and supply chains work in a digital world? Technology is one focus topic; working methods such as scrum are another. “Technical solutions are just one side of the coin. When it comes to Industry 4.0, what really makes the difference is the workforce. Their ability to spot problems as they arise and find new, creative solutions will take center stage in tomorrow’s factories,” says Dr. Stefan Aßmann, who heads Bosch Connected Industry, the business unit tasked with delivering the company’s Industry 4.0-related software and services. As a leading Industry 4.0 user and supplier, Bosch digitalizes and connects its plants and those of its customers. Virtually all the roughly 280 Bosch plants worldwide have connected solutions in place.

Bülent Cevran, one of the course’s first graduates, has worked for Bosch at Stuttgart-Feuerbach for 20 years. An industrial mechanic by trade, his responsibility as shift supervisor is to ensure there are always enough parts in stock to keep the manufacturing lines rolling. “My job has changed a great deal in recent years. In the past, deciding what parts were needed and then allocating them was a painstaking, manual process. Today this is done fully automatically. We’ve connected our depot with the drivers who deliver supplies to us. Now they always know what, when, and where things are needed. With the benefit of this course, I can play a part in mapping out the plant’s connectivity. My first project after completing it will be to improve the connectivity with drivers and add other use cases, for example, to pick up empty shipping crates,” Cevran says, describing the changes afoot.

Bosch associates can volunteer for the training program and take advantage of various types of support offered by the company, such as time off and tuition assistance. The company also footed the bill for the pilot program. Much of this training takes place during working hours, and around 20 percent off the job.

Industry 4.0 specialists: out of Germany and into the world

Bosch Industry 4.0 experts had a hand in developing the course’s content. Now, as instructors, they are going to help deliver it.

“Digitalization is among the biggest challenges companies face. The IHK supports them with practical programs such as the ‘Industry 4.0 specialist’ certification course. I am delighted that we have such an outstanding partner as Bosch to help develop and roll out this qualification course. Many other companies will benefit from it,” says Johannes Schmalzl, the director of the Stuttgart region IHK.

The German Chambers of Commerce Abroad aims to also offer Industry 4.0 specialist training in countries such as China.

Further information:

Press information: [Digital education: apprentices as Industry 4.0 ambassadors](#)

Press kit: [Working world Industry 4.0 at Bosch](#)

Press kit: [Bosch makes factories smart, lean, and flexible](#)

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The Bosch Group is a leading global supplier of technology and services. It employs roughly 402,000 associates worldwide (as of December 31, 2017). The company generated sales of 78.1 billion euros in 2017. Its operations are divided into four business sectors: Mobility Solutions, Industrial Technology, Consumer Goods, and Energy and Building Technology. As a leading IoT company, Bosch offers innovative solutions for smart homes, smart cities, connected mobility, and connected manufacturing. It uses its expertise in sensor technology, software, and services, as well as its own IoT cloud, to offer its customers connected, cross-domain solutions from a single source. The Bosch Group's strategic objective is to deliver innovations for a connected life. Bosch improves quality of life worldwide with products and services that are innovative and spark enthusiasm. In short, Bosch creates technology that is "Invented for life." The Bosch Group comprises Robert Bosch GmbH and its roughly 440 subsidiary and regional companies in 60 countries. Including sales and service partners, Bosch's global manufacturing, engineering, and sales network covers nearly every country in the world. The basis for the company's future growth is its innovative strength. At 125 locations across the globe, Bosch employs some 64,500 associates in research and development.

The company was set up in Stuttgart in 1886 by Robert Bosch (1861-1942) as "Workshop for Precision Mechanics and Electrical Engineering." The special ownership structure of Robert Bosch GmbH guarantees the entrepreneurial freedom of the Bosch Group, making it possible for the company to plan over the long term and to undertake significant upfront investments in the safeguarding of its future. Ninety-two percent of the share capital of Robert Bosch GmbH is held by Robert Bosch Stiftung GmbH, a charitable foundation. The majority of voting rights are held by Robert Bosch Industrietreuhand KG, an industrial trust. The entrepreneurial ownership functions are carried out by the trust. The remaining shares are held by the Bosch family and by Robert Bosch GmbH.

Additional information is available online at www.bosch.com, www.iot.bosch.com, www.bosch-press.com, www.twitter.com/BoschPresse.