

Building on experience

Harburg Freudenberger Maschinenbau has been operating since 1855, and is now looking to the future of machinery for the tire and rubber industry

by Nora Grupe, Harburg Freudenberger Maschinenbau GmbH

German Julius Koeber was a young man with a vision. At a time when railway systems had only been in use for a few years and the industrial revolution had reached Europe, he studied and worked in France and England, returned to Germany and established an ironworks in Harburg. This was the first step in the long and successful history of Harburg Freudenberger Maschinenbau GmbH (HF). Since 1855, HF and its affiliated companies have been pioneers in developing and manufacturing highly sophisticated systems for the global rubber and tire industry.

The HF TireTech Group, still based in Harburg, Germany, produces state-of-the-art co-extrusion lines, highly productive, fully automatic Unistage tire building machines (TBMs), and the leading hydraulic curing press technology for the worldwide tire industry.

Günter Simon, managing director of the TireTech Group, explains, "One of our customers created the term 'supplier integrity' with respect to the performance of HF. This makes us proud since we perceive our customers as our partners and we work hard to develop long-term relationships. We listen to our customers and follow their requirements. We keep our promises and we take care of our machines during their whole lifetime based on strong after-sales services capabilities worldwide."

Simon is convinced that the know-how, creativity, and enthusiasm of his employees "are our greatest resource. These highly motivated people are the key to our success. Our mission can only be accomplished by teamwork. We put our heart and soul into being creative engineers and this has brought us to the pinnacle of tire technology evolution. Our developments are always one step ahead, making us one of the most copied companies within our industry."

HF has continuously extended its R&D activities in the past few years. More than 5% of turnover is reinvested into research and development.

Simon says, "We aspire to maintain our position as a leading technology partner for our customers. We are able



HF designed the first hydraulic curing press, the first column-type press, and the first platen type press and has now released a new truck tire press design with the Truck Tire Press Type 67-450 H

to tailor-make our systems based on smart construction principles and advanced building block systems. We offer high-class products and services with the objective to provide minimum total cost of ownership to our customers."

This approach has deepened HF's relationship with its existing customers

and has given the company the opportunity to gain new customers in China, India, and other regions in Asia. To guarantee HF quality, they are currently in the process of increasing capacity in that region. In addition, the company has local cooperation partners in India, Malaysia, and China, which

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produce components for extrusion and tire building machines based on HF technology.

Cutting-edge extrusion technology

The HF Extrusion Machinery business unit has been one of the world's leading and most innovative extrusion equipment manufacturers for more than 70 years. The HF TireTech Group develops extruders for hot and cold feed applications, single and multiple extrusion heads in various customized designs, as well as complete extrusion lines, including control systems for the tire technical rubber goods industry. The company manufactures systems specifically for every individual application.

Dirk Wiegrefe, director of extrusion technology at HF says, "In the future of tires, the biggest challenge will be in implementing tire labeling systems within Europe and beyond its borders, as these labeling systems not only affect the design and quality of tires but also the extrusion equipment my team and I will have to provide to the tire industry. This turning point will have a great impact on my area of business. Our aim is to be recognized for our excellent high-performance technology. The terms 'HF' and 'extrusion' should become more closely intertwined with the tire and technological rubber industry."

Technology for an operational lifetime

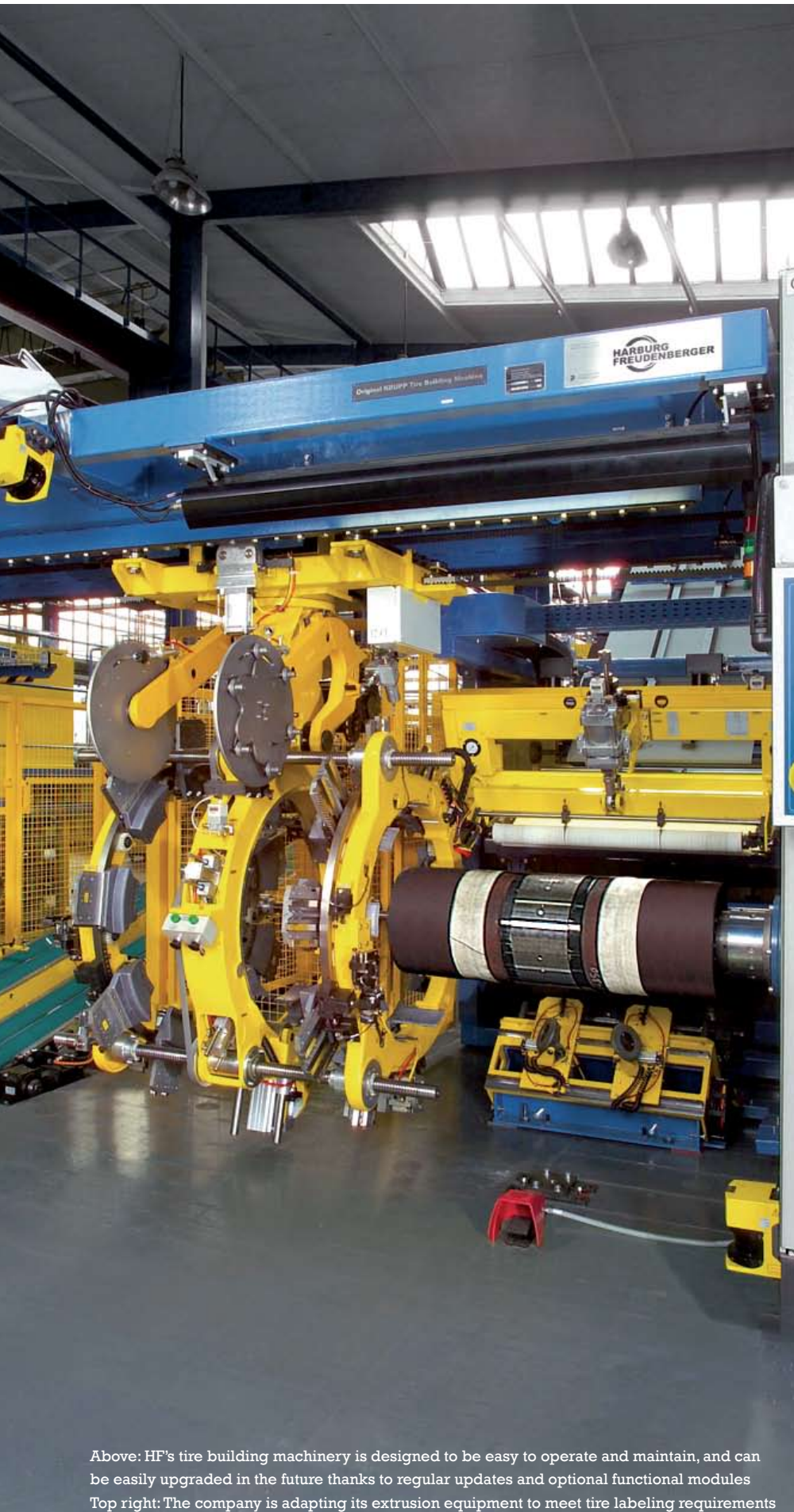
After HF delivered the latest TBM to one of its biggest customers, Ulrich Busch, director of the Tire Building business unit, received an email, which read: "Thank you very much, this is the most wonderful and impressive machine I've seen during my 25 years in the tire building business."

So what makes the HF tire building machines so outstanding? Busch says, "First of all, our machines are easy to operate and easy to maintain. They are tailor-made solutions, well equipped for any future high demands placed upon them thanks to the system's upgrade capabilities through regular updates and optional functional modules. This means the HF TBM will stay at the cutting edge of technology for its entire lifetime."

Innovative curing presses

The HF TireTech Group brought the first hydraulic curing press onto the market, followed by the first column-type press worldwide, and also designed the platen type press and finally stepped into a new chapter of truck tire press design with the Truck Tire Press Type 67-450 H in 2010.





The group is currently working on its next release.

Norbert Behrendt, director of the Curing Presses business unit and managing director of HF Belisce, Croatia, explains, "Our curing presses are designed at our head office in Hamburg, Germany, and produced in Croatia. We guarantee an intensive quality check before delivery and have a level of expertise drawn from more than 400 delivered systems annually."

It's no wonder that all major tire manufacturers are already customers and, in the past two years, HF has also sold more than 200 presses to the tire markets of India and Southeast Asia.

156 years of success – the future

Simon discusses what the future holds for the company following a successful 156 years of operation. "This will mainly be in continuing the successful steps we have taken in recent years. This means we want to increase and deepen our close cooperation with the leading tire manufacturers, to develop technical solutions that lead to differentiation in comparison to those suppliers operating from low-cost countries who are trying to threaten our position.

"We will expand our product portfolio and will provide energy-efficient systems with green technology that are easy to operate and service. In addition, we are creating a highly flexible and responsive organization with the ability to react quickly to the challenges posed by a rapidly changing world. We are investing in eco-friendly production technologies and improved energy management. We want to extend the leading position in all our business units of mixing, extrusion, tire building, and curing. In a market of growing complexity and increasing challenges, we believe the HF Group is the best option." **tire**

Above: HF's tire building machinery is designed to be easy to operate and maintain, and can be easily upgraded in the future thanks to regular updates and optional functional modules
 Top right: The company is adapting its extrusion equipment to meet tire labeling requirements