HF Curing Presses VP sets out ambitious programme

Executive VP Warren Rudman targets innovation, sustainability and increased global footprint

> F Group has embarked on a major strategic plan to enhance both its technology offerings and manufacturing footprint, according to Warren Rudman, executive vice president, Curing Presses, at the Hamburg, Germany-based tire machinery major.

This is an "aggressive strategy" focused on innovation in digitalisation, production, new-product development and sustainability," Rudman explained in an interview with *ERJ* at the recent Tire Technology Expo.

HF Group is also looking to enhance its manufacturing capabilities, which are centred in Belišce, Croatia, potentially by adding a new facility in another global region to increase its market footprint.

Potential locations, said the executive VP, include "where the hotspots are within the tire industry: it was China first and now it's moving into different areas in southeast Asia and in India."

According to Rudman, the key



is to adapt to the requirements of different markets, for instance with customers now increasingly looking for locally produced products.

In deciding where to manufacture, there are also considerations ranging from the sourcing of raw materials to delivering service support, noted Rudman, saying: "We have to look at all those factors in our strategic planning."

In terms of product innovation,

Rudman said "we now have an R&D dedicated team in Hamburg focused on certain key projects and a clear roadmap, so that every year or even every few months, new products will be released."

Sustainability and energy-efficiency is a major driver, with the Curing Presses BU focused on the replacement of conventional steam, hydraulic and pneumatic systems on its machines with more efficient electric alternatives.

New board for merged HF mixing and tire units

HF Mixing and HF Tire-Tech are now operating under the umbrella of the HF Group with one joint management team, the rubber & tire machinery major has announced.

Previous co-CEOs of the two divisions, Ian Wilson, Zoran Uranjek, and Dr. Holger Rudzio (pictured l to r) will form the joint management board in the future, said a HF press release supplied 26 April.

"With this merger, HF



will combine the strengths of both brands and the re-

sources to improve global service for HF's custom-

ers," according to the statement.

The focus, it added, is "on bringing together expertise and know-how to target and align technical innovations and the development of digital products and services to the market."

The new set-up will also help to "fulfil the common customer requirements for HF`s products in terms of quality, performance as well as sustainability and digitisation." In particular, electric heating is being introduced across the company's range of tire presses, with retrofitting technologies also being developed for existing machines.

To cover the complete curing process, the electric heating units are incorporated into the top and bottom plate of the press, as well as the container and within the bladder.

The shift to electric heating, said Rudman, is of "major significance for the curing process: with potential reductions in cure-times as well as energy savings of 10-30% in some areas."

While currently less than 1% of tire curing presses run on electrical power, Rudman forecast that within the next 10 years, adoption should increase to around 30-40% and maybe even up to 50%.

"Basically, it's more cost effective to do it with electricity. Yes, there's still a way to go but the improvements are so significant in terms of production cost per tire," he said.

Other important drivers for switching to electric systems include the CO_2 taxes being imposed by the EU and the increasing difficulty of finding skilled labour to maintain ageing steam-based heating systems.

But the main impetus for the adoption of electric presses will come from the tire manufacturers, who are under "huge pressure" to meet sustainability targets, believes Rudman.

Tire makers, he said, need to achieve tough targets to reduce emissions and achieve CO_2 neutrality. So, there's "a lot of focus on the mixing and curing areas, which have a significant impact on carbon footprint."

Alongside technologies that enhance the efficiency of the manufacturing process, Rudman said HF is working to enable tire makers to better track emissions, energy-consumption and manufacturing cost per kilogram of product.

The programme extends to evaluating ways to map the carbon footprint of HF Group's own products, taking account of the entire supply-chain.

The goal, said Rudman, is to be able to say to customers, 'when you buy our presses, this is the CO_2 footprint, from transporta-

Compact curing press advance

At the recent Tire Tech Expo, HF Group showcased its newly introduced Cure-Master PCR curing press for the manufacture of passenger car tires.

With a modular, compact design – facilitating its introduction into existing tire factory infrastructure – the new press is being targeted at specific global market regions.

The CureMaster PCR also offers a replacement option for mechanical presses with high operating and maintenance costs as they near the end of their lifecycle.

Features include main locking and 'squeeze' components outside of the heated area, with the design said to achieve "optimal" tire concentricity, as well as reduced wear, longer press life and improved cycle times.

Furthermore, the CureMaster PCR is equipped with "proven" energy-saving systems and is designed for ease-of-maintenance with improved access to key areas of the press.

tion, from shipping, from manufacturing, from where the raw material comes from.'"

Within the next year to 18 months, HF expects to have "significant data available on its own carbon footprint," said Rudman, noting the role of advanced automation and digitalisation in this area.

Rudman went on to describe



The design is also said to offer high levels of efficiency and functionality and can be fitted into a factory space without significant changes to plant infrastructure.

artificial intelligence (AI) as "obviously very important for us now as it offers huge advantages in the speed of how to achieve certain goals in a super-efficient way.

"You could actually double or triple your capacity with the people you have by bringing AI into the equation. We see a huge benefit from that in the future."

