



▶ COVER STORY

Step Inside HF's Virtual Halls

HF's Curemaster, TBR Truck Press



The past months overwhelmed all of us by the pandemic. This forced us to re-think, re-structure and adjust our activities and communication methods in order to keep the workflow processes running. We believe that personal contact, personal discussions and negotiations are essential for our partnerships and we are looking forward to intensifying our travels and personal visits at customers sites again as soon as possible. In the meantime, we set up various digitalisation projects. For example, we set up virtual showrooms to enable our customers to discover our machines and innovations virtually in HF's showrooms. With our sales and technician teams, our customers can book individual tours through our showrooms to get an impression of our latest developments related to Tire Building Machines, PCR and

TBR Curing Presses and PCI's, service topics, and our production facility in Belišće, Croatia as well as the Technical Center of the HF Mixing Group, Freudenberg, the related mill room production equipment and newest Mixing Technology.

Quality capability – outstanding results

During the past months HF ran through a VDA system-audit which was required by our valued customers who belong to the top ranked tyre manufacturers worldwide. HF achieved more than 95% which is considered an excellent achievement. HF was evaluated in the fields of risk management during the production process, traceability, maintenance, trainings, project change management, standardisation, production management, cutting edge technology, technical know-how and the professionalism of staff.

Additionally, we renewed our ISO 9001:2015 certificate. ISO 9001 is not just a standard that consists of numerous requirements. Behind ISO 9001 is the philosophy of an (almost) automatically functioning company. A company that develops unique competitive advantages through clear business processes and responsibilities, a high level of customer orientation and continuous improvement. ISO 9001:2015 is a management system that enables companies to align their products and services to customer needs and, by defining clear business processes, to offer their customers consistently reliable services. The standard aims to bring lasting and sustainable success to companies.

We are confident that these audits confirm our customers trust in our services.





COVER STORY



HF's virtual showrooms: Book a personal tour: showrooms@hf-group.com or showrooms@hf-mixinggroup.com

Tyre building machines – Service support & technical upgrades

HF TBM service department is ready and available to provide various service options for your machines. Our personnel are available to visit sites, inspect machines and provide detailed reports of the inspection. Reports will include technical improvement kit proposal, replacement parts, maintenance recommendations. HF can also offer a quotation for the maintenance/repairs to be completed on the machine.

HF has spare parts available for all machine types. For frequently ordered parts HF can provide standard price lists and yearly contracts for fixed pricing. HF also offers customised machine upgrades, technical improvement kits (new and replacement modules) for improvements in quality, reliability, output and capability. HF technical improvement kits can be offered for all machine types.

HF TBM service department provides turn-key services with our highly qualified personnel in the mechanical, electrical, technology and software disciplines.

HF TBM service department provides you with remote support using a connection terminal box that can be installed easily by the customer. Remote connection to PLC/Machine is safe and secure using a VPN connection. Online video and chat communications are available through TEAMS.



Tyre building machines – Common design approach for all tyre designs

The fundamental basis for our TBM design, no matter which type you are looking for, is the same. All tyre building machines consist of our long proven modular components and are sized to your specifications.

Depending on your requirements, we offer two carcass drum types, which are capable to adapt different tyre constructions: Inflated turn up with bladder or mechanical turn up drums or flat turn up with Ply up/down constructions with our patented FAPBS drum. This allows you to increase your flexibility and to react to current market changes due to the E-mobility such as high load index, lower rolling resistance and lower noise emissions.

The HF ONE is the solution for the current and future demands.

In addition, all TBMs are built up on a modular base to have the capability for integration of an automatic robot system for loading the beads & unloading the tyre. The machine layout is prepared for simple future upgrades of these features as well as additional reinforcement strips which are applied on Body Ply or Innerliner.

Features & benefits:

- Multiple drums support with quick change from drum to drum
- Patented FAPBS drum for high Ply turn up, thick sidewalls and Ply up/down constructions
- Modular machine design for upgrade possibilities
- Hands off operation with robot system for bead loading
- High OE quality standard by excellent accuracy of material positioning and splicing
- Maintenance friendly
- Excellent machine availability by robust design and high repeatability

Contact: HF Tire Building Machines: tbm-service@hf-group.com; www.hf-tiretechgroup.com ■

HF Mixing Group-WF Recycle-Tech Unveils New Two Stage Tyre Pyrolysis System

Farrel Pomini, a business unit of HF Mixing Group, has made a significant investment in UK Pyrolysis system builder WF Recycle-Tech. The partnership enables introduction of WF Recycle-Tech's revolutionary new pyrolysis solution for the recycling of end-of-life tyres (ELTs) to the market.

Building on Farrel Pomini's 150 years of global experience in the fields of engineering and manufacturing, WF Recycle-Tech's patented two stage continuous process takes shredded rubber crumb from ELTs through a thermodynamic system, which applies proven technologies in an innovative and efficient manner, to ensure continuity and reliability of performance. The outputs of this process include oil, raw recovered carbon black and non-condensable gases, all of which have profitable commercial applications and are environmentally sustainable products helping to close the tyre recycling loop.

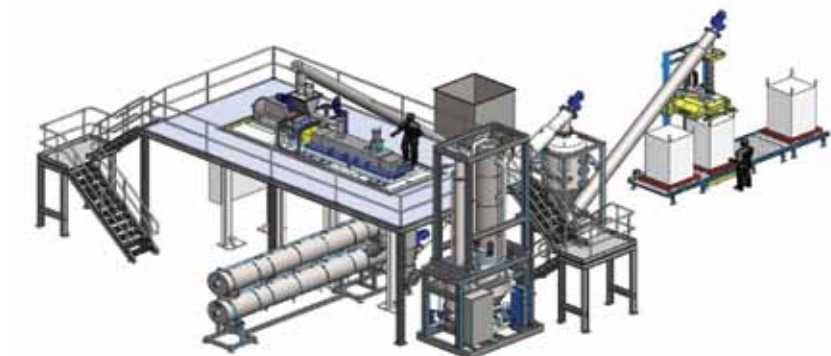
According to Ian Wilson, Co-CEO of HF Mixing Group, "This investment by our Continuous Mixing Business Unit, Farrel Pomini allows HF Mixing Group to engage in solutions for end-of-life tyres and support sustainability within one of our key sectors."

WF Recycle-Tech's new design comes on the back of its operational first-generation system, produced and tailored

over a lengthy research and development programme which has seen the company hone its product and deliver what its management team describes as a 'simple yet unique' system to the industry. The WF Recycle-Tech solution is specifically designed to process 1.5 tonnes of rubber crumb per hour in a shift from the norm of large-scale conventional pyrolysis plants. According to WF Recycle-Tech's Managing Director, Paul Neville, "This allows our customers the flexibility to strategically place systems and enables machines to be installed incrementally, making use of an initially small footprint and production capacity which can be increased as customers grow their business and the market for the outputs develops."

The patented WF Recycle-Tech continuous pyrolysis system consists of two core elements which make up the core pyrolysis system. The first stage, featuring a Farrel Pomini continuous mixer is used for rubber crumb ingestion and pre-heating, the second stage pyrolysis chamber controls final heat temperatures and residence time. The system is arranged into a compact footprint and is arranged with required ancillary equipment and a line control system for efficient full system control and 24 hour operation. The Continuous nature of the system also allows some processing flexibility which has been demonstrated to give some control flexibility of the outputs derived. In addition, the relatively short 18-20 minute process residence time ensures productivity and energy efficiency. The system is completed with a processing and handling equipment for both the feedstock and outputs, oil, recovered carbon black and gas. The full system is designed for simple installation without significant specialised facilities and offers the ability of the user to locate the equipment close to the source of feedstock, thus reducing transport requirement which further reduces cost and environmental impact of the process for recovery of end-of-life tyres.

WF Recycle-Tech have a pilot plant available for testing & demonstration in the UK which can be utilised for R&D or customer specific trials. The pilot plant is capable of processing upto 700kg/hr of end-of-life tyre from ground tyre stock to the three main system outputs. ■



WF RECYCLE-TECH

The patented WF Recycle-Tech production system