

Fine mesh straining technology for high-quality tire products

Manuel Bessler, general manager sales and project management, UTH GmbH, Germany

New requirements in the automotive industry and the demand for sustainable processes lead to new challenges in the tire industry. In addition to the consistent reduction of the reject rate, new material requirements also pose a challenge for production, including new chemicals and the reduction of plasticizers as well as devulcanized rubber and rubber powder. A new generation of processing machines is required to improve the processing of these materials. Fine mesh straining by gear extruders ensures a clean rubber product and homogeneous distribution of additives. Further developments show potential for the processing of sophisticated tire products.

Coffee and Networking Break

Clean and efficient tire curing – avoid sticking to the past

Tobias Lauterbach, technical sales manager auxiliaries EMEA, Lanxess Deutschland GmbH, Germany

Sustainability is a key topic not only in the rubber industry but also everywhere in our daily lives. We at Lanxess's Rhein Chemie business unit are supplying solutions throughout the whole tire production process to meet new challenges. An often overlooked detail during the manufacturing process is the right choice of release agents. The focus of this session will therefore be the role of the release agent in an efficient and sustainable tire curing process. We will discuss permanently coated bladders and synergies with different release agents together with trends in the tire industry and how they can be addressed.

Liquid-phase mixing: practical challenges

Elham Rezvanpanah, head of Innovation Center, Barez Industrial Group, Iran

Achieving acceptable dispersion and even distribution of fillers is always a challenge in the traditional solid mixing process. Liquid-phase mixing, as an alternative method, offers excellent dispersion; as a consequence, the produced NR/carbon black masterbatch demonstrates improved mechanical and dynamical properties. In theory, wet mixing includes simple steps: latex and filler slurry mixing, coagulation and drying. But in practice, some challenges affect the process design and the product. We recently tried wet mixing at a semi-industrial level. In this presentation, we share our experience in terms of the challenges we have faced and the reasonable solutions.

Edgetrack: automatic edge trimming tracking controlled by digital camera

Alberto Viganò, automation engineer, Comerio Ercole, Italy

Quality in the production of tires depends on the accuracy with which the rubberized layers of textile or steel cords are joined after the calendaring and cutting processes. The joint must be uniform and not show discontinuities. To achieve this, it is important that the cut of the trimming is as close as possible to the last cord. Comerio Ercole has developed and industrialized EDGETRACK on calenders in production. It is a vision system to detect the edges of cords in the rubber, based on digital cameras that control the edge cutting devices to achieve less than 0.5mm residual rubber.



Getting back together

This year's Conference will feature more than 120 expert speakers from leading companies and institutions, including **Jaguar Land Rover, Michelin, Continental, Bridgestone** and many more, plus exhibits from many of the world's most important suppliers to the tire manufacturing industry

Conference delegates, visitors and exhibitors will enjoy a networking opportunity that is unrivaled within the tire manufacturing sector

