

Company News

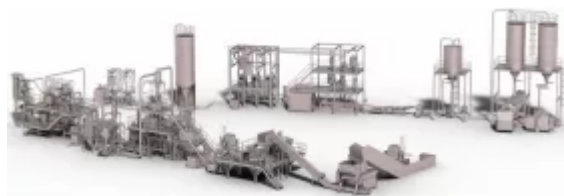
Coperion and Herbold Meckesheim at Fakuma 2023: High-Efficiency Technologies for Processing and Recycling Plastics

Edited by on 19. Oct. 2023

Stuttgart, Germany & Meckesheim, Germany –

At Fakuma 2023 (17-21 October 2023, Friedrichshafen, Germany) Coperion and Herbold Meckesheim will present innovative product and process solutions that make both the compounding and the recycling of plastics markedly more efficient and increase the product quality achieved.

One eyecatcher at Fakuma booth 6312 in Hall A6 is the preconfigured ProRate™ PLUS-S feeder. It serves as a representative of Coperion's comprehensive technology and process expertise in all compounding tasks. From raw material handling to conveying, feeding, melting, dispersing, homogenizing and devolatilizing up to pelletizing, Coperion delivers both high-efficiency individual components as well as complete systems.



With their complete systems, Coperion and Herbold Meckesheim create especially efficient solutions for plastics recycling. (Pictures: ©Coperion)

The added value from the merger of Coperion and Herbold Meckesheim, specialist in mechanical recycling of plastics and plastic waste, is evident at the booth in a virtual PET recycling plant that both companies have created. This virtual plant presents one of the complete solutions for plastics recycling that Coperion, together with Herbold Meckesheim, is now making available from a single source. It demonstrates the entire process and at the same time allows a glimpse into numerous key components and their functions.

Moreover, rotors from Herbold Meckesheim granulators will be on display in several sizes and for various applications. The rotor concept with the cutting geometry is a decisive reason for the high efficiency of Herbold Meckesheim's granulators.

Plastics Recycling Plants from A Single Source



Herbold Meckesheim granulators are characterized by a very efficient mode of operation, in particular due to the cutting geometry of the rotors.

Along with individual components, Coperion and Herbold Meckesheim now build entire systems for plastics recycling. From mechanical processing – size reduction, washing, separating, drying and agglomerating of plastics – to bulk material handling as well as feeding and extrusion all the way to compounding and pelletizing, such plants cover the entire plastics recycling process chain.

Since their merger, both companies have continued to develop and optimally attune their technologies for individual process steps so that entire systems excel in operation with extremely high efficiency.

Coperion and Herbold Meckesheim realize solutions for mechanical recycling of post-industrial and post-consumer waste, chemical recycling, solvent-based recycling, and deodorization, tailored to the type of plastic being processed.

Representative of their expertise in these various plastics recycling processes, Coperion and Herbold Meckesheim will be showing a PET recycling plant simulation at Fakuma 2023. Booth visitors can look directly into all process steps and view the construction and functionality of key technologies.



Coperion ZSK twin screw extruders are equipped with numerous new features that ensure high-efficiency plastics compounding.

Pivotal for the high efficiency of Herbold Meckesheim's granulators are both the rotor concept and the cutting geometry, individually adapted for the task and the raw material.

Herbold Meckesheim granulators work with true double cross cutting action: not only the rotor knives are mounted at an inclined angle, even the stator knives are creating a clean cut with a constant gap across the entire knife width.

The end product is a regrind with very good flow characteristics, low fines percentage, and high bulk density that can be easily reintroduced into the process. Various rotors from Herbold Meckesheim granulators will be available to view at the booth.

Smart Solutions For More Efficiency In Classic Compounding Tasks

At Fakuma, Coperion will also present versatile and efficient uses of its ZSK and STS twin screw extruders as well as its feeding and conveying technologies in classic and forward-looking compounding tasks.



The gravimetric ProRate PLUS single and twin screw feeders are very robustly constructed and stand out with their good price-performance ratio.

Coperion technologies are ideally suited for manufacturing demanding compounds such as bioplastics. Due to the number of possible base polymers and the variety of recipes, bioplastics manufacturing creates very high demands upon compounding technology. Coperion has already supplied numerous systems for the production of bioplastics. The company's comprehensive process expertise is leveraged to design each process step such that the required mechanical properties of bioplastic end products are achieved.

Representative of its first-class compounding technology and process solutions, Coperion is showing the preconfigured ProRate PLUS feeder in size S with integrated refill system at its Fakuma booth. This continuous-operation gravimetric feeder from Coperion K-Tron is very robust and stands out with a good price-performance ratio. This single screw feeder is an especially economical solution for reliably feeding free-flowing bulk materials. Coperion K-Tron has also expanded the ProRate PLUS feeder line with a PLUS-MT twin screw feeder especially for feeding powders.