



Contact

Kathrin Fleuchaus
Marketing Communications
Coperion GmbH
Theodorstraße 10
70469 Stuttgart/Germany

Telephone +49 (0)711 897 25 07
kathrin.fleuchaus@coperion.com
www.coperion.com

Press Release

Coperion and Herbold Meckesheim host two-day recycling conference

Creating New from Used: Which Technologies Are Key for High-Efficiency Plastics Recycling

Stuttgart, November 2024 – Over 180 participants from 25 nations accepted the invitation from Coperion and Herbold Meckesheim to attend the Recycling Days² in the newly opened Recycling Innovation Center in Weingarten, Germany, on November 6 and 7, 2024. In keeping with the theme of “Experience A New Dimension of Plastics Recycling,” the two-day conference featured a variety of presentations and live demonstrations, allowing participants to gain insights into various technologies designed to enhance the efficiency of the plastics recycling process.

Internal and external experts from the industry, including researchers, shared insights on how the right equipment can save resources and costs without compromising the quality of the recycled compound. Practical examples from successful recycling plants also significantly enhanced understanding of the topic. Achim Ebel, Head of Sales at Herbold Meckesheim, and Kürşat Başdemir, Company's Founder and Project Director at Ekosistem Ltd., presented the latest advancements in Herbold washing lines, focusing on the impact of water treatment on the quality of the recycled compound. Martin Müller, CEO at Polymetrix, and Sabine Schönfeld, Sales Manager at Coperion, gave a joint presentation on a bottle-to-bottle recycling plant. This system of Indian preform and plastic packaging manufacturer Magpet Polymer Pvt Ltd. produces rPET granulate approved for direct food contact by both the European Food Safety

November 2024

Administration (EFSA) and the U.S. Food and Drug Administration (FDA). Furthermore, it is brand owner approved.

Spotlight on extrusion: The impact of various technologies on the process

Coperion leaders Frank Mack, Head of Process Technology Engineering Plastics, and Jochen Schofer, Head of Sales Recycling, presented a lecture on the range of possible extruder types for plastics recycling, demonstrating how the choice of extruder technology can impact both the overall process efficiency as well as end product quality.

One unique feature of twin screw extruders is their especially high output capacity. Coperion developed the ZS-B MEGAfeed to complement its ZSK twin screw extruders. This side feeder compresses recyclates with primarily very low bulk density, such as flakes and fibers, enabling them to be introduced into the recycling extruder in large quantities while leveraging the equipment's optimal performance.

A further advantage of twin screw extruders touched upon by Mack and Schofer is their flexible configuration, adaptable to a variety of recycling applications. This flexibility makes it easy to incorporate additives, glass fibers, and fillers commonly needed in high-value recomponds into the process. Coperion ZSK recycling extruders feature a modular design: The co-rotating twin screws are comprised of various screw elements that perform specific tasks to achieve the desired effects. Depending on the recycling application, intensive mixing, plastification, or shearing can be achieved. Moreover, the continuous surface renewal caused by the rotation of the twin screws results in an especially high devolatilization capacity in this type of extruder.

Live demonstrations: Insights into the details

On both days of the conference, guests could witness the newest developments in action during live demonstrations in the Recycling Innovation Center. The added value of individual technologies was demonstrated on running systems, along with their impacts on the entire recycling process.

The processing of PCR film flakes with a bulk density of 30 kg/m³ into rPE compounds was demonstrated live during the event. The interplay of the ARW discharge agitator and the Smart Weigh Belt (SWB) feeder provided even feeding of fluffy and voluminous raw materials. The ZS-

November 2024

B MEGAfeed side feeder compacted the film flakes so they could be fed into the ZSK 58 Mc¹⁸ recycling extruder at a very high throughput to be compounded. The melt was then filtered and processed into rPE granulate in an underwater pelletizer.

Attendees had the opportunity to see the benefits of Coperion's twin screw extruders' self-cleaning screw profiles and mixing properties by observing an STS 25 twin screw extruder in operation. Fillers and reinforcing materials were added to the recyclate in varying quantities, demonstrating how quickly recipe changes can be implemented on Coperion extruders without cleaning effort or product loss.

Attendees asked a range of questions following the presentations and engaged in lively discussions during breaks and live demonstrations, illustrating the need for information in the field of plastics recycling. Participants repeatedly expressed amazement at the wide range of opportunities available, even within their own companies, to increase the efficiency of plastics recycling, with short-term ROI and increased quality consistency.

“The Recycling Days² exceeded our expectations. The interest and the atmosphere were both outstanding. These two days made it clear that we are on the right track and are sustainably driving the rate of plastics recycling forward as we continue to make adjustments to further increase the efficiency of the process and the attractiveness of plastics recycling,” said Massimo Serapioni, General Manager of the Recycling Business Unit at Coperion.

November 2024

About Coperion

Coperion (www.coperion.com) is a global industry and technology leader in compounding and extrusion systems, size reduction, washing, separating, drying, agglomeration, feeding, weighing, material handling and pneumatic conveying systems, as well as milling, mixing, thermal processing, dust collection and other services. Coperion develops, produces, and services plants, machinery, and components for the plastics and plastics recycling, chemical, battery, minerals, food and pharmaceutical industries. Coperion employs more than 5,000 people in its three divisions, Performance Materials, Food, Health & Nutrition, and Aftermarket Sales & Service - at over 50 sales and service locations worldwide. Coperion is an Operating Company of Hillenbrand (NYSE: HI), a global industrial company that provides highly-engineered, mission-critical processing equipment and solutions to customers serving a wide variety of industries around the world. www.hillenbrand.com

Herbold Meckesheim

Herbold Meckesheim (www.herbold.com) is a leading recycling specialist and produces machines and plants for processing pure plastic waste from the industry as well as used, mixed and contaminated plastics. The modular system solutions for automated recycling lines are tested in the company's own technical center. More than 260 employees at the headquarters and the staff of the international agencies accompany custom-made plants and machines from the conception stage through commissioning to the end of their commercial use. Since 2022 Herbold Meckesheim is part of the new Recycling Business Unit of Coperion, which offers complete solutions for plastics recycling processing. Coperion is the global industry and technology leader in compounding and extrusion systems, feeding and weighing systems, bulk material handling and services. Coperion is an Operating Company of Hillenbrand (NYSE: HI), an industrial company operating in over 40 countries serving a wide variety of industries across the world. www.hillenbrand.com



Dear Colleagues,

You can find and download this [press release in German and English](#) and [print-ready color images](#) at

<https://www.coperion.com/en/news-media/newsroom/>

Editorial contact and copies:

Dr. Jörg Wolters, KONSENS Public Relations GmbH & Co. KG,
Hans-Böckler-Str. 20, D - 63811 Stockstadt am Main, GERMANY
Tel.: +49 (0)60 27/ 99 00 5-0
E-Mail: mail@konsens.de, Internet: www.konsens.de

November 2024



Coperion and Herbold Meckesheim welcomed more than 180 guests to a conference in the newly opened Recycling Innovation Center in Weingarten on November 6 and 7.

Photo: Coperion, Stuttgart Germany

November 2024



Jochen Schofer, Head of Sales Recycling at Coperion, demonstrated how the choice of extruder technology can impact both the overall process efficiency as well as end product quality in plastics recycling.

Photo: Coperion, Stuttgart Germany

November 2024



The live demonstration on a ZSK 58 Mc¹⁸ recycling extruder impressively demonstrated how rPE flakes can be processed into rPE compounds at extremely high throughputs despite their low bulk density thanks to innovative equipment design.

Photo: Coperion, Stuttgart Germany