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Press Release

Coperion and Lummus Novolen Technology

Successful High-Performance Concept for Meltblown PP Production

Stuttgart, July 2020 – In a recent test series performed in its test lab at Stuttgart, Germany, Coperion together with the technology licensor Lummus Novolen Technology demonstrated the wide range of possible applications for the proven Coperion ZSK twin screw extruder series. Within the scope of tests, various Polypropylene pellets with extremely low melt viscosities were successfully produced. This so-called meltblown Polypropylene (PP) forms the raw material for the production of nonwovens, which are mainly used as filter media in medical protective masks.

The results obtained from the tests now allow the concept to be easily transferred from laboratory to production scale. Thus, the production of such products on existing and new large-scale extruders, as typically installed in modern PP production sites, becomes possible.

The tests are based on the proven ZSK extruder technology with ZS-EG side devolatilization and a screw design tailored exclusively for Novolen. According to Heiko Hornberger, Head of Team Polyolefins, Process Technology at Coperion: "The innovative system concept proves the successful interaction of different technologies. The combination of a new screw concept for optimum dispersion and very good degassing thanks to ZS-EG technology secures first-class product qualities. This is achieved with outstanding process reliability, regardless of throughput rates and melt viscosity. The overall concept of the Coperion system not only ensures the operational flexibility required and necessary by the licensor for the processability of a broad range of PP types, but also significantly extends the possible application window."



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For Sebastian Schwarzer, Technology Manager Extrusion at Lummus Novolen Technology, the new concept for the production of meltblown PP represents a milestone: "With this process, the licensees of Lummus Novolen Technology are now able to produce these coveted products safely and reliably, without restrictions on the existing product portfolio. Furthermore, the project impressively shows that the interaction between the technological expertise of Lummus Novolen Technology and the innovative system design and competence of Coperion leads to the desired success within shortest development time. It once again impressively demonstrates the innovative strength and customer orientation of Lummus Novolen Technology and Coperion," says Sebastian Schwarzer.

Lummus Novolen Technology makes this new development available to its interested licensees as part of a Process Design Package. The package contains all necessary process parameters and additive recipes. Coperion supplies the machine components for successful implementation.

About Coperion

Coperion is the international market and technology leader in compounding and extrusion systems, feeding and weighing technology, bulk materials handling systems and services. Coperion designs, develops, manufactures and maintains systems, machines and components for the plastics, chemicals, pharmaceutical, food and minerals industries. Within its three divisions – Polymer, Equipment & Systems, and Service – Coperion has 2,500 employees and nearly 30 sales and service companies worldwide. Coperion K-Tron is part of the Equipment & Systems division of Coperion. For more information visit www.coperion.com or email info@coperion.com.

About Lummus Technology

With a heritage spanning more than 110 years and a focus on innovation that has resulted in approximately 130 technologies and 3,400 patents, Lummus Technology is the global leader in developing and implementing process technologies. Lummus is a Master Licensor of petrochemical, refining, gasification and gas processing technologies, and a supplier of catalysts, proprietary equipment and related services to customers worldwide. Lummus Novolen Technology GmbH licenses Polypropylene technology and provides related engineering and technical support/advisory services. Novolen supplies as well NHP catalysts for the production of high performance polypropylene grades and NOVOCENE metallocene catalysts for the production of special polypropylene grades. To learn more about Lummus, visit www.LummusTechnology.com or email: maya.sichelschmidt@lummustech.com



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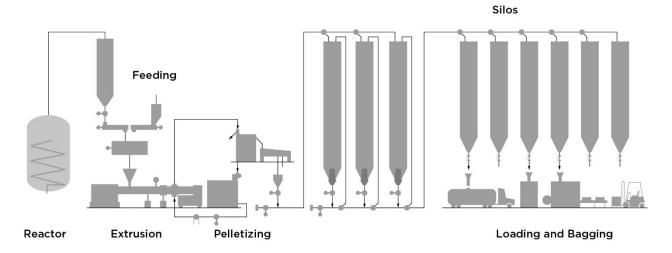
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Concept for High-Performance Production of Meltblown Polypropylene

Coperion and the technology licensor Lummus Novolen Technology have jointly developed a successful concept for the production of meltblown polypropylene, which serves as raw material for nonwovens used mainly as filter media in medical protective masks.

Image: Coperion, Stuttgart