

Press Release

New back-flush filter for film extrusion for use with regranulate


Oberglatt, Switzerland, October 16, 2019 – ESC-BF High Performance Filters offer maximum use of regranulate in film extrusion. The use of regranulate conserves resources and ideally a closed raw-material cycle can be created.

Melt filters are generally used in film extrusion even when processing virgin materials. The goal is to remove cross-linked and macro-molecular contents in the material – since they cannot be completely prevented from forming in the extrusion process or even as early as polymerization – along with gels and other impurities from the melt. Edge trimmings can also be fed directly back into the process, which adds further value. The use of regranulate, which may be of variable quality especially in regards to impurities, can be implemented perfectly with the recently developed ESC-BF back-flush filter from the MAAG Group. If dirt particles – down to the very finest – are not filtered out, there is a risk of reduced quality and interruptions in production.

This compact high-performance filter from the MAAG Group is equipped with a large conical static screen surface with the flow direction from inside to outside. A flushing piston moving in axial direction continuously cleans the entire dirty screen segment by segment. Impurities are carried directly out of the system. One advantage of this design is that a uniform filter area is always provided, even during back-flush. All parameters including back-flush volume and flushing piston movement can be precisely adjusted with the control system and adapted to the relevant process. A thorough back-flush is performed with a constant volume flow. One reason for the improved performance of the new ESC-BF high-performance filter is the continuous back-flush during the filtration process, segment by segment. Add to this the compact design, which in comparison to the melt filters with screen disks previously used offers about four times as much filter area for the same installation space. This has a positive effect on pressure losses, flow speeds and shear rates.

The uniform and continuously efficient back-flush of the complete screen ensures that pressures in the system are kept at the same level over a very long period of time. This procedure makes it possible to use regranulate even in highly sensitive applications such as blow film extrusion.

The existing filter surfaces of both sizes of construction, ESC-BF 500 (filter surface 500 cm²) and ESC-BF 1000 (filter surface 1000 cm²), can be easily retrofitted due to the size of construction.

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Pictures		MAAG Group ESC-BF High Performance Filter

CONTACT: Iris Fischer
iris.fischer@maag.com
+41 44 278 8349

About the MAAG Group

The MAAG Group is a broadly diversified global solutions provider with integrated and customizable systems in process technology for the polymer, chemical, petrochemical, pharmaceutical and food industries. Its Pump & Filtration Systems, Pelletizing Systems, Pulverizing Systems, and Recycling Systems divisions consolidate the many years of experience and in-depth know-how of the AUTOMATIK, ETTLINGER, GALA, MAAG, REDUCTION, and SCHEER product brands. The MAAG Group currently employs over 1,000 people at production sites in Switzerland, Germany, Italy, the USA, and China. Additional sales and service centers in France, Singapore, Taiwan, Malaysia, India, Thailand and Brazil ensure close attention to customers' needs. For more information visit www.maag.com.

The MAAG Group is a business unit of Dover Fluids, a segment of the Dover Corporation.