

Product Innovation

New spinning package with two-step filtration for recycled yarns and more

At the ITM in Istanbul, BB Engineering unveiled its new, patented ValuePack spinning package for the first time, which features a two-stage filtration system. This is particularly beneficial for recycling processes.

Until now, spinning packs have used either metal powder (“sand”) or filter candles as filter media. Both options are suitable for different applications, and each has its own specific advantages and disadvantages. Sand packs are characterized above all by high melt homogeneity and are therefore particularly suitable for virgin material. Packages with filter candles, on the other hand, offer a larger filter area and were originally developed specifically for recycling applications. The increased filter area improves filtration performance and extends service life but is also associated with a lower flux rate and shear, which can have a negative effect on homogeneity.

In the new ValuePack spinning package, BB Engineering combines both approaches – metal sand and filter cartridges – in a two-step filtration process. The melt first flows through the filter cartridge, where it is efficiently filtered down to 15 µm across a large filter surface area. It then passes through the sand chamber, where homogenization and shearing in particular take place. The concept is as simple as it is innovative and offers clear advantages. It results in significantly improved homogeneity in terms of temperature and viscosity, better spinning performance, and higher yarn quality. This added value is particularly evident in recycling processes, where it enables the production of higher-quality products. Furthermore, the ValuePack’s two-stage filtration can also offer advantages in other demanding or quality-critical applications.

Another advantage of the ValuePack is its pressure-independent seal. This helps prevent leaks, which can occur with self-sealing packages. At the same time, this allows for a wider process

window. Existing systems can be easily retrofitted to accommodate the ValuePack, which is slightly longer due to its design.

With its multi-stage filtration in the spinning package, BB Engineering plays a pioneering role and, underscores its expertise in the field of synthetic fiber spinning and recycling. At the ITM trade show, visitors were able to experience how the ValuePack works through an impressive VR animation.



Image 1: Rendering of ValuePack

Further information:

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About BB Engineering GmbH

BB Engineering GmbH is a German machine building company founded in 1997 as a joint venture between Barmag, nowadays a subsidiary of the Rieter group, and the Brückner group. Today, the company employs about 150 members of staff at its location in Remscheid, Germany, focusing their business on the development, engineering, design and manufacturing of extrusion, mixing and filtration technologies as well as complete spinning lines (VarioFil®), air-texturizing lines (JeTex®) and recycling technologies (VacuFil®, Visco+) for the plastics and textiles industry.