BKG[®] HiCon[™] R-Type 250 Recycling Filter for Highly Contaminated Applications

Discription

Principle: Separation in a continuous filtration process

Use: Medium to highly contaminated plastic melt

Polymers from the family of olefins and styrenes

Applications: Recycling

Operation

The contaminated melt flows through the fixed, cylindrical strainer tube from the inside out. The micro-conical holes provide efficient filtration of contaminated melt. The contaminants are separated from the melt and then scraped by a rotating blade shaft from the surface of the strainer tube. The cooled discharge screw removes the collected contaminants from the machine out. The speed of the blade shaft/discharge screw can be adjusted depending on the throughput, contaminat level and discharge rate, thus ensuring a continuous working process with a clean, open filtration area with low melt loss.



Technical Product Information

Operating pressure	max. 350 bar
Operating temperature	max. 320°C
Throughput	500 - 1500 kg/hr*
Available strainer tubes	120, 150, 200, 250, 300, 400, 500, 600, 750 [µm]
Preparation material	PS, PE, PP, ABS, SAN

^{*} The throughput values are only estimates. The actual rates are dependent upon the viscosity of the material, filtration fineness, application and the contamination level of the material; therefore, the values may differ depending upon the actual process parameters.



Conical micro-holes prevent use by particles

Feature

- Fully automatic self-cleaning
- Cylindrical, fixed strainer tubes
- Homogeneous cleaning by a variety adjustable scraper blades
- Autonomous control included heating control
- Hardware: Siemens Simatic SPS and HMI
- Analysis of melt pressure and temperature included in the standard delivery (incl. sensor)
- Optional recording of process data and remote maintenance

Benefit

- Minimal melt loss
- Robust and low-wear design
- Constant melt pressure behind the filter
- No outlet side: minimum pressure required
- User-friendly handling: independent strainer tube can easily be changed by the operator
- Low operating costs through long service life and regeneration ability of the filter media
- No edge flow around the strainer tube



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Application examples









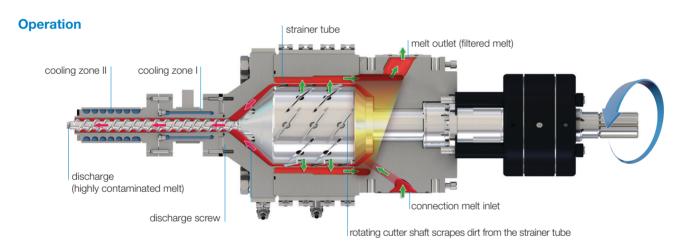
- Agricultural films
- Polystyrene from household appliances (white goods)
- Food packaging (Post Consumer Recycling - PCR)



- Organic and inorganic materials: e.g. wood, sand, paper
- Metals: e.g. steel, aluminum, copper
- Non-metallic materials: e.g. glass
- Foreign plastic and rubber







Process control

- Clearly, simple and intuitive: All process parameters visualized at a glance
- Quick and precise function: Integrated Ethernet/Profibus communication between CPU, field devices and frequency
- System capability & ease of maintenance: The onboard Ethernet / Profinet interface provides a convenient connection to other data systems to collect process or batch data or to perform remote maintenance.



For highest operator comfort: Siemens HMI incl. 9" touch control panel TP900

Change the strainer tube

For changing the strainer, production is briefly interrupted. The discharge unit can be detached, so that the machine housing including the dirty strainer tube can be removed.

