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

**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, contaminant level and discharge rate, thus ensuring a continuous working process with a clean, open filtration area with low melt loss.

**Technical Product Information**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Benefit</th>
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<tbody>
<tr>
<td>Fully automatic self-cleaning</td>
<td>Minimal melt loss</td>
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<td>Cylindrical, fixed strainer tubes</td>
<td>Robust and low-wear design</td>
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<td>Homogeneous cleaning by a variety</td>
<td>Constant melt pressure behind the filter</td>
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<td>adjustable scraper blades</td>
<td>No outlet side; minimum pressure required</td>
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<td>Autonomous control included heating</td>
<td>User-friendly handling; independent strainer tube can easily be changed by the operator</td>
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<td>control</td>
<td>Low operating costs through long service life and regeneration ability of the filter media</td>
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<td>Hardware: Siemens Simatic SPS and HMI</td>
<td>No edge flow around the strainer tube</td>
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<td>Analysis of melt pressure and</td>
<td></td>
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<td>temperature included in the standard</td>
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<td>delivery (incl. sensor)</td>
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<td>Optional recording of process data and</td>
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<tr>
<td>remote maintenance</td>
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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.
**Application examples**

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

Separation of impurities:
- 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

**Operation**

- **Mineral resources:**
- **Separation of impurities:**

**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.

**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.