INTAREMA® K

Fully automatic recycling system for edge trim
INTAREMA® K. Highly efficient edge trim recycling.

The INTAREMA® K gives 100%. Because it turns your edge trim waste efficiently and cautiously into high quality, clean pellets which you can reuse in their entirety in your production process. This means you not only save considerable raw material and disposal costs, you also benefit from a rapid return on investment.

Saves labour, space and energy

Thanks to the intelligent Smart Start operating concept the INTAREMA® K is remarkably easy to operate. Plus its fully automatic operation means that you can run the recycling system virtually without personnel. A convincing argument in in-house & industrial waste recycling.

Thanks to its compact design the system takes up only a marginal amount of your valuable floor space. And once it is producing, the INTAREMA® K is extremely economical: ecoSAVE® reduces energy consumption and CO₂ emissions.

Fully automatic and flexible. For perfect pellets.

Fully automatic edge trim system

- **Automatic feeding** of edge trim direct via pipes and cyclone
- **Maximum flexibility**: you can choose between a combination of feeding types via cyclone, roll feeder and conveyor belt for loose waste
- **Automatic throughput adjustment**:
  - Whether you have a lot or only some edge trim at the time – the fully automatic control system constantly adjusts throughput to the current amount of edge trim
  - If no edge trim at all comes from the main line, the system automatically switches over to standby mode until new material arrives
- **Minimum labour required** thanks to fully automatic operation

Top-quality end product

- Improved material intake through Counter Current technology and very careful processing with a short extruder ensure outstanding material properties
- **Silo-compatible** free-flowing pellets
- **Up to 100 % of pellets returned** to the production process
How it works

Feeding 1 with edge trim is automatic and direct via pipes and cyclone. A choice can be made between a conveyor belt for loose waste 2 or a roll feeder 3 for this purpose. In the patented cutter/compactor 4 the material is cut, mixed, heated, dried, densified and buffered.

The directly connected tangential extruder has an extremely short screw which is filled continuously. The innovative Counter Current technology enables optimised intake action across an extended temperature range.

In this special, patented extruder 5 the material is melted at an extremely low temperature and an air-cooled pelletising system 6 is then used to make the pellets 7.

Counter Current – a groundbreaking innovation

In the past the material inside the cutter/compactor turned in the same direction as the extruder: forwards. The patented Counter Current technology now changes the direction of rotation inside the cutter/compactor: the plastic material thus moves in the opposite direction to that of the extruder screw. A simple effect with a major impact. Because the relative speed of the material in the intake zone, i.e. when passing from the cutter/compactor to the extruder, increases to such an extent that the extruder acts in the same way as a sharp edge which literally “cuts up” the plastic.

The result: the extruder handles more material in a shorter time. Thanks to the enhanced material intake plastic can additionally be processed even at lower temperatures at a high throughput. Fully in keeping with higher productivity, flexibility and reliability.

INTAREMA® at a glance:

1. Counter Current technology
   - Highest process stability through improved material intake ensures constantly high output over a considerably broader temperature range
   - Higher flexibility and operational reliability with a variety of materials
   - Increased throughputs with the same plant size for more productivity

2. Smart Start
   - Remarkably easy to operate thanks to logical, clearly structured and simplified handling and ultramodern, ergonomic touchscreen display
   - Fewer buttons, more user-friendliness – thanks to high degree of automation including extensive control packages
   - The right recipe for every application – saved processing parameters can be loaded easily and conveniently from the recipe management system at the push of a button

3. ecoSAVE®
   - Lower specific energy requirements thanks to a complete package featuring design and process engineering measures including the new direct drive for the extruder screw
   - Lower production costs through optimised control technology and high-quality, energy-efficient components such as high-performance motors
   - Additionally, the practical energy display on your operating panel gives you a constant overview of energy consumption at all times, thus enabling you to take specific measures to optimise consumption
   - Reduced CO₂ emissions – an important contribution to environmental protection

INTAREMA® K. The smart edge trim system.

Technical benefits

- Fully automatic edge trim system including automatic throughput adjustment and standby mode
- No pre-cutting of the edge trim necessary
- Maximum flexibility: feeding possible via cyclone, roll feeder or conveyor belt
- Short extruder ensures careful material processing with minimum thermomechanical stress
- Enhanced material intake, greater flexibility and higher throughput rates thanks to Counter Current technology

Economic benefits

- High-quality end product: up to 100% of pellets returned to the production process
- Minimum labour required thanks to fully automatic operation
- Maximum user-friendliness thanks to intelligent Smart Start operating concept
- Short amortisation period
- Low production costs thanks to high energy efficiency: ecoSAVE® reduces energy consumption and CO₂ emissions
- Minimum servicing and maintenance
- Compact, space-saving design saves floor space

Technical data INTAREMA® K

<table>
<thead>
<tr>
<th>Output* (PE**) (kg/h)</th>
<th>Type</th>
<th>Cutter/compactor drive guidelines (kW)</th>
<th>Extruder drive guidelines (kW)</th>
<th>Screw diameter [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-50</td>
<td>INTAREMA 504 K</td>
<td>7.5</td>
<td>4</td>
<td>40</td>
</tr>
<tr>
<td>30-100</td>
<td>INTAREMA 605 K</td>
<td>11 (18.5)</td>
<td>11</td>
<td>50</td>
</tr>
<tr>
<td>100-200</td>
<td>INTAREMA 756 K</td>
<td>22 (30)</td>
<td>18.5</td>
<td>63</td>
</tr>
</tbody>
</table>

(*) Output rates for thin films (higher throughputs may be possible with thick-walled materials)
(**) The system is not suitable for processing thin-consistency melts such as PP, PET, PA and mixtures of these materials

Main dimensions (mm)

<table>
<thead>
<tr>
<th>Type</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTAREMA 504 K</td>
<td>970</td>
<td>1240</td>
<td>3200</td>
</tr>
<tr>
<td>INTAREMA 605 K</td>
<td>1040</td>
<td>1340</td>
<td>3450</td>
</tr>
<tr>
<td>INTAREMA 756 K</td>
<td>1950</td>
<td>1350</td>
<td>4022</td>
</tr>
</tbody>
</table>
More questions? We would be pleased to answer them!
Your EREMA advisor will be pleased to attend to your request personally and quickly. If you are interested in a demonstration or a test run with your specific material it would be a pleasure for us to make an appointment and welcome you to our EREMA Customer Centre at the headquarters in Ansfelden, near Linz in Austria.

We look forward to seeing you at EREMA!

For worldwide representatives please visit www.erema.at

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English