

Recycling system with integrated single-shaft shredder
for thermoplastics **COAX[®]**



We know how.



Fibre bales, endless strapping



Ropes/cables



Automotive parts



Lumps



Examples of materials that can be processed

COAX® - recycling lumps, fibres, tapes, parts from the automotive industry and much more.

The patented COAX system stands out through the coaxial configuration of a single-shaft shredder and extruder. The **single-shaft shredder and extruder are operated using only one shared drive system - simple and ingenious.** This system is ideal for processing production waste in the form of large-volume, non-shredded material portions such as PP tape piles, PP fibre bales, PA non-wovens, PP raffia, lumps, crates, ropes, piping parts, automotive parts and much more.

Technical benefits

- › **Innovative coaxial configuration of the single-shaft shredder with the single screw extruder** enables the design with just one main drive
- › **Stable throughput** thanks to the use of innovative process technology featuring a double pusher system and conical intersection
- › **Multiple-use (turnable) cutter knives at the cutting rotor** for maximum service life.
- › **EREMA filter system** with fully automatic self-cleaning for premium pellet quality

Economic benefits

- NEW** **ecoSAVE®** reduces energy consumption by up to 10% as well as production costs and CO₂ emissions as a result
- › **High-quality end product**
- › **Only one main drive** and therefore reduced energy and maintenance costs
- › **Compact, space-saving design**

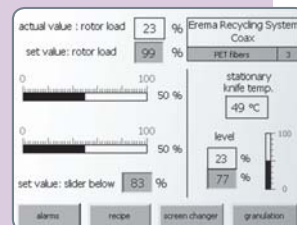


PP raffia



The patented double pusher system

- › The single-shaft shredder of the COAX features a **double pusher system**.
- › The **intake angle on the rotor is adjusted** according to material type and its properties. This enables the processing of heavy, well flowing and self-feeding materials and also lightweight, bulky materials and highly tear-resistant materials such as fibres and tapes.
- › The touch screen is used for **recipe administration** for different materials. Processing parameters can be changed at the press of a button.



Touch screen for recipe administration

The conical intersection

- › The **patented spiral conveyor groove fills the conical intersection** from the single-shaft shredder to the extruder. Working together with the double pusher system, this ensures continuous and uniform filling of the extruder.
- › Thanks to the compacting of the material and the reduction of oxygen in this intersection the material has **very low degradation**.



How it works

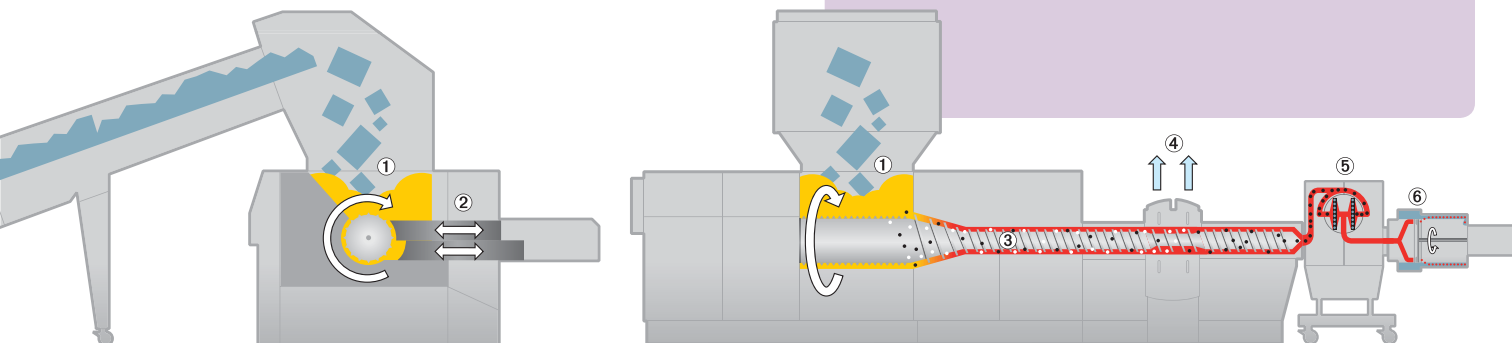
The **single-shaft shredder ①** reduces the size of the material fed into the system. The process is controlled by the **patented double pusher system ②**.

The material preheated by processing is conveyed directly and without any deflections to the **coaxial extruder ③** where it is plasticised.

The melt is degassed in the **degassing zone ④**. In the subsequent, **fully automatic, self-cleaning filter ⑤** any solid contaminants are removed from the melt which is conveyed to the **pelletising system ⑥**.

ecoSAVE®

- › Top quality energy-efficient components such as high-performance motors
- › High operational efficiency thanks to optimised control technology



System layout COAX with double degassing



Technical data COAX®

Systems available without degassing	Average output capacity in kg/h*
COAX 101	120 - 190
COAX 201	180 - 270
COAX 301	280 - 400
COAX 501	450 - 600

Systems available with double degassing	Average output capacity in kg/h*
COAX 101 E	90 - 110
COAX 201 E	100 - 180
COAX 301 E	230 - 320
COAX 501 E	350 - 500

*) depending on material processed

Due to the reduced control possibility of the intake material when feeding e.g. large-volume bales in terms of contamination with metal, stones etc., the system is particularly suitable for recycling clean production waste!

Demonstrations and test runs with your plastic material in our customer test centre are welcome by appointment.

Choose EREMA

- › Proven and reliable technology from the global market leader
- › Constant innovations secure the lead
- › First class worldwide customer service guarantees lasting reliability and fast support
- › Outstanding end product quality
- › Customised individual solutions



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