+

YOUR EXISTING extrusion system

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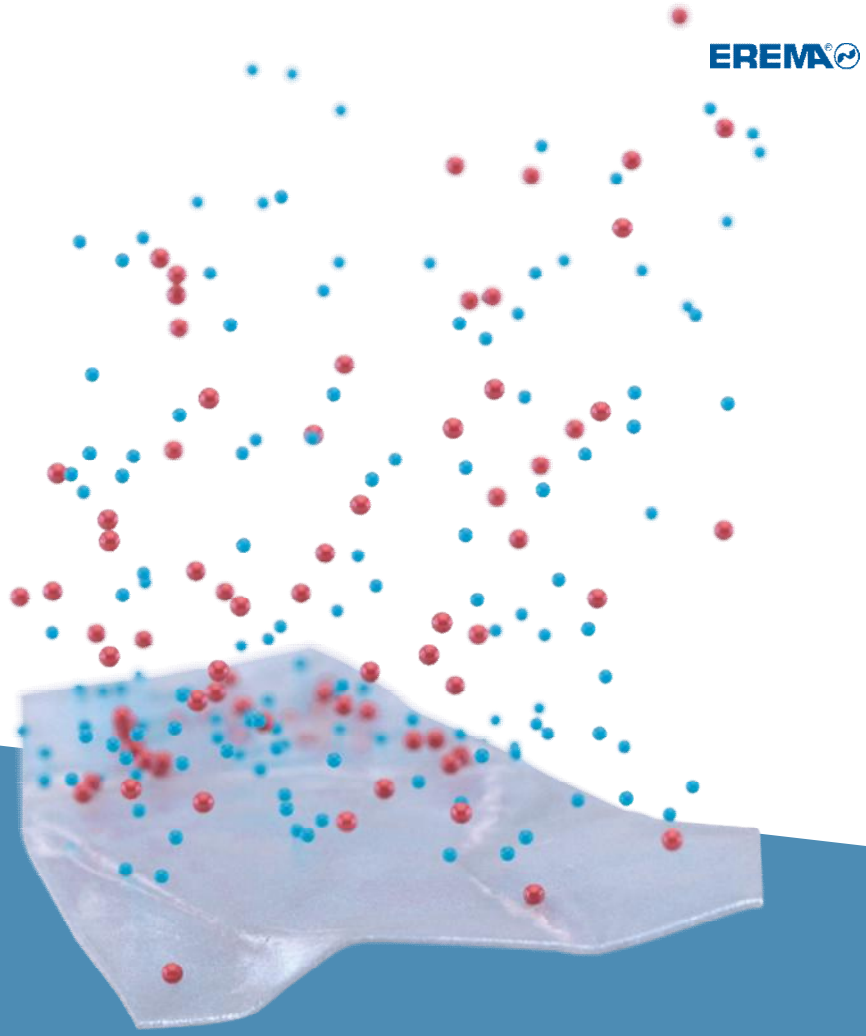
Food contact compliant PET sheet

MPR®: The entry model
into the food grade market

MPR® removes
migration substances and moisture
already **BEFORE extrusion**

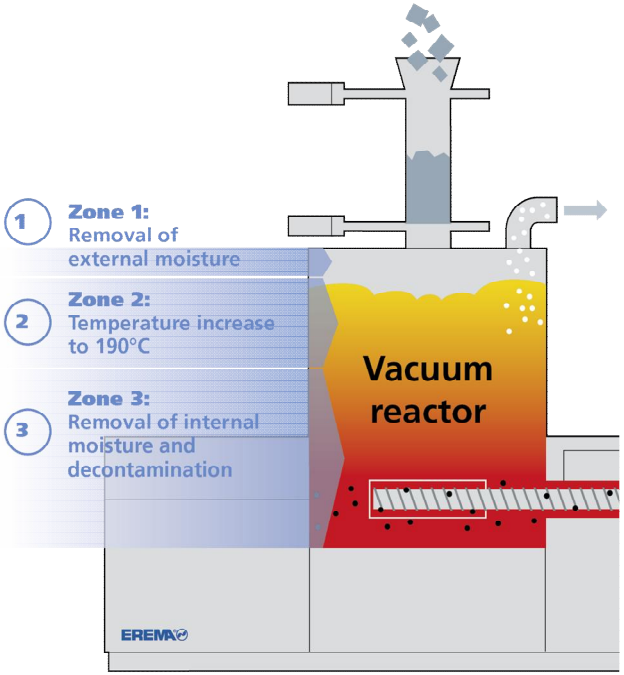


MPR Vacuum Reactor – Process

Vacuum reactor with **3 ultra-efficient function zones** to decontaminate and pre-dry the PET material prior extrusion

How it works:

- **Zone 1:** responsible for the removal of the outer moisture of the PET flakes.

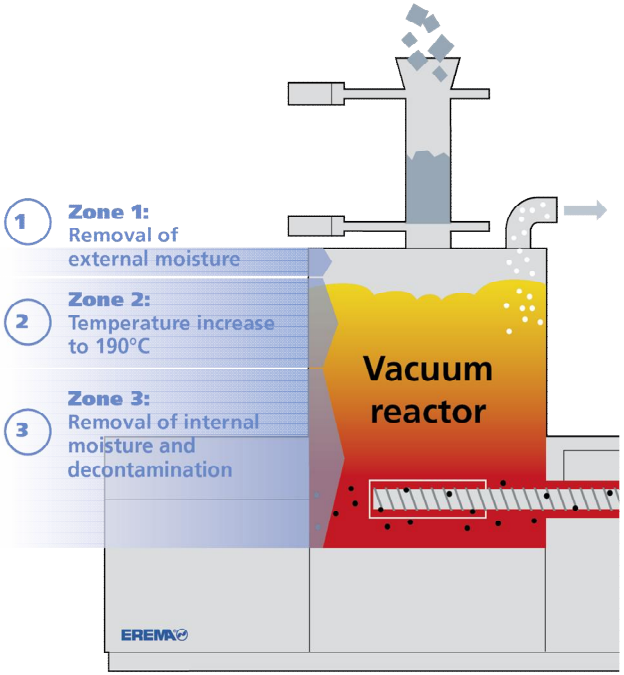


Vacuum Reactor – Process

Vacuum reactor with **3 ultra-efficient function zones** to decontaminate and pre-dry the PET material prior extrusion

How it works:

- **Zone 2:** the temperature rises from 20°C to 190°C. The polymer structure opens up and the process for the removal of migration substances and the internal moisture from the flakes begins
- **Zone 3:** The flake decontamination & removal process unfolds with full effect. With very low residual moisture of under 0,05% the clean, perfectly prepared material leaves the MPR and is ready to use at 3rd party extruders.



MPR® input material

MPR® output material:

- **Crystallised, dry, hot PET Flakes**
- Bulk density of the input material increased up to 80 % (~500kg/m³)
- Humidity: <50 ppm
- Slight IV increase possible
- AA (Acetaldehyd) 1 ppm and lower
- Influence of oxygen eliminated - vacuum treatment ideal for better colour
- No gels in the final product

MPR®: Dry and clean PET flakes

MPR® - Food Contact Approved Recycling

- **Extremely flexible with input material –** PET bottle flakes, ground amorphous skeleton waste/edge trim and virgin material (also in mixtures) AND mixtures of different Polymers (Multilayers, e.g. PET/PE)
- **Highly efficient food contact compliant decontamination**
- **Influence of oxygen eliminated** - vacuum treatment ideal for better colour
- **Flakes/Dust hot feeding** - no gels in the final product

MPR® - Food Contact Approved Recycling

- **Smart Start principle** - fully automatic continuous operation, permanent monitoring for direct food contact (FCC) and the storage of all relevant process parameters

- **Very low specific energy consumption (MPR:0,07 – 0,11kWh/kg)**

MPR® systems
Technical data

Technical data MPR®

Type	Average output capacity in kg/h max.
MPR 1300/80	500
MPR 1500/120	900
MPR 1700/120	1,500
MPR 2000/120	2,000

Evertis / Selenis

Portugal, Mexico

2 MPR®, 2015

MPR®: current examples

Alimpet

Italy, 2015

MPR®: current examples


EREMA®
PLASTIC RECYCLING SYSTEMS