

EXTRUSION

RECYCLING & COMPOUNDING



eFACTORTHREE

MAXIMUM ADDED VALUE IN PRODUCTION

The **MAS EXTRUDER** combines the familiar, superior, plastification and homogenization of a co-rotating parallel twin screw extruder with the specific advantages of the conical screw design; a key element of this integrated recycling and compounding system.

- Processing of undried PET, PLA
- Re-compounding



MAS EXTRUDER: RECYCLING AND COMPOUNDING

The **MAS EXTRUDER** is perfectly suited for any application when a variety of product requirements need an individual, high quality solution.

TECHNICAL HIGHLIGHTS

- Compact design; Small footprint
- Conical, co-rotational twin screw system
- Superior homogenization
- Large in-feed opening
- Process low density materials (Film, Fibers, etc.)
- Cascade configuration for heavily printed film
- Low melt temperatures
- Reduce energy consumption by as much as 40%



CONFIGURATIONS

TYPE	MATERIAL	OUTPUT
MAS 24 (laboratory line)	e.g. PE / PP/ PS / PET	20 - 35 kg/h
MAS 45	e.g. PE / PP/ PS / PET	200 - 300 kg/h
MAS 55L (K)	e.g. PE / PP/ PS / PET	400 - 700 kg/h
MAS 75 (K)	e.g. PE / PP/ PS / PET	700 - 1200 kg/h
MAS 90 (K)	e.g. PE / PP/ PS / PET	1000 - 1800 kg/h
MAS 93 (K)	e.g. PE / PP/ PS / PET	1200 - 2500 kg/h

* Depending on polymer, filtration finesse, bulk density, etc.



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MAS CASCADE EXTRUDER

The **MAS Cascade Extruder** makes it possible to reprocess materials (heavily printed materials, recycled materials with high contamination levels etc.) that are difficult to de-gas on conventional extrusion lines.

The Cascade extruder works in conjunction with an upstream Extruder (preferably MAS twin-screw extruder) to reprocess and de-gas the material after the melt filtration. Depending on the size, the MAS Cascade Extruder is equipped with 2 or 3 vent ports and a melt distribution system to increase the degassing efficiency.

With a MAS Cascading system, the two processes of Recycling and Re-Compounding can be combined into ONE STEP.



CASCADE EXTRUDER TA-90
Incl. two vent ports

THE MAS R-PET PROCESS FOR FOOD CONTACT

MAS has developed an R-PET process that has received a "No Objection Letter" from the FDA. The process also meets the EFSA criteria for direct food contact. It is a modular system that can be configured to the specific needs of each customer. Since conventional flake drying is used it is possible to utilize existing drying equipment if desired.

The main components of this system are as follows:

PRE-DRYING

DOZING

MAS EXTRUDER

DEGASSING

- Pre-Drying: 3 hours at ≥ 150 °C
- Dozing: Gravimetric or Volumetric
- MAS Extruder: Low melt temperature and short residency time
- Extruder Degassing: Vacuum System ≤ 10 mbar

FDA LNO #185

NOTE: Technical data subject to change.