EREMA
Recycling
Engineering Maschine`s
EREAMA - The Company

- Founded in 1983
- Each year more than 200 recycling Extruders for different materials
- Turnover 2002/2003  56,000,000.- Euro with 240 employees
- More than 50 patents
- Largest supplier for recycling extruder
EREMA is known world-wide for:

◆ Quality
◆ Innovation
◆ Know-how and technology
◆ Market Leader
◆ Strong Customer Service
Historic methods...

- Material jamming input zone
- Pre-Aglutinator necessary
- Many sensible components (drives, gearboxes, pipework...)
- High screw speed needed...
- High degradation, low output
- High power consumption
- Many sensible components (drives, gearboxes, pipework...)
- External compactor (Aglutinator) necessary. And/or Grinders

Cold feeding

Material under heat and oxygen influence
The patented EREMA TVE system

- Additives CaCO3
- Plastics scrap
- Cutter compactor: cutting & feeding, drying, densifying, homogenising, COMPOUNDING!
- Double vacuum venting
- Start-stop control
- Main drives
- Cutting tools
- Extruder
- Automatic RTF meltfilter
- Pelletising system
High performance Compounding-Recycling?

Addition of Reinforcing Fillers?
EREEMA Direct Dosing System
COAX From EREMA

The new developed - COAX - System
EREMA

What does COAX mean?
- cutting tool and extruder screw are mounted on one shaft

to be applied for patent
VACUREMA

Vacuum pre-dryer / extruder combination
EREMA RGA - TE - VSV

- Vacuum lock
- Vacuum cutter
- Extruder
- Double venting
- Screen changer
- Vakuum slide
- Extruder intake
- Extruder
- Rotating tools
- Conveyor screw
EREMA Melt Filters
Auto Backflush Sequence...

How it works?
EREEMA Melt Filters

... Symmetrical Piston Design

Pressure balance
Piston 1 and 2 in production position
all 4 screen packs in active filtration position

melt inlet

main melt flow

melt outlet
Cleaning of screen pack in piston 1
piston 1 in backflush position 1

main melt flow
backflush melt flow
Piston 1 and 2 in production position
all 4 screen packs in active filtration position

melt inlet

melt outlet
main melt flow
Cleaning of screen pack II in piston 1
piston 1 in backflush position 2

backflush melt flow

main melt flow
Piston 1 and 2 in production position
all 4 screen packs in active filtration position

melt inlet  →  main melt flow  →  melt outlet

EREEMA Melt Filters
... 30 backflushes between Screenchange
New SW 8/... RTF Filter Series

Picture:
SW 8/170 RTF
Cleaning of screen pack I in piston 1
piston 1 in backflush position 1

melt inlet

main melt flow

backflush melt flow

melt outlet
Operation Condition

Upper limits of contamination
(The maximum amount could be less in case of combination of different impurities)

- max. 5% of paper
- max. 1,5% - 2% of aluminium
- max. 1% - 2% of copper wire

Polymer types

- PP, LD, LLD, HD,
- PVC (individual check necessary)
- PET (individual check necessary)
Not only pelletising  why not make a product direct from recyclate!

- Flat sheet for different packaging
- Direct extrusion of fibres up to 5000 lb/hr
- Direct blown film production
- Core extrusion lines
- PET / PE compounds for different end products ie pallets, display trays, boxes and containers ...
EREMA  In-line Process
for production PET sheet and PET fibre

- No second degradation
- No external pre drying and crystallization
- Energy saving, low Production cost
- Higher value product
- Food contact compatibility
- Also for virgin material
EREAMA PET In-line Sheet
Injection/compression moulding system making large moulded products direct from recyclate

Cutter / compactor

Extruder with dosing

Accumulator / Injector

Press section
One way, stackable PET Pallets manufactured from coloured PET

bottle flake
Process / Quality control
Continuous Quality Control IV
Inline Viscometer
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