

# ASP

Semi-submerged strand pelletising systems  
for low-viscosity thermoplastics

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# ASP

## Semi-submerged strand pelletising systems for low-viscosity thermoplastics.

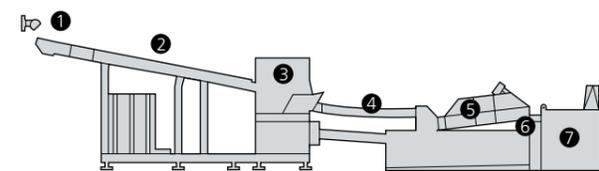
EREMA's semi-submerged strand pelletising systems are used to pelletise technical thermoplastics such as PET and PA. The straightforward operation and minimum labour requirements contribute to the very high degree of operational reliability. **Easy start-up, fast cleaning when changing over material and automatic self-feeding if strand breaks occur make these systems indispensable in practice.** Integrated crystallisation is also possible for PET.



### How it works

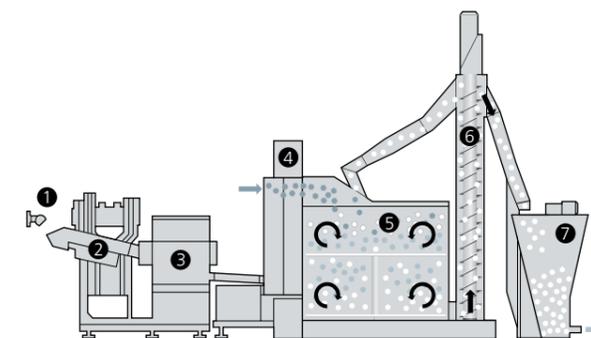
The melt strands coming through the boreholes of the **heated die head ①** are conveyed to a horizontally and vertically adjustable **water chute ②**. The strands are cooled by a laminar flowing film of water and manually adjustable spray nozzles. They are cooled down to such an extent that they do not lose their shape in the subsequent **strand pelletiser ③**. The strands retain enough core heat to effectively support the later drying process on the vibration screen and enable crystallisation if required.

**If there are any torn or interrupted strands the laminar water flow refeeds them to the strand pelletiser fully automatically and without any external operator intervention.**



### ASP system

After it passes through the **cooling piping ④** the transport water and any fine particles which it may have are removed from the pellets on the **pellet water removal screen ⑤**. After filtration and cooling the water is returned to the process water circuit. The inner residual heat of the pellets continues the drying process on the pellet water removal screen. They then move on via a **oversize screen ⑥** to the **centrifuge ⑦** for the final drying process.



### ASP-CIC system with integrated crystallisation

Immediately after the strand pelletiser the surface moisture is removed in the **centrifuge ④**. The amorphous pellets are crystallised in the **crystallisation unit ⑤** using the residual core energy and without needing any external energy. A **vertical conveyor screw ⑥** moves the major part of the crystalline pellets into the **post-crystallisation unit ⑦**. A small portion of the crystalline pellets is returned to the crystallisation unit to prevent the still amorphous pellets from sticking. The system is controlled automatically via the integrated weighing cell. Non-conforming pellet sizes are removed at the **classification screen**. A **transport blower** then moves the pellets to the next step.



VACUREMA® technology combined with ASP-CIC

### Improved downstream components for the ASP system

- **Optimised pellet water removal screen** with self-cleaning effect and easy-change filter cartridge
- **Pellet centrifuge for enhanced drying performance** featuring Direct Drive technology, integrated blower, noise protection and folding housing cover
- Easy to clean if there is a colour change and maintenance is straightforward
- Compact downstream components



New pellet water removal screen and new pellet centrifuge

### Technical data ASP

Type	ASP 100 series	ASP 200 series	ASP 300 series
Drive	Frequency-controlled 3-phase motors		
Transmission – cutting mechanism (kW)	4,0	7,5	11,0
Intake speed (m/min) with a pellet length of 3 mm	up to 250	up to 250	up to 250
Max. number of strands with a strand diameter of 3 mm and head space of 10 mm	13	26	36
Pellet length (mm)	3	3	3
Height – strand supply (mm) approx.	PA, PETP=1650; PP=2170		
Options	Moveable sub-frame, different pellet lengths		

Throughput (kg/h)	ASP-CIC 100	ASP-CIC 200	ASP-CIC 300
PET (kg/h) up to approx.	1000	1800	2600
PA 6.6 (kg/h) up to approx.	1000	1800	2600
PP (kg/h) up to approx.	250	500	1000



### Technical benefits

- **Easy start-up with no bypass valves and lowest possible material loss**
- **Cooling water removes cutting dust**
- **Optional CIC - Compact Inline Crystallisation** for the integrated, energy-efficient and compact crystallisation of PET
- **Fully automatic self-feeding if strand breaks occur**
- **Adjustable spray heads** for the effective cooling of the polymer strands

### Economic benefits

- **Cylindrical pellets on a par with virgin material**
- **Minimum personnel costs** thanks to easy operation and fast cleaning and maintenance of the easily accessible components of the complete system
- **Reduced wear on tooling** thanks to wet cutting
- **Avoiding downtime caused by strand breaks** increases productivity

# The specialists in plastic recycling systems.

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## 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](http://www.erema.at).

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English

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