



PELLETIZING SYSTEMS ›

› STRAND PELLETIZING

PRIMO^{Plus}

Strand pelletizing system
for all cases of application

The dry cut pelletizers of the PRIMO^{Plus} Series are characterised by their robust design. The double-sided bearing of the cutting rotor ensures high stability and precision, resulting in excellent quality of the cylinder pellets. Wear-protected machine parts also ensure a high degree of machine availability and profitability.

AUTOMATIK

Your benefits

- Shortest possible unguided section from feeding unit to cutting unit
- Sturdy, double-sided bearing of the cutting rotor to meet highest stability and precision standards
- Upper feed roll driven available
- Changes on the pellet length and weight to be made with Dual Drive
- Integration into automatic JSG system feasible
- Very high machine availability due to wear-resistant cutting tools
- Quick and easy access for cleaning and servicing; quick product changeover
- Use of a hybrid rotor with 200 mm diameter possible

PRIMO^{Plus}

Functionality and system components

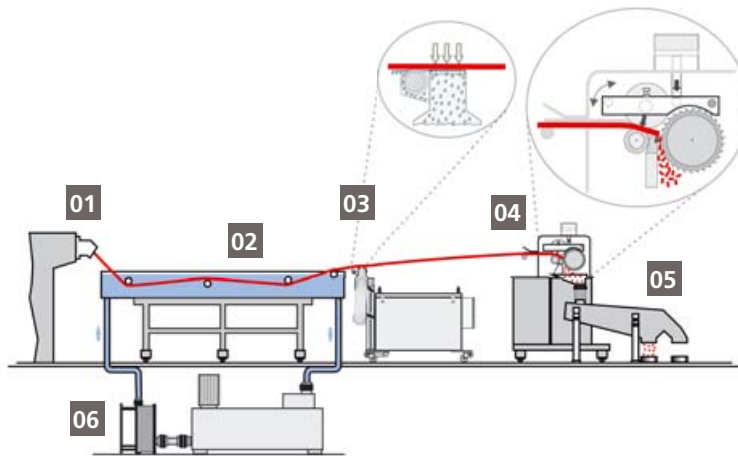
Functioning of the WSG systems

Polymer strands extruded from a die head
01 pass through the cooling trough **02**.

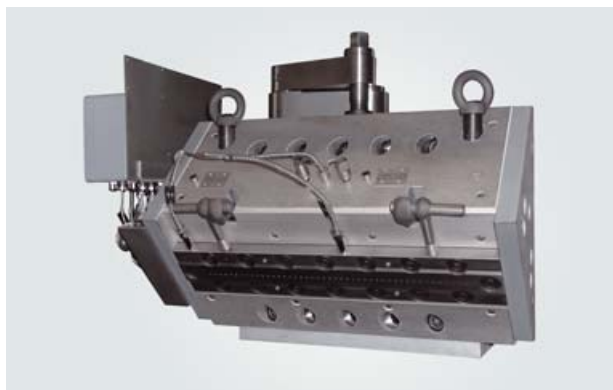
The air knife **03** ensures effective strand drying prior to cutting. The residual moisture after strand drying evaporates in the evaporation section.

The feed tools of the strand pelletizer **04** catch the polymer strands and direct them to the cutting tools where the strands are cut into pellets.

The pellets are classified, cooled, and conveyed in subsequent operations **05**.
The cooling water is filtered and temperature controlled in a process water unit **06** and then returned to the cooling trough.



WSG system components



SG 450C die head



KW 600 cooling trough for up to 60 strands



PWA 20 process water unit



SE 400-2 air knife for dewatering

PRIMO^{Plus}

Strand pelletizer

Strand pelletizer

- Strand draw-in speeds of up to 150 m/min possible
- Reduced cleaning and product changing times due to optimization of dead spaces and deposits inside the cuttinghead
- Minimised changeover and setup times thanks to good accessibility and simple operation of the setting and assembly elements
- Infinitely variable pellet length adjustment through Dual Drive possible
- The design of the knife holder ensures minimum deformation of the cutting blade and highly consistent cutting gap
- Easy-exchange cutting head guarantees maximum machine availability
- Design drive U or S
- Can be integrated into automatic JSG system
- Individual strand guide and pivoting stripper ledge for PRIMO^{Plus}
- Driven upper feed roll with rubber coating, grooved or knurled steel roller
- Upper feed roll and cutting head cooling for high-temperature applications
- Optimized start-up for soft products with Soft Polymer Kit



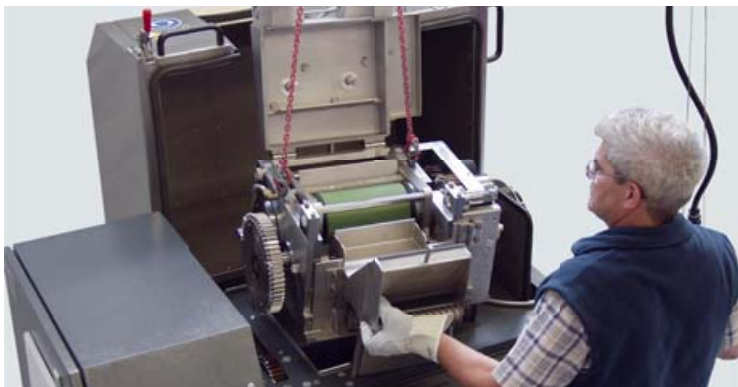
PRIMO^{Plus} S



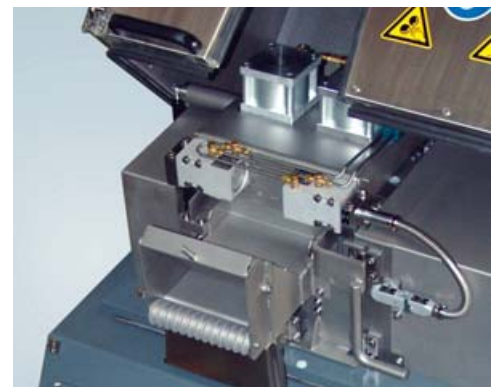
PRIMO^{Plus} U

Cutting tools

- Long service life of cutting tools depending on the selection of materials, e.g. cutting rotor for PA with 15-50 % glass fiber > 1,000 hours
- Wide range of materials, e.g. stainless tool steel, tungsten carbide, ceramics, and diamond
- Wedged cutting rotor with positive interlock available (patented)
- Rotor diameter selectable in the hybrid version (162.5 mm or 200 mm)
- Patented wear protection for additionally increased service life of the cutting components (Patent number EP 2 190 638 B1)



Simple exchange of the cutting head



PRIMO^{Plus} 200 U cutting head

PRIMO^{Plus}

Technical data

Technical data:	PRIMO ^{Plus} 100	PRIMO ^{Plus} 200	PRIMO ^{Plus} 300	PRIMO ^{Plus} 400
Operating width:	100 mm	200 mm	300 mm	400 mm
Drive system:	AC motor with belt drive			
Motor power of pelletizer:	3-15 kW	3-18,5 kW	3-22 kW	3-30 kW
Line speed at pellet length of 3 mm::	30-120 m/min			
No. of strands at 75 % utilization rate and a pellet diameter of 3 mm:	25	50	75	100

Throughput rates [kg/h]*:		PRIMO ^{Plus} 100	PRIMO ^{Plus} 200	PRIMO ^{Plus} 300	PRIMO ^{Plus} 400
Product:	Density [g/cm ³]				
PP, PE:	0,91	1.000	2.000	3.000	4.000
GPPS, SAN:	1,04	1.200	2.400	3.600	4.800
ABS, HIPS:	1,04	1.150	2.300	3.450	4.600
PMMA:	1,18	1.250	2.500	3.750	5.000
PC:	1,20	1.300	2.400	3.450	4.600
PET, PBT:	1,31	1.250	2.500	3.750	5.000
PA 6, PA 6.6:	1,14	1.100	2.200	3.100	4.000
PET, PBT, PA, PP	1,00	1.050	2.050	3.000	3.500
+ 15 bis 50 % glass fiber:	1,55	1.250	2.500	3.750	5.000
Thermoplastic elastomers:	1,10	1.050	2.100	3.150	4.200
Masterbatch with > 40 %fillers:	1,30	1.250	2.500	3.750	5.000

* Pellet length 3 mm, pellet diameter 3 mm, and maximum number of strands.

Maximum flexibility

Due to the possibility of using different cutting tools, the PRIMO^{Plus} offers a maximum of flexibility. The granulator is suitable for the use of 200 mm Scheer knife segments.



Automatik rotor with 162.5 mm diameter



Scheer rotor with 200 mm diameter



PUMP & FILTRATION SYSTEMS > MAAG ETTLINGER
 PELLETIZING SYSTEMS > GALA SCHEER AUTOMATIK REDUCTION
 PULVERIZING SYSTEMS > REDUCTION
 RECYCLING SYSTEMS > ETTLINGER



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