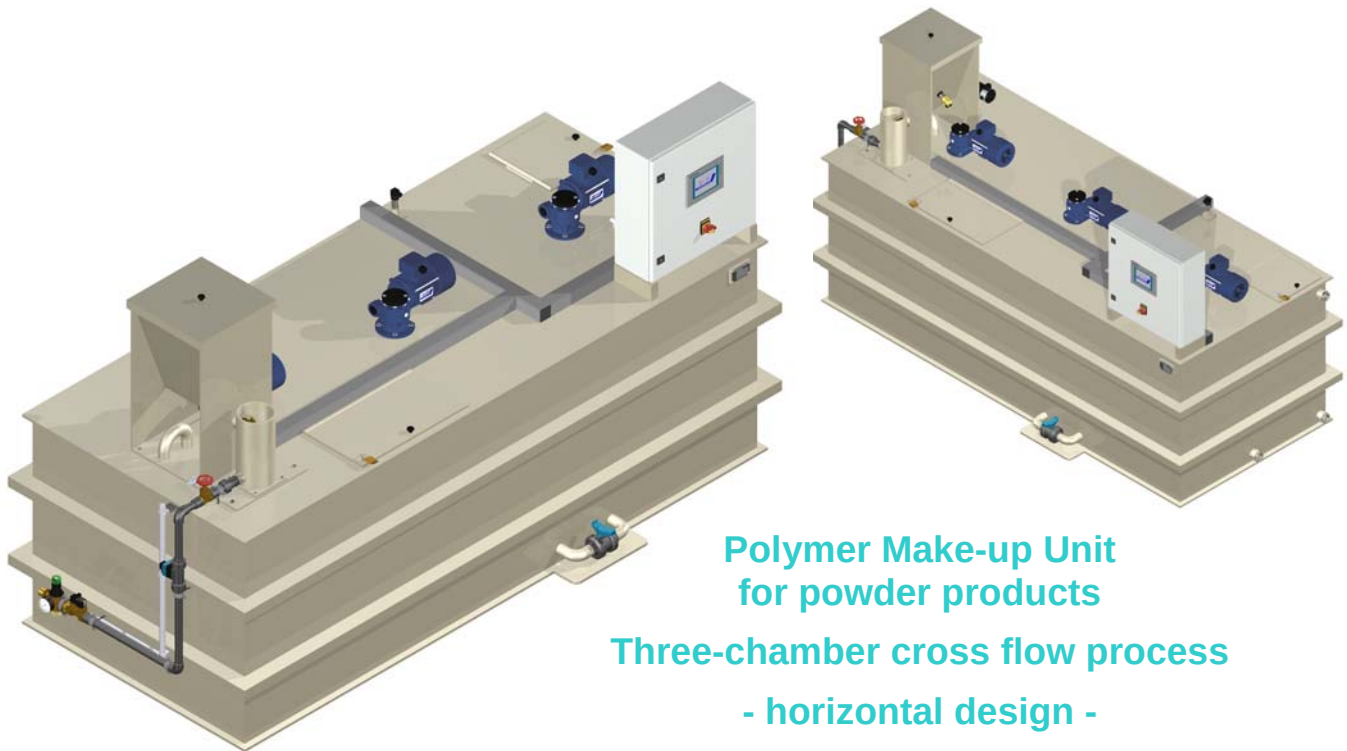


POLYCOMPACT PD Series



Polymer Make-up Unit
for powder products

Three-chamber cross flow process
- horizontal design -

- Automated product preparation in a cross-flow process
- Optimum and effective product preparation and provision
- Intelligent control with Siemens PLC
- User-friendly handling via Siemens touch screen
- Measurement of preparation water with Min. monitoring and shutdown
- Contact-free, analogue level monitoring and control
- Use of high-quality and reliable components
- Minimum repair and maintenance costs
- Optimum price-performance ratio



Functional description of the PD unit

The **POLYCOMPACT** unit type **PD** is a continuously operating dissolving and dosing unit. The parent or post solution is prepared and matured in a three-chamber cross flow process.

An electronically regulated screw auger transports the free-flowing powder polymer into the high-performance wetting device. Here, an effective introduction into the water flow ensures an optimum wetting of the solid polymer particles. This technology avoids the generation of lumps and ensures an economic and homogeneous make-up of the polymer solution.

The solution - immature as it still is - then flows into the preparation chamber where gentle stirring ensures a further homogenisation.

The optimally wetted product flows from the preparation chamber into the extraction chamber, thereby passing the cascades installed inside the unit. Smooth stirring in every chamber ensures a further breakdown of the product so that a fully matured solution can be extracted from the third chamber.

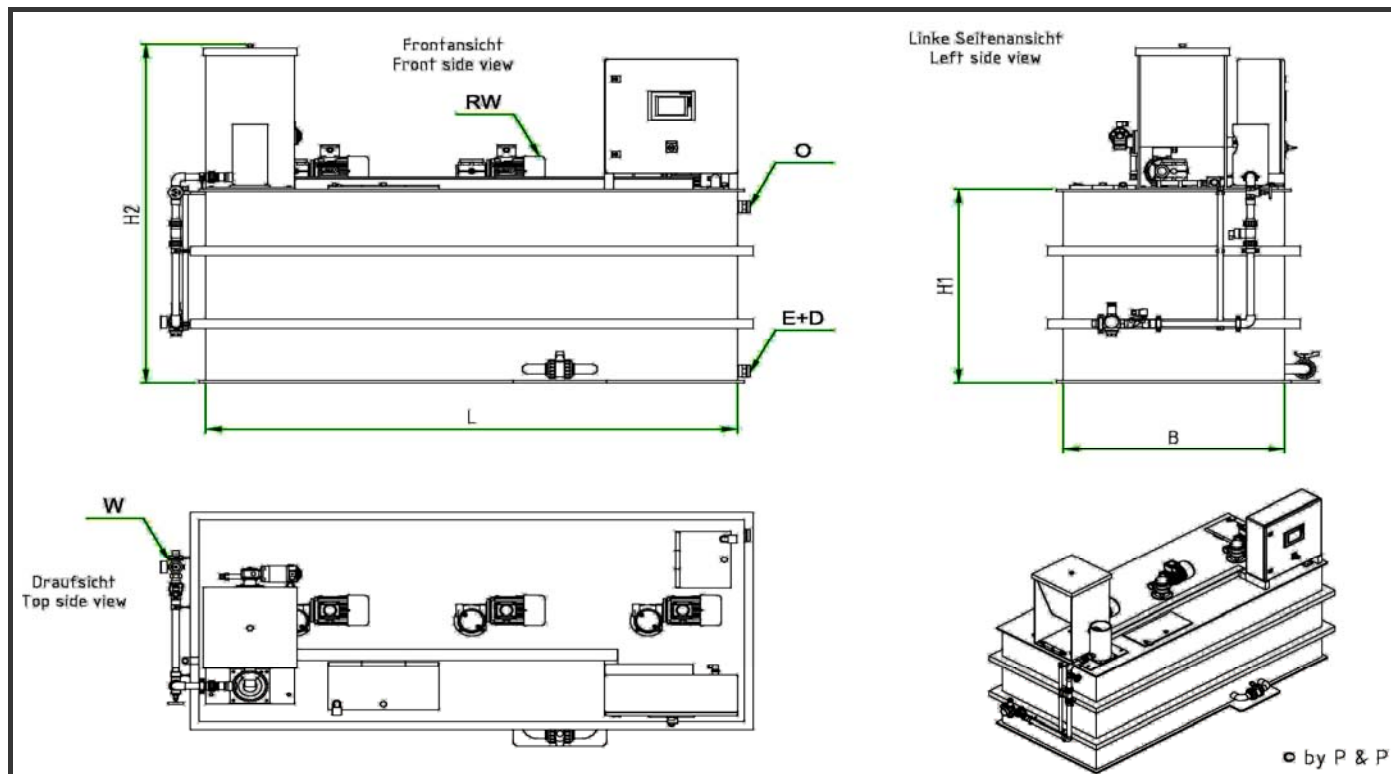
In the extraction chamber, there is a level sensor which automatically controls the preparation process. As soon as the level in the extraction chamber falls below a minimum value because solution has been extracted, the preparation process is re-started until a maximum level in the extraction chamber will have been reached.

Additionally recommended functions are, among others, the run dry protection for the external extraction / dosing pump, the product shortage sensor, the volume measurement, etc.

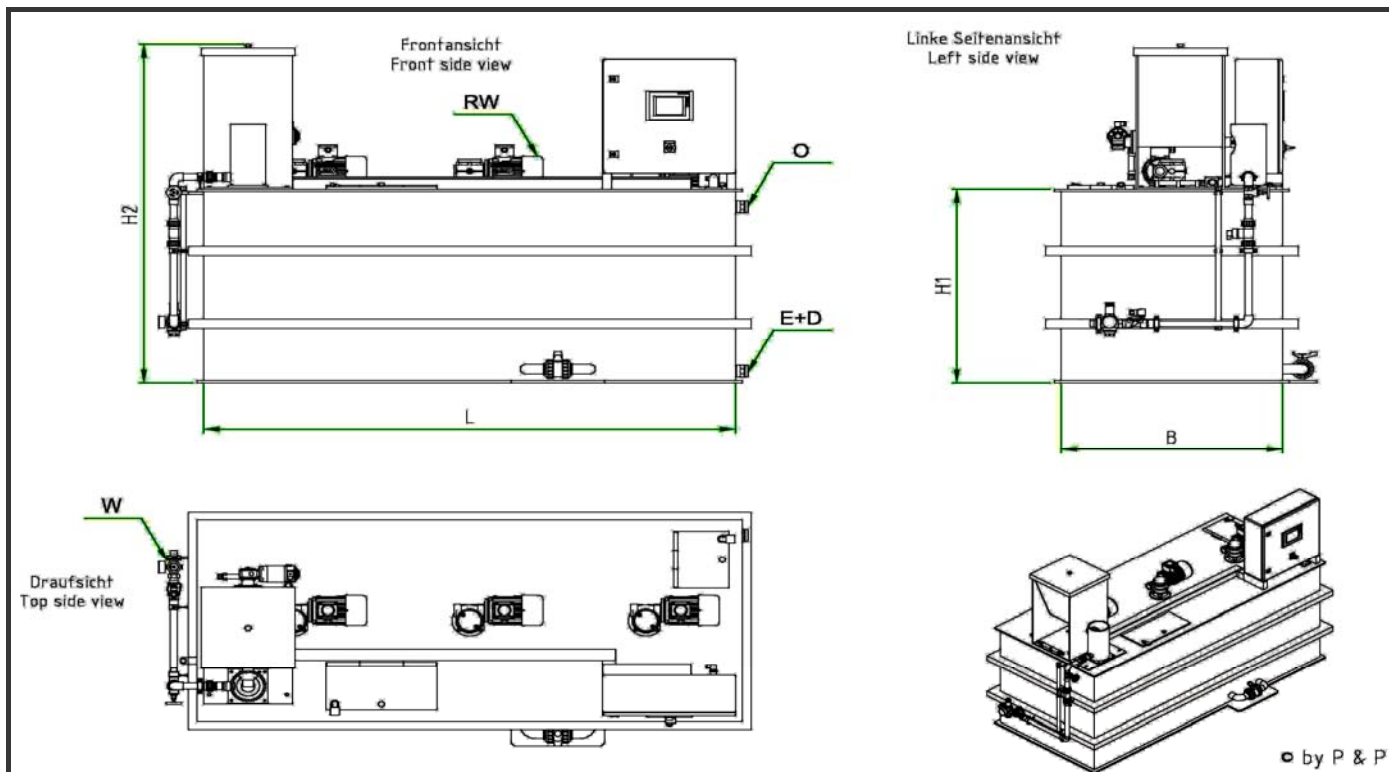
The effective volume of the chambers is designed to the effect that the throughput rates mentioned in the technical table can be realised with a preparation and maturing time of 60 minutes thereby ensuring a smooth and effective make-up of the polymers.

The matured polymer solution can be extracted from the extraction chamber and transported to its application point by means of pumps.





POLYCOMPACT Powder Unit	PD	500	500	1000	1500	2000	3000
Throughput rate	l/h	500	500	1000	1500	2000	3000
Overall dimension incl. funnel and control cabinet:							
Length L	mm	1355	1355	1775	2075	2675	3175
Width B	mm	885	885	995	1225	1225	1425
Height H 1	mm	1025	1025	1025	1025	1025	1025
Height H 2	mm	1785	1785	1785	1785	1785	1785
Empty weight approx.	kg	220	240	270	340	380	450
Power requirement of the stirrers RW	kW	2 x 0.55	3 x 0.55	3 x 0.55	3 x 0.55	3 x 0.55	3 x 0.55
Revolutions	1/min	100	100	100	100	100	100
Power requirement of the plant approx.	kW	2.2	2.8	2.8	2.8	2.8	2.8
Preparation water connection W	DN	25	25	25	25	25	25
Recommended amount of preparation water at 3 bar pressure approx.	l/h	1000	1000	2000	2500	3000	4000
Extraction + Drainage connection E + D	DN	25	25	25	40	40	40
Overflow O	DN	25	25	25	40	40	40



POLYCOMPACT Powder Unit		PD	4000	5000	6000	7000	8000	9000	10000
Throughput rate		l/h	4000	5000	6000	7000	8000	9000	10,000
Overall dimension incl. funnel and control cabinet:									
Length	L	mm	3600	3905	4385	4885	5485	5575	5575
Width	B	mm	1625	1825	2065	2105	2105	2305	2305
Height	H 1	mm	1025	1025	1025	1025	1025	1030	1130
Height	H 2	mm	1785	1785	1785	1865	1865	2110	2210
Empty weight approx.		kg	510	570	700	750	810	1100	1130
Power requirement of the stirrers RW		kW	3 x 1.1	3 x 1.1	3 x 1.1	6 x 1.1	6 x 1.1	9 x 1.1	9 x 1.1
Revolutions		1/min	100	100	100	100	100	100	100
Power requirement of the plant approx.		kW	4.5	4.5	4.5	8.0	8.5	12	12
Preparation water connection W		DN	25	40	40	40	40	50	50
Recommended amount of preparation water at 3 bar pressure approx.		l/h	5000	6000	7000	8000	10,000	11,000	12,000
Extraction	E	DN	40	40	40/50	50	50	80	80
Drainage	D	DN	40	40	40/50	50	50	50	50
Overflow	O	DN	40	40	40/50	50	50	2 x 50	2 x 50

P&P Dosierttechnik GmbH

Weseler Straße 66
46519 Alpen
Germany

☎ +49 (0) 2802 / 80897 - 0

☎ +49 (0) 2802 / 80897 - 30

info@pp-dosierttechnik.com
www.pp-dosierttechnik.com

MSE Hiller

Harper Way
Markham Vale
GB-Chesterfield, Derbyshire
S44 5JX

☎ +44(0)1246 861166

☎ +44(0)1246 823639

info@mandse.com
www.mandse.com