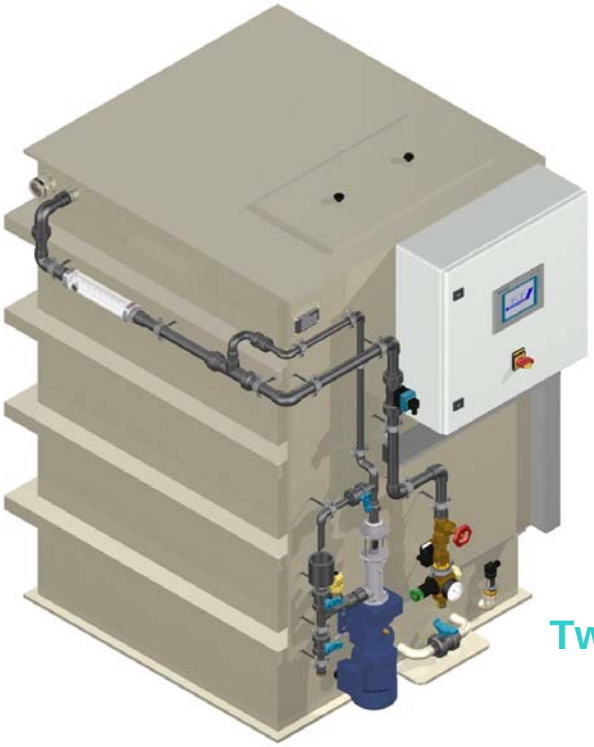
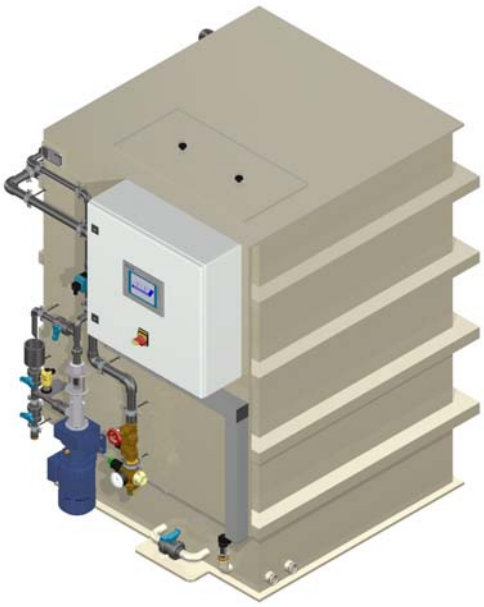
POLYCOMPACT

FWA Series





Polymer Make-Up Unit
for liquid products

Two-chamber cross flow system

- horizontal design -

- **Automated product preparation in a cross flow process**
- **Ideal for installations with reduced available space (various tank sizes possible)**
- **Optimum and effective preparation and provision of product**
- **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**
- **Optimum operational costs with low power requirements**
- **Minimum repair and maintenance costs**

Functional description of the FWA unit

The **POLYCOMPACT** unit type **FWA** is a two-chamber cross flow system. It is designed for the automated make-up of a polymer parent or post solution with an exactly specified concentration.

A progressive cavity pump transports the liquid polymer to an injection point being equipped with a check valve and installed in the water line. At this injection point, water and polymers are efficiently intermixed. This technique ensures a most economic and effective use of the polymer.

Then the solution - immature as it still is – flows through a static mixer and a specially designed mixing block for further homogenization before arriving at the preparation / maturing chamber. In a final step, the solution flows into the extraction chamber from which a fully matured solution can be extracted.

In the extraction chamber there is a level sensor which serves for automated control of the preparation process. As soon as the filling level inside the chamber falls below a minimum value because solution has been extracted, the preparation process will be re-started and new solution will be made up until a maximum level in the chamber will have been reached.

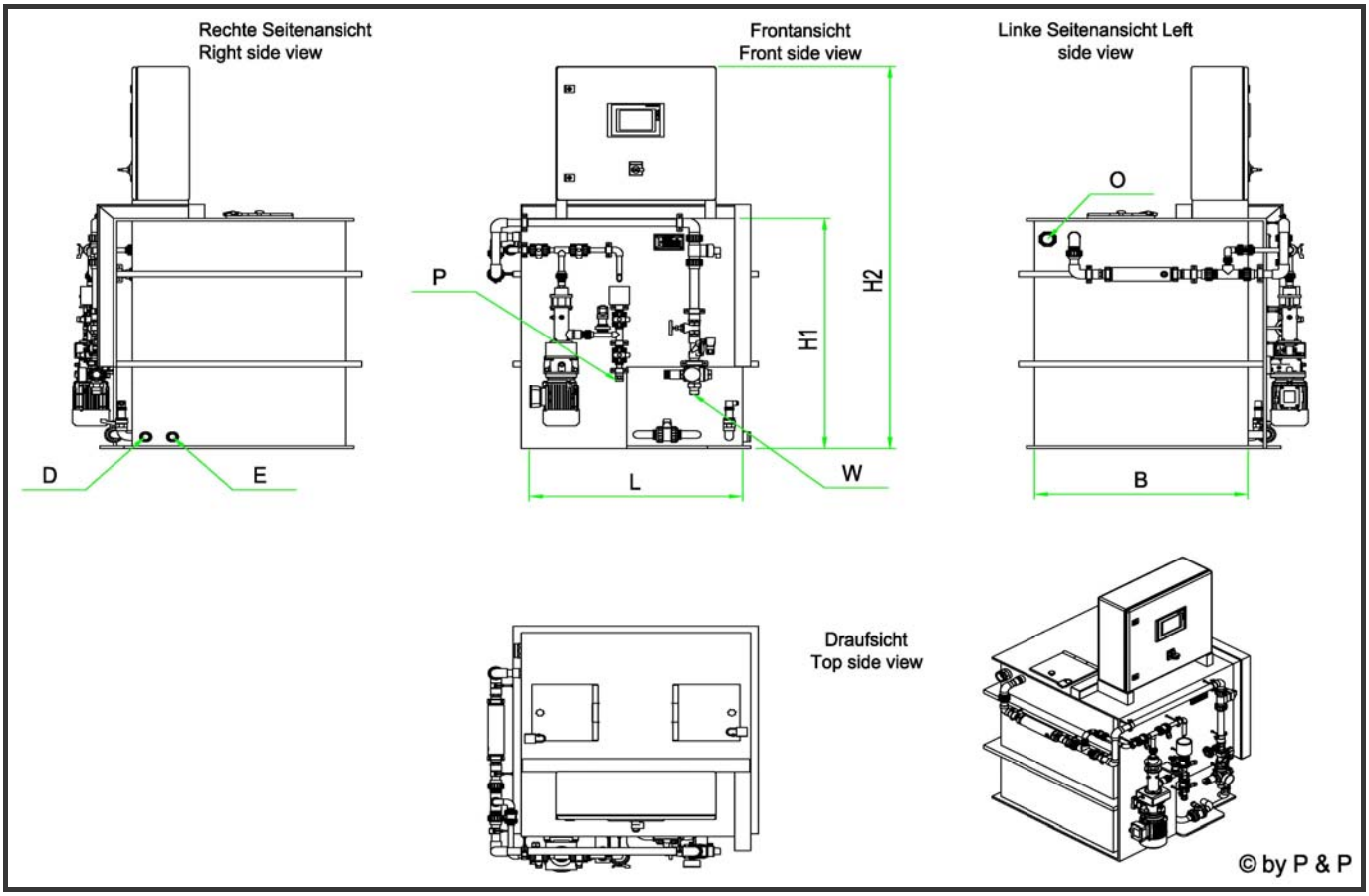
Additional and recommended options are, among others, the run dry protection for an external solution dosing pump, the product shortage sensor, the volume measurement, etc.

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.

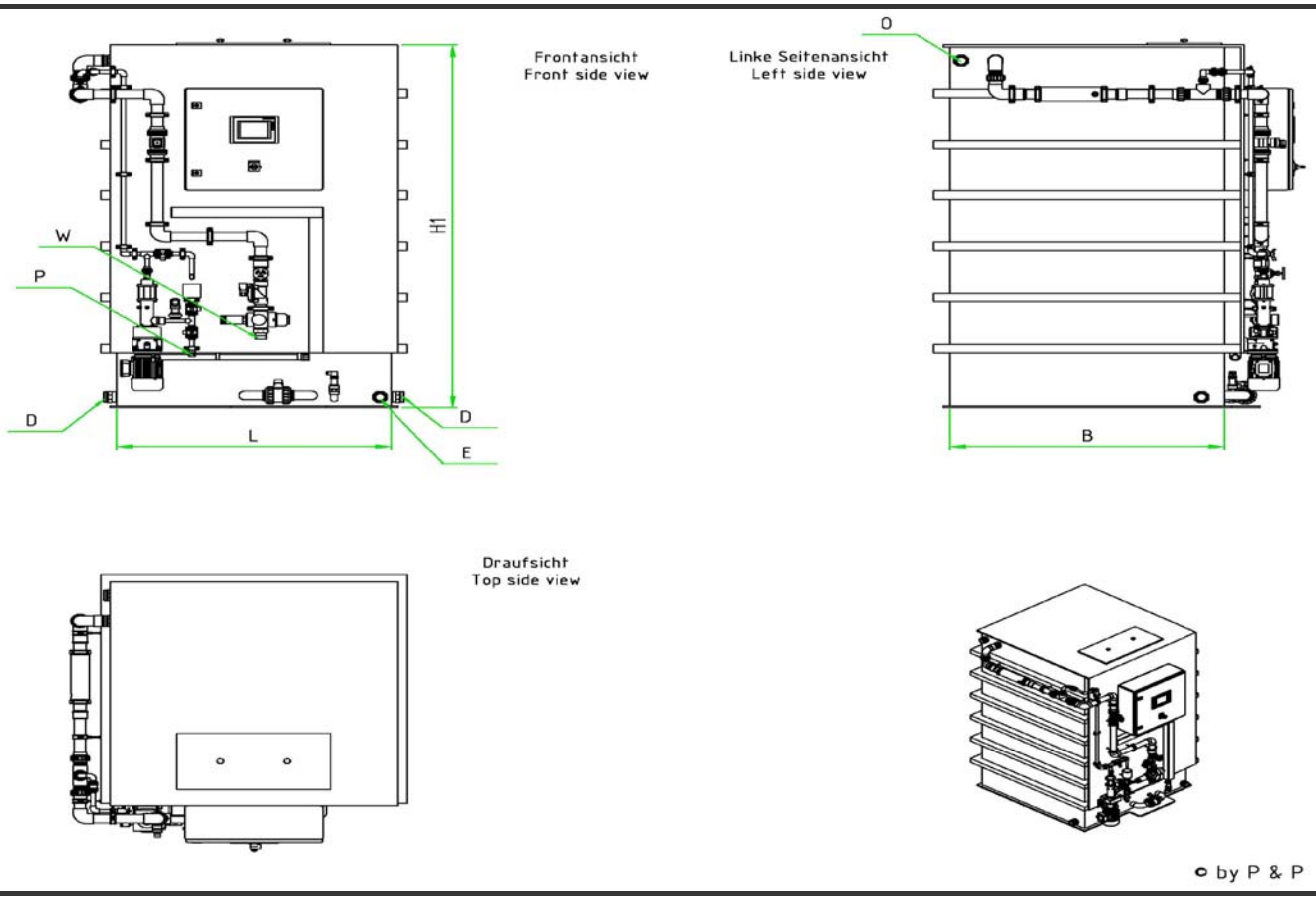
The matured polymer solution can be extracted from the extraction chamber and transported to its application point by means of pumps.

P & P
DOSIERTECHNIK

MSE Hiller



POLYCOMPACT Liquid Unit	FWA	300	600	1000	1500
Throughput rate	l/h	300	600	1000	1000
Overall dimension incl. neat polymer pump and control cabinet					
Length **L**	mm	1290	1290	1015	1635
Width **B**	mm	690	840	1090	1020
Height **H1**	mm	1025	1025	1025	1025
Height **H2**		1705	1705	1705	1705
Empty weight approx.	kg	170	190	200	240
Power requirement of the plant approx.	kW	1.0	1.0	1.0	1,0
Preparation water connection **W**	DN	25	25	25	25
Recommended amount of preparation water at 3 bar pressure	l/h	1000	1000	2000	3000
Polymer connection **P**	DN	15	15	15	15
Extraction + drainage connection **E + D**	DN	25	25	25	25
Overflow **O**	DN	40	40	40	40



POLYCOMPACT Liquid Unit	FWA	3000	6000	9000	12000
Throughput rate	l/h	3000	6000	9000	12000
Overall dimension incl. neat polymer pump and control cabinet					
Length L	mm	1235	1470	1670	2325
Width B	mm	1425	1625	1820	2025
Height H1	mm	1660	2160	2160	2160
Empty weight approx.	kg	330	480	560	630
Power requirement of the plant approx.	kW	1.0	1.0	1.0	1.0
Preparation water connection W	DN	25	40	40	50
Recommended amount of preparation water at 3 bar pressure	l/h	4500	9000	12,000	15,000
Polymer connection P	DN	15	15	15	15
Extraction + drainage connection E + D	DN	25	40	50	50
Overflow O	DN	40	40	50	50

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