DimWater Engineering
Environmentally Sustainable Solutions

Automatic Polyelectrolyte Preparers

Equipment for the preparation of the solution from powder, emulsion or dual

The solutions of polyelectrolyte are **polymers that possess electrolytic groups**, which favors the **processes of separation between the solid and liquid phases**. To optimize its use, **DimWater Engineering** offers different systems intended for **automatic and continuous preparation**.

The **advantages** of these equipments are several and of great importance for the processes in which it is used:

- Considerable **saving** of polymer.
- **Accuracy** in preparation and **dosing** optimizing treatments.
- Space saving and **centralized** installation.

Applications of our equipment:

- **Treatment of drinking water** and industrial process.
- **Waste water treatment**, specifically in physical-chemical treatments.
- **Sludge treatment**, to improve the performance of centrifuges and press filters.
- **Industrial processes** in paper mills, chemical industry, petrochemical, mineral treatment, etc...

General Constructive Characteristics:

- **Automatic water supply system** formed by isolating valve, filter, pressure switch, pressure gauge, pressure reducer, solenoid valve, regulating valve, pulse emitter flowmeter, and dispersion nozzle.
- **Tanks in polypropylene PPH**, and optionally in INOX. With three compartments, threaded inspection ports, and drain connection.
- **INOX propellers designed** and optimized for a homogeneous blend.
- **Volumetric dispenser** made of the material of the tank and provided with dosing screws of special design for working with polyelectrolyte.
- **Electrical protection and control panel**, with touch screen, ready for manual / automatic operation with emergency stop and wiring.
- **Heating resistance** and methacrylate peephole in dust discharge tube.
- **Ultrasonic level probe** for very high, high, low and very low level with warning alarms.

Automatic Polyelectrolyte Preparers in Powder, Emulsion and Dual. Models: DimW Basic and DimW Top

Version for Polyelectrolyte Powder (DWAP)

The dilution water reaches the tank through the **automated water collector.**

The polyelectrolyte powder, stored in the **hopper of the dispenser**, is extracted by means of a special screw and discharged on the dispersion cone of a **water nozzle**.

The obtained mixture falls by gravity into the first compartment and then passes through **siphons** to the second and third. The first and second have **stirrers**.

The volume of the compartments and the continuous action of the stirrers ensures a **homogeneous mixture** and a suitable retention time for a good dilution.

The **distribution panel and control panel** are responsible for operating the entire system automatically, ensuring correct dosing and preparation.

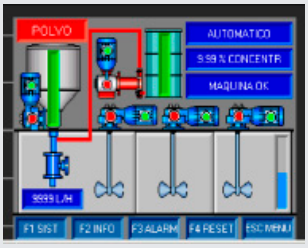
Version for Polyelectrolyte in Emulsion (DWAE)

The dispenser is supplanted by a **special pump** for liquids of **high viscosity.**

Version for Polyelectrolyte in Powder and Emulsion (Dual) (DWAD)

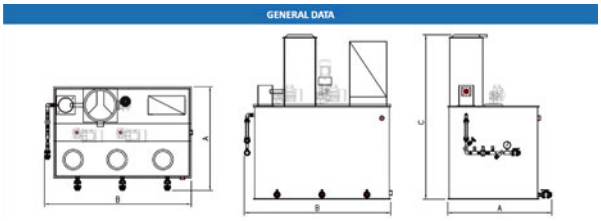
Prepared for operation with **polyelectrolyte powder and emulsion.**

Model DimW Top, improved system



With color **touch screen** easy operation with display and control of all parameters.

In addition, it includes automatic regulation of dosage percentages through **control software**.



MODEL	TOTAL VOLUME	A mm	B mm	C mm	WATER INLET	PUMP ASPIRATIONS	EMPTY	OVERFLOW	EMPTY WEIGHT
	Lts	mm	mm	mm					
DWAP - DWAE - DWAD 5	650	1150	1150	1690	1/2"	1 1/2"	1"	1 1/2"	145
DWAP - DWAE - DWAD 8	1000	1150	1650	1690	1/2"	1 1/2"	1"	1 1/2"	160
DWAP - DWAE - DWAD 12	1350	1150	1650	1690	1/2"	1 1/2"	1"	1 1/2"	200
DWAP - DWAE - DWAD 20	2120	1150	2150	1800	3/4"	2"	1"	2"	265
DWAP - DWAE - DWAD 30	3210	1150	3150	1800	3/4"	2"	1"	2"	380
DWAP - DWAE - DWAD 40	4320	1400	3150	2050	1"	2"	1"	2"	560
DWAP - DWAE - DWAD 60	6265	1650	3150	2300	1 1/4"	2"	1"	2"	710
DWAP - DWAE - DWAD 80	8400	1650	4150	2300	1 1/2"	2"	1"	2"	835

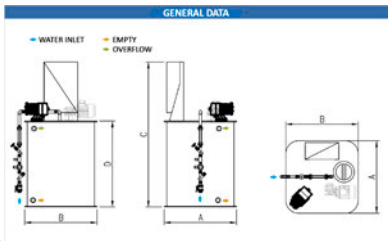
Automatic Preparers of Polyelectrolyte in Emulsion. Model DimW Basic (DWAE)

The emulsion polyelectrolyte is extracted from its storage drum by means of the **pump** which injects it, in the desired ratio, into the dilution water manifold.

The pump is specially designed for liquids with **viscosity up to 8,000 Cps in standard version and up to 50,000 Cps on request**.

Both products are pre-mixed by means of a **high performance static mixer** and enter the preparation tank.

The tank design and the continuous action of the agitator guarantee **a suitable mixture for a good dilution**.



MODEL	CAPACITY	A	B	C	D	WATER INLET	PUMP ASPIRATIONS	OVERFLOW
	Lts	mm	mm	mm	mm			
DIMW BASIC DWAE 5	500	900	900	1700	1000	3/4"	1 1/2"	1 1/2"
DIMW BASIC DWAE 7	700	1000	1000	1700	1000	3/4"	1 1/2"	1 1/2"
DIMW BASIC DWAE 10	1000	1000	1000	1700	1500	3/4"	1 1/2"	1 1/2"