



DOSAPACK® MAX

Dosing systems for preparation and storage of powder chemical

SDM

DOSING AND MIXING
SYSTEMS

Providing Value to Technology

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MAIN CHARACTERISTICS

Conceived as a compact unit, it includes all elements assembled on the tank itself. The kit is supplied fully assembled, in such a way that it is only necessary to install the unit upon its foundation and make the connections to the tank input and the electricity system.

BASIC OPERATION

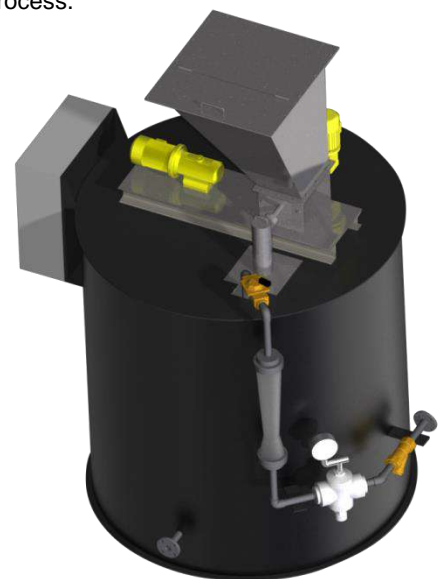
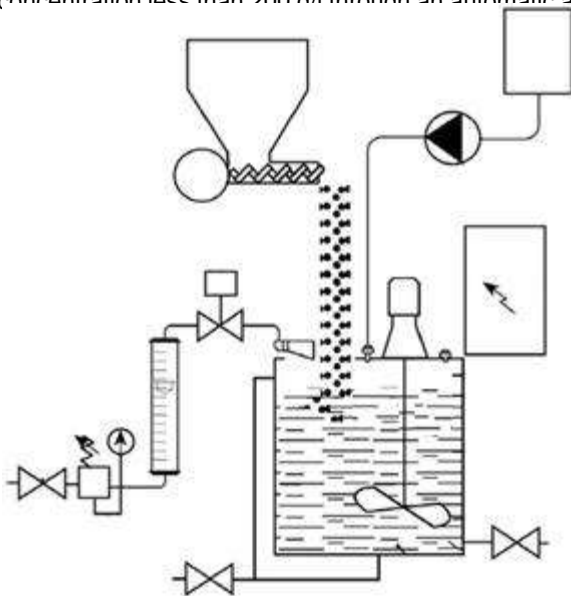
- ✓ As soon as the level sensor indicates a minimum, the water entry electrovalve is opened and the powder dosing system begins to operate.
- ✓ In the same way, as soon as the level sensor indicates a maximum, the water entry electrovalve is closed and the powder dosing system stops.
- ✓ The mixer is always in operation.

ELEMENTS INCLUDED

- ✓ High density polyethylene tank (HDPE).
- ✓ Powder reagent dosing system series DPS in AISI 304L with vibrating device and hopper.
- ✓ Electric mixer in AISI-304L.
- ✓ Control panel and remote with ultrasonic level sensor.

This preparation module can be complemented with the assembly of dosing pumps or progressive cavity pumps installed on an additional bank, joined together, creating a unique entire set.

Equipment designed for preparation from granulated or powder product (granulometry less than 180 μm) of solutions with concentration less than 200 g/l through an automatic and continuous process.



Guidance figure

DESCRIPTION OF THE ELEMENTS

• Tank:

Tank made integrally of POLYETHYLENE ferrules (HDPE), cover, deflectors and base using welded panels of thermoplastic material with an automatic machine or through extrusion with, in any case, the welding being 100% revised with a high frequency comb to detect pores or fissures in the same.

Volumes available: 1000 l and 2000 l.

• Water Supply:

The water entry kit is a line of PVC pipe formed of a flow regulation valve, a pressure regulation valve, NC electrovalve and spinner of either floater type or variable section in order to permit an adequate adjustment of the dissolving water entry flow.

• Mixer:

Designed with high-efficiency propellers for maximum performance in the reagent preparation processes.

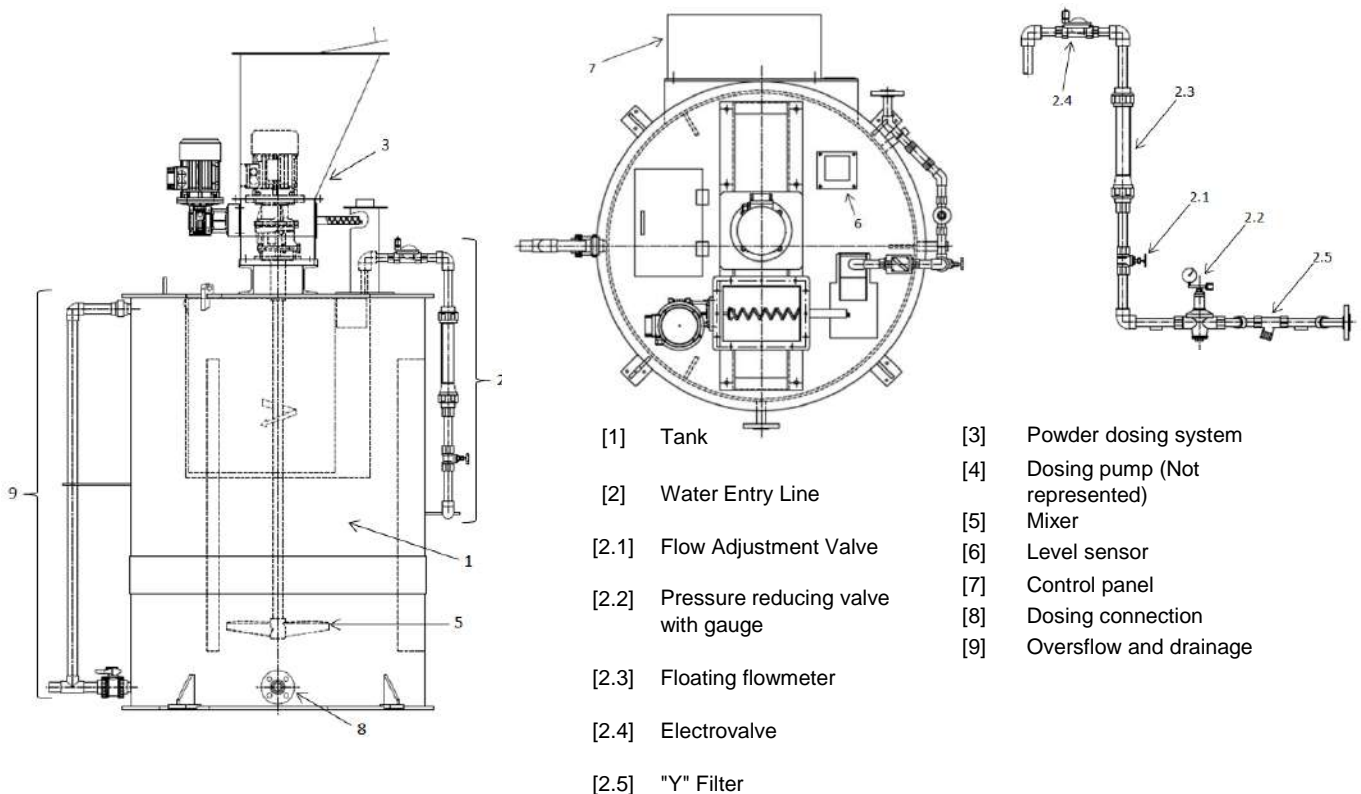
• Powder dosing system:

The powder product dosing system is of a volumetric type, with a dosing screw. The flow adjustment is through variation of the continuous speed by actioning through a gear motor supplied by a frequency converter. Several models available with flow ranges that permit obtaining the required solution concentration. It is also possible to install hoppers with various volumes (60 and 100 l), with the existence of a vibration system and a pneumatic membrane level switch.

• Electric cabinet:

The electric cabinet has a micro-controller, thus permitting optimal operation of the kit when receiving information from the ultrasonic level sensor.

Possibility of local or remote control.



APPLICATIONS

The Dosapack® Max equipment can be used for preparation of the main chemical reagents:

✓ Reagents used in water treatment:

- Lime milk.
- Potassium permanganate.
- Sodium metabisulphate.
- Trisodium phosphate.
- Others.

✓ Other types of reagents for industrial applications.

AGITATION IN THE PREPARATION OF REAGENTS

An adequate agitation is essential in the preparation of reagents for any type of process.

In the case that the mixer is placed centrally in a cylindrical tank, it is necessary to install three anti-rotation deflectors in it that are designed taking into account the structure of the tank, to:

✓ Avoid that the entire fluid mass, as a whole, turns around the axis.

✓ Avoid the vortex that may damage the mixer and introduce air to the product.

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✓ Obtaining correct agitation.

