

# POLYPACK:

Continuous and automatic preparation of polymers.

**SDM**  
SISTEMAS DE DOSIFICACIÓN  
Y MEZCLA

## Introduction

The use of polymers or flocculants considerably improves the separation process between the solid/liquid phases for applications in:

- Water treatment (flocculation of industrial and potable water).
- Waste water treatment (physico-chemical treatment).
- Sludge treatment (centrifuges, filter press to improve dewatering).
- Paper industry (retention agent).
- Various other industries (chemical, petrochemical, quarry etc).

These flocculants, in powder and emulsion form, are very high molecular weight polymers. To ensure efficiency of the separation process, the preparation of the usable dilute polymer solution (2 to 5 g/l) is critical. The POLYPACK APS-MAX employs rigorous technical standards and features which ensure optimum and consistent flocculant preparation.

The POLYPACK APS-MAX range offers very significant improvements in through-put of prepared polymer in a most cost effective manner.

Tank Available in 3 materials:

- SS 304L
- SS 316
- Polypropylene PPH

## Design

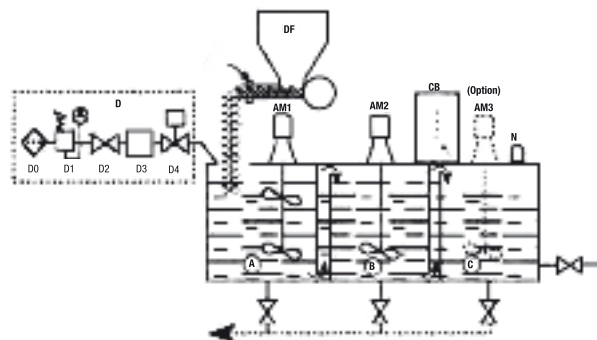
The POLYPACK APS-MAX is composed of:

- A 3-compartment tank(\*): preparation, maturation, dosing.
- A water feed unit.
- A system to "wet" the powder by water flow.
- A control panel with warning light indication which operates:
  - A dry feeder with supply hopper.
  - 1, 2 or 3 mixers.
  - Water feed electro-valve.
- 1 ultrasonic level detector.
- 1 draw-off nozzle, 3 drain nozzles and 1 overflow nozzle.

(\* AP\* 0 model: 2-compartment tank.

## Options

- Hopper loader : automatic polymer powder refilling
- Extraction pump.



A : Preparation tank  
B : Maturation tank  
C : Extraction/dosing tank  
D : Water feed  
D0 : Filter  
D1 : Pressure reducer  
D2 : Gate control valve  
D3 : Flow meter  
D4 : Electro-valve

DP : Dry feeder  
CB : Control panel  
R : Heating resistance  
AM1 : Mixer  
AM2 : Mixer  
AM3 : Mixer (option)  
N : Ultrasonic detector

## Operating principle

The circulation of the polymer preparation is routed through the compartments, which are separated by baffles. This ensures the optimum reaction time in each compartment, and a continuous concentration level, thereby avoiding any preferential route between the preparation compartment and final dosing solution compartment.

The POLYPACK APS-MAX is automated by the control panel connected to the ultrasonic level detectors located above the dosing solution compartment. As soon as the solution in the dosing compartment reaches "low level", the detector activates the opening of the water feed electrovalve and the start-up of the dry feeder. As soon as the "high level" is reached, the process cycle stops, although the two (or three) mixers continue to operate.

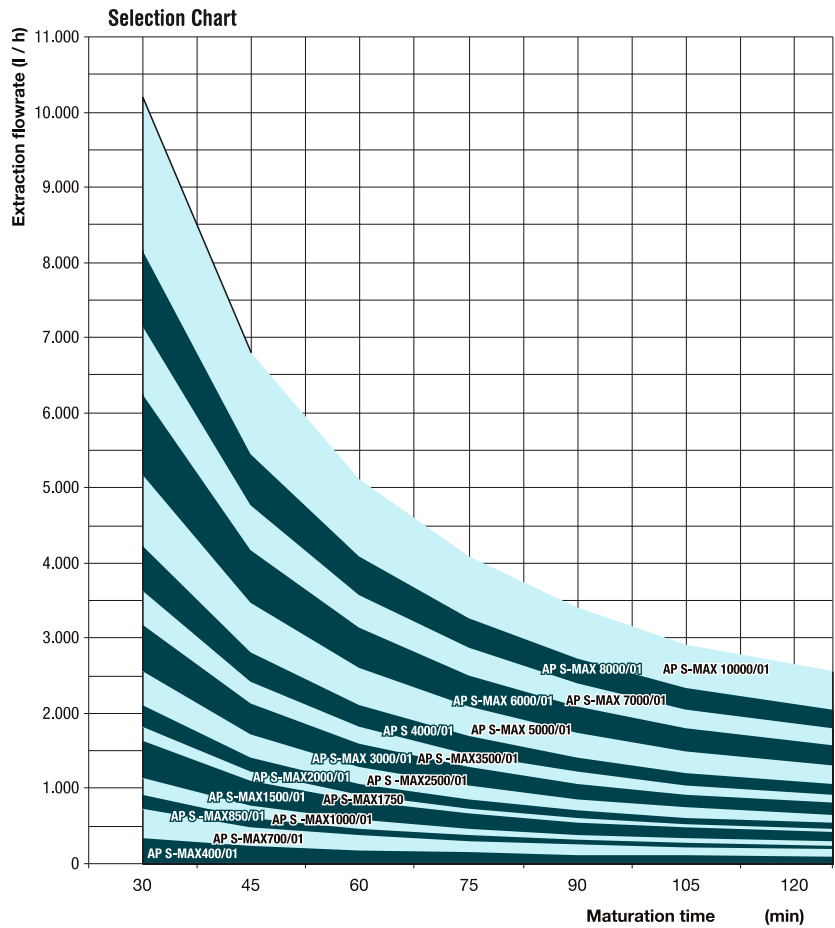
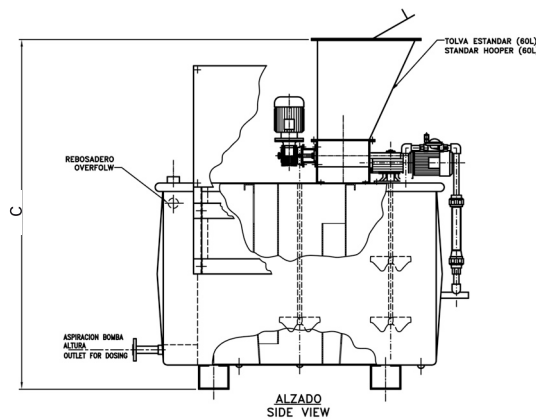
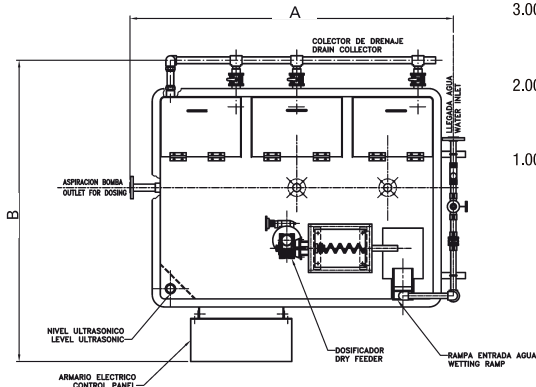
The POLYPACK APS-MAX provides automatic and continuous preparation of polymer solution of constant and uniform quality, thanks to:

- A mixer located in the preparation compartment and in the maturation compartment.
- Optimised maturation cycles.

This main solution can in turn be further diluted, by fitting an optional dilution unit.

# POLYPACK APS - MAX

## How to select the POLIPACK APS-MAX



MODELO MODEL	DIMENSIONES EQUIPO ESTANDAR AxBxC STANDARD EQUIPMENT DIMENSIONS AxBxC	LLEGADA AGUA WATER INLET	ASPIRACION BOMBAS DOSING PUMP CONNECTION	DRENAJE DRAIN SIZE
* APS-MAX-400-SS	1300x1600x1600	3/4"	1"	1"
APS-MAX-700-SS	1300x1600x1630	3/4"	1"	1"
APS-MAX-850-SS	1550x1500x1630	3/4"	1"	1"
APS-MAX-1000-SS	1650x1500x1730	3/4"	1"	1"
APS-MAX-1500-SS	2000x1550x1850	1"	1"	1"
APS-MAX-1750-SS	2200x1550x1850	1"	1 1/2"	1"
APS-MAX-2000-SS	2500x1550x1850	1"	1 1/2"	1"
APS-MAX-2500-SS	2500x1800x1850	1 1/2"	1 1/2"	1 1/2"
APS-MAX-3000-SS	3000x1800x1850	1 1/2"	2"	1 1/2"
APS-MAX-3500-SS	3100x1950x1850	1 1/2"	2"	1 1/2"
APS-MAX-4000-SS	3150x1950x1950	1 1/2"	2"	1 1/2"
APS-MAX-5000-SS	3300x2050x2150	2"	2"	2"
APS-MAX-6000-SS	3900x2000x2150	2"	2"	2"
APS-MAX-7000-SS	3900x2250x2150	2"	2"	2"
APS-MAX-8000-SS	4400x2250x2150	2"	2"	2"
APS-MAX-10000-SS	4400x2650x2150	2"	2"	2"

IMPORTANTE:  
LAS MEDIDAS INDICADAS  
CORRESPONDEN AL EQUIPO  
TOTALMENTE MONTADO

IMPORTANT:  
ALL SIZES AS SHOWN ARE FOR  
"ALL COMPONENTS FITTED" EQUIPMENT.

\* NOTA/NOTE:  
MODELO DE DOS COMPARTIMENTOS EN LUGAR DE TRES  
MODEL WITH TWO COMPARTMENT INSTEAD OF THREE.

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