



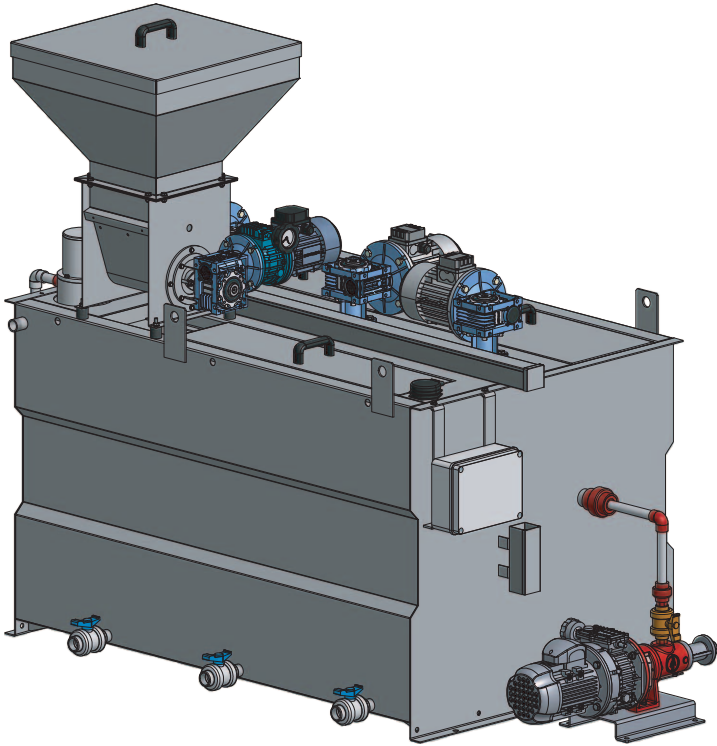
# POLYMER

## PREPARATION UNIT



**ECOMACCHINE**  
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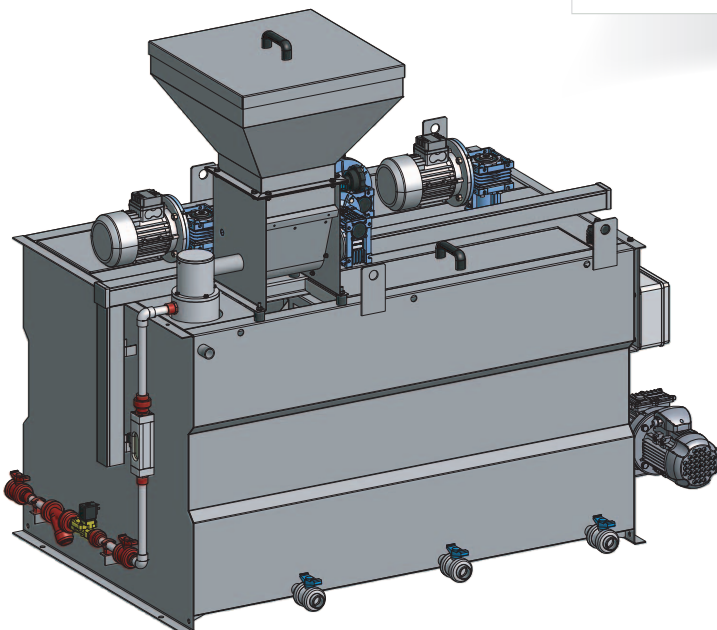
## OPERATING PROCESS



This equipment is designed to automatically dose the polyelectrolyte powder in water and continuously pump this solution into the dewatering equipment. The powder or granules of polyelectrolyte is dosed with a speed controlled screw into the first of three connected tanks filled of water, through a special dissolving device. Thanks to the presence of a trickle of water which continuously washes and cleans the area where the surplus of dosed powder falls down, a perfect mixing of the polyelectrolyte solution is obtained with no lumps.

Generally a 0.2% concentration is preset, but it can be diluted furthermore manually operating a control valve acting on the water incoming flowrate. The volumes of the tanks and the speed of the mixers, equipped with radial-axial impeller, assure the dissolution of the polyelectrolyte and the perfect ageing of the solution. One or more metering pumps can be installed to pump the solution to the dewatering equipment. All functions are carried out automatically with level probes with the option of manual operation.

## MATERIALS AND FINISHING



The dosing station is completely made of stainless steel AISI 304 or AISI 316, including all stiffenings and brackets and the dosing screw. the dissolving funnel is made of P.V.C. plastic as well as the piping and the intercepting valves

### Metering pump

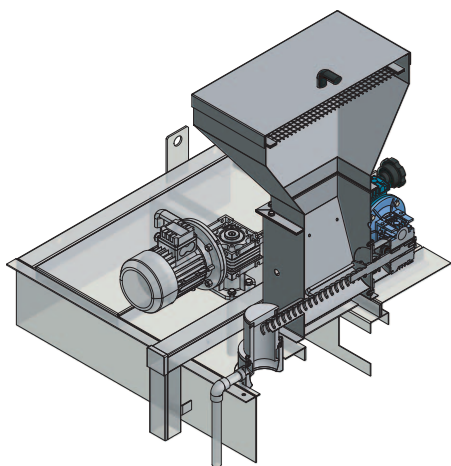
As an option the unit includes a positive displacement screw type pump equipped with a variable speed gearbox and motor or with a fixed speed gearbox and an adjustable speed electric motor by means of a variable frequency drive.

## EQUIPMENT DESCRIPTION

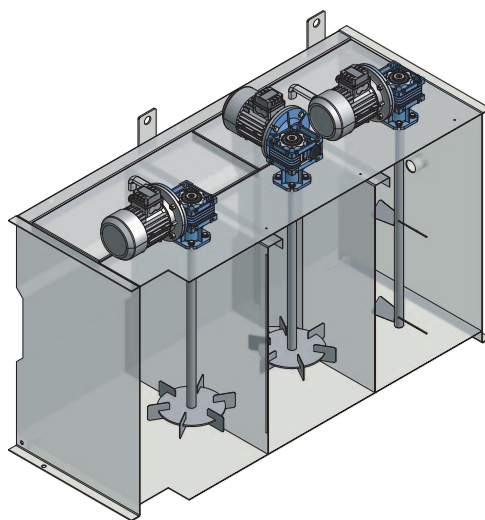
The polymer continuous and automatic make-up unit consists of a tank divided in three sectors, one for the dissolution, one for the aging and one for the storage of the solution.

A wide range of sizing is available to cover all needs, from a total volume of 800 lt. up to 10,000 lt., the biggest unit. Each unit is supplied completely assembled and wired, ready for operation, including:

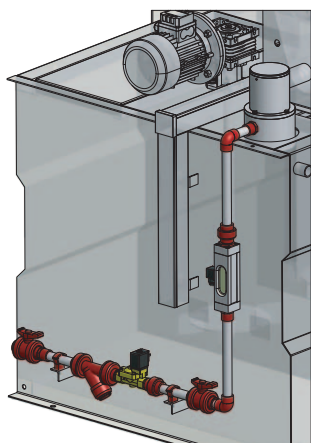
HOPPER FOR POLYELECTROLYTE POWDER STORAGE  
POLYELECTROLYTE SCROLLING UNIT AND DOSING  
SCREW WITH VARIABLE SPEED GEAR MOTOR  
DISSOLVING FUNNEL



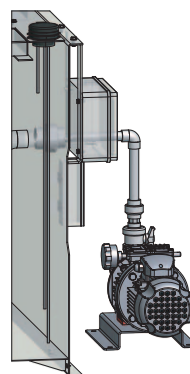
PREPARATION, STORAGE AND AGEING TANKS  
ONE FAST MIXER AND TWO SLOW MIXERS



INTERCEPTING VALVE  
WATER FILTER  
SOLENOID VALVE FOR INCOMING WATER  
SETTING VALVE  
FLOATING TYPE FLOWMETER WITH LOW FLOW  
THRESHOLD



CAPACITIVE LEVEL PROBES WITH HIGH, LOW AND  
LOW-LOW THRESHOLDS  
METERING PUMP AS AN OPTION





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