



WATERCARE INNOVATIONS

Solid/Liquid Separation AUTOMATIC FLOCCULANT PREPARATION AND DOSING PLANT

In any solid-liquid separation process, accurate flocculation is one of the most critical components.

During flocculation, the process stream is dosed with a prepared polymer solution, which agglomerates the solids within it.

If this is not done correctly, poor agglomeration can occur, which in turn will have a negative effect on equipment and systems downstream.

Watercare Innovations has developed a robust range of plants, which can handle from 6-240 kg of any polymer-based powder per day.

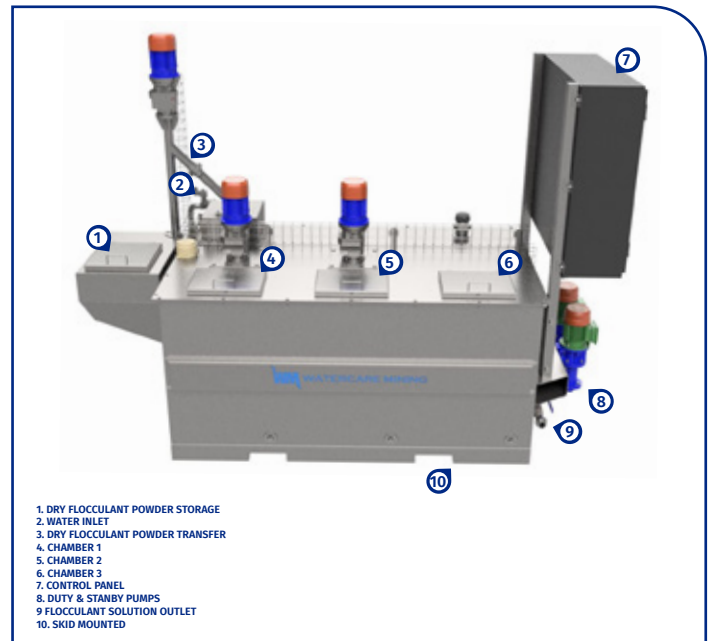
The control philosophy is based on an automated batch preparation and transfer system, that is controlled via a Programmable Logic Controller (PLC) or Solid-State (SS) control panel.



WCM-H-120 AUTOMATIC FLOCCULANT DOSING PLANT

Applications:

- Underground/Surface mining operations
- Process and industrial plants
- Steel manufacturing
- Waste water treatment works
- Drinking water plants



1. DRY FLOCCULANT POWDER STORAGE
2. WATER INLET
3. DRY FLOCCULANT POWDER TRANSFER
4. CHAMBER 1
5. CHAMBER 2
6. CHAMBER 3
7. CONTROL PANEL
8. DUTY & STANBY PUMPS
9. FLOCCULANT SOLUTION OUTLET
10. SKID MOUNTED

PROCESS DESCRIPTION

A wide range of benefits, such as:

- Robust design for reliable performance in challenging operating conditions
- Variable flocculant make-up concentrations
- Compact, skid-mounted
- Quick installation and commissioning
- Low power consumption
- Minimal civil construction required
- Minimal operator intervention

Specifications:

- Construction Material: Stainless Steel 304
- Make-Up Concentration: 0.05 to 0.2%
- Dosing Concentration: 1 to 10 ppm
- Hydration Time: Up to 60 Minutes

PROCESS AND PHYSICAL PARAMETERS:

Std Module Type	Capacity		Approximate size		Approximate Dry Weight
	Kg / day	lb. / day	M	ft	Metric Ton
WCM-H-60	6	13.3	2.0 H x 1.1 W x 2.2 L	6.6 H x 3.6 W x 7.2 L	0.6
WCM-H-120	12	26.6	2.0 H x 1.1 W x 2.7 L	6.6 H x 3.6 W x 8.9 L	0.8
WCM-H-240	24	53.2	2.5 H x 1.2 W x 4.0 L	8.2 H x 4.0 W x 13.1 L	1.0

NON-STANDARD MODULES AVAILABLE ON REQUEST



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