

FLOCCULANT MIXING PLANT

The solid grade flocculant mixing plant is a purpose built unit for the mixing of anionic, cationic or non-ionic solids grade polymer with water for use as flocculants for the treatment of contaminated drilling fluids, dredges silts and clays, site dirty run off water, waste fluids, bentonite fluids and other civil engineering fluids.

The plant consists of a 25m³ capacity flocculant mixing tank with vertical shaft agitator powered through a speed reduction box by a 4kW electric motor with DOL starting, a solid grade flocculant feeder unit and a 12m³ capacity water storage tank.

The flocculant feeder unit houses a stainless steel hopper, which will hold the contents of a standard 25Kg sack of polymer. This hopper discharges to a screw feeder driven by an electric motor through a mechanically variable speed gearbox. The feeder discharges the solid grade polymer at the required rate in to a water stream where the grains of polymer are wetted before they fall under gravity in to the mixing tank below. The flocculant feeder unit attaches to the water tank to form a standard 20 foot container sized module, complete with ISO corner castings, for transport.



The flocculant mixing plant is designed to mix solid grade polymer flocculants with water to provide dilute solutions. The dilute flocculant would normally be dosed in to the flowline by a positive displacement, infinitely variable speed, peristaltic pump. The size of pump required will depend upon the site requirements.

TECHNICAL DATA:

Electrical:		The unit requires power at 380 to 415 volts, 50 Hz, 3 phase and earth.		
		Power	Running current	Starting current
	Agitator:	4 kW	7 Amps	55 Amps
	Feeder:	0.25 kW	1 Amp	7 Amps
Overall size:	For transit:	2 No. 20 foot containers, each 6058x2438x2591 mm high.		
	In use:	6058 x 3038 x 5200mm high		
Weight:	Transit:	2 items, each at 6 tonnes.		
	In use:	42 tonnes		
Water inlet:	4" female Bauer on unit			
Flocculant outlet:	4 No. Low level 4" and 2 No. 6" flanged outlets.			