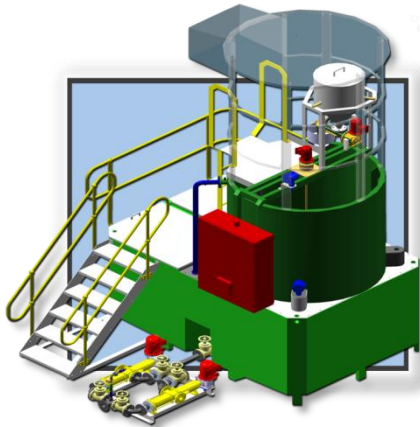


# Compact Flocculant Plants



Flocculant plants are used on nearly all mineral beneficiation plants. The use of a flocculant plant improves the efficiency of recovering the mineral and facilitates efficient water recovery. Flocculant plants are used wherever an additive is required or to cause either a mineral or a waste product to settle out of the process water.

All RESOURCES Compact Flocculant Plants are designed to provide a range of retention times to accommodate flocculant delivery demands and hydration time requirements. Design can also incorporate operational time requirements, such as a specified shift time if required.

The compact design optimizes materials economics by utilizing the conditioning tank as a structural base for the mixing tank. This minimizes plant footprint and optimizes space layout requirements.

**Size Offerings** - RESOURCES Compact Flocculant Plants are available in a range of sizes based on volumetric flow, designed to meet the specific needs of your process:

- **M-250** – 230 to 575 litres per hour dosage rate
- **M-500** – 535 to 1,335 litres per hour dosage rate
- **M-1000** – 1,295 to 3,240 litres per hour dosage rate
- **M-2000** – 3,150 to 6,000 litres per hour dosage rate

**Design and Installation** - RESOURCES Compact Flocculant Plants include advanced design features allowing ease of logistics and installation, including:

- Compact design does not require any special civil works. Plant is easily accommodated on a concrete slab and is supported on stub legs. Plant is easily relocated if required.
- Containerized dimensions with capability to consolidate and pack ancillaries within the tank sections for easy transport.
- Recessed outlet flanges, preventing lifting damage to critical battery limits.
- High quality paint specification, internally and externally for maximum practical life of equipment.
- Available in stainless steel construction for hostile environments.



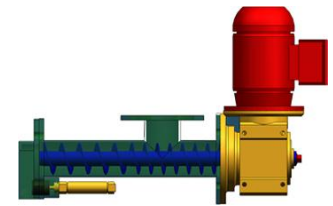
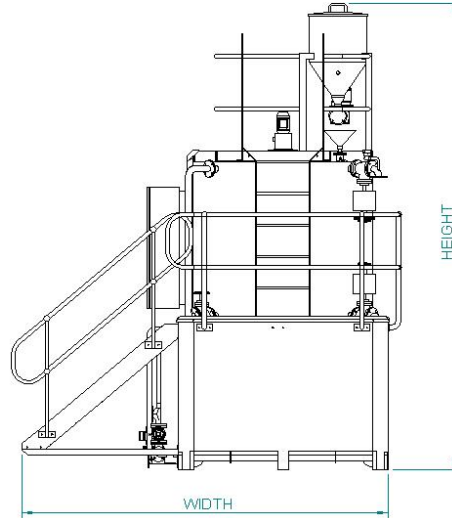
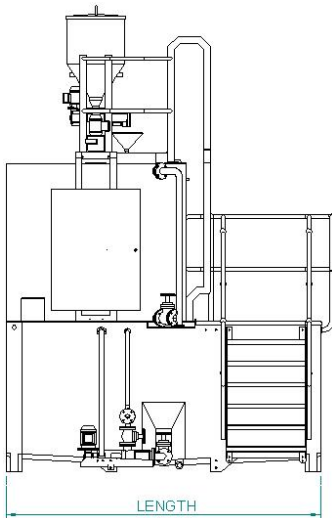
**Operation** - RESOURCES Compact Flocculant Plants are engineered to operate continuously, with automatic flocculant make-up in the mixing tank on a batch basis. Transfer of mixed flocculant is by gravity flow into the conditioning tank. Delivery of hydrated polymer is continuous from the outlet flange of the conditioning tank. This operational method, combined with the tank volumes, comfortably allows the required residence time for optimal flocculant hydration.

Approximately one third of the total retention time of the flocculant plant is present in the mixing tank section of the plant while the balance is available in the conditioning tank section. The combined residence time in the two tanks make up the total residence time of the flocculant plant. The conditioning tank is equipped with a flow director baffle to prevent short circuiting within the tank.

# Compact Flocculant Plants



resources™  
water technology



Variable Pitch Screw Feeder

MODEL		M-250	M-500	M-1000	M-2000	
<b>Total Mass</b> (Empty)	kg	1,100	1,550	2,320	3,800	
<b>Flocculant Delivery Rate</b> (Variable)	l/h	230 - 575	535 - 1,335	1,295 - 3,240	3,150 - 6,000	
<b>Flocculant Hydration Time</b> (Min Flow - Max Flow)	hr	6.4 - 2.5	5.3 - 2.0	5.3 - 1.8	5.8 - 1.5	
<b>Screw Feeder</b> (Stainless Steel)	kW	0.55	0.55	0.55	0.55	
<b>Dosing Pump</b> (MONO)		C31M	C41M	C61M	C71M	
<b>Dosing Pump Motor/ Gearbox</b> (Bonfiglioli)	kW	0.55	0.75	1.10	2.20	
<b>Mechanical Agitator</b> (Mixtec)	kW	0.37	0.37	0.37	0.37	
<b>Mixing Tank Volume</b>	m <sup>3</sup>	0.750	1.500	3.000	5.400	
<b>Conditioning Tank Volume</b>	m <sup>3</sup>	1.500	3.000	7.500	12.000	
<b>Total Plant Volume</b>	m <sup>3</sup>	2.250	4.500	10.500	17.400	
<b>Automatic Valves</b>		Auto Actuated with Manual Override				
<b>Flanges</b>		50NB (Unless Otherwise Specified)				
<b>Bolts</b>		Galvanized / Stainless Steel				
<b>Hand Railing</b>		Tubular Hot Dip Galvanized / solid (client specified)				
<b>Internal Paint Specification</b>		Ameron 90S primer and final coat - 250µm DFT				
<b>External Painting Specification</b>		Ameron 385 red oxide primer, Ameron 450S top coat - 150µm DFT				
<b>Dimensions</b>	<b>H</b>	m	3.60	3.80	4.50	4.90
	<b>L</b>	m	2.10	2.60	3.20	4.10
	<b>W</b>	m	2.20	2.50	3.80	3.90