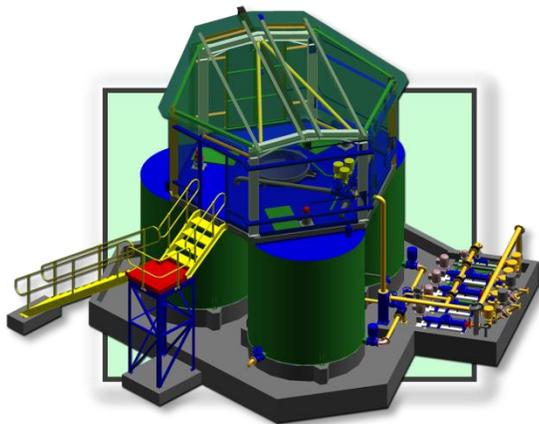


# High Capacity Flocculant Plants



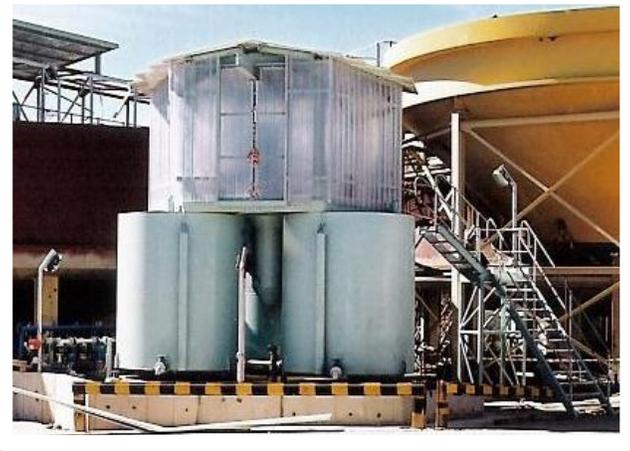
Flocculant plants are used on nearly all mineral beneficiation plants. The use of a flocculant plant improves the efficiency of recovering the mineral and facilitates efficient water recovery. Flocculant plants are used wherever an additive is required or to cause either a mineral or a waste product to settle out of the process water. RESOURCES High Capacity Flocculant Plants provide the high capacity dosing needed for large high throughput processing plants.

RESOURCES High Capacity Flocculant Plants are designed on the principal of process availability. Our unique design is based on a process oriented philosophy, focused on maximizing availability. This

unique design also provides an efficient compact pyramid structure, minimizing the total footprint requirement while delivering high quality performance. Low cost standard tank construction provides adequate hydration volume and time over unnecessary mechanical complexity and undesirably high flocculant concentrations often encountered when mixing large flocculant quantities. As a result, the need for extensive post hydration dilution can be eliminated or reduced significantly.

**Size Offerings** - RESOURCES High Capacity Flocculant Plants are available in a range of sizes based on dry Flocculant mass to be mixed and dosed to the process:

- **C-5** – 3 to 8 kg per hour at 0.1% m/v.
- **C-10** – 7 to 12.5 kg per hour at 0.1% m/v.
- **C-15** – 12 to 18 kg per hour at 0.1% m/v.
- **C-25** – 17 to 30 kg per hour at 0.1% m/v.
- **C-50** – 29 to 60 kg per hour at 0.1% m/v.
- **C-100** – 50 to 150 kg per hour at 0.1% m/v.
- **C-250** – 140 to 300 kg per hour at 0.1% m/v.



Operating expenditure on flocculants per annum is significantly higher in comparison to the capital expenditure on the flocculant plant, emphasizing the need for hydration to be full and complete before dosing takes place, greatly minimizing flocculant waste. The advanced process design features inherent to all of the C-Series Flocculant Plants include sophisticated instrumentation, optimal control and critical safety considerations. As a result, RESOURCES High Capacity Flocculant Plants are the equipment of choice for large flocculant dosing applications. All C-Series Flocculant Plants feature top quality paint specification, internally and externally for maximum practical life of the equipment. For critical components, stainless steel construction is standard. The RESOURCES High Capacity Flocculant Plant incorporates a unique proprietary primary

hydrator. The high energy hydrator ensures an even and complete water coating of the individual flocculant particles, eliminating clotting. A transfer pump then transfers the initially wetted flocculant to the hydration tanks.

**Operation** - A RESOURCES High Capacity Flocculant Plant operates utilizing three tanks sequentially for dosing, hydration and make-up. Delivery of hydrated chemical flocculants is continuous from the outlet flange of the dosing manifold, while conditioning of flocculant takes place on a sequenced basis in the currently active hydration tank. Sufficient volumetric reserve capacity is available for maintenance purposes. One tank can be taken offline for maintenance while the plant continues to operate without stopping production.

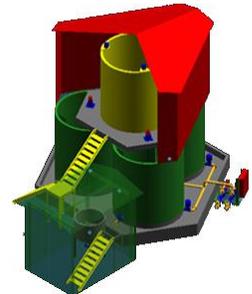
# High Capacity Flocculant Plants



**Non-Return Valve-** mechanical fail safe non-return valve for protection against delivery line run-back during process shutdown or emergency stoppage.



**Explosion Coupling-** Dangerous pressures can occur within delivery lines. Rubber explosion safety couplings protect against catastrophic failure and dangerous pipe bursts in the event of unexpected damage or blockage of remote delivery piping.



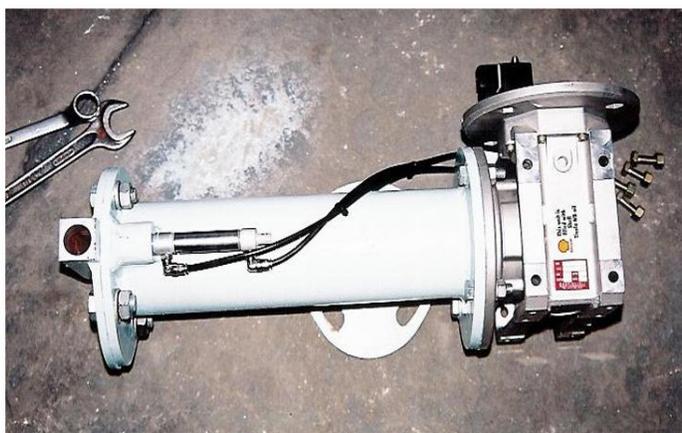
C-Series w/ Water Header Tank



**Dilution Assembly-** for dilution to process concentration. Delivery lines are equipped with flow measurement, to ensure continuous accurate dilution ratios under all operating conditions. This automation allows multiple pumps to independently operate at whatever delivery rate is required for correct concentration to numerous delivery points.



**Steep Angled Hopper-** eliminates dry reagent bridging and material flow hindrance. Inner surface of hopper is coated with specialized ultra low friction coating for smooth movement of dry material. Air inlet flange and fluidizing air piping is provided should this be required for certain flocculants.



**Proprietary Multiple Pitch Screw Feeder-** ensures increasing material velocity profile as reagent moves toward the delivery aperture. Pneumatic shut-off valve automatically seals screw feeder against atmospheric moisture content and liquid ingress while feeder is not operating.



**Pneumatic Main Water Distribution Valve Assembly-** for filling of the primary sequence tanks. Compact single point location for ease of maintenance. All automatic valves are equipped with proximity sensors for position status confirmation.