



## MANUFACTURING

### **The Right Formula in the Right Place Cuts Maintenance Costs and Reduces Downtime**

#### **Problem**

At a concrete mixing plant in Missouri, the water-based system for reclaiming aggregate and wash water from the post-delivery, rinse, and clean-out process was both troublesome and inefficient. The problem was with the system's recirculating reclaim system pump screens, which continually clogged up with finely suspended concrete and silt carrying over from upstream wash water reclaim settling basins. The maintenance staff had to spend an hour or two every day cleaning the screens just to keep the pumps operating – which increased downtime for the reclaiming system while unduly taxing the maintenance team whose services were often needed elsewhere.

#### **Solution**

Challenged to improve the liquid-solid separation process in the wash water reclaim system's recirculating water supply, Garratt-Callahan engineers settled on the company's Formula 7273 flocculant. They then arranged to have it fed into the system on the discharge side of the main recirculating pump. This injection point allowed for thorough polymer dissolution and sufficient mixing with the untreated wash water resulting in dense floccules that settled quickly in the first settling basin – and greatly enhanced the clarification rate of recirculating water in the wash water reclaim system.

#### **Results**

By extending the time between pump screen cleanings, Garratt-Callahan's solution reduced maintenance time on the wash water reclaim system from ten hours to two hours per week, saving the concrete mixing plant approximately \$5,200 annually. The extra up-time also enhanced all-around efficiency and productivity at the plant. And since the clarified wash water is now free of suspended and abrasive silt and concrete fines, the company can expect longer service lives from their wash water pumps.

#### **Conclusion**

Drawing on its extensive product line and the broad experience of its engineers, Garratt-Callahan creates cost-saving, performance-enhancing solutions to all kinds of industrial water treatment problems.

**Garratt-Callahan: The clear leader in water treatment solutions.**