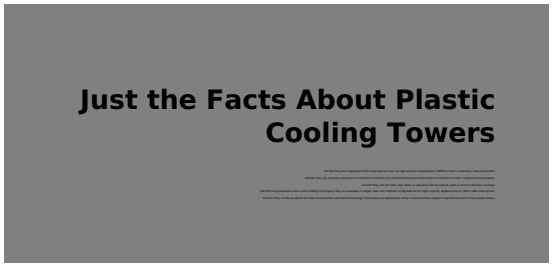
Manufacturer ofBleachKeeps CoolWith EngineeredPlastic Towers

Relying on metal cooling towers can be catastrophically expensive if a failed or leaking tower shuts down a process. That's why many industries are converting to engineered plastic cooling towers



It's a tough world out there, especially in production areas that involve harsh chemicals or corrosive environmental elements such as coastal air. It's no small wonder that galvanized metal cooling towers are often problematic, requiring frequent cleaning, patching, and early retirement.

When it comes to handling the heat generated in the chemical and other process industries, taking a cooling tower offline due to pH problems, scale, leakage, or unplanned cleaning can be disastrous, delaying production and shipments for days or even weeks. Plus, maintenance costs for those often unnoticed-yet-critical towers, such as water treatment, filtration equipment, and manual cleaning, can certainly add up. Water deposits that coat or foul heat exchangers can cause far more expensive problems including lowering process efficiencies or damaging production equipment.

The process interruptions and expensive maintenance of traditional metal clad cooling towers have increasingly led manufacturers and process industries down another path &#151 the engineered plastic cooling tower. Engineered with tough plastics such as high-density polyethylene (HDPE) to form a seamless, heavy-wall shell, today's more advanced plastic cooling towers are virtually impervious to the harsh chemical, pH, and environmental factors that are the bane of their metal-clad counterparts.

Yet, although engineered plastic cooling towers have been around for several years, their toughness and other performance attributes have gone unnoticed by many plant managers. That may be, at least in part, to the fact that they perform so well that their owners take them for granted. However, for chemical producer Allied Universal Corp. in Miami, that is not the case.

"If a cooling tower goes down, we lose production, and it can adversely affect our delivery schedules," says Jim Palmer, Allied Universal president. "We have a very corrosive and tough environment to have any type of equipment. And even though

the cooling towers are not in direct contact with our products, they are exposed to corrositivity in the air."

Allied Universal is the leading U.S. manufacturer of sodium hypochlorite (bleach), liquid sodium bisulfite, sulfuric acid, hydrochloric acid, and swimming pool acid. With plants in Florida, Georgia, Mississippi, Arkansas, and Arizona, the firm has been using engineered plastic cooling towers for approximately 15 years with highly reliable results.