HandiChem System Solves Poultry Processing Plant Water Treatment Problems

Problem
A poultry processing plant in the Southwestern U.S. was experiencing severe problems in their 3,500 ton ammonia refrigeration system due to poor water treatment practices. Since the evaporative condensers were on the roof, a liquid program was considered impractical by plant personnel due to accessibility concerns. Instead, a “pulsed power” non-chemical device was used to treat one of the seven evaporative condensers, while the remaining six systems were only treated by heavy manual bleed. These practices were ineffective and heavy scale deposits formed on the evaporative condenser tubes, resulting in high condensing pressure and increased energy costs. Severe corrosion also occurred, which significantly reduced the lifespan of the evaporative condensers.

Analysis
Plant personnel were concerned about safety/handling requirements associated with transporting and storing liquid water treatment chemicals on the roof. Limited space for drum storage was also an issue. However, the high maintenance and operating costs associated with the current ineffective water treatment practices, along with the potential for production losses, begged for a better solution. To address these concerns, Chem-Aqua recommended the HandiChem System.

Solution
The plant implemented the HandiChem System, which has provided an effective and reliable water treatment program to help remove energy-robbing scale deposits from the condenser tubes while also controlling corrosion to extend the system’s life and reliability. The HandiChem System’s simplicity of use

• Reduced splash and spill concerns
• Eliminated drum handling, storage, and disposal
• Proved ideal for this hard-to-reach rooftop location

The HandiChem Solid Water Treatment System provided an innovative and effective water treatment program that solved a difficult handling, space, and storage issue for a hard-to-reach location.