



FOOD INDUSTRY

Garratt-Callahan Meets a Unique Water Treatment Challenge With a Customized Solution That Saves Time and Money

Problem

At its plant in the southeast, a major producer of prepared meat products uses several evaporative condensers to chill both ammonia and cooling jacket water for refrigeration and packaging machines. With no flow pressure other than gravity, the heat transfer surfaces are prone to build up layers of scale that precipitate out of the water. In addition, copper cooling coils in the plant's packaging machines require that the water be treated with copper corrosion inhibitors. When the local water district required the elimination of all molybdenum from the plant's discharge water, the plant managers turned to Garratt-Callahan to come up with a new approach to their unique water treatment needs.

Solution

Garratt-Callahan's product development laboratories modified the company's Formula 2300, which is designed for use in galvanized evaporative condensers, adding a copper corrosion inhibitor. The result, called Formula 2310, provides both high-performance scale control and copper corrosion control – and it meets all the plant's discharge water quality requirements.

Results

Within a very short time, inspections of an ammonia refrigeration compressor and a condenser at the plant showed significant improvements, with reductions in both scale and copper corrosion. Instead of needing to be cleaned once a year or more – a job that required shutting down each tower for at least a day – the cooling towers are now performing trouble-free, and for far less in fuel and maintenance costs. The plant operates without fear of water district fines. And Garratt-Callahan's Formula 2310 is being adopted by other customers with similar water treatment requirements.

Conclusion

Combine expertise and experience like Garratt-Callahan's with the company's proactive, can-do attitude, and no water treatment challenge is too great. Just as in this case, Garratt-Callahan often delivers custom solutions that go beyond serving a single customer to advance the entire water treatment industry.

Garratt-Callahan: Setting new standards in water treatment solutions.