



BELL AND EVANS CASE STUDY

01. PROJECT OVERVIEW

Bell & Evans, America's oldest chicken company, is a 5th generation family-owned and operated business. Founded in 1894, Bell & Evans has evolved into the most trusted chicken processor in the U.S. and continues to be a pioneer in the poultry industry.

Outgrowing its former facility, Bell & Evans expanded operations and built a 411,500 square-foot organic-certified chicken harvesting plant. As Bell & Evans transitioned to the larger facility, its aim was to achieve top efficiency in water heating to maintain overall plant sanitation with eco-friendly systems.

Bell & Evans has utilized Kemco equipment and services for more than 10 years in their processing plants and hatcheries. The companies have established a beneficial relationship of trust and service. Kemco supplied a fully integrated cost-effective water heating systems to fulfill Bell & Evans new plant requirements.

WATER & ENERGY SOLUTIONS

redefining efficiency since 1969

02. SOLUTION OVERVIEW

Kemco installed five direct gas thermefficient-100 (TE-100) water heaters each outfitted with a control panel housing the motor starts for the combustion air blower and a variable speed drive for the heater discharge pump. In addition, the system is designed with a programmable logic controller for monitoring and controlling system events.

The patented oxygen stripping direct contact water heaters are rated at 9.90 MMBTU per hour. Each heater is capable of heating 198 GPM water from 40°F to 140°F with a combined capacity of 990 GPM. Stack temperature from the heaters will not reach more than 10°F above inlet water temperature when heaters operate at design conditions and in accordance with operating procedures.

03. RESULTS

Kemco was chosen for this installation compared to competitors due to the TE-100 water heaters achieving a fuel efficiency rate of 99.7%. The TE-100 heater functions conserve water, reclaim wastewater heat energy and eliminate the need for steam to support Bell & Evans green initiatives. Working in conjunction with Stellar Engineering, Kemco direct water heaters will significantly reduce CO2 emissions, greenhouse gases and energy needed in the processing plant.

