

# Pick Heaters, Inc

## The Comprehensive Industrial Liquid Heating Systems Provider

**F**ood safety is one of the most important issues within meat and poultry processing plants due to the potential for cross-contamination, foodborne illness, and accelerated spoilage. Proper sanitation procedures are paramount to ensure the quality of food products. Traditionally, indirect heat exchangers and large storage tanks have been used to heat water for sanitization purposes across all areas of a plant. However, these methods have several drawbacks ranging from inefficient heat transfer, difficulty cleaning, and extensive maintenance procedures. Also, many of these systems take up enormous space, making it suboptimal for plant sanitation and other related purposes. Offering a superior alternative to heat exchangers is Pick Heaters with its advanced direct steam injection (DSI) systems. "Throughout the plant, from process heating to plant sanitation to in-line product cooking, Pick Heaters provides instantaneous, unlimited hot water at a precise temperature," states Phil Sutter, president of Pick Heaters.

With Pick DSI, medium to high pressure steam is effectively blended into the process fluid, resulting in 100 percent heat transfer with full use of both the latent and sensible heat energy. To heat liquids, steam is dispersed through precisely arranged orifices in many fine streams, promoting rapid mixing and instantaneous heat transfer. Pick's unique and advanced DSI heaters are compact and, thus, eliminate the need for large storage tanks. As a central heating system, it can accommodate wide variations in water flows and frequent start-stop applications, which is ideal for plant sanitation and clean up needs. In addition, the liquid pressure drop level does not exceed 1 PSI, and the sound level is usually 85 dBA or less. "When compared to tank steam sparging, or indirect heat exchangers, Pick DSI heaters can cut fuel costs as much as 28 percent because the system is 100 percent energy efficient," states Sutter. Another

strong suit of Pick Heaters is accurate temperature control to within 1 degree Celsius throughout the entire operating range. With over 70 years of experience in the manufacturing industry, Pick's products showcase a high degree of reliability, with many of its heaters operating for more than 10, 20, and

some even 30 years requiring very little maintenance. This is attributed to the robust design and operating principal of the heaters, which can be inspected quickly and easily. For food processing plants that want to operate their equipment non-stop for long periods of time with minimal downtime, Pick's DSI heaters help fill this niche. Further, Pick doesn't offer a one-size-fits-all product to its customers, each Pick DSI system is tailored according to specific customer needs in a compact engineered module. Sutter mentions an instance regarding a particular client that required



a better sanitation system than existing steam sparge pipes (crude pipes with drilled steam holes inserted into a tank). Due to the sparge pipes exhibiting steam hammer, uneven water temperature control and low efficiency, the client was unable to keep up with plant hot water cleaning demands and required maintenance repairs to the tank. Pick installed an external in-line circulating DSI system on the side of the tank to rapidly heat liquids by injecting steam directly into the water circulating loop. Consequently, the client was able to exercise complete temperature control of the liquid inside the tank and save on fuel and maintenance costs.

Aside from quality products, Pick's strength lies in its knowledgeable and dedicated workforce that possess decades of experience solving the unique application challenges of its various clients. Since 1945 Pick's DSI products have been subjected to a continuous flow of refinement and innovation. "This design philosophy has Pick at the heart of heating liquids in industries ranging from food to chemical and pharmaceutical processing, pulp and paper, textile to power plants," concludes Sutter. 