

CASE STUDY: FOOD PROCESSING



WWW.OMEGATHERMOPRODUCTS.COM

ROLLED LASER PLATE JACKET FOR KETTLE COOKERS

One of the main staples of equipment in industrial food processing is a kettle cooker. They offer the same capacity of cooking as on a stock pot but provide increased production and efficiency. They can be used for heating, stirring and mixing food. When an Omega customer decided to add kettles to their food service product line, they were looking at different options to heat the inside. After researching why steam heated kettles cook food faster, have larger heat surface areas, provide uniform cooking with no hot spots and have less food scorching, they reached out to Omega about our laser plates!

PROJECT OBJECTIVES

- › Maintain target temperatures
- › Provide uniform heating for heat sensitive products
- › Provide large heat surface area
- › Provide a high process performance

RESULTS

When a well designed steam kettle system is installed, increased process performance, improved product quality and hours of trouble-free operation can be expected. The customer sent Omega's engineering team specifications and drawings of a custom shaped horizontal kettle. The kettle needed a formed laser plate jacket that was dimpled and channelled to fit around the outside of the kettle to assure uniform heating



Industrial kitchen with two kettle cookers installed.

and/or cooling. By adding the single embossed ASME code stamped laser plate to the outside of the kettle, it provides 1-2 times more heat transfer area than a stock pot. The steam condenses on the product surface of the laser plate jacket and then it's heat is transferred to the product. It is insulated for operator safety and since it provides even heating and precise temperature control, less labor is needed for "pot watching". Cooking with the kettle also provides faster heat up times and uses less energy. With Omega's flexibility and custom-made plates, the customer is able to provide kettles in different sizes, shapes and heating capacities depending on what their end customer needs..



OMEGA THERMO PRODUCTS
STRATFORD, WI | PHONE: 715.687.8102
OMEGA@LASER-PLATE.COM