



## Tomato Sauce Cooking

### Objective

Eliminating safety concerns with direct steam injection from benefits such as low maintenance.

### End User

Tomato Sauce Producer

### Design Conditions

Fluid:	Tomato Sauce
Flow Rate:	25-75 GPM [6 m <sup>3</sup> /hr]
Inlet Temperature:	45°F [7°C]
Discharge Temperature:	195°F [91°C]
Steam Supply Temperature:	120-130 PSIG [8-9 barg]

### Process Challenges

This tomato sauce producer was using a competitor's 3-way steam valve heater with poor results. The unit had difficulty maintaining target temperatures, caused a loss of product due to burn-on, and consistently had issues with severe hammer and vibration. These issues caused concern over the piping's integrity and added extra maintenance time and costs.

### Solution

A Solaris® Hydroheater, designed for highly viscous fluids was installed and successfully replaced our competitor's 3-way valve heater. The straight-through flow design of the process steam heater minimizes flow disturbances and enables instantaneous condensation of steam without vibration or noise.

### Results

Target temperatures are reached quickly and held constant. The mill reports that the Solaris® handles the entire flow range with smooth operation. The safety concerns experienced with the other steam valve are non-existent with the Hydroheater®.