

Technical Project Notes **TPN15.09/07**

THERMOSAFE® replaces steam box in Resins/Latex Manufacturer

Project Review:

Company: Eliokem, Akron, Ohio USA
 Product heated: Soap ingredients



Requirement:

To improve efficiency, reduce energy use, and enhance personnel safety whilst improving the operating environment.

The original method of heating was to place the drums into a steam heated water bath. This was noisy, unsightly, and created a hot and undesirable area in the factory. There were safety risks as the operator had to reach over the tub to move drums in and out. The chance of a drum falling into the hot water and splashing an operator was a concern.



After a highly successful trial with a single Type “A” Thermosafe Induction Drum Heater and BF400 power controller, the Company purchased 8 sets to replace the hot box. Drums of soap with typically 150°F (65°C) melt temperatures would previously take 8 – 12 hours to melt, and sometimes the entire tub would be used for one drum.

With the new units, at just 60% of their maximum power level this was reduced to 6 to 8 hours. Substantial steam savings have been realized, and energy efficiency is further improved as drums are just individually heated as required.