



## CASE STUDY

### INDUSTRY: FOOD & BEVERAGE

**CUSTOMER:** Tootsie Roll Industries

**LOCATION:** Chicago, IL, USA

**BACKGROUND:** The heat content of flash steam, identical to that of live steam at the same pressure, is a valuable resource that shouldn't be wasted by being allowed to escape to atmosphere.

Tootsie Roll Industries clearly understood that every pound of steam saved is a pound that does not have to be produced by the boiler. As a typical example, when 500 lb/hr (45.3 kg/hr) of flash steam is lost to atmosphere for an entire year, the cost is roughly \$35,040 per year based on a steam cost of \$8/1,000 lbs steam produced.

**SCOPE OF WORK:** For Tootsie Roll Industries, maximizing its energy dollar through flash steam and heat recovery included an Armstrong International solution that was designed and engineered specifically to meet their needs.

By replacing its former, inefficient equipment with the Armstrong flash steam and heat recovery solution to manage their condensate, Tootsie Roll began realizing greater energy efficiency immediately.

**BENEFITS:** In addition to eliminating flash steam loss so that valuable energy is no longer being sent up the vent pipe, Tootsie Roll is also utilizing flash steam to heat process water - at 100 gallons per minute (378.54 L/min) – to drive additional energy efficiencies within their facility.

