SensoryEffects by Balchem, Sleepy Eye



Wesley Graham

Mechanical Engineering, University of Iowa Matt Domski, MnTAP advisor

Organization

The SensoryEffects by Balchem plant in Sleepy Eye manufactures dry ready-to-eat powders for clients all over the United States.

Intern Project

Conserve energy and reduce waste at the dry powder manufacturing plant in Sleepy Eye.

Incentives to Change

SensoryEffects by Balchem wants to be environmentally responsible by conserving energy and reducing wastes. This will allow the company to stay competitive and be able to adapt to new regulations as well as rising costs of materials, labor, and waste disposal.



Solutions

Reuse Pasteurizer Cooling Water

Sending water used to cool pasteurized products to the scrubber tank will reduce water use and help increase the temperature of the scrubber tank water.

Solenoid Valves

Automatically turning on and off water sent to cool the homogenizer and high pressure pump will reduce water unnecessarily run during downtime.

New Foot Mats

Replacing the foot mats will lead to less sanitizing powder that ends up being wasted in the space between the knobby protrusions.

