

## University of Minnesota

# Natalia Kaliszewski

### **Project Abstract - Post Consumer Brands**



#### **INTERN**

#### Natalia Kaliszewski

Senior in mechanical engineering at the University of Minnesota - Twin Cities

#### PROJECT FOCUS

Energy

#### **ADVISOR**

**Brent Vizanko** 

#### **COMPANY**

**Post Consumer Brands** 



#### **COMPANY DESCRIPTION**

Post Consumer Brands' Malt-O-Meal facility in Northfield, MN is the largest ready-to-eat cereal manufacturing plant in the United States. Multiple production lines utilize steam as part of the manufacturing process of cereal and compressed air to operate multiple variations of production equipment.

#### **INCENTIVE**

The focus of this project was on improving the energy efficiency of the boilers and compressed air system. In addition to energy and cost savings, there is an incentive to produce electricity on-site due to power reliability concerns.

#### APPROACH / FOCUS OF RESEARCH

Data from the boiler system was analyzed and upgrade options were identified. Research was then conducted into these upgrade options including multiple replacement strategies and an in-depth look at combined heat and power options to increase power reliability. A secondary focus area was optimizing compressed air use throughout the facility with research into baghouse efficiency and packaging equipment alternatives that don't use compressed air.