

**Project Overview**  
**Square D Company**  
**Lincoln, NE**



**Intern:** Nathan Roberts  
**Major:** Industrial Engineering  
**School:** University of Missouri-Columbia

## **The Company**

Square D Company, a division of Schneider Electric, manufactures and supplies electrical distribution, industrial control, and automation products, systems and services. The plant in Lincoln, Nebraska has been in operation since 1971 and its primary product is miniature circuit breakers. The molding department at the Lincoln facility produces a high volume of thermoset injection molded parts, casings and handles for circuit breakers and related items. The molding department supplies both in-house operations and Square D affiliates in Thailand, Mexico, and other locations in the United States.

## **Project Description**

An assessment of the thermoset molding compound waste produced in Square D's molding department was conducted in the summer of 2006. The goal of this project was to reduce the amount of thermoset waste sent to the landfill each year by launching a recycling or reuse program. Activities included calculating the amount of waste generated, identification of and a comprehensive investigation into alternatives.

## **Pollution Prevention Benefits and Results**

The following alternatives were identified and investigated:

1. Size reduction of thermoset compound waste before being sent to the landfill
  - Reduction of 40% of the bulk volume sent to the landfill
  - No cost savings
2. Mechanical recycling of BMC thermoset compound with supplier
  - Potential 74% reduction in thermoset waste sent to landfill
  - Savings on material purchased
3. Reuse of thermoset scrap regrind as blast media
  - Potential 33% reduction of plastic blast media purchased and sent to the landfill
  - Ascetic, work environment, and process concerns identified