



## Information

**Components Insulated:**  
Rotary dryer

**Annual Energy Savings:**  
400K Therms  
40B BTUs

**Solutions:**  
Removable panels  
Hot Side: Vermiculite/fiberglass, silicone  
Cold Side: Silicone fiberglass

**ROI:**  
20 months  
400K Therms

## Modular Removable Rotary Dryer

### Background

When a major food and pet care manufacturer first opened their new facility in southeast Missouri in 2021, they were faced with sustainability goals set by the corporation that what felt like a monumental challenge. Meeting these goals meant attempting to insulate their rotary dryer. This was difficult for many reasons, including that: 1) it is an enormous piece of constantly moving equipment; 2) that is outdoors; 3) without a uniform surface temperature, and 4) includes several protruding pieces that needed to be accounted for when installing insulation. Additionally, there were many safety issues that needed to be considered when implementing an insulation solution. The combination of these factors resulted in was insulation that wouldn't stay in place and wound up bunched up on one end, eventually having to be removed completely.

By the time Thermaxx was brought on board, they had already become a trusted partner, working with one of the company's other facilities complete a custom energy savings project. Thermaxx's proven track record as an expert in custom removable insulation solutions gave the company hope that there might still be a workable solution to their rotary dryer project.

# A first-of-its-kind modular, removable, rotary dryer insulation solution

## Project Overview

Thermaxx's Alex Unger went on site to take detailed photos of the equipment that corresponded to drawings provided by the manufacturer. They then leveraged their in-house expertise and technology to develop a first of its kind custom modular removable, serviceable, and reusable insulation jacket.



This innovative approach made the installation process quick and relatively painless for the facility, as it was completed over a weekend using only a boom lift. The modular design also makes servicing the dryer easy, as only small parts of the entire insulation jacket need to be removed to access the dryer. Additionally, putting the insulation back on is using a combination of hook and loop (i.e., Velcro®), straps, and D-rings.

## The Thermaxx Difference

- Expert field team and mechanical insulation designers that use a unique combination of knowledge, technology, and artistry to create custom solutions that meet their customers specific needs.
- Top quality materials suited to specific use case including exposure to UV and moisture as well as hygiene concerns
- Production process that is ISO 9001:2015 certified
- An industry leading 5-year warranty on all installed products
- They make it easy for you, turnkey service includes project management of installation, leaving you and your team with bandwidth to continue to do your best work
- Minimal impact to production, 90% of install was completed in a single weekend

**Need help with your unique insulation or energy savings project? We're here to meet your facility's needs. Reach out to Rose Titcomb at [rtitcomb@thermaxx.es](mailto:rtitcomb@thermaxx.es)**