

# KAISHAN AND IOWA PUMP & COMPRESSOR SAVE MANUFACTURER \$122,000 ANNUALLY AND END MAINTENANCE “NIGHTMARE”



## CLIENT

Unverferth Manufacturing Co.

## LOCATION

Shell Rock, IA

## THE SITUATION


Unverferth Manufacturing Co. makes grain handling equipment, sprayers, nutrition applicators and dry fertilizer. The company’s plant spans 14 acres and employs 500 people. Compressed air is the primary driver of the powder-coating and press departments, so operations grind to a halt when the compressed air system isn’t working.

## THE CHALLENGE

The company was growing rapidly, adding new capabilities and expanding into a new building. But, admittedly, no one was in charge of the compressed air system’s current and future needs. The company had five compressors from different manufacturers serving various functions in the plant, according to Kevin Van Mill, Maintenance Supervisor. As they added new equipment or increased demand for compressed air, they simply bought a new compressor. “Every time we’d run low on air, we just added another one,” Kevin said. There were occasional shutdowns as the compressors, which weren’t adequately ventilated, overheated. Variable-speed drives burned up. Summer was the worst. “We were just constantly dealing with issues,” Kevin said. “It was a nightmare.”

## THE SOLUTION

A subcontractor suggested that they have an air compressor professional conduct an audit, Kevin said. He recommended Steve Rasmussen from Iowa Pump and Compressor in Waterloo, IA. Steve conducted the audit and recommended that Unverferth deploy two 150-HP Kaishan KRSD direct-drive rotary screw air compressors, one of which is equipped with a variable-speed drive. He proposed organizing the units in a three-compressor configuration, using the VSD-equipped unit as a trim compressor and the other 150 as the base unit. One of the existing units serves as a backup. They also added a 30-HP KRSD direct-drive rotary screw air compressor to cover the much smaller workloads over the weekend.



UNVERFERTH MANUFACTURING ADDED TWO 150-HP KRSD ROTARY SCREW AIR COMPRESSORS TO SUSTAIN ITS GRAIN HANDLING, SEED HANDLING, TILLAGE EQUIPMENT AND FERTILIZER APPLICATION BUSINESS.

## THE RESULTS

### 1 \$122,000 IN ANNUAL SAVINGS

The new rotary screw air compressors produced significant savings for Unverferth:

- \$67,000 in electricity costs
- \$35,000 in heat recovery savings
- \$10,000 in maintenance
- \$10,000 in rentals

### 2 GUARANTEED RELIABILITY

Kevin admits to some skepticism about smart factories and advanced control systems. But he is pleased with the way the Kaishan rotary screw air compressors work in tandem to ensure his plant has adequate supply. And great reliability. "When one is in standby long enough, it just shuts down and then starts up on its own," Kevin said. "It doesn't require somebody to run down and turn it on. It just takes care of itself. So that was pretty important."

### 3 RELIEF FROM THE NIGHTMARE

Kevin is pleased with the new system. "Once we were established with Steve and Kaishan, it was a relief for me because it took a ton of daily tending we just don't have to do," Kevin said. "It's just a good product. I have nothing but good things to say about it." And it's much quieter. "You can't even compare," Kevin said. "The other ones were so loud."

### 4 A GREAT PARTNERSHIP

Kevin and his company are thrilled with the relationship they've built with Kaishan and Iowa Pump and Compressor. "Steve's a 24/7 kind of a guy," Kevin said. "I'll take a picture of a fault or alert, and he goes, 'Oh, okay, we'll be out and take care of that.' Or 'That's not something you need to be worried about, so you can let it ride.' I have so much confidence in his organization right now, it's crazy."

**UNVERFERTH GAINS BIG SAVINGS, ENDS NIGHTMARES ...  
AND HAS SO MUCH CONFIDENCE, IT'S CRAZY.**

