

# PERFORMANCE STUDIES

Field Reports from Cook Compression

MANUFACTURING  
REPORT #119

## Next-day Piston Rod Production Restores Plant Operation

### SCENARIO

Emergency outages can test not only the capabilities of plant personnel, but also the abilities of the companies they rely on for products, services and technical support. Cook Compression recently faced a critical situation that displayed the company's resourcefulness and willingness to "go the extra mile."

A fertilizer manufacturing plant in Kansas experienced a major component failure forcing the shutdown of a Dresser-Rand HHE compressor in CO<sub>2</sub> service. With no spare on site, the outage resulted in a large portion of the plant's operations being shut down.

### SOLUTION

Cook Compression received the call for help and resolved the customer's problem by the next day. Following is a recap of events:

#### Thursday:

- At the fertilizer plant, a second-stage piston rod snaps into two pieces during operation. The rod is part of a 12-inch piston and rod assembly.
- Plant personnel contact the Cook Compression Service Center in Oklahoma City, where the plant's spare piston rod assembly had recently been received for repair.
- Cook personnel discover that the spare rod is cracked and must be condemned.
- Plant personnel place a "hot" order for a new piston rod.
- The Cook Compression Service Center in Odessa (TX) manufacturers and induction hardens a new rod overnight.

#### Friday:

- At 9:30 am, the new rod leaves Odessa on a "hot shot" carrier.
- The rod arrives at the Cook Compression Service Center in Oklahoma City at 5:30 pm.
- The rod is assembled with the piston, rings and riders.
- The new assembly is delivered to the customer in Kansas before midnight.

### RESULTS

The quick turnaround on this project demonstrates the depth of resources available through the Cook Compression network of manufacturing and service centers, as well as the dedication of Cook personnel to respond when customers need them most.

The fertilizer plant manager acknowledged Cook's performance and thanked all involved for their exemplary service.

**For more details about Cook capabilities, contact your Cook Compression representative or visit [cookcompression.com](http://cookcompression.com).**



Induction hardening a piston rod at the Cook Compression Service Center in Odessa, TX.



Cook engineers and manufactures rods that perform reliably and deliver lasting value.



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