

## Specialty Machine Builder Improves Overall Performance

### CUSTOMER

In designing and manufacturing machines to fabricate, press, size, weld, join, straighten, or cut, specialty machine builders often need to get greater performance and improved accuracy to meet their customer's specifications. These innovative solutions are used in warehouse automation as well as automotive and aerospace industries.

### APPLICATION

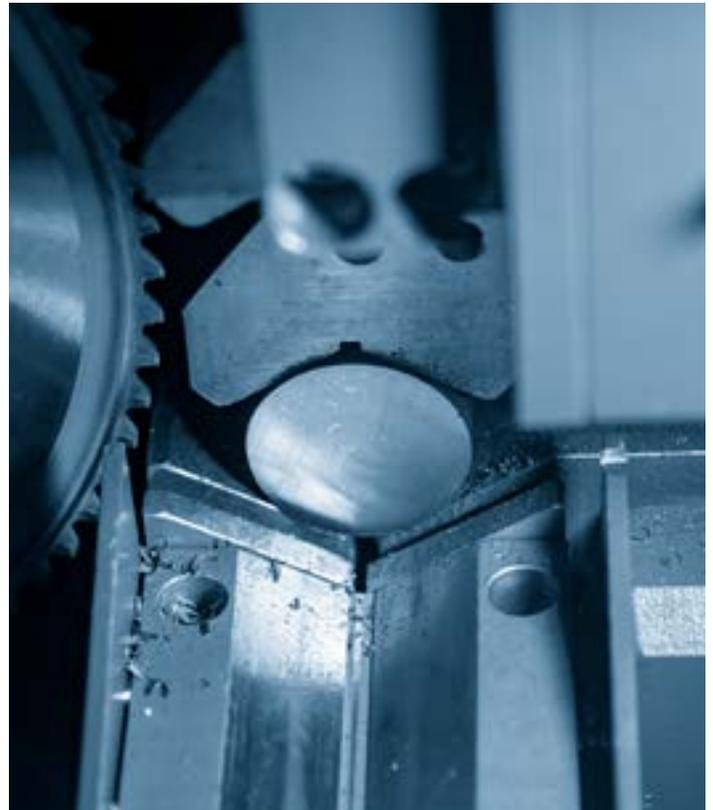
Steel shaft bars consisting of different steel compositions, 24 to 30 feet long with varying diameters, are used in telehandlers, skid steers, and lift trucks. Hydraulic presses are often used to straighten these rods but can be problematic because of the maintenance and downtime required. The application demands the actuator travel along the rod and apply high force in 4 to 6 locations, as needed, to straighten the rod.

### CUSTOMER CHALLENGE

In tailoring a solution for their customer, several requirements were considered. The entire machine needed to operate effectively, meeting desired accuracy and repeatability standards. Acceptable tolerances (.005 in) in straightening the rods were difficult to achieve, especially utilizing multiple material changes.

### SOLUTION

The FTP Series actuators were chosen and boast forces up to 356 kN (80,000 lbs) giving it the power and precision needed to press the steel rods effectively. The high performance and repeatability of the actuator has been consistent. Other factors that influenced the customer's



decision were Exlar's industry experience, the FTP Series programmability and long life, as well as the support offered by our local distributor.

### RESULTS

The Exlar FTP215 significantly reduced the twisting and flexing associated with bent bars in lift trucks. The machine builder and their customer were both happy with the results.