

## Hydraulic Ram Repair

### PROBLEM

This hydraulic cylinder on an automotive assembly line hoist was scored and pitted causing loss of hydraulic oil, efficiency, and a hydraulic fluid puddle that could lead to a potential slip/fall to a coworker.

Originally, the plant was looking to repair the hydraulic cylinder that would cost them over \$20,000.00 for the repair and result in a minimum loss of two weeks of production costing millions of dollars in downtime.



### SOLUTION

The Unconventional Solutions, Inc. technical consultant recommended **RESIMETAL 101 Metal Repair Paste**.

The area was degreased with **USI Universal Cleaner** and the rods were heated to “sweat out” and absorbed oil. After another cleaning with **USI Universal Cleaner**, a series of holes were drilled along the score marks to add surface area along with “V” out for proper adhesion.

**RESIMETAL 101 Metal Repair Paste** was applied, and a profile template was used to remove excess material. After curing, the original profile was restored with wet emery paper. The entire repair process was completed in six hours and was ready for production the following Monday, resulting in minimized downtime and significant savings over a complete ram replacement. The repaired hydraulic ram was used for 5 years and was still in use when they shut down the plant.

### SUBSTRATE

Metal

### PRODUCTS USED

[USI Universal Cleaner](#)

[RESIMETAL 101 Metal Repair Paste](#)