



## Pickle and Oil

### Benefits

-  Remove scale from the heat-treating process
-  Remove rust/contamination to improve post processing appearance and oil

### Process

#### Stage 1 – Pickling:

The purpose of pickling is to remove contaminants from the surface of the steel such as scale, stains, or rust. Sulfuric acid is commonly used for its high rate of corrosive properties. The acid will attack the steel surface creating soot and will leave the surface of the steel texturized for post processing.

#### Stage 2 – Oiling:

Elevated temperature oiling of the pickled surface will displace any water from the etch surface of the steel. By doing so the surface will not have a chance to initiate any rust underneath the oil. The hot oil once removed will dry onto the steel allowing for a film of rust preventative.

### Materials

The pickle and oiling process is best suited for low carbon steel, plain carbon steel, medium carbon steel, alloy steels, and cast irons.

### Applications

-  Crankshafts
-  Gears
-  Transmission components
-  Connecting rods
-  Gas valve bodies
-  Pistons
-  Sockets