

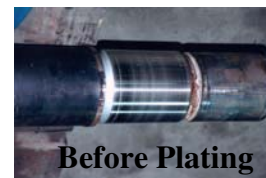
# Bearing Journal Repair

## Resize Worn or Mis-machined Bearing and Seal Areas

Selective plating is a portable process that can be used both on-site or in the shop to apply engineered deposits onto localized areas with precise thickness control.

Deposits from 0.0001" to 0.030" are quickly and uniformly applied onto shafts ranging in size from as small as 1/2" to 15' in diameter – and without the use of an immersion tank. These deposits have excellent adhesion and performance properties that will meet or exceed that of the base material.

The SIFCO Process has been used for forty-three years to resize worn bearing and seal areas on shafts in a variety of industries that include Pulp and Paper, Steel Mills, Power Generation, and Printing.

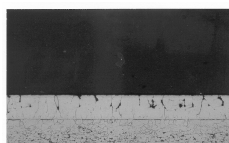


Before Plating



After Plating

Deposit	Use	Hardness	Compressive Yield Strength	Buildup Rate
Copper	As a base for buildups >10 mils, or when grinding is not possible	141 Hv	70,500 psi	0.023"/hr
Nickel	For initial buildups <10 mils, or as a cap for a high thickness copper deposit.	585 Hv	n/a	0.047"/hr



Nickel Code 2085  
Magnification 200X



Two layers of Copper Code 2050  
Magnification 50X

### In-Place Repair of Journals on a Minster Press

The advantage of a brush plating repair on worn bearing journals of a Minster Press is that it drastically reduces the production downtime compared to other repair options such as welding, flame spray, and tank plating. All of which require disassembly and removal from the machine. A brush plating repair can be carried out completely in as little as one day, whereas other options will require complete disassembly and removal of the shaft and a week or more to repair and reinstall it.

A typical repair (*right*) involves plating two 4"OD x 1.125"L bearing diameters on the outboard end of the crankshaft with a hard nickel deposit. Deposit thicknesses of up to 0.030 are practical and economical for in place repair.

