

Metal Component Repair Services

The SIFCO Process® of selective plating can be used to plate, anodise and electropolish without using an immersion tank. In past years, our versatile process has been successfully used in thousands of repair and OEM applications over a wide range of industries.

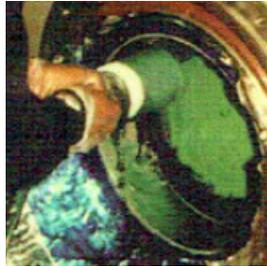
Common applications for the process are:

Resizing...

Components that are out of dimensional tolerance due to the wear or corrosion can be restored to factory original dimensions.

Resize Bearing

An internal bearing diameter was 0.002" out of tolerance. A nickel deposit was applied, restoring the part to original dimensions.



Rebuilding...

Components that have been damaged (dents, gouges, grooves, etc) or mismachined can be repaired and resized.

Rebuild Flange

The flange on this cast iron housing was mis-machined by 0.005". Nickel was used to rebuild the surface.



Resurfacing...

Our process can restore or improve surface properties such as electrical conductivity, corrosion resistance, hardness, and wear resistance

Resurface Bus Bar

Non-Cyanide Silver was applied to this bus bar to improve conductivity.



Onsite Repairs...

The SIFCO Process® is portable, so we can perform the service at your facility or our service shops. Our range of 100+ different deposits of pure metals, alloys and anodised coatings can be applied to virtually all common metals and alloys.

Our experienced technicians have the mechanical, metallurgical, and chemical skills to answer your questions and help with special problems. Before you scrap or replace your metal component - or finalise the design of your OEM product - call us to discuss your application.



Steering Shaft from an articulated loader used at the Tauranga Wharf.

The shaft was removed for seal replacements and maintenance. We filled the wear marks and damaged areas with copper and then capped with nickel cobalt to the original diameter.

This gives the repaired area a very hard and none porous finish, ready to go back into service the same day.

Approved

through numerous commercial, industrial and military specifications

Portable

alternative when a stationary part is too difficult or costly to move

Process

with excellent adhesion and little or no need for finishing

Provides

coatings on pure metals, alloys and anodising plus hard chrome

Pinpoint

localised plating, electropolishing and anodising without excessive masking

Plating

you can count on anywhere, anytime

Experience in All Major Industries

✓ Printing Industry

Purpose:

- Restore surface
- Improve appearance
- Resist corrosive atmosphere
- Cut disassembly costs
- Copperizing
- Defect repair

Components:

- Plate cylinder
- Ink drums
- Blanket roll cylinders
- Guide rolls
- Saddle
- Housings

✓ Machining & Machine Tool Industry

Purpose:

- Repair machining errors
- Reduce seizing/scuffing
- Improve surface hardness
- Corrosion protection
- Resist foreign particle action
- Provide minute surface porosity

Components:

- Gear box bores
- Mis-machined diameters
- Bearing housings and Journals
- Grinding roll journals
- Hydraulic press sleeves
- Pillow blocks

✓ Aerospace & Aircraft Industry

Purpose:

- Repair corrosion damage
- Restore design size
- Correct machining errors
- Repair scoring
- Resize worn areas

Components:

- Shafts
- Spacers
- Landing gear parts
- Vanes
- Engine cases
- Wing spar
- Nozzle supports

✓ Mold & Die Industry

Purpose:

- Resizing for dimension
- Repair worn areas
- Reducing product size
- Enhance mold release
- Prevent acid attack
- Improve corrosion resistance

Components:

- Parting lines
- Gates
- Cavities
- Ejection pins
- Stripper rings
- Molding screens

✓ Navy & Commercial, Hydraulic Rams & Marine Industry

Purpose:

- Repair corrosion damage
- Restore design size
- Correct machining errors
- Repair scoring
- Resize worn areas

Components:

- Hydraulic cylinders
- Reduction gears
- Pump impellers
- Hull fittings
- Steam valves
- Casing flanges
- MG sets
- Bearing areas

✓ Power Generation & Distribution Industry

Purpose:

- Repair corrosion damage
- Restore design size
- Correct machining errors
- Repair scoring
- Resize worn areas

Components:

- Commutators
- Circuit contacts
- Generator components
- Bus bars
- End bell housings
- Armatures
- Turbine components
- Valve Components