

# Marine Applications

## Pumps & Motors

Resize bearing diameters  
 Repair worn commutators  
 Repair impeller diameters



## Hydraulics

Repair damaged pistons and rods



## Valves

Repair worn/damaged packing area on stems  
 Repair damaged seats

## Propulsion

Repair/resize worn bearing areas on main propulsion shafts  
 Repair worn grounding areas  
 Resize bearing saddles and supports  
 Repair steam cuts and erosion damage in casing flanges  
 Repair damaged or out of tolerance cylinder block liner bores  
 Resize out of tolerance crankshaft diameters

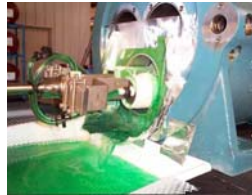
## Seal Areas

Repair pitting in "O" ring grooves  
 Repair damaged flange faces



## Applicable Specifications/Process Approvals

AMS 2451  
 Mil-Std 2197(SH)  
 NAVSEA  
 American Bureau of Shipping  
 Korean Registry



## Typical Deposits Used in Marine Applications

Copper Code 2050  
 Nickel Code 2085  
 Nickel Code 7280  
 Cobalt Code 2043  
 Silver Code 3084



## Refer To Application Exchanges

95005, 98033, 20109, 20403

## Refer To Technical Service Bulletins

81006 and 82005

- In-Situ Repairs
- Reduce Downtime
- Reduce Teardown & Shipping Costs
- Reduce The Need For Post Plating Machining
- Make Permanent Cost Effective Repairs

## Adhesion Of SIFCO Process Deposits

By using ASTM C633-79 Standard Test Method for Adhesion or Cohesive Strength of Flame Sprayed Coatings, SIFCO ASC established values for adhesion of SIFCO Process deposits which indicate that the cohesive strength of the deposit exceeds that of the cement. For example, the minimum tensile strength value established (at the point of cement failure during testing) for Nickel High Speed is 22,803 kPa (11,200psi) on a SAE 4130 steel base material.

Additional qualitative tests, as described in QQN 290 were conducted in which the plated areas were subjected to high stresses and strains. These tests consisted of compressive and tensile bend tests as well as chisel tests into the deposit. The results showed excellent adhesion to the base material.



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