Nickel (SRP-55)
PRODUCT SPECIFICATIONS

CAPE COATING

SRP-55 deposits have a nickel-phosphorous alloy that is deposited by means of an autocatalytic reduction of metal from solution without the use electricity. SRP-55 coatings are noted for the following properties: Coating is uniform homogeneous and amorphous, semi-bright Electroless nickel process with high phosphorous.

SRP-55 is a high-performance Electroless Nickel, designed to protect steel parts used in multiple applications in the oil and gas industry. Its superior hardness, corrosion resistance, heat resistance and thin mil application allows for parts to be 100% protected. SRP-55's versatility makes it an excellent choice for protecting steel parts and lowering operating expenses.

Additional Information:

Recommended Services:
• CO_2 injection (WAG)
• Oil / water / gas production
• Salt water disposal (SWD)
• Gas production
• Brine water remediation

Benefits:
• Excellent flexibility
• Excellent temperature resistance
• Excellent corrosion resistance
• Excellent wear resistance

Characteristics:
• Color: Dull silver
• Generic type: Electroless Nickel
• Operating temperatures: 450°F (232°C)
• Thickness: 1 mils as deposited

Technical Specifications:
• Hardness : 48-52 Rc as plated
• Phosphorous Content : 10-12.0 wt. %
• Internal Stress : Compressive

Coating Capabilities:
• Fittings
• Valves
• ESP stages
• Downhole tools

Typical Engineering Properties of SRP-55

Property		ASTM	Value
Hardness (As plated) Rockwell Hardness (Heat treated) Rockwell	750°F for 1 hour		48 - 52 62 - 68
Taber wear index Taber wear index – Heat Treated	Mg/1000 cycles Mg/1000 cycles	D-4060 D-4060	18 – 22 10 - 15
Coefficient of friction – vs steel (dry) Coefficient of friction – vs steel (lubricated)			0.38 0.20
Thermal spray hours – 1 mil Corrosion Resistance Ductility	Exposure to various corrosive environments	B-117 D-4060 B-571	1000 50 Pass

These test results are presented as simulated conditions and should be used as guidelines only; they are not intended for warranty serviceability.