THE PROPERTIES

CORROSION RESISTANCE — Electroless Nickel is a barrier coating with excellent resistance to chemical and corrosive attack by all but the most severely oxidising agents. Tests to ASTM-B117 show Neutral Salt Spray corrosion resistance up to 1000 hours.

HOURS TO FAILURE

HIGH HARDNESS — A typical hardness of electroless Nickel, as deposited is in the range 450-480 H.V. (46-48 Rockwell C.) However, the deposits can be precipitation hardened by heat treatment at 400°C for one hour, to 800-950 H.V. (64-68 Rockwell C.) This heat treatment will also improve adhesion and wear resistance.

RELATIONSHIP WITH HEAT TREAT TEMPERATURE FOR NICKEL PHOSPHORUS COATINGS

LOW COEFFICIENT OF FRICTION — The Phosphorous content of Electroless Nickel provides natural lubricity and helps minimise heat build-up, reducing galling and scoring. : 9 of 0.13 lubricated (0.14 dry) proves the excellent frictional properties, being approx. one half that of steel. This allows extensive use for machinery and Automotive componentry, where friction is a problem.

UNIFORM COATING THICKNESS

TYPICAL APPLICATIONS FOR ELECTROLESS NICKEL

HYDRAULIC AND PNEUMATIC COMPONENTS
Rods, Pistons, Cylinders

PUMPING EQUIPMENT
Housings, Rotors, Impellors, Valves, Fittings, Shafts

VALVE COMPONENTS
Balls, Gates & Discs, Plugs, (! 9

MECHANICAL COMPONENTS OIL AND GAS EQUIPMENT
Packers, Rods, Fire Tubes and Barrels

PLASTIC MOULDS, DIES, SCREWS AND FITTINGS FOOD EQUIPMENT
Gang Knives, Slicing Blades, Bowls, Mixing Blades, Presses, Timing Screws, Hooks, Conveyor Chain

AUTOMOTIVE COMPONENTS
Diff Pins, Rocker Arms, Steering Unit Comp., Shocker Rods, Brake Pistons, Fuel Injection Comp., Trans. Thrust Washers

CHEMICAL EQUIPMENT
Heat Exchangers, Filter Units, Mixing Equipment, Tubing

SCIENTIFIC EQUIPMENT MEDICAL COMPONENTS FOUNDRY PATTERNS, PAPER AND PULP, TEXTILE EQUIPMENT AEROSPACE COMPONENTS

Quality System
Quality Endorsed Company
ISO 9001 Lic, 2102
Standards Australia