CORROSION PROTECTION PACKAGE

NMC offers complete protection package against Corrosion, Impact, Abrasion etc. Systems available are :

"Rilsan" Nylon 11
Fusion Bonded Epoxy
Galvanising
Transit Coat

"RILSAN" NYLON 11 COATING

It is a dip process giving a coating thickness of 250-375 microns or an electrostatic spray process giving a coating thickness of 80-200 microns. Rilsan Nylon 11 is a thermoplastic polyamide based on vegetable oil. It forms a hard and durable protection with excellent resistance to impact, abrasion, chemicals and low temperatures. Furthermore, unlike many other coatings, it actually adheres to the surface it is not just an 'envelope'.

Technical Characteristics :

- Relatively low melting points (186°C) allow superior coating speeds compared to other thermoplastic or thermofusible powders.
- Possibiity of having a better finish by using water cooling immediately after the particles of powder have completely fused.
- Abrasion resistance : RILSAN is 500 to 600 times superior to the current best ovenbaked paints.
- High impact resistance : e.g. Repeated impact on a steel "Rilsanised" tube (1.5 mm in thickness)causes distortion in the tube without destroying the coating.
- Chemical resistance : RILSAN resists organic acids, salts, alkalis, solvents, hydrocarbons etc.

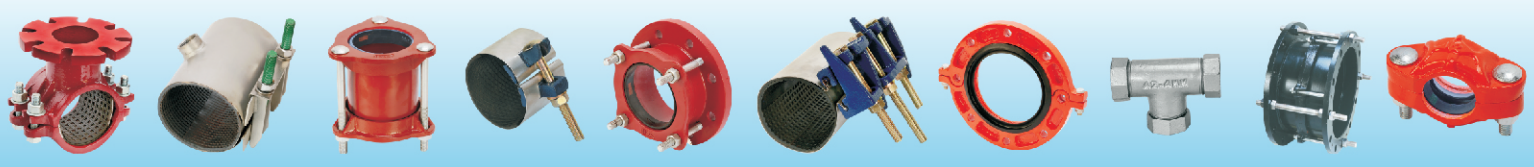
PHYSICAL PROPERTIES

Coating Thickness	Body Bolts & STUDS	(dip coated in a fluidized bed) 300 microns average (electrostatically sprayed) 100 microns (Over zinc plating)
Impact Resistance	ASTM 914-72	>0.5 Kg-m
Scratch Resistance	BS 3900 Pt E2	6 Kg
Hardness	API RP5L2 Pencil Hardness	 >HB
Tensile Strength	ASTM D638	at yield 320-340 Kgf / Cm^2 At break 400-480 Kgf / Cm^2
Elongation	ASTM D522 Conical Mandrel Test	 >40%
Useful Temperature Range		 -50°C to 90°C

APPROVAL

Rilsan coated Couplings have bee tested under severe salt spray conditions (the standard test for any corrosion protection) Neither couplings not bolts showed any evidence of corrosion.

RILSAN NYLON IS WRC (WATER RESEARCH CENTRE, UK) LISTED



CORROSION PROTECTION PACKAGE

FUSION BONDED EPOXY

It is a thermosetting powder coating material based on a special epoxy resin system designed to provide maximum protection against corrosion.

A SUPERIOR PROTECTION FOR ARDUOUS CONDITIONS.

When applied to Fusion Bonded Epoxy Couplings, Stepped Couplings, Flange Adaptor and Fabricated Fittings it forms an excellent protection with superior resistance to organic and inorganic chemicals, low temperatures and soil compaction. It is highly compatible with treated, and untreated sewage in addition to potable water. Fusion Bonded Epoxy offers maximum protection in severe corrosive environment. Fusion Bonded Epoxy coated products are supplied with zinc coated bolts and studs (or stainless steel if preferred).

PHYSICAL PROPERTIES

Coating Thickness	Body	dip coated in a fluidized bed (Average thickness 300 microns)
Impact Resistance	ASTM G14 3.2 mm panels Film : 350-400 microns	18 J
Hardness	Buchholz 2 DIN 53153	< 95 Units
Abrasion Resistance	ASTM D-1044 (Taber) CS17 wheel 1000g load 5000 cycles	0.50g loss
Salt Spray	DIN 50021/ASTM B117 Film : 400 microns	< 1500 hrs
Elongation		< 5%
Tensile		> 3000 psi
Useful Temperature Range		-25°C to 130°C

APPROVAL

Fusion Bonded Epoxy has successfully passed an accelerated corrosion test (10% solution H_2SO_4 at 50°C for 100 days). This indicates good resistance to acid conditions in sewage systems.

GALVANISING

A hot dip process giving a minimum coating thickness of 85 microns to BS 729.

Bolts & Studs are Electrostatically sprayed to BS 3382.

TRANSIT COAT

This protection is provided by spray coated Epoxy paint or fast drying Red Oxide Chlorinated Rubber paint.

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