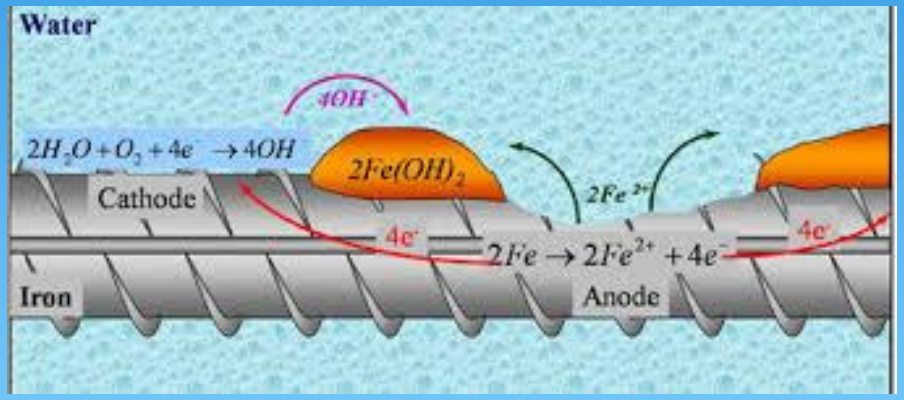

GLOBALNAVY
PERFORMANCE IN COATINGS

The Corrosion Reaction



-0,84 Volts

WHAT NOBODY WANTS TO HAPPEN

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PERFORMANCE IN COATINGS

Surface preparation

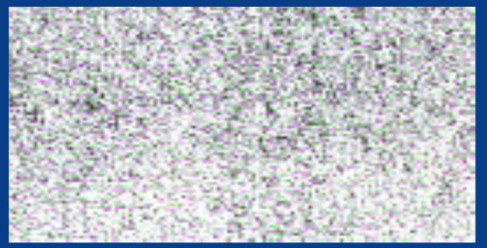
- The removal of :
  - -rust
  - - salt
  - - mill scale
  - - weld spatter
  - -rounding of sharp edges
  - - grease & oil
  - - dirt
  - - old paint depending upon quality and standard

- These are critical to achieve optimum performances of epoxy coatings
- Surface preparation is a critical process, labour intensive and represents a significant part of total costs of the coating process.

Surface Preparation Techniques

PERFORMANCE IN COATINGS

- **ABRASIVE BLASTING - ISO 8501-1: 1988**

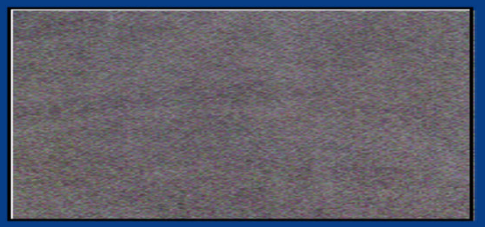


- **HYDROBLASTING - SSPC-VIS 4 (1) / NACE N°7**

  Visual Standard Wj2

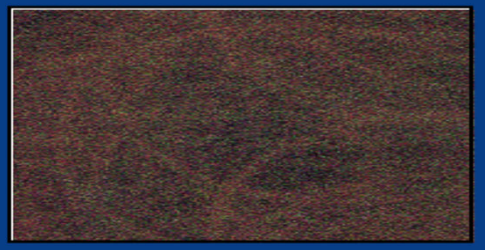
  after hydrobasting (before flash rust occurrence)

  (Similar to WETBLASTING)



- **Visual Standard Wj2 M**

  Tolerable flash rust before coating



RUST GRADE C as initial condition

Surface Preparation Techniques

PERFORMANCE IN COATINGS

Hydro Blasting/Wet Blasting
Blast cleaning
Mechanical wire brushing
Manual brushing

Ideal

Poor

Properties of ambient cured epoxy coatings

Chemical cure

2 pack systems
Limited pot life

Excellent adhesion on many substrates (specially on steel)
Excellent corrosion protection
Superior resistance to water, chemicals, solvents & oil
Extremely resistant to mechanical stress
Proper surface preparation required
Curing rate depends upon temperature.
Chalking when exposed to sun light
Over coat-ability limitations
Minimum & maximum intervals between layers to be respected
Cathodic disbondment resistance required in some applications

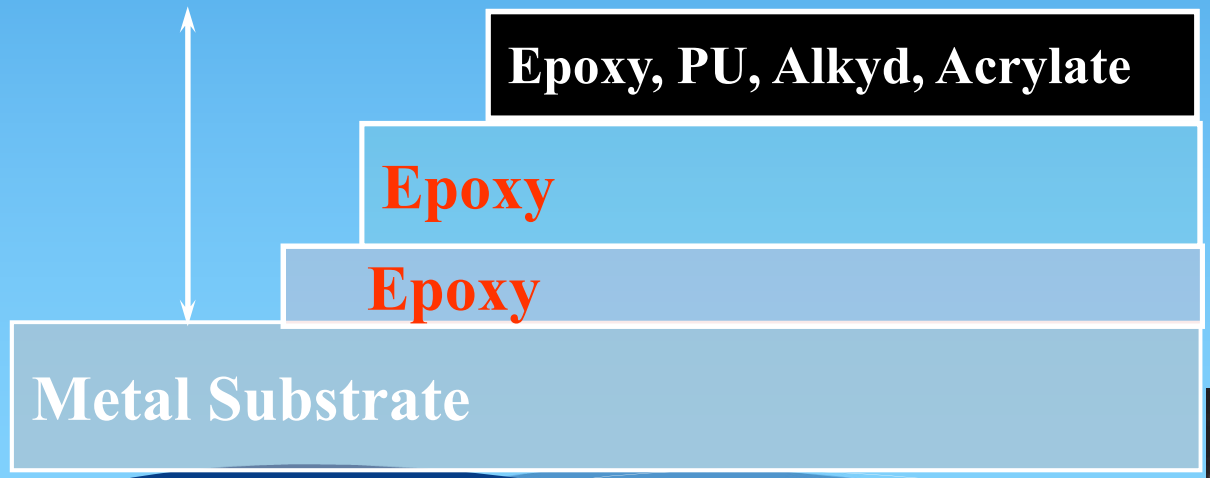
Accurate Mix ratio.
Thorough mix prior to use.
Pot-life of 1 - 8 hours.
(Pot life depends on temperature, quantity, type of resin and hardener)

Example of Anticorrosion Coating System

PERFORMANCE IN COATINGS

Top Coat:	Appearance & Protection against UV-light
Mid Coat:	Barrier Protection effect. Intercoat adhesion
Primer:	Corrosion protection & Adhesion

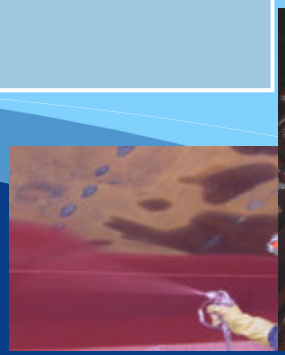
ca 400 µm



Topcoat; 60 µm

Mid coat; 150 µm

Primer; 150 µm



Technology Trends & Some unmet needs

Higher solids coatings
Solvent-free coatings
Water borne coatings

} VOC reduction

Faster cure
Low temperature cure
to extend application window
Surface tolerant coatings
to reduce surface preparation costs
Improved overcoat ability window
Flexible Epoxy Resins
Improved balance between drying time and pot-life

} Productivity gains

GLOBALDUR GN 101 ANTICORROSIVE TECHNOLOGY

PERFORMANCE IN COATINGS

	HYDROBLASTING WETBLASTING	SOLVENT FREE	EDGE RETENTIVE
PERFORMANCE	• Coating immediately after hydro blasting: time and cost saving for drying / lower salt level. • Edge retention => higher coating performance. • Very high adhesion => higher resistance and coating performance. • Surface tolerance (dew point/rust): allows excellent performance also on offshore works. •Solvent-free: eliminates the risk of solvent retention. • User friendliness: low viscosity/long pot-life ⟶ air-less application/avoids potentially dangerous over-thickness.		

GLOBALDUR GN 101

PREMIUM TOLERANT EPOXY PRIMER

HIGH PERFORMANCE COATING TECHNOLOGY

	HYDROBLASTING WETBLASTING	*SOLVENT FREE*	*EDGE RETENTIVE*
HEALTH & SAFETY	• Lower Flammability Risk - during application and paint stock – Lower Fire Risk. • Lower Impact on Human Health: no abrasive dust, no solvents.		

GLOBALDUR GN 101

HIGHEST ANTICORROSIVE PERFORMANCE THROUGH AN UNIQUE TECHNOLOGY

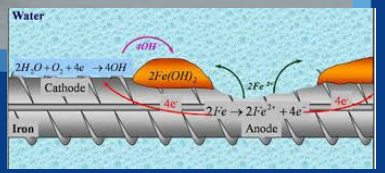
GLOBALNAVY
PERFORMANCE IN COATINGS

SOLVENT FREE
Highest Barrier Efect
Best Edge Retention

TOLERANT
Conversion
No dew Point Restrictions
Surface Wash-Highest Non-Visual Standard Surface Preparation (L.S.L.)

GN101

INHIBITOR
Highest Coating Barrier
Highest Barrier to Coating Defects
Long life service and performance



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