NORTH ASTER

'IAM SUB'

PROFESSIONAL SOLUTIONS FOR UNDER WATER STRUCTURES

OFFSHORE OIL RIGS | JETTIES | SEA HIGHWAYS

NORTH ASTER LIMITED

Registered Address:
2A, Agbeke Rotinwa Close, Dolphin Extension, Ikoyi, Lagos State, Nigeria.
Email: info@north-aster.com
Contact: +234 707 365 2870 /+91 8108183053
www.north-aster.com

**image shown is for illustration purposes only*

The IAM SUB line from Zetagi delivers revolutionary solvent-free, high-build epoxy polyamine coatings designed for in-situ underwater application. Ideal for protecting submerged steel and concrete structures in marine and industrial environments—ensuring long-term corrosion resistance without downtime or dry-docking.

Why Choose IAM SUB?

- **Underwater Applicability:** Direct application on wet/submerged surfaces—no need to drain or expose
- **Extreme Durability:** Very high build (up to 3000 microns), superior adhesion (6-7 N /mm² on sandblasted steel)
- **Eco-Friendly:** 100% solids, solvent-free, low VOC for sustainable protection
- **Versatile Methods:** Airless spray, brush, or manual spreading for precise, site-specific use
- **Proven Performance:** Compressive strength 25 N/mm², tensile strength 12 N/mm²; suitable for tidal/splash zones, buoys, pipelines, and offshore structures

**image shown is for illustration purposes only*

IAM SUB Product Line Overview

Solvent-Free Polyamminic Epoxy Coatings

High-build linings for aggressive marine immersion, compatible with epoxy primers and topcoats for full systems. Mix ratio: Base + Hardener (typically 4:1 by weight). Pot life: ~1 hour at 20°C. Cure time: Touch dry 24h, full cure 7 days. Theoretical coverage: 0.3-0.5 kg/m² per mm DFT.

IAM SUB AIRLESS

Code: 7081531

High-build polyamidine epoxy for airless spray application on submerged or wet substrates.

Key Features	Technical Specs	Applications
• Solvent-free, 100% solids • Very high build: 500-3000 microns DFT • Excellent wetting on humid/rusty surfaces • Rapid cure in cold water	• Solids by Volume: 100% • VOC: 0 g/L • Specific Gravity: ~1.5 kg/L • Adhesion: 6-7 N/mm² (sandblasted steel) • Compressive Strength: 25 N/mm² • Tensile Strength: 12 N/mm²	• Submerged steel/concrete repairs • Tidal/splash zones on offshore platforms • Buried/submerged pipelines & valves • Marine structures (piers, jetties)

*image shown is for illustration purposes only

IAM SUB PENNELLO

Code: 7081526

Brush-applied polyamminic epoxy for detailed underwater touch-ups and repairs.

Key Features	Technical Specs	Applications
• Solvent-free, brush-friendly thixotropy • Very high build: 1000-2000 microns per coat • Superior gap-filling & adhesion to damp surfaces • No shrinkage during cure	• Solids by Volume: 100% • VOC: 0 g/L • Specific Gravity: ~1.4 kg/L • Film Thickness: Wet-on-wet multi-layer • Theoretical Consumption: 1.5-2 kg/m² (2000 microns)	• Underwater brush repairs on ships/hulls • Buoy & beacon maintenance • Concrete crack filling in wet conditions • Spot repairs in tidal zones

**image shown is for illustration purposes only*

IAM SUB SPREADING (Spalmature)

Code: 7081550
Manual spreading polyamminic epoxy for large-area underwater coverage using trowels or spatulas.

Key Features	Technical Specs	Applications
• Solvent-free, highly thixotropic for spreading • Extreme high build: Up to 3000 microns in one pass • Ideal for irregular/porous substrates • Resistant to freshwater/seawater immersion	• Solids by Volume: 100% • VOC: 0 g/L • Specific Gravity: ~1.5 kg/L • Pot Life: 45-60 min • Theoretical Coverage: 0.33 m²/kg at 3000 microns	• Submerged concrete/steel protection • Splash/tidal zone linings on marine structures • Signaling buoys & offshore installations • In-situ pipeline coatings

Recommended Coating Systems

Full Protection Cycles for Marine & Industrial Use

- Preparation: Clean/wet surface; optional epoxy primer (e.g., TITANIA EP SL PRIMER).
- Application: IAM SUB variant (1-3 coats wet-on-wet).
- Topcoat (Optional): Polyurethane (e.g., TITANIA PU) for UV/abrasion resistance above water.

Cycle Example for Submerged Steel: Primer (100 microns) + IAMSUB AIRLESS (2000 microns) + Topcoat (50 microns) = Total DFT 2150 microns. Coverage: 5-10 years in aggressive marine conditions.

Certifications & Compliance

- Compliant with ISO 12944 for corrosive environments (C5M immersion)
- Tested for potable water contact (where applicable)
- Environmentally safe: No solvents, minimal waste

Application Guidelines

- Surface Prep: Remove loose rust/marine growth; power tool clean (St 2) or high-pressure wash.
- Mixing: Stir base, add hardener, mix 3 min; use immediately.
- Conditions: Apply 5-30°C; humidity <85%; underwater use requires diver certification.
- Tools: Airless (200 bar, 0.019-0.023" tip), natural bristle brush, or metal trowel.
- Safety: Wear PPE; ventilate dry areas. Shelf life: 12 months unopened.