

MARINE EPOXY COATING SYSTEMS

Epoxy Coatings for Ships, Offshore Steel and Marine Infrastructure

JDMARINEPAINT epoxy coatings are designed for corrosion protection, barrier performance, high build film formation and strong adhesion on prepared steel and special metal substrates.

System Positioning

Primer Protection

Anti-corrosion foundation for blasted steel, rough maintenance steel, zinc-rich systems and special substrates.

Barrier Build

Intermediate epoxy and MIO layers improve film thickness, water resistance and intercoat compatibility.

Service Adaptation

Systems can be matched with antifouling, acrylic polyurethane topcoat or tank lining depending on service area.

Core Product Range

PRODUCT	TYPE	CATALOG SOLIDS	TYPICAL DFT	MAIN USE
JDH06-4	Epoxy zinc-rich anti-rust primer	70%	50 um	Heavy machinery, ship hulls, decks, waterlines, port machinery and steel structures requiring zinc-layer protection.
JDH263	Epoxy tie coat	59%	50 um	Transition layer between epoxy primer and antifouling, acrylic, polyurethane or chlorinated rubber coatings.
JDH815	Iron oxide red epoxy primer	65%	70 um	General high-performance primer for steel structures, pipelines and port facilities.

PRODUCT	TYPE	CATALOG SOLIDS	TYPICAL DFT	MAIN USE
JDH816	Grey epoxy primer / intermediate coat	65%	70 um	Hull, deck, cargo hold and ballast tank corrosion protection, especially where surface preparation is difficult.
JDH817	MIO epoxy anti-rust tie coat	65%	50 um	Waterline, superstructure, offshore facilities, coastal equipment and bridge steel structures.
JDH818	Rough surface epoxy primer	62%	50 um	Maintenance and repair areas where complete rust removal is difficult.
JDH819	Epoxy zinc phosphate primer	63%	70 um	Steel structures, pipelines, engineering machinery, valves, containers and general anti-corrosion work.
JDH836	Solvent-free aluminum iron epoxy anti-rust paint	90%	300 um	High-build heavy-duty protection for steel structures, pipelines and dock facilities.
JDH838	Primer for galvanized steel sheet	64%	50 um	Galvanized steel, aluminum, stainless steel and surfaces that cannot be roughened easily.
JDH912	Epoxy potable water tank coating	98 +/- 2%	Project-specific	Potable water tanks, grey water tanks, crude oil tanks and industrial storage tanks.

Recommended System Routes

SERVICE AREA	SUBSTRATE	SUGGESTED BUILD-UP	NOTES
Ship hull below waterline	Blasted carbon steel	JDH815 or JDH06-4 primer + JDH263 tie coat + antifouling topcoat	Use JDH263 as the transition layer before chlorinated rubber or self-polishing antifouling coatings.
Ballast tanks and cargo holds	Prepared steel	JDH816 primer / intermediate + project-specific epoxy lining	For potable water, grey water or crude oil tanks, evaluate JDH912 as tank lining.
Offshore steel and port facilities	Carbon steel	JDH836 high-build epoxy + JDH817 MIO tie coat + JD908 or JD918 polyurethane topcoat	JDH836 provides 90% volume solids and a thick-film route for heavy-duty service.
Repair and maintenance steel	Rough or hand-cleaned steel	JDH818 rough surface primer + compatible epoxy / polyurethane finish	Designed for areas where rust is difficult to remove completely.
Galvanized, aluminum and stainless surfaces	Special metal substrates	JDH838 special substrate primer + compatible topcoat	Use where adhesion is the main selection issue.

Key Selection Factors

- **Exposure:** immersion, splash zone, atmospheric marine exposure, tank interior or dry cargo condition.
- **Substrate:** blasted carbon steel, oxidized steel, galvanized steel, aluminum or stainless steel.
- **Film build:** select standard primer layers for general protection or high-solids epoxy for thick-film systems.
- **Compatibility:** verify subsequent coats, including antifouling and polyurethane topcoats, before application.
- **Surface preparation:** coating performance depends strongly on cleanliness, salt removal and anchor profile.

This brochure is a product selection guide. Final coating specifications should be confirmed against the latest product TDS, project exposure conditions, surface preparation standard and application environment.