

Liquid Armour's DTM (Direct To Metal) coating, represents a revolutionary advancement in protective coatings, offering a comprehensive solution for metal surfaces. This innovative, water-based acrylic and urethane coating is engineered to provide superior protection and aesthetic appeal without the prerequisite of traditional primers. Its unique formulation incorporates advanced rust-inhibiting technology, enabling direct application onto rusted metals, thereby streamlining the preparation process and enhancing efficiency.

DTM is a direct to ANYTHING coating, acting as a primer, anti-rust coating and an attractive topcoat all in one.



- Higher film density compared to competitive products.
- Excellent abrasion resistance maintaining its performance during wear and tear.
- Superior corrosion protection - Category C5 (>25years) according to DIN EN ISO 12944-1 @ 200µm DFT
- Outstanding resistance to Salt Spray.
- Naturally UV stable.
- Water Based - No V.O.C's.
- Time Saving - Primer, Anti Rust and top coat in one.
- Less labour intensive.

Liquid Armour's DTM range is available in the following versatile formulations:

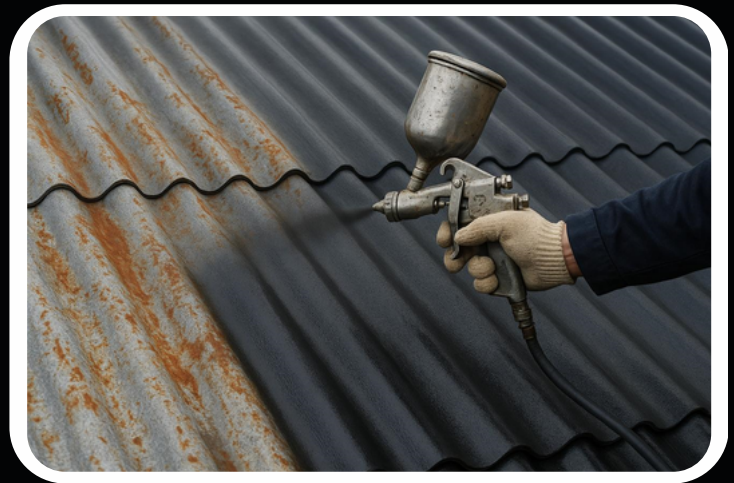
- **DTM+33** - Inland - Excellent corrosion protection, but salt spray is not a predominant factor.
- **DTM+03** - Formulated for Industrial uses. Exceptional resistance to Salt Spray and Superior corrosion protection.
- **DTM+03R** - Rust Converter. For areas with extreme rust.

DTM+33 - Inland

Formulated for inland environments where exposure to salt spray is not a predominant factor, DTM+33 is ideal for residential and light commercial applications. This variant is perfectly suited for a wide array of metal surfaces, including gates, fences, railings, balustrades, handrails, doors, windows, burglar bars, trims, shutters, garage doors, outdoor furniture, playground equipment, lighting fixtures, piping, farm implements, machinery, and storage tanks.



Excellent adhesion to galvanised or chromadek gutters



Apply directly over rusted galvanised corrugated roofing.



Apply directly over un-treated metals - without using a primer.

DTM+
Inland / DIY 33

Pack Sizes:

1L, 5L, 20L

Aerosols coming soon . . .

Standard Colours::

Black, White, Red Oxide, Hunter Green,
Gunmetal Grey, Midnight Blue.

Contact us for custom colours . . .

DTM+03 - DTM Coastal / Industrial

COASTAL REGIONS

Specifically engineered to endure the harsh conditions prevalent in coastal regions, DTM+03 offers exceptional resistance to salt spray, providing robust protection for up to **25 years**. Coastal environments pose significant challenges to metal integrity due to accelerated corrosion induced by salt spray.

DTM+03 by Liquid Armour, is a crucial defense against rust and corrosion, which is a primary concern in saltwater and high-humidity environments. DTM+03 forms a robust barrier that prevents moisture, salts, and chemicals from reaching the metal.

NEGATIVE EFFECTS OF SALT SPRAY ON METAL INCLUDES:



- Accelerated Corrosion - Salt dissolves in moisture, creating an electrolyte that accelerates the corrosion process.
- Pitting Corrosion
- Surface Degradation - metals develop white salt deposits, tarnish or rust streaks.
- Coating Breakdown - conventional coatings start blistering and salt creeps in underneath.
- Loss of material strength - as corrosion progresses, the cross sectional thickness of metal decreases.
- Fastener Failure - Bolts, screws and joints exposed to salt spray often size up, weaken or snap.

Although DTM+03 has been designed for use in various sectors, it's most common applications in the Marine and Coastal sectors are as follows:

- **Vessels and Barges:** DTM+03 is ideal for coating the hulls, decks, and superstructures of boats, ships, and barges.
- **Offshore Platforms:** Oil rigs and other offshore structures benefit from the corrosion resistance and longevity of Liquid Armour's DTM+ coatings.
- **Coastal Structures:** Metal railings, structural steel, and other metal components in coastal areas are well-suited for DTM+03
- **Machinery and Equipment:** DTM+03 protects engines, motors, and other machinery from the corrosive marine environment

Key Benefits in Marine and Coastal Settings:

- **Corrosion Protection:** DTM+ coatings are a crucial defence against rust and corrosion, which is a primary concern in saltwater and high-humidity environments. They form a robust barrier that prevents moisture, salts, and chemicals from reaching the metal.
- **Time and Cost Savings:** By acting as both a primer and a topcoat, DTM+ coatings reduce the number of coats needed, cutting down on application time and labour. This is especially beneficial for marine vessels that have short maintenance windows.
- **Durability and Adhesion:** These coatings are engineered for superior adhesion to various metals, including aluminium, galvanised and steel, reducing the risk of coating failure. They are also resistant to abrasion, which helps maintain performance even with wear and tear.
- **Versatility:** DTM+ coatings can be applied to a wide range of surfaces on a vessel, including weather-exposed areas, decks, engine rooms, pipes, and interior spaces. Some formulations can even be applied over sound, rusted areas after minimal surface preparation.



While DTM+ coatings offer many advantages, proper surface preparation is still crucial for optimal performance. For heavily rusted surfaces, apply Liquid Armour's Rust Converter, DTM+03R, before applying DTM+.

DTM+03 - Industrial Uses

Structural Steel Fabrication

Applications:

Beams, columns, trusses, handrails, walkways, support frames

Why DTM helps:

- Reduces the need for a separate primer coat → saves time and labour.
- Provides strong corrosion protection for mild and galvanized steel.
- Excellent adhesion and UV resistance for indoor/outdoor structures.

Transportation & Automotive Engineering

Applications:

Truck chassis, trailers, loaders, railway wagons, marine frames, and storage containers.

Why DTM helps:

- Prevents rust in high-vibration, outdoor, or coastal conditions.
- Available in aesthetic finishes (smooth, hammered, satin) for OEM or refurbishment.
- Often includes built-in rust converters to stabilize oxidized surfaces.

Heavy Equipment & Machinery

Applications:

Earth-moving equipment, cranes, tractors, agricultural implements, mining vehicles.

Why DTM helps:

- Withstands impact, abrasion, and exposure to oil, dirt, and weather.
- Can be applied directly onto steel parts (after degreasing) — fewer steps in the coating process.
- Offers fast turnaround in repair or refurbishment cycles.



Construction & Infrastructure

Applications:

Fencing, gates, scaffolding, bridges, handrails, light poles, guard rails.

Why DTM helps:

- Provides corrosion and UV protection without requiring complex priming.
- Durable film resists environmental wear and tear.
- Suitable for both on-site and factory applications.

Manufacturing & Fabrication Workshops

Applications:

Metal cabinets, tanks, frames, industrial equipment, pipelines.

Why DTM helps:

- Simplifies production lines — one coat acts as both primer and finish.
- Speeds up throughput in spray-booth operations.
- Water-based - suitable for low-VOC manufacturing environments.

DTM+
Coastal / Industrial 03

Pack Sizes:

1L, 5L, 20L

Standard Colours::

Black, White, Red Oxide, Hunter Green, Gunmetal Grey, Midnight Blue.

Contact us for custom colours . . .



Maintenance Engineering

Applications:

Industrial plants, refineries, warehouses, HVAC housings, conveyors.

Why DTM helps:

- Perfect for spot repairs and maintenance work.
- Good adhesion even on pre-painted or partially rusted surfaces.
- Extends service life of metal components exposed to moisture or chemicals.

Energy & Utilities

Applications:

Transformers, substations, transmission towers, pipelines, wind turbine bases.

Why DTM helps:

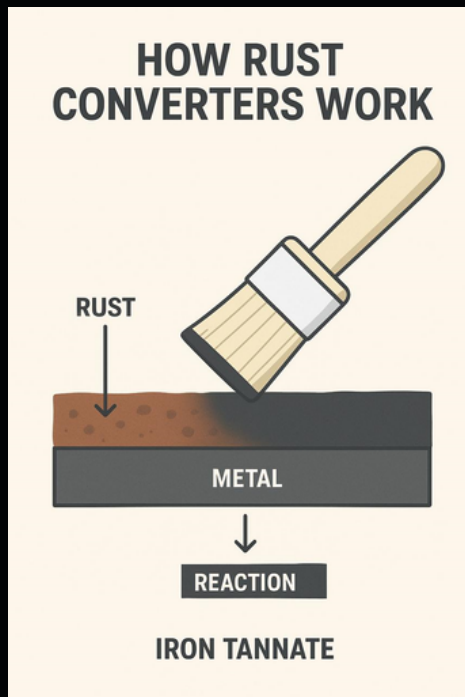
- Protects against corrosion caused by high humidity and pollutants.
- Some epoxy-DTM hybrids offer strong chemical resistance.



DTM+03R - Rust Converter

DTM+03R by Liquid Armour, is a rust converter with a chemical additive or component that reacts with existing rust (iron oxide) on metal surfaces to chemically stabilize and neutralize it, turning it into a non-reactive, paintable surface.

While DTM+by Liquid Armour, offers many advantages, proper surface preparation is still crucial for optimal performance. For heavily rusted surfaces, apply Liquid Armour's Rust Converter, DTM+03R, before applying DTM+33 or DTM+03.



How a Rust Converter Works

- Rust converters contain tannic acid and organic polymers or phosphoric acid.
- When applied to a rusty surface, these chemicals react with the iron oxides (Fe_2O_3) in rust.
- The reaction converts the rust into iron tannate or iron phosphate, which are dark, stable compounds that stop further corrosion.
- This creates a protective barrier and improves paint adhesion.

Advantages of DTM+03R- Rust Converter

- Acts as a built-in primer and rust stabilizer.
- Allows painting directly over light to moderate rust, saving prep time.
- Enhances corrosion resistance and extends coating life.
- Reduces surface prep — no need to remove all rust.
- Improves adhesion and performance on corroded metal.
- Provides both chemical and physical protection.

DTM+
Rust Converter**03R**

Pack Sizes:

1L, 5L, 20L

Standard Colours:
Rust Converter only
available in Clear

KEY BENEFITS OFFERED BY DTM+

DTM+ coatings offer a multitude of advantages, making them an unparalleled choice for metal protection:

Direct Application Over Existing Rust: Functions effectively as a rust converter, eliminating the need for extensive rust removal.

Eco-Friendly Formulation: A V.O.C (Volatile Organic Compound) free, waterbased solution, ensuring minimal environmental impact.

Exceptional Corrosion Protection: Achieves Category "C5" classification according to DIN EN ISO 12944-6:2018-06, signifying superior corrosion resistance.

Excellent Intercoat Adhesion and Blocking Resistance: Ensures robust layering and prevents unwanted adhesion between coated surfaces.

Time-Efficient One-Coat System: Combines primer and topcoat functionalities into a single application, significantly reducing labour and drying times.

Enhanced Security: Provides maximum corrosion protection performance, safeguarding metal assets.

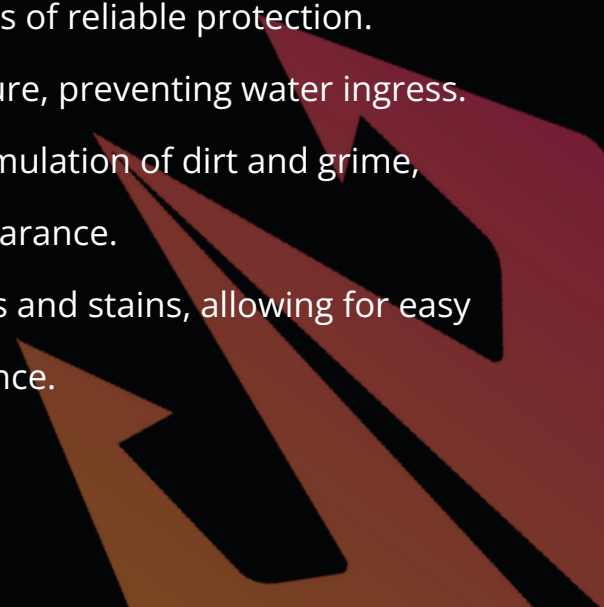
Reduced Weight: Achieves effective protection with a lower dry film thickness, contributing to reduced overall weight.

Extended Protection: Offers up to 25 years of reliable protection.

Water Repellent: Forms a barrier against moisture, preventing water ingress.

Dirt Pick-Up Resistance: Minimizes the accumulation of dirt and grime, maintaining a cleaner appearance.

Washable: Resists common household chemicals and stains, allowing for easy cleaning and maintenance.



APPLICATION GUIDELINES . . .

For optimal results and maximum durability, adhere to the following application guidelines:

- 1. Surface Preparation:** Thoroughly clean all oily and new metal surfaces using Liquid Armour's Metal Cleaner, Acetone, or Alcohol.
- 2. Rust Removal:** Remove all loose and flaking rust with a wire brush to ensure a stable substrate for coating application.
- 3. Coating Application:** Apply a minimum of three coats to achieve optimal durability and strength.
- 4. Drying Time:** Allow approximately 15 minutes of drying time between coats. Ensure the previous coat is touch dry before applying the subsequent layer.
- 5. Curing Time:** The coated surface should be dry and ready for use within two hours after the final coat application.

Upon curing, DTM+ coatings yield a beautiful, hard-wearing sheen finish, providing exceptional protection and an aesthetically pleasing appearance. The ability to apply directly over rusted metal without the need for a primer further underscores the efficiency and convenience of DTM solutions.



DTM+
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Coastal / Industrial 03

DTM+
Rust Converter 03R