Stanvac®

UPGRADED FOR
★ 2026 ★

WORLD'S FIRST MULTI-CHEMISTRY NANO-MOLECULAR ADHESION RUST CONVERTER POWERED BY TRIARMOR TECHNOLOGY

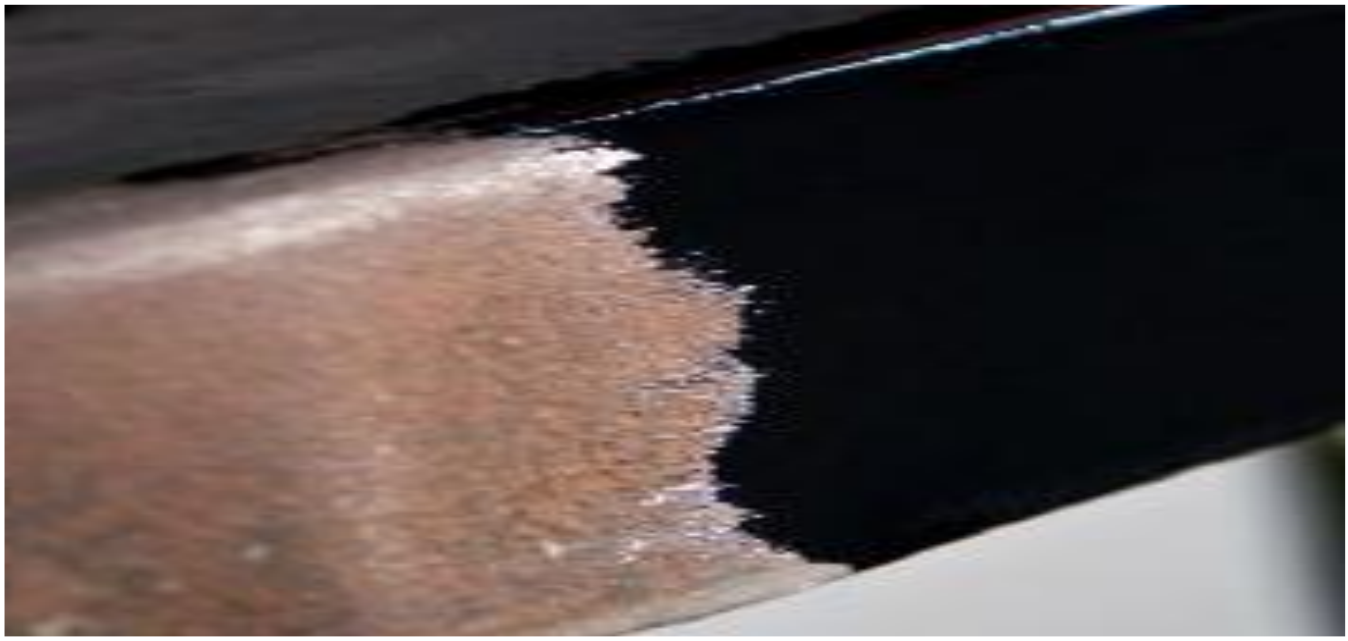
Z 704 RUSTEX – NMB

The proven rust converter — now re-engineered for 2026.

*Coatings that **last for years** — on steel you cannot blast or grind.*

5% of GDP lost to corrosion in India every year.

75% of coating failures begin with poor surface prep.



Before ***After***

It has happened

— **India — GAIL pipeline, 2014.** A corroded gas pipeline at Nagaram leaked for days, then exploded

— killing about 22 people and gutting the village.

— **Genoa, Italy — 2018.** Corrosion of the steel stays brought the Morandi road bridge down, killing 43 people.

Rust under a sound-looking coating thins walls, weakens structures and fails equipment — until it leaks, burns or collapses.

FOUR ACTIONS · ONE COAT — *a unique multi-chemistry formula.*

It **converts** the rust, **seals** the steel, **bonds** the topcoat — and **lasts**. Multi-chemistry reaches rust to the base of every pit, where a single chemistry only skins the surface; nano-molecular bonding grips steel and topcoat.

PROVEN TO PAY BACK — *independent corrosion research.*

A coating over a Z 704 **TriArmor**-bonded surface — instead of painted straight over rust — is shown to:

★ grip around **2× harder** to the steel

★ last around **2× longer** before breakdown

★ resist **peeling, blistering and under-film corrosion** far better

Half the repaints — and each repaint avoided is cost, downtime and **hot-work fire risk** avoided.

ORDINARY CONVERTER VS Z 704 — THE DIFFERENCE

Ordinary single-chemistry converter	Stanvac Z 704 — TriArmor multi-chemistry + nano-bonding
Single chemistry — skins the surface	**Multi-chemistry — converts deep in every pit**
Porous film; no bond to the topcoat	**Nano-molecular bonding seals and bonds topcoat — blue-black proves it worked**
Re-rusts within a season	**Holds for years — 500+ hrs salt spray under epoxy primer**
Traps salt and acid residues — pitting keeps growing under the film	**Tolerates residual salt and acid after a simple wash — neutralize beneath them and seals covalently**

WHERE IT EARNS ITS PLACE

Live, running plants — cold-applied and grit-free; no shutdown, no blasting grit near machinery or product.

Fire-risk & hot-work-banned zones — refinery, gas, solvent and dust areas; brushed on cold, no sparks.

Salt- and acid-laden environments — coastal, fertiliser, chemical and effluent-plant steel; wash, dry, and Z 704 converts beneath the residue and seals it out.

Refineries · petrochemicals · fertilisers · power · steel plants · tanks & pipelines · ports & marine — and across heavy industry, wherever steel must be protected live.

HOW TO USE

1	2	3	4
Wash & dry	**Mix (5–6 min)**	**Brush or HVLP**	**Topcoat within 6-24 hrs**

Tip: on coastal or acid-fume steel, fresh-water wash neutralize and dry first.

Not for alkaline residues *(cement/lime splash, caustic zones) + removal + neutralise and wash first.*

REQUEST A FREE SITE TRIAL

Pick the worst rusted panel in your plant. Remove all loose rust, We'll wash, convert and seal it in front of you — **30 minutes, free** — and you watch the rust turn blue-black.

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Production Machinery


Railings


Structural Steel


Conveyer Belt Structure

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Z 704 RUSTEX – NMB

Multi-chemistry, nano-molecular adhesion rust converter · TriArmor Technology · two-pack, site-mixed, water-borne

PRODUCT DESCRIPTION

Z 704 RUSTEX – NMB is a surface-tolerant rust converter and adhesion primer for hand- or power-tool-cleaned steel (St 2 / St 3) where abrasive blasting is not possible. Its **TriArmor multi-chemistry** combines complementary conversion reactions that reach residual rust to the base of corrosion pits, with a **nano-molecular coupling layer** that bonds covalently to the converted steel on one side and to the applied topcoat on the other. The product is mixed fresh on site for full reactivity and indicates completed conversion by a uniform blue-black colour change.

MECHANISM

- **Multi-chemistry conversion** — transforms residual iron oxides, including within pits, into a stable, adherent, passive layer that a single-chemistry converter cannot reach.
- **Nano-molecular bonding** — a covalent coupling bridge between converted steel and the topcoat; an adhesion interface, not a film sitting on the surface.
- **Wet adhesion** — the covalent bond resists displacement by water; coating adhesion is retained when moisture reaches the interface.
- **Sealed & passive** — under-film corrosion is starved of reactants; no rust expansion to lift or blister the coating.

PERFORMANCE & APPLICATION DATA

Mixing	As supplied per kit; mix 5–6 minutes to uniform consistency. Mixed fresh on site.
pH (mixed)	2–4
Pot life	3–4 hours
Coverage	7 m² per litre per coat (profile-dependent) Average. Max 10 sqm /ltr if light rust & minimum 5-6 sqm /ltr if very heavy, flaky, absorbent rust.
Application	Brush, roller or HVLP spray
Service / application temperature	1°C to 70°C
Conversion indicator	Reddish-brown rust converts to blue-black; remaining orange indicates recoat required
Overcoating window	Topcoat within 24 hours
Compatible topcoats	Epoxy, polyurethane, alkyd, TPA
Salt-spray performance	500+ hours (system with epoxy topcoat)
Packaging	1 / 5 / 20 kg kits

SURFACE PREPARATION & RESIDUE GUIDANCE

- **Standard preparation:** remove loose rust, scale and old coating by hand or power tool (St 2 / St 3); degrease oil and grease; wash and dry.

- **Salt residues (chloride, sulfate):** fresh-water wash and dry before application — washing removes loose soluble salts; Z 704 then converts beneath residual traces and seals them out covalently. The converted, sealed interface resists the osmotic blistering by which residual salts defeat single-chemistry converters.

- **Acid residues / acid-fume zones:** compatible territory — the mixed product is itself acidic (pH 2–4) and passivates the active corrosion that acid fumes sustain. Wash off heavy deposits and dry first.

- **Alkaline residues — excluded:** cement or lime splash and caustic-zone deposits neutralise the conversion chemistry. Wash and neutralise such surfaces before application.

- **Not a substitute for degreasing:** oil, grease, mill scale and biological growth must be removed before application.

APPLICATION PROCEDURE

1. Wash & dry (fresh-water wash mandatory on coastal/salty/acid-fume steel) → **2.** Mix full kit 5–6 min → **3.** Apply by brush, roller or HVLP, working into pits and crevices → **4.** Verify uniform blue-black conversion; spot-recoat any orange → **5.** Topcoat within 24 hours.

FIELDS OF APPLICATION

Oil & gas refining — pipe racks, process columns, exchanger shells, pump/compressor skids, flare structures, spheres, bullets.

Petrochemicals & polymers — cracker and reactor structures, silos, conveyor galleries, bagging-plant steel.

Fertilisers — ammonia/urea plant steel, prilling towers, acid and effluent-area steel, pipe bridges.

Gas processing & distribution — gas plants, LNG terminals, compressor stations, city-gas networks, metering skids.

Pharma, food & beverage — plant, mezzanine and packing-hall steel; no contamination, clean finish.

Steel & metals plants — coke-oven, sinter, blast-furnace and rolling-mill structures, stockyard cranes.

Power generation — boiler and ESP structures, duct and flue steel, coal-handling plant, cooling-tower steel, transmission towers.

Cement — preheater towers, kiln supports, conveyor galleries, bag-house and silo structures.

Tanks, terminals & pipelines — shells and roofs, floating-roof rims, bund steel, loading gantries, manifolds. **Marine, ports & offshore** — jetties, gangways, cranes, platform and jacket steel, splash-zone members, lock gates. **Water & wastewater** — penstocks, gates, screens, clarifier bridges, gallery pipework, walkways.

Bridges, infrastructure & railways — girders, trusses, bearings, gantries, OHE masts, wagons, depot steel.

Stored spares & material handling — conveyors, cranes, castings, valve and pump bodies, motors, yard spares.

LIMITATIONS & SAFETY

Not for alkaline-contaminated surfaces without neutralising wash · not a structural repair for heavily wasted steel (assess remaining thickness) · acidic when mixed — use gloves and eye protection; see SDS before use.

STANVAC · SURFACE PROTECTION DIVISION
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Performance figures from in-house testing and NCRB / industry data. Verify before specifying.