



STEELCOAT™

SURFACE TOLERANT SYSTEMS FOR EXPOSED AND ABOVE GROUND STEEL PIPEWORK AND STRUCTURES

SUITABLE FOR:

- Steel structures
- Exposed Steelwork
- Exposed Pipelines
- Cables
- Tanks
- Chemical Plants
- Power Plants
- Oil Refineries
- Rigs





SELECTION GUIDE

SURFACE PREPARATION	PROTECTING	STEELCOAT™ SYSTEM	EXPECTED SERVICE LIFE (YEARS)	AVERAGE THICKNESS (MICRONS)	
Minimal surface preparation, chipping hammers, hand wire brushing	Cold/damp pipes Badly rusted/pitted pipes and structural steelwork Fittings Pitted pipelines Tank bases Column bases	100/ S105	15	1400	
		100/ HT Primer	15	1400	
		100/500 (combined)	30	3000	
		100/400 (combined)	30	2800	
		Tank Base Protection System	30	2800	
		Column Base Protection System	30	2800	
Hand or power tool to St2 / St3 (ISO 8501-1) or high pressure water jetting (ISO 8501-4) Alternative: SSPC-SP2 Hand Tool Cleaning SSPC-SP3 Power Tool Cleaning	Process plant Pipe bridges Structural steel Pipework Fittings Pipelines Tie bars Storage tank bases Metal roof purlins Hot pipework Soil air interface pipework	700	7-9	4-500	
		500	30	1600	
		400 and 400/D5	30	1400/1600	
		300	15	2500 (55% overlap)	
		200	15	2300 (55% overlap)	
		Soil Air Interface System	30	2800	
		Dry Abrasive Blast Sa2½ (ISO 8501-1) with an angular surface profile of 50 to 125 microns Alternative: SSPC SP-10, NACE No. 2	Steel structures Rigs New jetty piles Decking Walkways Ramps Loading installations Very hot pipes Plant Tanks Pipelines Cranes Bridges	1000	20-30
1000	15-25			1000	
700	12-15			4-500	
Pre-stressing and post-tensioning bridge cables and anchorages	50			50+	Sleeve/anchorage completely filled

The above Surface Preparation requirements are indicative only. Refer to Instructions for Use and Project Specifications.

NOTE: ISO Standards are not exact equivalents to NACE / SSPC.



A VAST RANGE OF SYSTEMS FOR APPLICATION TO EXPOSED STEEL PIPEWORK AND STRUCTURES IN HIGHLY CORROSIVE ENVIRONMENTS

Steelcoat™ systems provide a cost-effective, long-term solution to corrosion on exposed steel surfaces, including soil air interface pipework, pipebridges and the bases of aboveground storage tanks and structural support columns.

Based on either glass flake reinforced liquid coatings or self-amalgamating tapes, mastics and void fillers, Steelcoat systems are designed to tolerate less than perfectly prepared metal surfaces. VOC compliant and environmentally responsible, the systems offer a safe and economical solution for steelwork in highly corrosive environments.

Many of the Steelcoat systems require minimal surface preparation of the steel substrate; often, surfaces only require hand wire brushing or hand tool cleaning to remove loose scale, rust or flaking coatings. Once correctly applied, Steelcoat systems efficiently protect vital assets and can provide up to 30-years maintenance free service life.



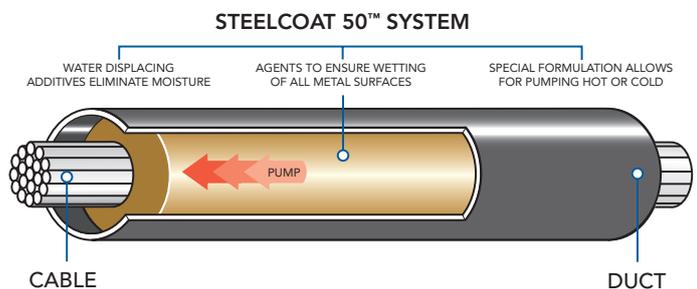
STEELCOAT 50™ SYSTEM

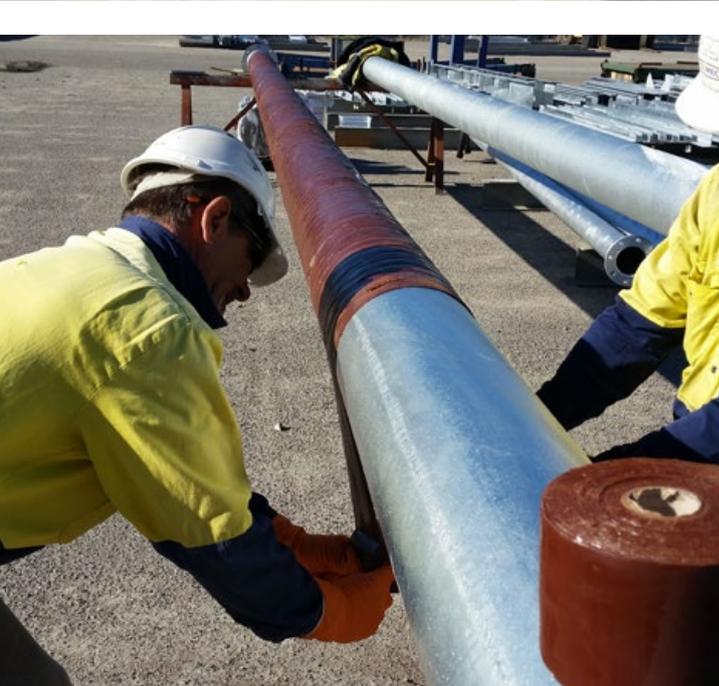
(OR DENSO VOID FILLER™ TYPE 1)

The Steelcoat 50™ System is a specially formulated petrolatum compound for pumping hot or cold to fully fill the space between tendons or cables and ducts where it forms a semi-solid paste that encapsulates the cable.

Non-cracking, lightweight, and allowing the easy removal of the protected tendon for inspection or replacement, Steelcoat 50 makes a sensible alternative to traditional cement mortar grout.

- Hot or cold applied
- Completely fills the void stopping corrosion
- Non cracking and lightweight
- A good alternative to traditional cement mortar grout





STEELCOAT 100™ SYSTEM

The Steelcoat 100™ System comprises an adhesive petrolatum primer (Denso Hi-Tack™ Primer), an optional petrolatum paste compatible with damp surfaces (Denso Paste S105™) and a very adhesive petrolatum tape (Denso Hi-Tack™ Tape). For pitted or badly rusted structural steel and pipework applications, a petrolatum mastic is used to seal voids and fittings (Denso Profiling Mastic™).

Where additional insulation is needed, Densofil™ is utilised to seal flanges and voids prior to tape wrapping.

- Cold applied
- Surface tolerant
- Useful for damp/low temperature surfaces
- Useful for pitted or badly rusted surfaces
- Minimum surface preparation needed – hand tool cleaning only
- Can be applied by hand or wrapping machine

STEELCOAT 200™ SYSTEM

The Steelcoat 200™ System comprises a polymer backed petrolatum tape (Denso Hotline™ Tape) and a high temperature mastic for sealing fittings in awkward shapes (Densoseal 16A™). The system is designed to protect pipes that run at high temperatures, up to 110°C maximum (90°C if buried). No primer is required.

- Cold applied
- For service temperatures up to 110°C maximum
- Surface tolerant
- Minimum surface preparation needed – hand tool cleaning only
- Can be applied by hand or wrapping machine

STEELCOAT 300™ SYSTEM

(OR DENSO COLOURTAPE™)

The Steelcoat 300™ System comprises a grey petrolatum tape (Denso ColourTape™) which is ideally suited for small to medium diameter pipes. No primer is necessary and application by hand or wrapping machine is quick and easy.

- Cold applied
- Surface tolerant
- Exceptionally conformable
- Controlled thickness
- Minimum surface preparation needed – hand tool cleaning only
- Can be applied by hand or wrapping machine

STEELCOAT 400™ SYSTEM

The Steelcoat 400™ System, ideal for badly pitted or rusted steel structures, comprises deep penetrating primer (Denso Penetrating Primer™), a fabric backed tape (Denso Ultraseal™ Tape) and a topcoat (Denso Acrylic Topcoat™). After priming, Denso Profiling Mastic™ is used to seal and profile back to back angles, voids, flanges or fittings. The final topcoat can also be reinforced with a selected reinforcing scrim (Denso D5™ or Denso D10™ Scrim) for sections of steelwork or pipework requiring additional impact resistance.

- Cold applied
- Surface tolerant
- Highly conformable
- Proven performance
- Minimum surface preparation needed – hand/power tool cleaning only
- Easily repaired and over-coated
- Low future maintenance costs



STEELCOAT 100/400™ SYSTEM

The Steelcoat 100/400™ System is now widely specified due to the superior protection it provides by combining the strengths of the Steelcoat 100™ and Steelcoat 400™ system components. The system comes in two variations: A and B.

DENSO STEELCOAT 100/400(A) SYSTEM:

For badly pitted and rusted pipework and structural steelwork. For pipework, Steelcoat 100/400(A) System comprises Denso Hi-Tack™ Primer followed by a double wrap (55% overlap) of Denso Hi-Tack™ Tape. The outer Denso Ultraseal RT™ Tape is applied with a 25% overlap before painting. For steelwork, the Steelcoat 100/400(A) System is applied as above but with a single layer only (25% overlap) followed by Denso Ultraseal RT Tape with a 25% overlap before painting. Once applied the fabric backed Denso Ultraseal RT Tape is overpainted with two coats of Denso Acrylic Topcoat™.

DENSO STEELCOAT 100/400(B) SYSTEM:

For damp/sweating pipework surfaces. As above 'For pipework' with Denso Paste S105™ replacing the Denso Hi-Tack Primer.

- Cold applied
- Surface tolerant
- Minimum surface preparation needed – hand tool cleaning only
- Highly conformable
- Ideal for badly pitted and rusted steelwork
- Ideal for damp or humid steelwork
- If applied in the recommended way it will have a 30-year expected service life.





STEELCOAT 500™ SYSTEM

The Steelcoat 500™ System comprises a deep penetrating primer (Denso Penetrating Primer™) and a tough acrylic backing laminated to a thick rubber bitumen adhesive compound (Denso™ Acrylic Tape). The tape can be applied by hand or machine wrapping to pipe lengths.

- Cold applied
- Surface tolerant
- Minimum surface preparation needed – hand tool cleaning only



STEELCOAT 700™ SYSTEM*

The Steelcoat 700™ System is ideal for exposed steelwork and pipework wherever steel grit blasting is not possible. It comprises a two part glass flake reinforced epoxy mastic coating (Denso S.T. Epoxy™). A minimum of two coats is easily applied by brush or airless spray. Denso S.T. Filler™ is utilised to fill any voids, gaps or bad pits.

When exposed to ultraviolet light a third coat of Urethane based material (Archco 65™ Topcoat) is applied for extra protection (prevents chalking).

- Requires minimal surface preparation (SSPC-SP2/3)
- Provides long term exterior protection
- Excellent water/sea water resistance
- Good resistance to impacts, acids and alkalis
- Good flexibility, hardness and adhesion
- Low VOC

*Not available for sale in the UK or EU.



STEELCOAT 1000™ SYSTEM

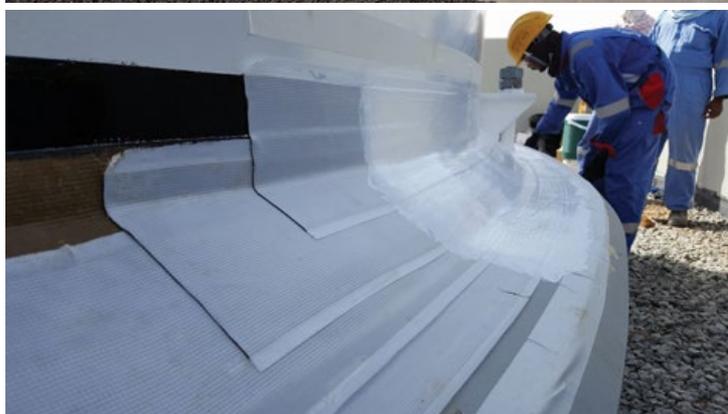
The Steelcoat 1000™ System comprises a two component reinforced polyester glass flake coating (Denso Rigspray™), applied by airless spray, that offers outstanding resistance to corrosion and abrasion. For protecting structural steel in aggressive environments such as bridges, lock gates or marine applications, and where abrasion and erosion are prevalent at temperatures up to 65°C. For improved service life two coats are applied at 750 microns per coat.

- Excellent corrosion and undercutting resistance
- Very good abrasion and erosion resistance
- Very low permeability
- Good chemical resistance
- Excellent application properties
- Single coat application up to 1mm D.F.T.
- Fast cure time
- Excellent reparability

STEELCOAT™ TANK BASE PROTECTION SYSTEM

The Steelcoat™ Tank Base Protection System is a combined tape and liquid coating system designed for the protection of the external base area of aboveground steel storage tanks (AST).

- Encapsulates the circumference of the tank base with a tough, highly weather resistant seal
- Remains flexible with cyclic movement caused by emptying and filling the tank
- Easy to apply with no need for excavation, lifting, blast cleaning or other disruption
- Rapid installation, no delay for curing
- Long-lasting & cost effective
- Can be applied to new and existing tanks
- Subject to operating temperatures, the system is suitable for use on all ASTs, including those with slab or ringwall foundations



STEELCOAT™ COLUMN BASE PROTECTION SYSTEM

A surface tolerant system designed to protect column bases in corrosive environments. The system comprises Denso Hi-Tack™ Primer, Denso Profiling Mastic™ to fill voids and to build up angles required to create a smooth profile, Denso Hi-Tack™ Tape and Denso D5™ Scrim. A coat of Denso Basecoat™ is applied to complete the protective system. An optional acrylic topcoat is available.

- Cold applied
- Hand applied
- Flexible and mouldable for awkward shapes and angles
- Long-term protection



STEELCOAT™ SOIL AIR INTERFACE SYSTEM

The Steelcoat™ Soil Air Interface System is used to protect the section of pipe that rises from below to above ground in elevated temperatures. A section of at least 500 mm above and 500 mm below ground should be protected.

The system comprises Denso Hotline™ Tape and Denso Glass Outerwrap™, both wrapped with a 55% overlap (cured underneath a layer of Denso Clear Outerwrap™ that is removed post-curing) and finished with a coating of Archco 65™ Topcoat.

- Provides tough Denso protection to the vulnerable area above and below ground from corrosion





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