



Energy

Maintenance solutions for the toughest challenges

Protective & Marine Coatings
Europe, Middle East, Africa & India

Offshore maintenance

We understand your challenges

Whatever the maintenance challenge, Sherwin-Williams is committed to providing tailor-made specifications to fulfil your project requirements.

With our global supply chain and skilled technical service network, we ensure that your asset will remain protected whatever its location.

We are your asset protection partner.

Preparation is key

According to materials performance, good surface preparation and correct application are essential in achieving long term cost effective coating systems.

The standards used to define the visual assessment of surface cleanliness of steel, before application are:

Surface preparation description	ISO 8501-1 (2007)	SSPC (1982)	NACE
Thorough hand and power tool cleaning	St2	-	-
Very thorough hand and power tool cleaning	St3	-	-
Power tool cleaning to bare metal	-	SP11	-
Blast cleaning to visually clean steel	Sa 3	SP5	1
Very thorough blast cleaning	Sa 2½	SP10	2
Thorough blast cleaning	Sa 2	SP6	3
Light blast cleaning	Sa 1	SP7	4

Power cleaning



Thorough hand and power tool cleaning



Very thorough hand and power tool cleaning



Power tool cleaning to bare metal

Blast cleaning



Blast cleaning to visually clean steel



Very thorough blast cleaning



Thorough blast cleaning



Light blast cleaning

Images are for illustrative purposes only.

Mechanical wear protection

Splash and tidal zone areas

Structural steel situated in extreme C5 offshore environments where immersion, or exposure to constant salt fog is likely require coating systems which will perform when you need them most.

Our ultra high build brushable mastic, Macropoxy™ M922M, provides a high solids surface tolerant epoxy, which can achieve a single coat film build by brush or airless spray, at elevated application temperatures over 100°C (212°F), surpassing 400µm (15mil) DFT and can withstand temperatures up to 150°C (302°F). Its aluminium and glass flake content delivers excellent impact, abrasion and corrosion resistance, and it allows early immersion in splash zone after application.

Macropoxy™ M902, offers an 'all-year-round' surface tolerant aluminium epoxy mastic where rapid overcoating and handling times are required. It has the ability to cure down to 0°C (32°F) and application on substrate temperatures of 0°C (32°F), providing flexible maintenance schedules.

Winner of the Queens Award 2016 for Innovation, Dura-Plate™ 301 delivers very high performance over UHP water jetted surfaces, low profile roughness, flash rust or damp areas. There is no restriction on application humidity and it can be applied over substrate temperatures of 0°C (32°F), which helps to increase maintenance efficiencies and reduce overall project costs.

Our multipurpose tolerant epoxy Macropoxy™ 646 provides a 1:1 mix ratio, and is available in a full range of colours.



Topcoats

Efficient application with premier protection

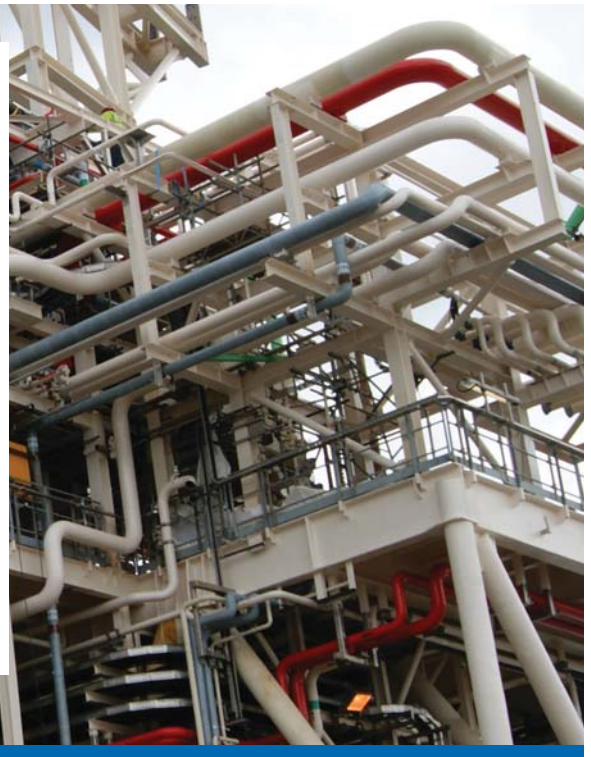
Our Acrolon™ range provides U.V. resistant, durable and flexible topcoats that provide good colour and gloss retention.

Acrolon™ 1850, a two pack Isocyanate free finish based on an acrylic epoxy binder system, features a film build up to 200µm (8mil) DFT which promotes superior opacity in one coat for yellow, red and orange colours, offering application cost savings and reduced downtime.

Acrolon™ 7300 utilises innovative tin free two pack polyester modified acrylic polyurethane which delivers fast handling times and optimised pot life, leading to paint application efficiency and reduced downtime.

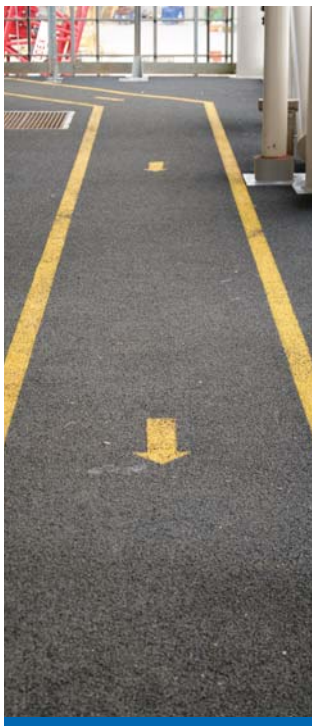
Innovative technology; mildew resistant coating for tank externals.

Macropoxy™ 646 MR is a high solids, high build, fast drying, polyamide epoxy designed to protect steel and provide mildew resistance in industrial exposures. The high solids content ensures adequate protection of sharp edges, corners and welds.



Deck coatings

Hard wearing, tar-free anti-slip coatings



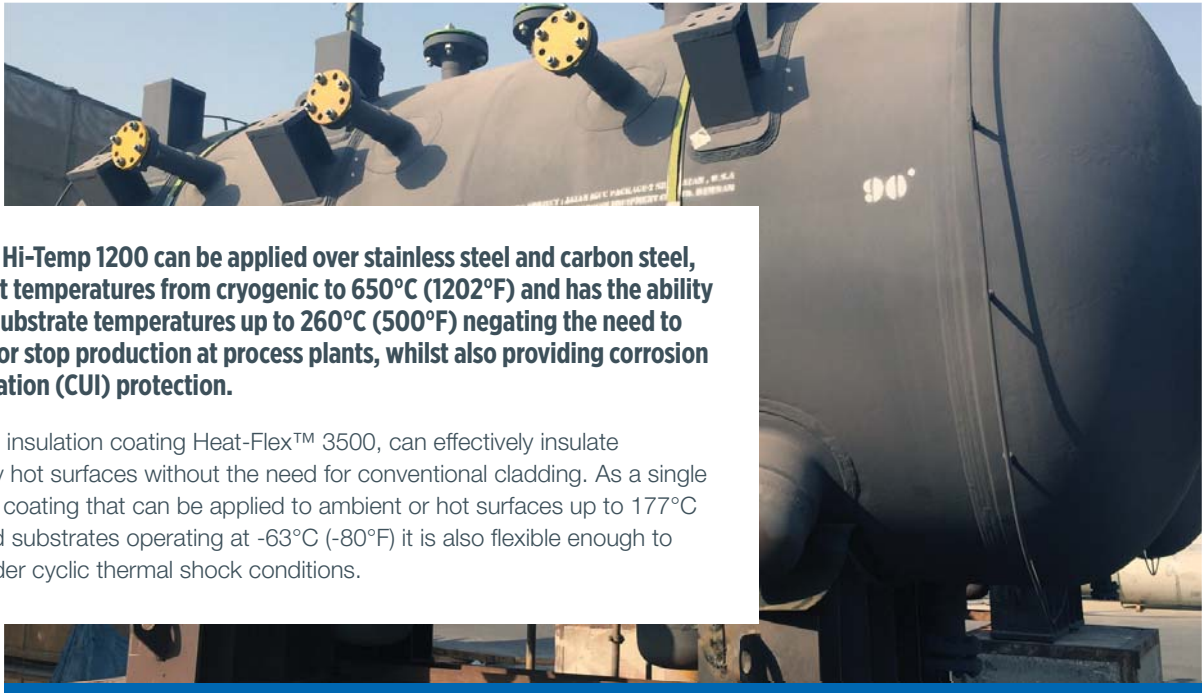
The unforgiving offshore environment requires heavy duty protection for all types of service. Including extreme mechanical resistance and anti-slip properties.

Our Epidek™ range has an extensive North Sea offshore track record where it needs to perform under conditions of severe crude oil and hydrocarbon contamination.

Epidek™ can also be supplied with a luminescent aggregate providing a cost effective solution for deck coatings and safety markings in low light areas.

Thermal insulative coatings

Next generation coatings for high heat applications

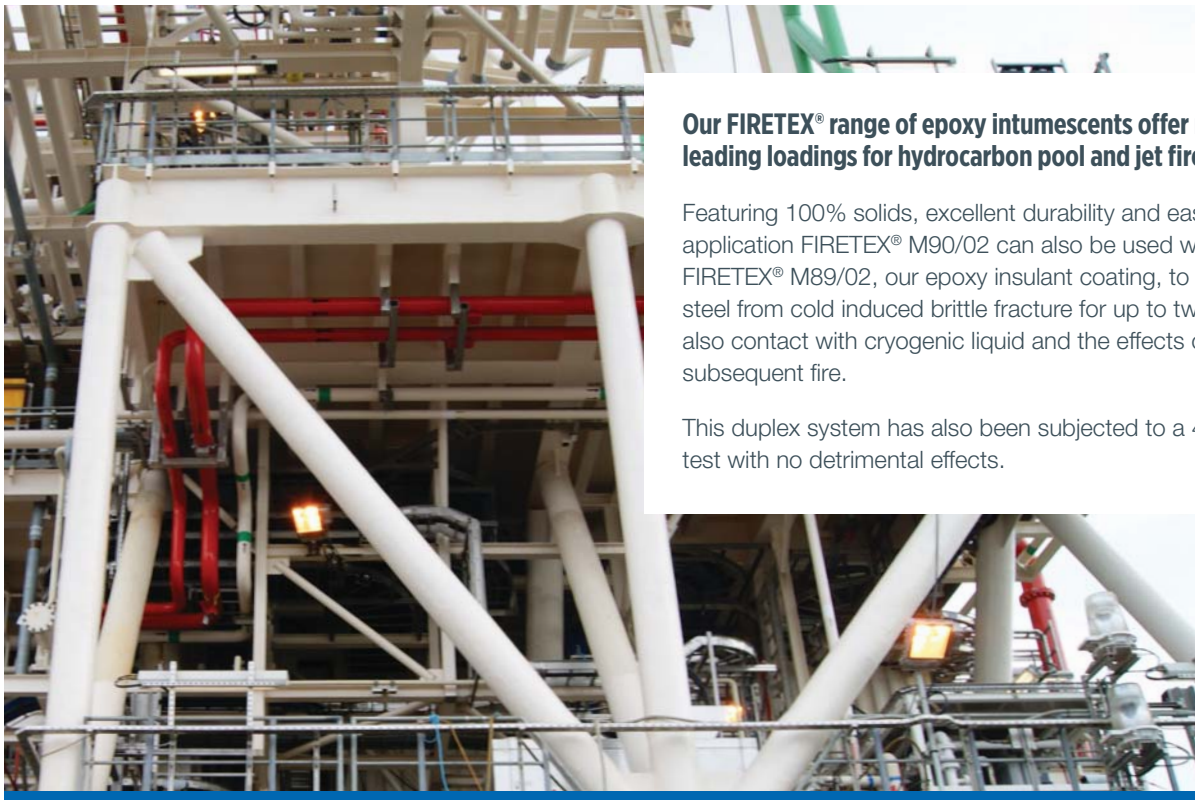


Heat-Flex™ Hi-Temp 1200 can be applied over stainless steel and carbon steel, operating at temperatures from cryogenic to 650°C (1202°F) and has the ability to go over substrate temperatures up to 260°C (500°F) negating the need to slow down or stop production at process plants, whilst also providing corrosion under insulation (CUI) protection.

Our thermal insulation coating Heat-Flex™ 3500, can effectively insulate dangerously hot surfaces without the need for conventional cladding. As a single component coating that can be applied to ambient or hot surfaces up to 177°C (350°F), and substrates operating at -63°C (-80°F) it is also flexible enough to perform under cyclic thermal shock conditions.

FIRETEX® hydrocarbon protection

Epoxy passive fire and cryogenic spill protection



Our FIRETEX® range of epoxy intumescent offer market leading loadings for hydrocarbon pool and jet fire protection.

Featuring 100% solids, excellent durability and ease of application FIRETEX® M90/02 can also be used with FIRETEX® M89/02, our epoxy insulant coating, to protect steel from cold induced brittle fracture for up to two hours, also contact with cryogenic liquid and the effects of a subsequent fire.

This duplex system has also been subjected to a 4 bar blast test with no detrimental effects.

Tank linings

Fast return to service

Our range of tank linings can be applied at high film thicknesses, in a single coat, have superior abrasion resistance and come with an extensive track record.

Fast-Clad™ ER, Dura-Plate™ UHS and Nova-Plate™ 325 each feature Opti-Check™ technology, which helps to reduce inspection times.



Quick reference guide

Product	Features									
	Low temp application	Single leg airless	Single coat system	Mix ratio	Return to service <24h	HTHP service (150°C)	OAP (Optional)	Multiple uses	Abrasion/chemical resistance	Crude oil approval
Nova-Plate™ 325*	10°C	●	●	2:1	●	●	●	●	3+	●
Nova-Plate™ UHS	10°C	●	●	4:1	●	●	●	●	3	●
Magnalux™ 41V	10°C	●	●	98:2	●	●	●	●	3	●
Macropoxy™ C251	5°C	●	●	4:1	●	●	●	●	2	●
Dura-Plate™ UHS	10°C	●	●	4:1	●	●	●	●	2	●
Fast Clad™ ER	2°C	●	●	1:1	●	●	●	●	2	●
Phenicon™ HS	13°C	●	●	4:1	●	n/a	●	●	1	●
Epo-Phen™ FF	10°C	●	●	4:1	●	●	●	●	1	●

Abrasion/chemical resistance key: 1 = Good, 2 = Better, 3 = Best, 3+ = Premium.

● = Applicable. ● = Not applicable.

*Nova-Plate™ 325 can be used as both a high pressure tank and pipe lining.

Technical support Qualified and trusted teams

Our expert ICorr and NACE certified technical support and field service teams have in-depth market-specific knowledge and experience which allows them to evaluate, recommend and deliver the highest performance, tailored coatings solutions for your project.

Why not contact them today to discuss the requirements of your next project.

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SW Oil & Gas App allows you to explore the best Sherwin-Williams coating for each area of an oil refinery, shale drilling or offshore site. From tanks to piping, cooling towers to rail tank cars, Sherwin-Williams has your coatings needs covered. With comprehensive coating specifications for every aspect of your equipment, the SW Oil & Gas App is interactive, fast and easy-to-use.

A complete line of products.
Market expertise.
On-time distribution.

What else would you expect from a world leader in protective coatings, linings, and fire protection?

It starts with a complete line of time-tested, high-performance products and some of the most innovative and greenest technologies in the coatings industry. But we know that it takes more than product alone to be a world leader in protective coatings and linings, and so do the customers that rely on us every day as we help them protect their business.

That's where nearly 150 years of coatings industry experience comes in. Add to that a NACE-trained workforce with a combined 3,700 years of experience in corrosion control. And the market-specific knowledge that our experts provide to evaluate, recommend and deliver the highest-performance coatings and linings that protect our customers' assets.

Leave nothing to chance. Your single source of supply. Sherwin-Williams.



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