

PROTECTIVE COATINGS

solutions that cover your needs



SIGMA *Weld*

Prefabrication Primer Range



**PPG Protective &
Marine Coatings**

The SigmaWeld Prefabrication Primer Range

PPG Protective and Marine Coatings is dedicated to the development, manufacture and supply of coatings to meet the demanding challenges of the marine and protective coatings industries. Our proven products and technologies are used to safeguard a wide variety of assets: from marine newbuilding and vessel maintenance & repair to offshore and petrochemical, from civil building/infrastructure and power to rail. With a heritage of outstanding expertise we use the knowledge and experience we have gained to provide excellent products, performance and service.

Prefabrication primers provide steel plates and sections with temporary or permanent corrosion protection during transportation and construction. Sigma Coatings' products have over 30 years of experience and comprises a complete range of prefabrication primers for application by both manual and fully automatic blasting and coating facilities.

Applications can vary from a temporary blast primer on structural steel to the use as a permanent primer on special 9% nickel carbon steel plates as used for the inner containment shell in large concrete LNG tanks. Other uses are land storage tanks and chemical installations.

The period of protection provided depends on the technology used and on the exposure conditions encountered during transport, storage and construction.

SigmaWeld applications

Sigma Coatings' prefabrication primers are used in a wide range of applications.

Infrastructure

- Bridges
- Port facilities and harbor structures
- Tanks
- Stadiums and airports
- Waste water facilities
- Coastal defense

Petrochemical

- Land storage tanks
- Jetties

Offshore

- Drinking water tanks
- Slop tanks
- FPSO's
- Platforms

Power

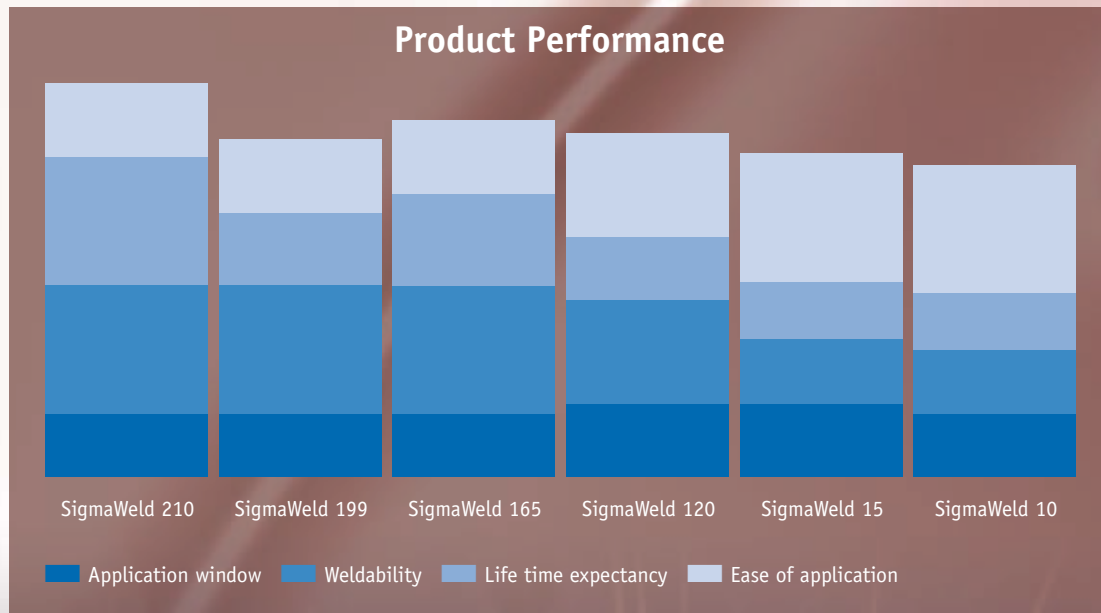
- Storage tanks
- Wind mills
- Fossil power plant

Performance you can trust

All our coatings are manufactured to world-leading standards. So you can rely on a consistent performance from each and every coating in the SigmaWeld range.

Quality and performance

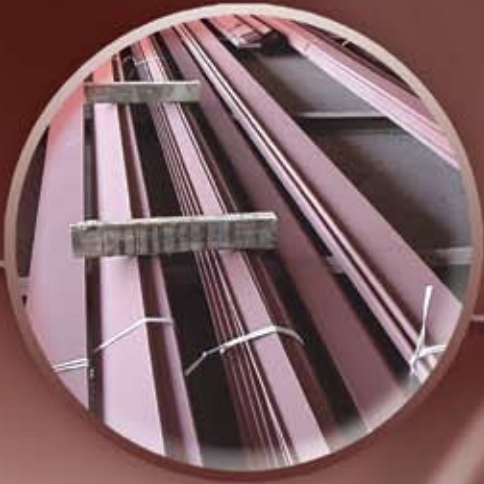
The SigmaWeld range covers epoxy, alkyd, zinc ethyl silicates and waterbased acrylic product technologies and provides corrosion protection periods of between six months and one year in typical exposure conditions on construction sites and in shipyards.



We can provide relevant and convincing case studies to support any business requirement. Our products are developed, produced and supplied under the strictest quality, environmental and health and safety procedures which are enforced by our company throughout the world.



The SigmaWeld Range



SigmaWeld 210

High zinc ethyl silicate prefabrication primer

- Provides up to 12 months protection on blast cleaned steel
- Excellent heat resistance minimizing weld burn-back
- Meets the requirements of DVS-0501 (tested at the German Schweisstechnische Lehr- und Versuchsanstalt Duisburg)
- Welding certificates available (including Lloyd's Register of Shipping and Det Norske Veritas)
- Compatible with almost all types of organic topcoats

The SigmaWeld 210 inorganic zinc silicate prefabrication primer protects tank plates or even pipes to cold deformation and mechanical abuse. This is caused by bending equipment used to shape them after blasting and coating. Coated plates and structural components will survive weathering and abuse during extended periods of overseas transport.

SigmaWeld 199

Zinc ethyl silicate prefabrication primer

- Provides up to 6 months protection on blast cleaned steel
- Excellent anti-corrosive properties
- Welding certificates available (including Lloyd's Register of Shipping)
- Excellent cutting and welding properties including MIG/MAG
- Provides regular, smooth weld seams
- Excellent heat resistance minimizing weld burn-back

Welding properties

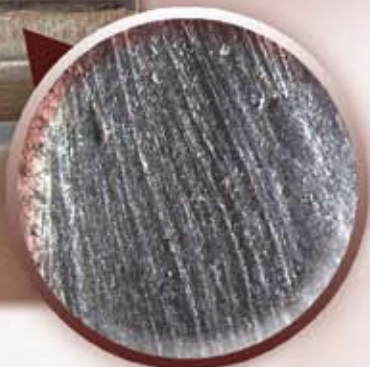
Prefabrication primers can be welded and cut with manual or automatic equipment depending on the welding and cutting technology, conditions, speed and quality requirements. The zinc silicate technology based products will typically show minimal damage and no burn-back whereas organic binder based products will show burn-marks that should be removed if used in combination with a permanent coating system.

Welding properties will vary depending on the product technology and dry film thickness used. Please check with PPG Protective and Marine Coatings for specific certification on weld quality and welding fume analysis.

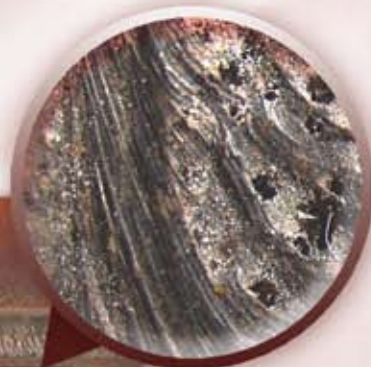




Fracture of weld seam with SigmaWeld 199



Fracture of weld seam without suitable welding primer



SigmaWeld 165

Zinc ethyl silicate prefabrication primer

- Provides up to 9 months protection on blast cleaned steel
- Excellent anti-corrosive properties
- Balanced zinc level
- Good cutting and welding properties including MIG/MAG
- Excellent heat resistance minimizing weld burn-back
- Approved by Lloyd's register of shipping

SigmaWeld 120

Polyamide cured epoxy prefabrication primer

- Provides up to 6 months protection on blast cleaned steel
- Good anti-corrosive properties
- Suitable for atmospheric conditions
- Qualified for an automatic production line
- Fast drying
- Good cutting and welding properties including MMA and gravity welding

Application

The SigmaWeld range can be applied by fully automatic blasting and painting facilities for steel plates and structural steel sections.

The excellent spray atomization and film forming properties allow pinhole free application to a very low and uniform film thickness on an abrasive blast cleaned steel substrate. The fast drying properties allow handling by magnets and stacking of steel plates or sections within the short process times of the coating facilities.





SigmaWeld 15

One component alkyd based prefabrication primer

- Provides up to 6 months protection on blast cleaned steel
- Suitable for atmospheric conditions
- User friendly
- Fast drying
- Good cutting and welding properties with electrode welding
- Suitable for automatic application

SigmaWeld 10

One component waterbased prefabrication primer

- Provides up to 6 months protection on blast cleaned steel
- Qualified for an automatic production line
- Suitable for atmospheric conditions
- Fast drying
- User friendly
- Good cutting and welding properties with electrode welding

Permanent top coating systems

Provided the condition of the prefabrication primer is good and its surface cleanliness is in compliance with the requirements for the next coat, these products can be used as the first coat anti-corrosive primer in a permanent coating system. Suitability will vary with the type of prefabrication primer, the required coating performance and the selected coating system. Bare areas, welds and mechanically damaged areas require cleaning and repairing with a suitable touch-up primer.



The SigmaWeld Range

SigmaWeld 210 (*Dimetcote 210*)

- High zinc ethyl silicate prefabrication primer

SigmaWeld 199

- Zinc ethyl silicate prefabrication primer

SigmaWeld 165

- Zinc ethyl silicate prefabrication primer

SigmaWeld 120

- Epoxy based prefabrication primer

SigmaWeld 15

- One component alkyd based prefabrication primer

SigmaWeld 10

- One component waterbased prefabrication primer



PPG Protective and Marine Coatings

PPG Protective and Marine Coatings brings unrivalled levels of experience and expertise in coatings technology through our expanding global supply and distributors network.

We understand our customers' needs and the challenges they face. We respond quickly with effective economic solutions, working closely with our customers to develop products that meet their requirements.

Formulations that can be applied more easily, resist the elements better and reduce overall environmental impact in compliance with both local and international standards.

With in-depth knowledge of the day-to-day reality that faces the industries we supply, our technical service representatives offer an unsurpassed perspective and optimal coatings solutions; maximizing technical performance and minimizing expensive downtime.



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