MetaLine®.com

surface protection

Chemical Resistant Coating System

Pulp & Paper, Marine & Off-Shore, Natural resources,
Wastewater, Engineeering, Power Generation, Oil & Gas

MetaLine® 100 XTM

Self-processable Novolac coating
for long-term surface protection,
against corrosive and
chemical influences

From professionals for professionals

MADE IN GERMANY
60 YEARS OF EXPERIENCE

MetaLine® 100 XTM

**Chemical Protective Coating based on Novolac,
against corrosive and chemical influences – applicable directly on site!**

MetaLine® 100 XTM is a purely elastic novolac/ceramic coating developed for customer-specific self-processing by brush, roller or airless-spraying. Alternatively the MetaLine® lowpressure 100XTM Cartridge-Spray-System may also be used for application.

The main area of application is the long-term protection of metal or cement-bound surfaces against aggressive chemical liquid substances, such as acids, dyes or solvents – even under elevated temperatures.

MetaLine® 100 XTM adheres durably and absolutely corrosion-resistant to nearly all hard surfaces. An almost impermeable polymer composite with good chemical resistance forms after solidification. The protective function covers a broad spectrum of organic and inorganic pure chemicals, mixed products and production waste on water and solvent base. Temperature resistance amounts under immersed conditions to approximately 130°C (270 °F). Good thermal and electrical insulation characteristics are given.

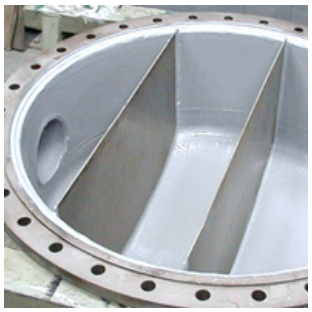
MetaLine® 100 XTM with a final thickness of 1.5 mm (60 mils) fulfills corrosion protection requirements of a 10,000 hours salt mist spray test according DIN EN ISO 7253.

Available pack sizes: 0.5 kg, 5 kg and 200 kg (1.1 lbs / 11 lbs / 440 lbs)

Leaking protection

Corrosion protection

- Chemical resistant
- Abrasion- & scratch-resistant
- Resistant up to +150 °C/300 °F (dry) and +130 °C/270 °F (wet)
- Residual elastic film characteristic
- Electrically / thermally insulating



Chemical protection

Material characteristics

MetaLine® 100 XTM is a two component duroplastic composite coating with exceptionally good long-term stability against fluid influences. It will be applied in 1 – 3 layers up to a thickness of 1.5 mm (60 mils) – no priming needed. The material solidifies at room temperature without external heat supply. It adheres permanently to (stainless)-steel or concrete and develops exceptionally good permeation resistance – even with higher temperatures. Dimensionally stable and **pressure resistant up to approximately 100 bar (1,450 psi).** It may be repaired and overcoated at any time.

Application areas

For the durable protection of metal and concrete structures against corrosive, caustic, penetrating or other aggressive influences. It is suitable for the electrochemical insulation against bimetallic corrosion. It shall preferably be used for the following:

- Paper machines
- Troughs / receptacles
- Reservoirs
- Water boilers
- Scrubbers
- Separators
- Chemical reactors
- Filtration equipment
- Evaporators
- Neutralization tanks
- Tanks
- Floors
- Valves
- Pipes
- . . . .

MetaLine® 100 XTM Cartridge-Spray-System

MetaLine® 100 XTM in a particularly efficient and professional processing form – the MetaLine® Cartridge-Spray-System:

Spraying off **directly from the packaging** – without any contact to the application tool. The material is mixed precisely away from any need for manual weighing. The disposable static mixer serves as spray nozzle as well. The coating material, unlike ALL other spraying methods, is not passed through the coating device. This means absolutely no cleaning of the APPLICATOR XTM. MetaLine® is the first really **cleaning-free spraying process** for multi-component materials!

The application itself is air atomized in a **low pressure process** at only 3-5 bar (40-70 psi) spray thrust. Protruding edges and exposed areas are evenly covered by the low material pressure dispersion. NO risk for being scraped off again due to high operational pressure forces. Apart from this, there is no particular safety risk for the user, as it is the case with conventional airless spray systems working at up to 500 bar (7,000 psi).

MetaLine®'s experience in cartridge spray processing dates back to the end of the 1990s – **our invention** and our pride and joy as the **pioneer** in cartridge-based spray processing!

MetaLine® APPLICATOR XTM

MetaLine® 100 XTM Spray Cartridge (1.25 kg / 2.75 lbs)

Ballast water piping

- NO solvents
- NO spray-gun cleaning
- NO mixed waste
- NO weighing
- NO hand mixing
- . . . and NO worries!

Scrubber coatings

Storage tanks

From professionals for professionals

MetaLine® 100 XTM is not a fast do-it-yourself product! The professional surface preparation by edge rounding, gritblasting and degreasing as well as the even & pore-free application are esential steps to success. We will not leave you alone! Whether on site or in the training facilities at our company headquarters in Southern Germany: Experienced **trainers** will take you by the hand and are available for your personal training or developing special skills on request – this is how real **system partnership** works!

Technical Data Sheet

MetaLine® 100 XTM

Chemical description	Novolac / Ceramic / Glasflake	
Color	blue gray (sim. RAL 7031)	
Application	brush / roller / spray	
Working life	30 minutes	at 20 °C / 68 °F
Mixing ratio	4 : 1 per weight	not for cartridge packaging
Dry film thickness (depending on load)	0.5 mm to 1.5 mm	20 - 60 mils
Wet film thickness	0.5 mm per coat	20 mils per coat
Number of coats (depending on load)	1 – 3	
Consumption (theoretically)	1.25 kg/m² per mm thickness	0.25 lb/ft² per 40 mils coat
Hardness	75 Shore D	A.S.T.M. D2240
Density	1.25 g/cm³ (0.045 lb/in³)	DIN EN ISO 1183-2
Compression strength	> 80 N/mm² (> 11,600 psi)	A.S.T.M. C579
Tensile strength	> 35 N/mm² (> 5,070 psi)	A.S.T.M. C307
Flexural strength	> 40 N/mm² (> 5,800 psi)	A.S.T.M. D790
Pull-off adhesion strength (Steel S235JR)	> 35 N/mm² (> 5,070 psi)	A.S.T.M. D4541
Dielectric surface resistivity	> 8 x 10^{10} Ohm	DIN EN 62631
Dielectric breakdown voltage	> 5 kV/mm (> 5,000 Volts per 40 mils)	DIN EN 60243
Temperature resistance (dry / wet)	+150 °C / +130 °C	300 °F / 270 °F
TABER-Abrasion (CS17, dry, 1 kg/2.2 lbs, 1,000 rev.)	55 mg (0.85 grain)	A.S.T.M. D4060
Corrosion resistance (salt spray test)	passed 10,000 hours	DIN EN ISO 7253
Chemical resistance (see I-100XTM.pdf)	pH 1 – 14	depending on load
Solids content (by volume)	100 %	
Shelf life	at least 12 months	
Specifications	meets DIN EN ISO 12944-9	
Overcoating time	1 h (minimum) 2 h (maximum)	at 20 °C / 68 °F
Cure time (full mechanical load)	> 2 days	at 20 °C / 68 °F
Cure time (full chemical load)	> 7 days	at 20 °C / 68 °F

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surface protection

You will find MetaLine® products used worldwide in various industries such as:

- Aeronautical Engineering
- Automation Technology
- Automotive Manufacturing
- Ceramics Industry
- Chemical Industry
- Concrete Production
- Conveyor Technology
- Electrical Engineering
- Fertilizer Production
- Foodstuff Processing
- Glass Processing
- Metal Foundries
- Mining Industry and
- Municipal Technology
- Nautical
- Occupational Safety
- Offshore & Marine
- Packaging Technology
- Petro-Chemical
- Pharmaceuticals
- Plastics Processing
- Power Plant Technology
- Pulp & Paper
- Recycling Technology
- Surface Technology
- Textile Machinery Design

... and many more

With more than 60 years of experience, MetaLine® stands for the protection, preservation and reconstruction of contaminated surfaces and components.

... we change surfaces!

protect | repair | save | cover | improve

P-100XTM (EN), October 2025

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