

**PROTECTIVE COATINGS**

*solutions that cover your needs*



**SIGMA  
COATINGS**

A PPG Brand



# **SIGMA** *Shield*

Heavy-duty, reinforced range

# SigmaShield

## Heavy-duty, reinforced range

### PPG Protective & Marine Coatings

*Unrivalled performance and protection*

*PPG Protective & Marine Coatings (PMC) is a world leader in protective and marine coatings.*

*We create proven products that protect customers' assets in some of the world's most demanding markets including:*

- Civil building
- Infrastructure
- Offshore
- Petrochemical
- Power
- Rail
- Marine new-build
- Marine dry dock
- Marine sea stock

*Our coatings are unrivalled in performance and protection among asset owners, contractors, fabricators and applicators across the globe, helping customers meet the challenges they face today, and tomorrow.*

*Experience, innovation and integrity – that's what makes PMC the ideal coatings partner.*

Heavy-duty applications require more features than can be offered by conventional coatings. The SigmaShield range offers long-term, cost-effective protection in the toughest environments. Our products deliver superior protection as they are all reinforced with glass-flake, aluminum oxide or flint, depending on the level of performance required.

The SigmaShield range is qualified and approved to meet the demanding duty of infrastructure, mining, offshore, petrochemical, and power applications.

### SigmaShield applications

The SigmaShield range is widely used and respected in all key industry sectors, meeting the extreme challenges required to protect major assets throughout the world.

#### Infrastructure

- Caissons
- Decks and walkways
- Waste and water tanks

#### Petrochemical

- Floating roof tanks
- Jetties
- Walkways

#### Mining

- Conveyors
- Slurry lines

#### Power

- Condensate boxes
- Renewable energy applications

#### Offshore

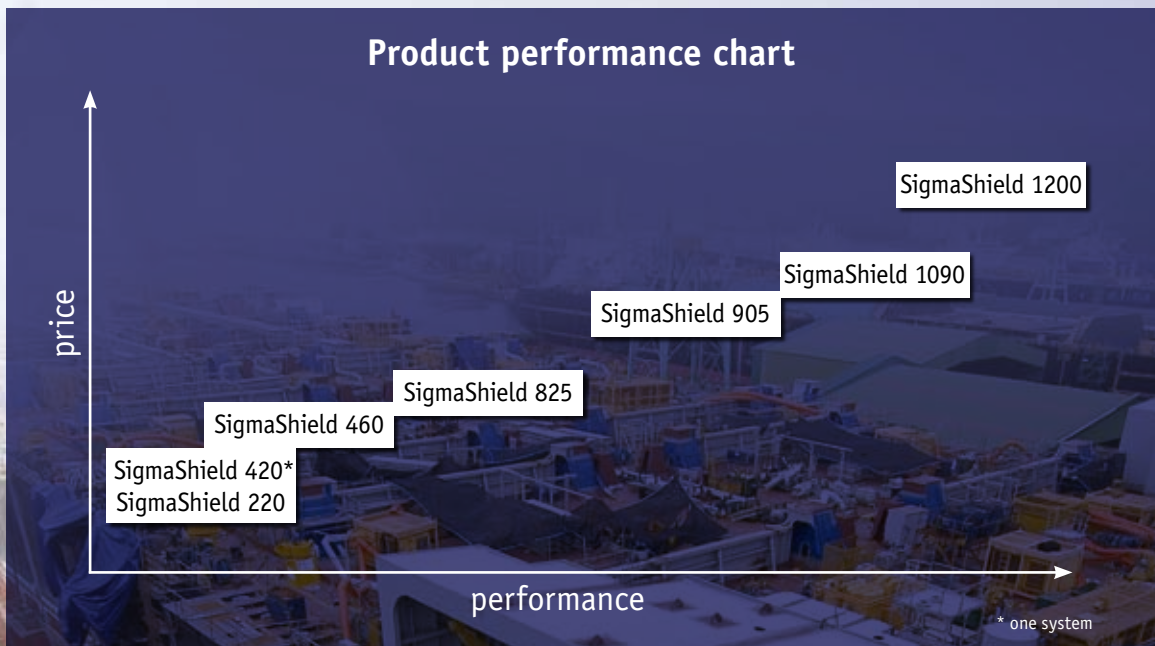
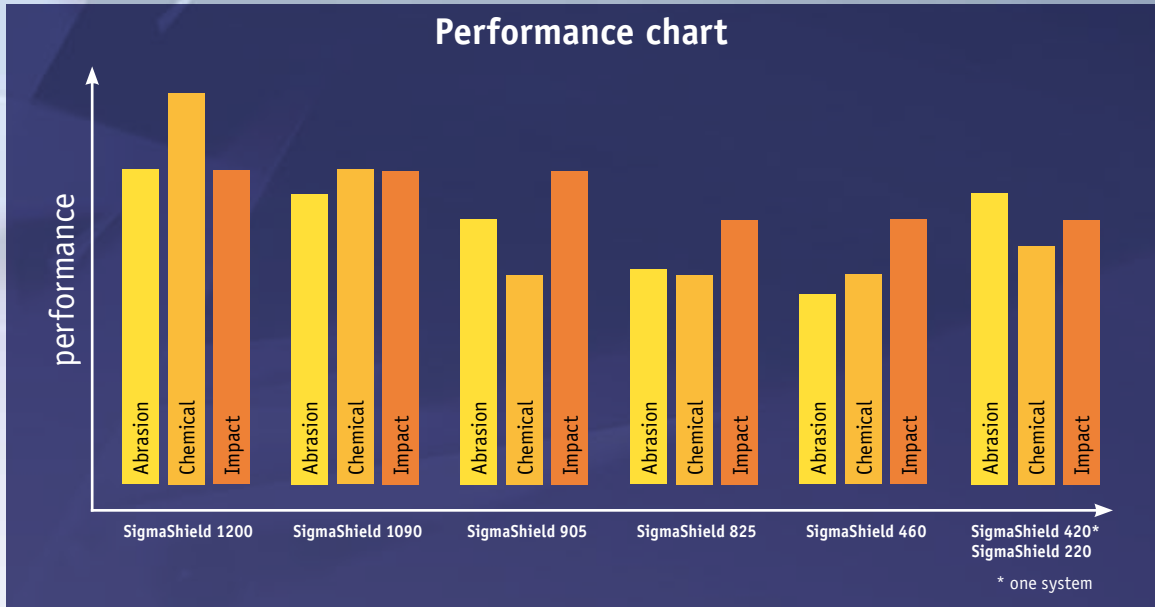
- Decks and walkways
- Helidecks
- Jackets and caissons

### Performance you can trust

Every SigmaShield coating provides consistent and reliable performance and is manufactured meeting world-leading standards.







# The SigmaShield Range



## SigmaShield 1200

A unique, solvent-free, reinforced phenolic epoxy coating designed for ultimate chemical and abrasion resistance.

- **One-coat system, direct to metal**
- **Excellent impact and abrasion resistance with a low-friction coefficient**
- **Compatible with well-designed cathodic protection systems**
- **Reduced explosion risk and fire hazard**

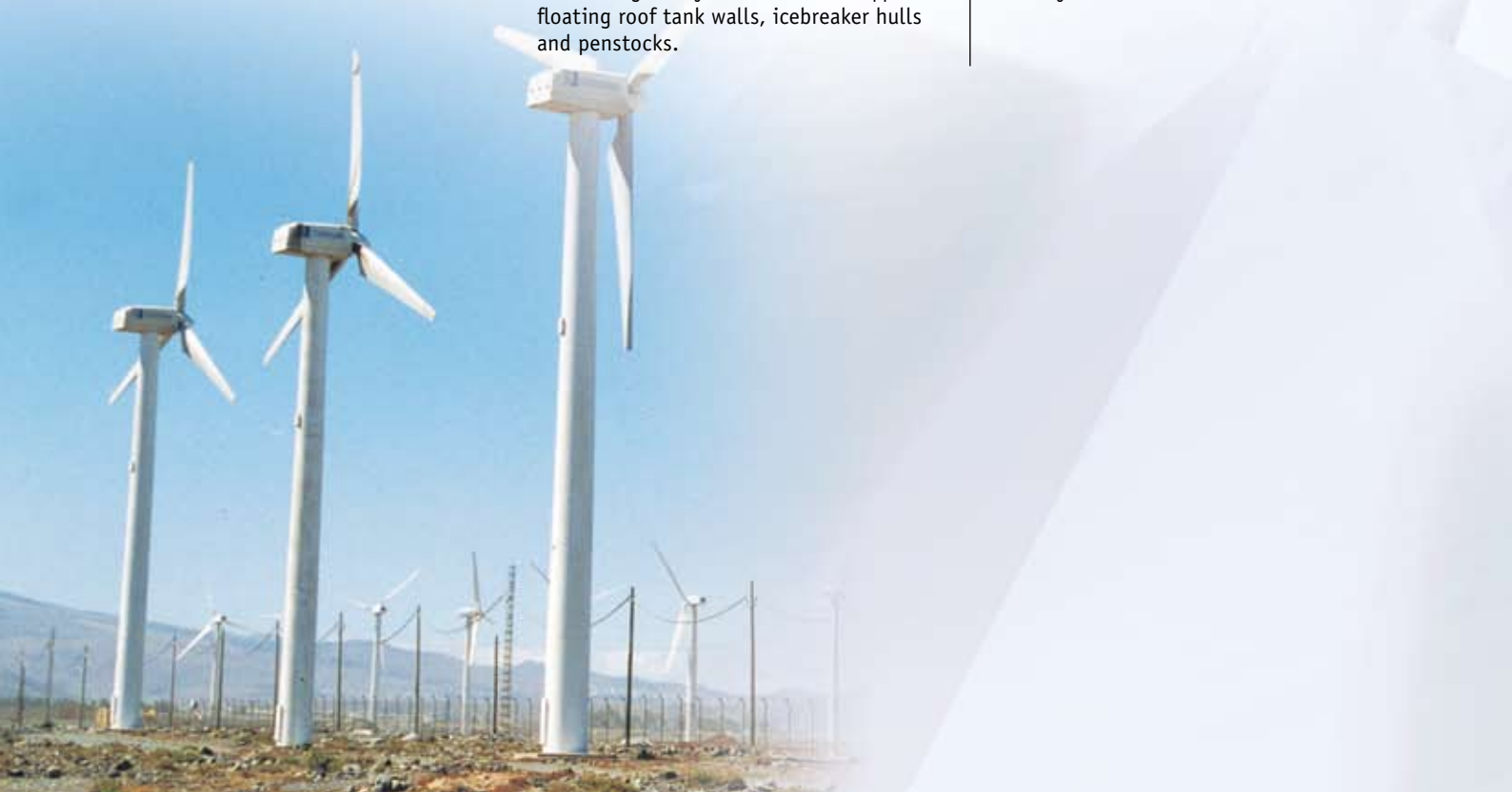
Tests clearly show the combination of phenolic epoxy and aluminium oxide gives much higher abrasion resistance than glass-flake reinforced systems. The combined chemical and mechanical properties make this coating ideally suitable for rail hoppercars, floating roof tank walls, icebreaker hulls and penstocks.

## SigmaShield 1090

A flint-reinforced, solvent-free, heavy-duty epoxy coating designed for ultimate impact and abrasion resistance. Applied by spraying at thicknesses of 3 to 5 mm.

- **Seamless, water-impermeable coating**
- **Excellent anti-corrosive properties**
- **Exposable to water within 30 minutes after application**
- **Compatible with well-designed cathodic protection systems**

Delivers exceptional impact and abrasion resistance, providing long-lasting splash zone protection. The mechanical and chemical resistance makes this product an excellent choice for heavy-duty decks, walkways and helidecks.







### **SigmaShield 905**

A solvent-free, glass-flake reinforced pure epoxy coating for chemical, impact and abrasion resistance.

- One-coat system, direct to metal
- Good resistance to various chemicals
- Application by heavy-duty, single-feed airless spray equipment (60:1)

Light-tint, abrasion-resistant coating for use in bulk handling equipment, railcars and bulk carriers.

### **SigmaShield 825**

A high-solids, glass-flake reinforced epoxy coating for high-abrasion areas.

- High-build
- Good abrasion and impact resistance
- 25% glass-flake
- Compatible with well-designed cathodic protection systems

Single-coat system on offshore structures, pipes and other steel and concrete substrates that are exposed to high abrasion in corrosive conditions.





### SigmaShield 460

Glass-flake reinforced epoxy coating where ease of application is a key requirement.

- Excellent corrosion protection
- Long-term protection
- Excellent abrasion and impact resistance
- Application and curing at temperatures down to 5°C
- The low-temperature cure version allows curing down to -10°C

Used in combination with epoxy blast primer for ease of application. The system provides protection and abrasion resistance for immersed, or intermittent immersed, offshore constructions and sheet piling.

### SigmaShield 420

A high-solids, reinforced epoxy coating with good chemical and abrasion resistance when used in combination with SigmaShield 220.

- Suitable for cargo tanks, bulk or oil carriers and storage tanks
- Excellent abrasion and impact resistance
- Easy to clean
- Good low-temperature curing
- The low-temperature cure version allows curing down to -10°C

Used for water resistance and cargo handling.

### SigmaShield 220

A high-solids, reinforced epoxy primer giving good chemical and abrasion resistance in combination with SigmaShield 420.

- General purpose primer for coating systems for steel
- Excellent corrosion protection
- Resistant to chemically polluted water
- The low-temperature cure version allows curing down to -10°C

Blast primer used in combination with abrasion resistant topcoats, allowing convenient application to large structures and tanks.



# The SigmaShield Range

## SigmaShield 1200

- Solvent-free, reinforced, phenolic epoxy coating

## SigmaShield 1090

- Solvent-free, flint-reinforced epoxy coating

## SigmaShield 905

- Solvent-free, glass-flake reinforced, pure epoxy coating

## SigmaShield 825 (*Amerlock 400 GFA*)

- High-solids, highly reinforced epoxy coating

## SigmaShield 460

- Solvent-based, glass-flake reinforced epoxy coating

## SigmaShield 420

- High-solids, reinforced epoxy coating

## SigmaShield 220

- High-solids, reinforced epoxy primer



# PPG Protective & Marine Coatings

PPG Protective & Marine Coatings brings unrivalled levels of innovation, experience and expertise in coatings technology, supported through our expanding global supply and distributors' network in over 80 countries.

We have in-depth knowledge of the industry, our customers' day-to-day challenges and the environmental, health and safety standards in the marketplace. By working in close partnership with customers, our technical service representatives are able to offer an unsurpassed level of market knowledge. This enables us to respond quickly with efficient, economic solutions in all environments and industries.

The result – performance-enhancing coating systems that can be applied more easily, resist the elements more effectively, and deliver maximum performance with minimum downtime.

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