

# Sports and leisure facilities

Global experience  
and trusted solutions



# World-leading coatings supplier

Hempel was founded in 1915 and is today one of the world's leading manufacturers and suppliers of coating solutions. Our advanced protective and decorative coatings can be found on millions of surfaces around the globe.

From the world's longest bridges and tallest skyscrapers to airports, sports stadia and civil structures, our coatings protect your assets against corrosion in many different and challenging environments.

Our history is rooted in protective coatings for the extreme conditions experienced in the Marine, Decorative and Protective industries, so you can be assured that we offer trusted technology, expert technical service and reliability.

With our vast expertise and knowledge, you know that by choosing Hempel, you are choosing a brand you can trust.

# Tailored for sports and stadia

Modern sports venues and leisure facilities are designed to be multi-functional, accommodating a range of sporting and entertainment events, retail and commercial activities.

These venues often use steel and concrete in their construction to create sustainable and iconic additions to the landscape. The increasing sizes and larger open aspects of these venues present additional challenges for the protective coatings required.

We understand the difficulties and offer a range of high performance coatings that address these specific needs, backed up with a technical service that is second to none.



## Global service

We want to give you the right products on site, on time, every time. With the support of our 28 manufacturing plants and over 150 stock points worldwide, we offer a flexible service to all our customers. A service that we believe is second to none.

## Proven performance

Our range of high performance protective coatings offer advanced protection and optimised application for a durable finish that looks good for longer for all arenas and climates. With a proven track record, we are a trusted protective coatings partner for our sports stadia and leisure venue customers around the world.

## Professional support

Our customers know that specifying the right products is crucial when designing structures, to ensure corrosion and fire protection, good appearance and minimum maintenance. Our multinational, globally based teams are uniquely positioned to ensure the smooth running of your project. From planning to completion, specification to application, we have key people to support you both off and on site.

## Innovative solutions

With 15 global research and development facilities, we work locally with you to provide the right solution for your project. Our research and development teams are committed to continuous development of innovative and effective speciality coatings to give you durable protection whilst ensuring environmental responsibilities are met.

# Avantguard®

## Superior corrosion protection

Here at Hempel, we strive to develop coatings that are ever stronger to protect our customers' assets around the world against the corrosive effects of industry and nature alike.

Avantguard is our innovative, award winning<sup>1</sup> anti-corrosion technology, based on activated zinc. Our patented Hempadur Avantguard coatings have been proven to deliver superior corrosion protection compared to competitor zinc rich epoxy products<sup>2</sup>.

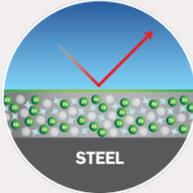
Strengthening the system at its core, Avantguard gives the full coating system enhanced corrosion performance.

- Redefining protection with reduced rust creep and proven, superior corrosion protection<sup>2</sup>.
- Redefining durability with improved mechanical strength and significantly improved crack resistance through high flexibility and self-healing of micro cracks.
- Redefining productivity by being fast drying with best-in-class<sup>3</sup> overcoating intervals. Easy to apply, even in high temperatures and humidity, there is less rework due to cracking, as the coating is more tolerant, even with high DFTs.

“Avantguard has a self-healing effect on micro cracks, which is something that we've never seen before. The insoluble salts which are created in the unique zinc activation process actually occupy the space left by the microcrack, further preventing the development of a more serious crack.”

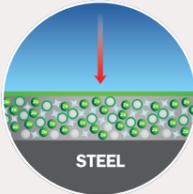
Josep Palasi  
Hempel Strategic Technology Director

These activated zinc primers reduce the effects of corrosion, offering advanced protection and increased durability for all-round performance. Unlike standard zinc epoxies, Avantguard is effective using all three methods of anti-corrosive protection.



**Barrier**

**Improved barrier properties**  
Avantguard displays low water permeability. The salts produced by the unique zinc activation process fill any space within the film, sealing it and enhancing the barrier properties of the coating.



**Inhibitor**

**Inhibition effect for improved protection**  
The zinc salts formed contain high levels of chloride ions that are captured as they are diffused from the environment through the film. This reduces the concentration of corrosive agents that reach the steel surface.



**Galvanic**

**Activated zinc gives excellent anti-corrosive properties**  
In the presence of oxygen, water and salt, zinc reacts faster than steel. This delays the corrosion process for much longer.

Product	Compliance
Hempadur Avantguard 750 Anti-corrosive performance in compliance with NORSOK M-501 which is faster curing, easy to apply and retains its properties even at excessive application.	Complies with NORSOK M-501 Ed. 6 (ISO 12944:2018 Part 9) and Level 2, type II in SSPC Paint 20, 2002. Utilises ASTM D520, type II zinc dust.
Hempadur Avantguard 550 Anti-corrosive performance in compliance with ISO 12944 C5 high, which is fast curing and easy to apply.	Complies with the requirements for Level 3, type II in SSPC Paint 20, 2002. Utilises ASTM D520, type II zinc dust.

1. Avantguard won the prestigious 2014 European Frost & Sullivan Award for New Product Innovation and NACE's MP Corrosion Innovation of the Year Award 2015.  
2. This superiority has been independently proven by third party laboratory neutral salt spray tests according to ISO 9227. In this test, steel protected with Avantguard produced a lower evolution of rust creep, assessed according to ISO 12944-6, when tested up to 3x the duration for C5 high environments.  
3. Avantguard's overcoating interval is a minimum of 33% faster than competitor zinc-rich epoxies when comparing product data sheets.

# Cellulosic passive fire protection

## Uncompromising safety, unbeatable efficiency

From the world's most impressive stadiums to the tallest skyscrapers, our solutions are constantly relied upon to protect against fire and corrosion in difficult and challenging environments.

Our established PFP products, Hempacore One and Hempacore AQ, offer 30-120 minutes of fire protection to almost all section types and are still in global use after many years.

Our new Hempafire product range ensures that we and our customers continue to develop and grow the passive fire protection market. Hempafire Pro 315 and Hempafire Pro 400 provide 60 minutes and 90 minutes of fire protection respectively, with unrivalled dry film thicknesses (DFTs). While Hempafire Optima 500 offers 90 and 120 minutes of waterborne fire protection, with higher application efficiency and reduced VOC emissions to meet sustainability requirements.

Our intumescent team offers global support to ensure that whatever or wherever your building is, our fire protection solutions are optimised, fit for purpose and suitable for all your project needs. We can also provide a full estimation and fire engineering service and bespoke project advice to ensure uncompromised asset protection at a lower total cost.

### Benefits include:

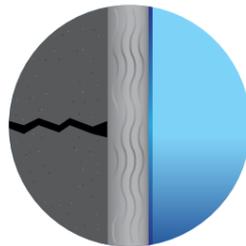
- Increased productivity with faster processes and fewer coats to apply
- Reduced cost, increase efficiency
- Reduced specification and application complexity
- Easy to apply
- Lasting performance, enhanced appearance

# Contex

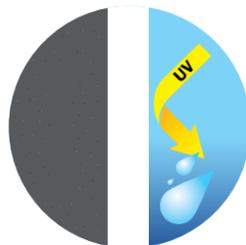
Protective coatings for concrete



Tough climates require tough protection. Our Contex range uses advanced technology to deflect solar rays, reduce heat conductivity, protect against carbonation and enhance crack bridging. Ideally suited for buildings, stadia, roads and bridges, it is available in a variety of finishes and textures that prolong the life of concrete surfaces.



Product	Benefits
<b>Contex EM</b> Contex EM is waterborne elastomeric topcoat with outstanding dynamic and static crack bridging properties to accommodate structure movements. It is based on 100% pure acrylic binders and provide effective protection against harsh climatic conditions. The breathable smooth textured surface offers brilliant anti-carbonation properties.	Outstanding crack bridging properties
	Excellent anti-carbonation properties
	Excellent UV resistance
	Exceptional weathering resistance



Product	Benefits
<b>Contex Topcoats</b> Contex topcoats are known for their outstanding colour retention, allowing exterior walls to maintain their appearance even in the hottest climates. They are available in both waterborne and solvent-borne versions to serve different needs and requirements. Contex topcoats have three different sheens: Matt, Silk, Semi-gloss.	Outstanding weather resistance
	Excellent UV resistance
	Proven colours retention and opacity properties
	Excellent anti-carbonation properties

# Strata

Ultimate protection for floors

Strata floor coating systems are designed to be long lasting and provide years of trouble-free service. Strata provides ultimate protection for concrete floors. Offering best-in-class abrasion resistance and mechanical strength, it has been developed to reduce the need for cyclical maintenance whilst offering high standards in sustainability.

Stadium terraces and other floors are required to be durable and resist external weathering and temperature variations, mechanical wear and abrasion and at the same time keep a high aesthetics appearance. Our Strata product range includes flooring for different areas in stadiums; flooring in spectator terraces, flooring in car parking areas and flooring in commercial areas.

Strata	Finish	About the product
Strata Epoxy HT	High gloss	For areas with heavy traffic or very low maintenance requirements Outstanding mechanical properties Excellent abrasion and chemical resistance Can be applied to a smooth glossy or slip-resistant finish Solvent-free epoxy and LEED compliant in VOC
Strata Epoxy MT	Glossy	For areas with medium traffic High abrasion and chemical resistance Solvent-borne epoxy with high solid content
Strata Epoxy LT	Glossy	For areas with light traffic Can be used on walls Solvent-borne epoxy
Strata Epoxy SL2000	High gloss	Self-levelling system Seamless and hygienic surface Excellent abrasion resistance Solvent-free epoxy and LEED compliant in VOC
Strata Epoxy WB	Semi gloss	Waterborne epoxy coating for floors and walls VOC free and LEED compliant Can be used on damp surfaces For areas with light traffic
Strata PU Top	Glossy	Outstanding UV resistance, colour and gloss retention Exterior and interior use Can be used as UV protective topcoat on epoxy flooring

**Arena Fonte Nova Stadium, Brazil**

This World Cup 2014 stadium with a capacity for 55,000 spectators, was coated with 40,000 litres of Hempel, was awarded the 2013 European Steel Design Award by ECCS (European Convention for Construction Steelwork).

With a reputation among steel constructors as an extremely reliable product that combines excellent mechanical resistance with high productivity, Hempadur Fast Dry 15560 was integral to this durable protective coating system.

**Products**

Hempadur Zinc 17360

Hempadur Fast Dry 15560

Hempathane HS 55610

**Doha Golf Club, Doha, Qatar**

Doha Golf Club boasts an 18 hole Championship Course, a 9 hole Academy Course, an enormous driving range and putting green, 8 artificial lakes, graceful landscaping and a beautiful clubhouse designed in old traditional Arabic style, which has been located at one of the highest points on the course giving it a magnificent prominence.

**Products**

Topaz Emulsions 588ME/589ME

Contex EM 58600

**S.L.B Luz Stadium, Lisbon, Portugal**

The stadium features a translucent, polycarbonate roof which is supported by tie-beams of four steel arches, each measuring 43 metres in height. The capacity of 65,647 seats is used for football matches among other sporting events. Hempel has been used on this stadium to protect the steel work in the roof.

**Products**

Hempadur Zinc 17360

Hempadur Fast Dry 15560

# Selected references

Project	Location	Products	Year
F1 Grand Prix	Bahrain	Topaz emulsions 588ME/589ME	2016
Sabah Al Salem Sports Hall	Kuwait, Middle East	Casa Stone Tex 582ME, Topaz emulsions 588ME	2015
Vigo AVE Railway Station	Vigo, Spain	Hempacore One 43600	2015
Torun Sports Stadium	Poland	Hempacore One 43600, Hempadur Fast Dry 17410	2014
Fisht Olympic Stadium	Sochi, Russia	Hempadur Fast Dry 15560, Hempathane HS 55610, Hempadur Mastic 45880	2014
Itaipava Arena	Fonte Nova, Brazil	Hempadur Zinc 17360, Hempathane HS 55610, Hempadur Fast Dry 15560	2014
FIFA Worldcup Stadium Arena Castelão	Brazil	Hempadur Zinc 17360, Hempathane HS 55610, Hempadur Fast Dry 15560	2012
FIFA Worldcup Stadium Arena de Gremio	Brazil	Hempadur Zinc 17360, Hempathane HS 55610, Hempadur Fast Dry 15560	2012
Al Shaqab Academy	Doha, Qatar	Topaz emulsions 588ME	2012
FIFA Worldcup Stadium Arena Fonte Nova	Brazil	Hempadur Fast Dry 15560, Hempathane HS 55610, Hempadur Zinc 17360	2011
Sanmenxia Culture & Sports Centre	China	Hempadur Fast Dry 17410, Hempadur Hi Build 45230, Hempaxane Classic 55000	2011

As a world-leading supplier of trusted coating solutions, Hempel is a global company with strong values, working with customers in the protective, marine, decorative, container and yacht industries. Hempel factories, R&D centres and stock points are established in every region.

Across the globe, Hempel's coatings protect surfaces, structures and equipment. They extend asset lifetimes, reduce maintenance costs and make homes and workplaces safer and more colourful. Hempel was founded in Copenhagen, Denmark in 1915. It is proudly owned by the Hempel Foundation, which ensures a solid economic base for the Hempel Group and supports cultural, social, humanitarian and scientific purposes around the world.

**Hempel A/S**

Lundtoftegaardsvej 91  
2800 Kgs. Lyngby  
Denmark

Tel: +45 4593 3800  
Email: [infrastructure@hempel.com](mailto:infrastructure@hempel.com)  
[infrastructure.hempel.com](https://infrastructure.hempel.com)