

# PROTECTIVE COATINGS AND INTUMESCENT COATING SYSTEMS



# KANSAI HEI IOS SONEOFTHE WORLD'S LEADING OF SPECIAL TY

# "DESIGNING EXCELLENCE"









# HIGHTECH COATINGS FOR DIFFERENT INDUSTRIAL REQUIREMENTS

KANSAI HELIOS Austria has been a specialist in industrial high-performance coatings since 1937, which today include corrosion protection systems, ACE coatings, railway coatings, high-heat resistant coatings under the brand Thermodur, road marking materials, zinc flake coatings, and the market-leading Rembrandtin core plate varnishes. KANSAI HELIOS is one of the few complete system suppliers in Europe, offering perfectly aligned coating systems: liquid coatings, powder coatings, gelcoats, e-coat as well as industrial adhesives and sealants.

As part of KANSAI PAINT, one of the world's leaders in the paints and coatings industry, KANSAI HELIOS represents the European competence center of the group. We focus on high-quality products, long-term cooperation and a strong technical support. With our own modern and fully equipped production sites and our well-located field offices throughout Europe, KANSAI HELIOS serves customers in more than 60 countries worldwide. We share our long-term experience with our partners through our renowned IKI symposia and technical trainings.

### "DESIGNING EXCELLENCE" – R&D AT THE HIGHEST LEVEL

At KANSAI HELIOS research and development is based on the highest standards, extensive know-how and a passion for inventive product solutions. We drive progress and innovation in our high-end laboratories. Looking far ahead, our experienced R&D teams formulate, develop and test high-performance coatings and paints, chemicals for bleaching and cleaning as well as materials for sticking and sealing that meet the high criteria of future product quality – especially with regard to the environment.

# CREATING MORE VALUE FROM LESS RESOURCES

The KANSAI HELIOS Group is committed to the principles of sustainable development and relies on clean, energy-saving production technologies and the responsible use of resources. Accordingly, environmental protection and a strong ESG management are a key focus for us, not only in product development, but along the entire value chain and in all areas of the Group.



# PROTECTING VALUES – SECURING THE FUTURE

Diverse climatic influences and environmental conditions can cause severe damage to steel buildings and constructions. KANSAI HELIOS protective systems are designed to withstand different degrees of stress and ensure safety worldwide in the fields of energy supply, traffic, and many different industry sectors.

From electricity pylons over bridges to steel constructions or industrial plants: the high-quality coating systems – solventborne, low solvent, and waterborne – withstand highest stress. We have taken up the cause against corrosion on new constructions as well as when renovating existing objects. KANSAI HELIOS protects objects which shall last for many years.

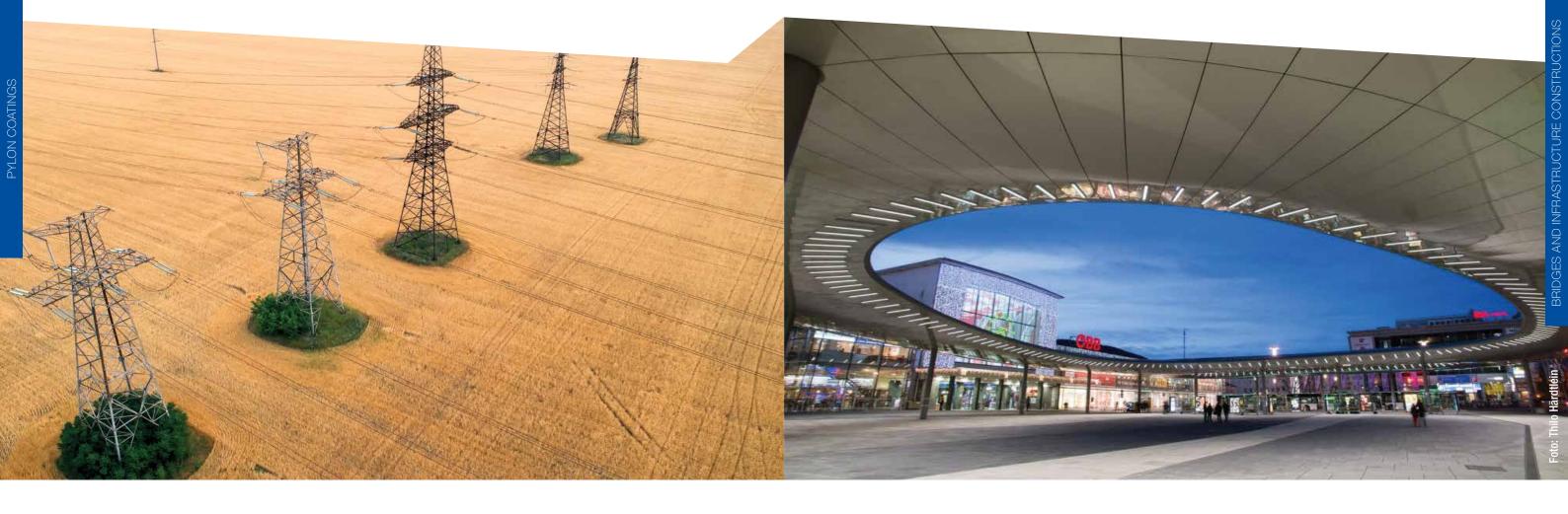
### Environmentally friendly & sustainable

Our protective systems shall meet all requirements also in the future. Therefore, they are constantly enhanced – with focus on environmental compatibility and sustainability.

### EN ISO 12944

The coating systems are based on the high quality standards of EN ISO 12944 – "Corrosion protection of steel structures by protective paint systems".

AN OPTIMALLY SELECTED PROTECTS VALUES PERMANENTY AND CAN SAVE HUMANINESIN AN EMERGENCY.



### PYLON COATINGS

Electricity pylons are the pillars of our energy supply. The transport of electricity via high-voltage lines ensures the independence of businesses, industry and private households. For many decades, the environmentally friendly, waterborne or low solvent coatings of KANSAI HELIOS have been used successfully as corrosion protection by all national energy suppliers. They are applied as duplex system to hot-dip galvanized steel or combined with suitable primers on steel.

### **SELECTED REFERENCE PROJECTS**

- Wien Energie (Austria)
- Austrian Power Grid (Austria)
- Steweag (Austria)
- Tiwag (Austria)
- EVN (Austria)
- Kelag (Austria)SAFE (Austria)
- Cell phone towers (Austria)
- MVM Landline (Hungary)
- Power lines in Serbia, Bosnia-Herzegovina and Montenegro

### PRODUCT HIGHLIGHTS

- Environmentally friendly
- Duplex system
- Easy to apply
- Durable protection from corrosion

### APPROVALS

- Verbund Austrian PowerGrid
- = CWIOOGIN
- 50 Hertz
- EVN
- Saizourg Net.
- Energie Steiermark
- OB
- Tiwac
- \\/:---
- Kelad
- Energie AC

# PROTECTIVE COATINGS FOR BRIDGES AND INFRASTRUCTURE CONSTRUCTIONS

Without stable infrastructure systems, today's mobility would be impossible. The durable protection and conservation of road and railway bridges, noise barriers, or toll gantries is therefore of highest importance. Enormous atmospheric and chemical stress e.g. from humidity, exhaust gases, or road salt make protection and conservation more difficult. **With** 

the development and production of tested and certified coating systems complying with RVS 15.05.11 in Austria as well as with TL/TP-KOR –steel constructions, sheet 87, in Germany, we contribute to the protection of the general infrastructure.

### SELECTED REFERENCE PROJECTS

- Central Station Graz, Linz, Salzburg, Wien (Austria)
- System bridges in Indonesia
- Railway bridges in Sri Lanka
- STON & PRAPRATNO bridge (Kroatien)
- Supporting structures Richthausen (Österreich)
- Bridges in Austria:
- Donaukanalbrücke (Vienna)
- Rope way underneath the Praterbrücke (Vienna)
- Prater Hauptallee bridge (Vienna)
- ÖBB-Salzachbrücke (Lend)
- Hohenlimburgbrücke (Styria)
- Donaustadtbrücke (Vienna)
- Floridsdorferbrücke (Vienna)
- U6 Donaubrücke (Vienna)
- Nordbrücke (Vienna)

### PRODUCT HIGHLIGHTS

- Excellent corrosion protection
- Easy processing
- Based on decades of experience
- Also suitable for special applications (e.g. CUI)

### APPROVAL

- Approval according to BVS 15.05.1
- BAST according to TL/TP-Kor Steel construction
- FMF approva
- Bridge approval in Romania

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# PROTECTIVE COATINGS FOR STEEL AND HALL CONSTRUCTIONS

The requirements regarding multi-storey steel buildings and hall constructions are constantly rising. Particularly for the automotive industry, new production and assembly facilities are built frequently. Corrosion protection and aesthetics of the surfaces are equally in demand. Numerous renowned steel construction companies throughout Europe rely on our innovative corrosion protection systems for their industrial projects.

### SELECTED REFERENCE PROJECTS

- The Vienna Giant Ferris Wheel (Austria)
- Ernst Happel Stadium Vienna (Austria)
- RB Stadium Salzburg (Austria)
- ÖAMTC headquarters Vienna (Austria)
- AUA Hangar Wien (Austria)
- Tivoli Stadium Innsbruck (Austria)
- Airbus Hamburg (Germany)
- Audi Ingolstadt (Germany)
- Mercedes Bremen (Germany)
- Thyssen (Germany)
- Daimler Kecskemet (Hungary)
- Audi Györ (Hungary)
- Hofer supermarket Ljubljana (Slovenia)
- Hrsak (Croatia)

### PRODUCT HIGHLIGHTS

- High corrosion protection according to EN ISO 12944
- Quick layer build-up with high solids protective coatings
- Economical system constructions
- Optimal finish for modern buildings

# PROTECTIVE COATINGS FOR UNDERWATER STEEL CONSTRUCTION

Hydroelectric power stations generate environmentally friendly electricity. The steel constructions are exposed to high mechanical stress. Lock systems, weir barriers, turbines, and high pressure pipelines require high quality and durable corrosion protection. KANSAI HELIOS coatings are used successfully in run-of-river as well as storage power stations.

### SELECTED REFERENCE PROJECTS

- Power station Freudenau (Austria)
- EVN DRL Ottenstein (Austria)
- TIWAG power station Langkampfen (Austria)
- "Wehr 1" Vienna (Austria)
- Power station Ybbs (Austria)
- Power station Altenwörth (Austria)
- Power station Wallsee (Austria)

### PRODUCT HIGHLIGHTS

- BAW tested materials
- Ideally suited for permanent stress caused by water
- Easy application
- Durable

### APPROVALS

 Federal Waterways Engineering and Research Institute (BAW) for Im1

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# PROTECTIVE COATINGS FOR INDUSTRIAL PLANTS AND INSTALLATIONS

Chemical plants, refineries, thermal power stations or steel production plants are exposed to enormous environmental influences, extreme temperatures and high chemical loads. Corrosion protection projects for storage tanks, silos, steel structures and pipelines in the chemical industry as well as for crane runways, transformers or generators are correspondingly

### **SELECTED REFERENCE PROJECTS**

- VOEST (Austria)
- Daimler climate wind tunnel (Germany)
- BMW climate wind tunnels (Germany)
- OMV (Austria)
- Shell and Avanti tank farms (Austria)
- Donauchemie (Austria)
- Borealis (Austria)
- HKW Glückstadt (Germany)
- RTA climate wind tunnel Vienna (Austria)
- TES 6 Sostanj (Slowenia)
- Lenzing (Austria)
- ELG tank farm (Austria)
- Power stations: Dürnrohr, Wien-Simmering,
- Wien-Spittelau (Austria)
- HKW München (Germany)
- Power station Dhekelia (Cyprus)
- Power station Ras Al Kaimah (United Arab Emirates)

complex. In the energy supply sector, it is lattice towers, substations, power plant halls, turbine pipes that require long-lasting corrosion protection. KANSAI HELIOS offers tailor-made products for such high corrosion protection requirements.

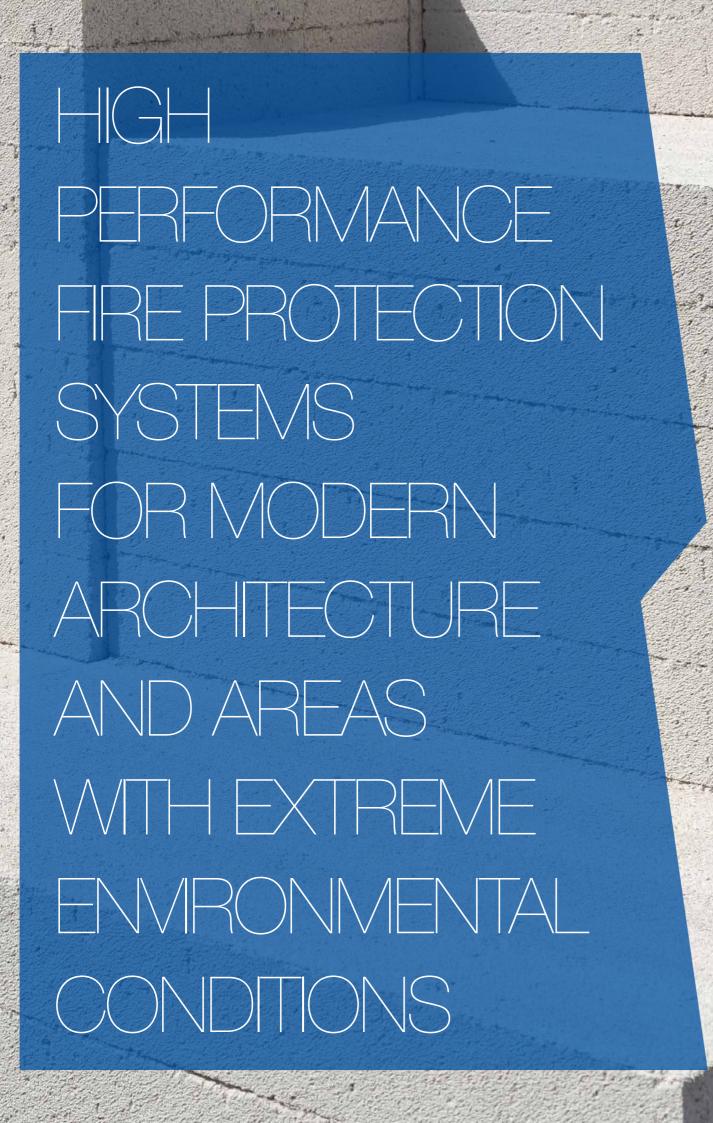
### PRODUCT HIGHLIGHTS

- Permanently heat-resistant up to 600°C
- High-solids coatings
- VOC-reduced systems
- Acrylics, epoxies & polyurethanes on waterborne basis
- For all corrosion protection classes according to EN ISO 12944

### APPROVALS

- Siemens transformers C4-C5
- Siemens TUN 901240 for transformers
- Clean room approval
- Listed according to OMV Refining Standard 1670
- OMV RefStd. 1670/1671
- CS 1A/B with zinc dust, CS 1A/B with zinc phosphate
- CS 2A/B for 120C° to 200C°
- CS 3A/B for 200C° to 500C
- CS 6 for components exposed to permanent water







# FIRE PROTECTION SYSTEMS FOR STEEL, CONCRETE AND WOOD

Steel fire protection systems from KANSAI HELIOS can save lives. Intumescent systems are applied between primer and top coat and guarantee valuable time: they support the statics of the steel structure and secure evacuation measures and rescue operations. Intumescent coating systems are suitable for many applications and react by foaming in case of fire. They are available as **1-component water-based**, **1-component solvent-based or 2-component epoxy-based systems**.

# Steel fire protection systems according to DIN EN 13501-2 for factory coatings and construction sites, Fire resistance class R 30 to R 90; up to U/A 470 m-1

Tested according to European Standard (EN) for fire protection of open and closed steel profiles in fire resistance classes from R15 to R180 and approved for the European market with a European Technical Assessment (ETA).

## Concrete fire protection systems according to EN 13381-3:2015, analogous to prEN 13381-3:2012

Particularly suitable for use on reinforced concrete components in areas with high emission loads (e.g. underground car parks, multi-storey car parks). Priming with concrete-carbon-barrier provides additional protection against the penetration of pollutants and water. For structural components made of reinforced concrete (e.g. hollow concrete ceilings, reinforced concrete girders/columns, reinforced concrete ribbed ceilings and reinforced concrete flat ceilings), fire resistance times of up to 240 minutes are achieved, depending on the structural component and application quantity, with hardly any static load, space-saving and maintenance-free.

# Wood fire protection systems for indoor and outdoor applications according to DIN 4102-1 and DIN EN

With this fire protection system, the building material wood can be upgraded from building material class B2 to building material class B1 'flame-retardant'.



# COATING SYSTEMS FOR USE IN EXPLOSIVE ATMOSPHERES (ATEX)

ATEX coating systems are specifically designed for areas with a high risk of explosion. They fully comply with the ATEX Directive or TRGS 727 and EN IEC 60079:2018. These systems combine excellent corrosion protection and UV resistance with additional properties required due to the special risk in potentially explosive areas.

### PRODUCT HIGHLIGHTS

- High-Performance Polyurethane Monolayer System
- Specifically developed for corrosion protection classes C2 high and C3 high
- Significant reduction of the normative threshold of 200 µm (no normative requirements for surface resistance necessary)
- Coating savings and maximum flexibility

### EXTERNALLY TESTED

External testing of the surface resistance of the coating systems according to

- FN IEC 60079-0:2018
- IEC TS 60079-32-1:2013
- FC/FN 60079-32-2:2015
- TRGS 727 at 30% r.h. and at 50% r.h.
- EN IEC 60079-0:2018 paragraph 26.13 at 30% r.h. and a 50% r.h.

# SPECIAL SYSTEMS FOR CUI – CORROSION UNDER INSULATION

Corrosion of steel occurs when steel is in direct contact with water and oxygen. In most atmospheric applications, corrosion occurs very rapidly – most frequently and severely in a temperature range between 50°C and 180°C. A special coating system forms a protective barrier and thus significantly extends the life of exposed piping, vessels and equipment. We offer the optimal coating systems for the CUI phenomenon. The systems are also suitable for applications that require **the highest corrosion protection performance combined with resistance to high temperatures and high humidity.** 

### **SELECTED REFERENCE PROJECTS**

- Waste heat utilisation system Weitendorf (Austria)
- OMV exhaust gas stack in Schönkirchen Reyersdorf (Austria)

### PRODUCT HIGHLIGHTS

- Excellent temperature resistance up to 600°C
- Peak load up to 650°C
- Processable on hot substrates (up to 100°C)
- Very good corrosion protection properties with single-layer coating
- Meets the requirements of the new AGI worksheet Q 151 as well as NACE SP0198 : 2017U.

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