

Industry

NAVIGATOR

SUSTAINABLE DEVELOPMENT
STRATEGIES FOR T&D

CONFERENCE 2025

Sustainable coatings for transformers

Stefan Kobor
Petra Gomez Alfaro-Kalteis

10 April 2025

Agenda

Company Introduction

Sustainability approach KANSAI HELIOS

KANSAI HELIOS as System Supplier for Transformers

Legislation regarding Chromium

Coating's portfolio for transformers





High standards, extensive know-how, passion for innovations and the drive for continuous improvement are the secrets of our success and the environment, where Kansai-Helios Coatings are born.

As a member of the KANSAI PAINT Group, Kansai-Helios is the Kansai Paint's European center of innovation, R&D, production and distribution.



KANSAI HELIOS at a Glance



AMONG THE TOP COATING COMPANIES IN EUROPE

Sales 2024: EUR 740 Mio.

Employees: approx. 3,200

Local production in: Austria, Brazil, China, Croatia, France, Germany, India, Italy, Russia, Slovenia, Serbia, Ukraine and USA

Production: 110,000 tons liquid coatings, 32,000 tons powder coatings, 80,000 tons resins, 5,000 tons glues and starches, 17,000 tons dry mortar, 29,000 tons chemicals





Name of the company

Kansai Paint Co., Ltd.

President

Kunishi MORI

Establishment

17th May 1918

Segments

Automotive-, Industrial-, Decorative-, Marine- and Protective Coatings

Headquarters

Osaka, JAPAN

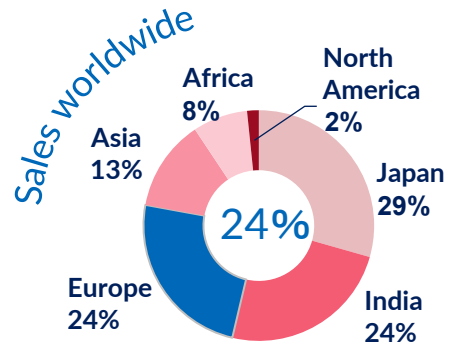


Revenues in FY 2023

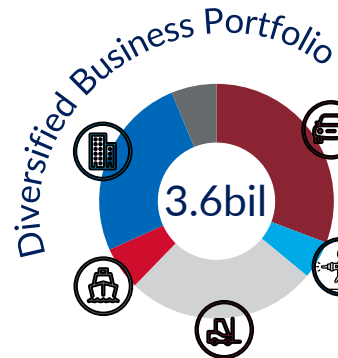
562,077 Mil JPY (3.610 bil USD* ※1 USD=155.7 JYP)

In the Global Paint Manufacturers

No. 9



※KHEC sales are all incorporated into Europe



Market Share in Automotive Industry

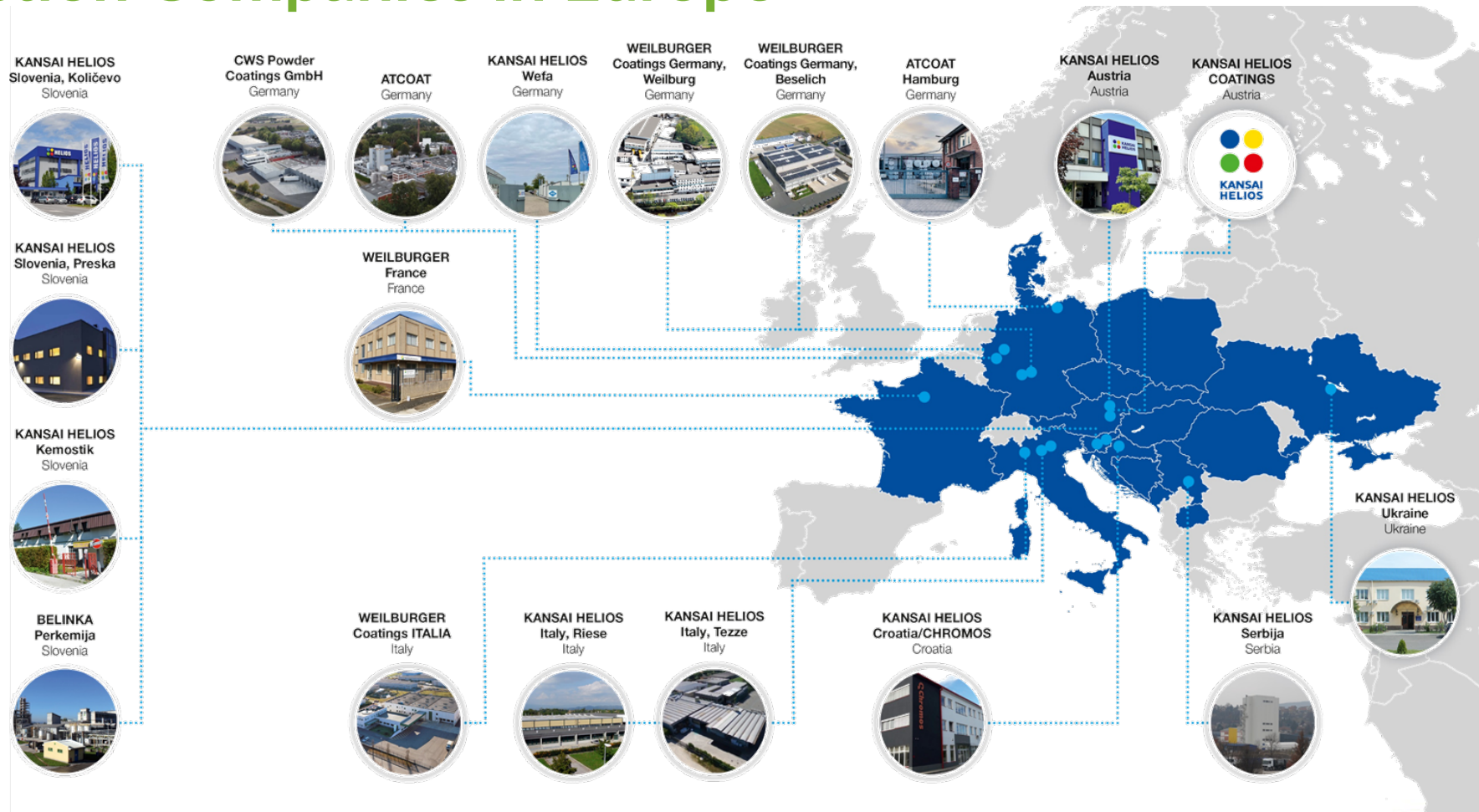
No. 1

※in Japan, India, Asia

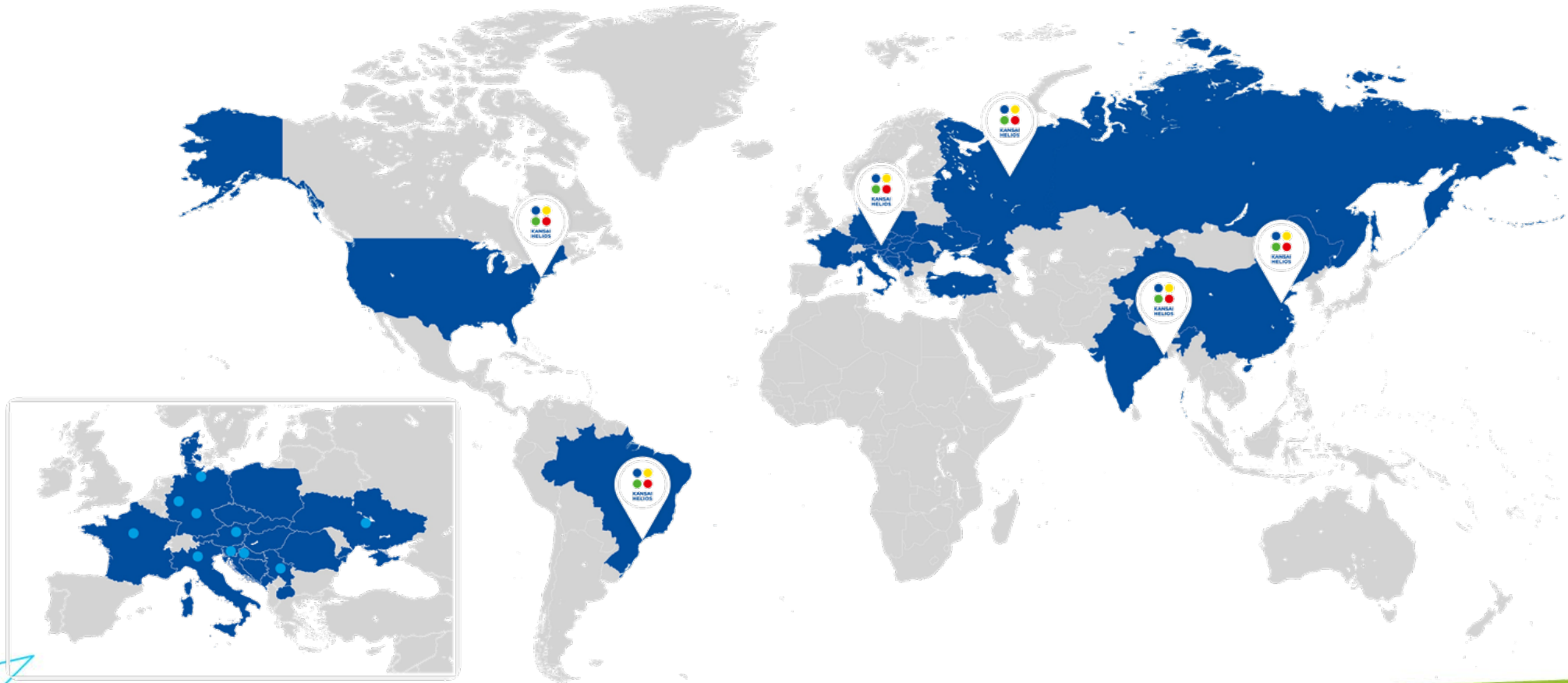
Employees

16,236

Production Companies in Europe



Production and Trading Companies around the World



Our Contribution to the European Green Deal – Sustainability Goals 2030



ESTABLISHING SUSTAINABLE OPERATIONS AND RESPONSIBLE CONSUMPTION

Achieve a **30 %** reduction in scope 1 and scope 2 GHG emissions (baseline 2021)

Realize a **20 %** reduction in water consumption (baseline 2021)

Accomplish a **30 %** reduction in waste generated in our operations (baseline 2021)

Reach a **20 %** reduction in energy consumption (baseline 2021)



ENSURING SAFETY AND HEALTH

Achieve **1.5 or less** frequency of occupational accidents (according to ILO)



STRENGTHENING SOCIETIES

Assess **80 %** of targeted suppliers through a CSR evaluation

Attain a minimum of **30 %** of all sales derived from sustainable products

Ensure **50 %** or more containers are recycled

Allocate a **10 %** of our annual marketing budget to support local children's development, health, and sports programs



CREATING SUSTAINABLE VALUE THROUGH KNOWLEDGE, SKILLS AND TALENT

Ensure that **100 %** of employees have access to participate in the employee engagement survey

Ensure **100 %** of employees' familiarity with KHEC values

Strive for **80 %** of R&D projects to focus on sustainable products



BUILDING PROFESSIONAL INTEGRITY

Ensure that **100 %** of our employees complete at least one compliance and integrity training annually

Achieve **0** confirmed incidents of corruption

Provide an effective and transparent grievance system accessible to all employees



What it means for our customers?



Need to assess your scope 3 emissions?

We provide Product Carbon Footprint Analysis, measuring the total greenhouse gas emissions generated by our product, from raw material extraction to the point it reaches our gates.



Looking to assess the total environmental impact of your product?

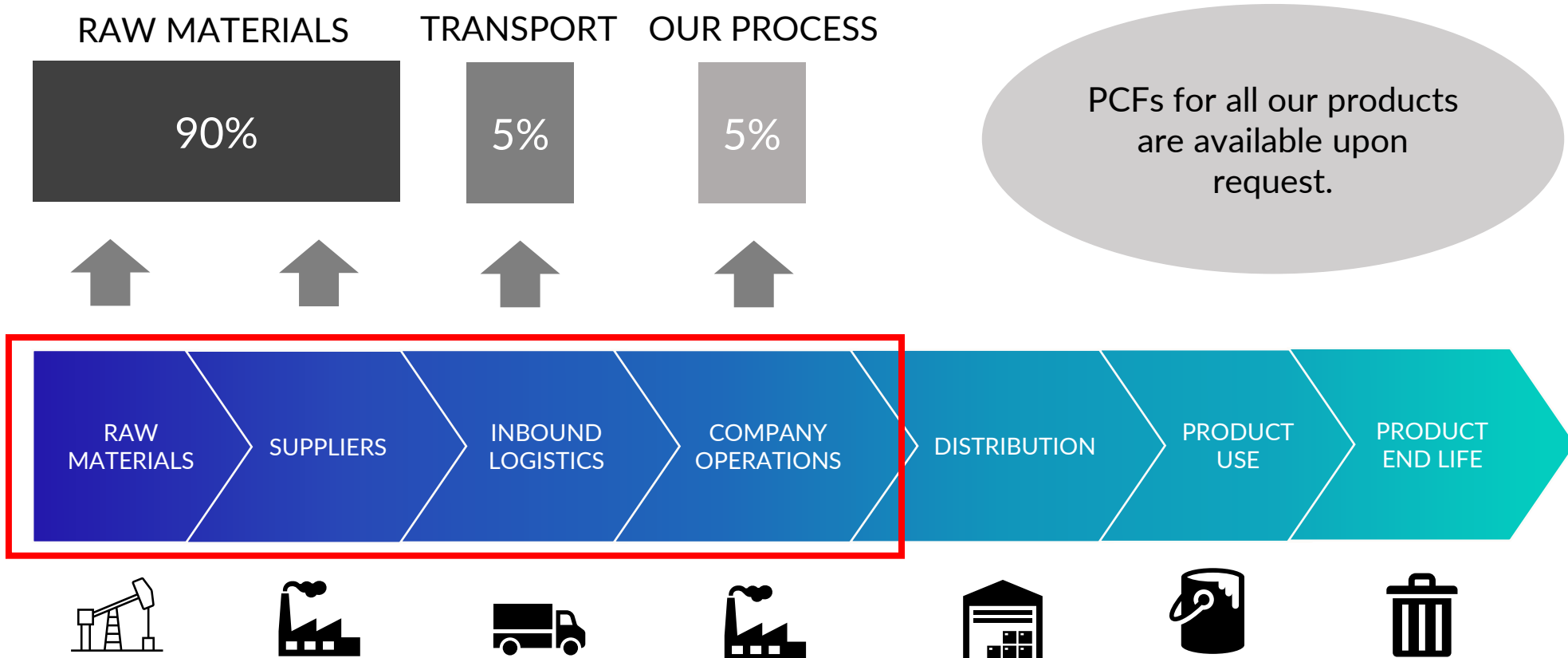
We can offer Life Cycle Assessment of our coatings (to our gate). This can enable your data-driven decisions to improve sustainability.



Minimizing Environmental Impact through Coating Innovation. We are developing solutions that minimize emissions, energy consumption, and waste during production and application. Our approach aligns with the "Safe and Sustainable by Design" framework for enhanced sustainability.



PCF – KANSAI HELIOS Products



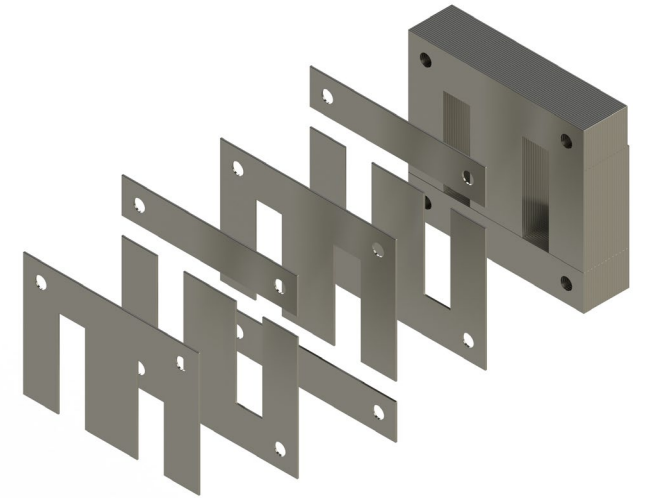
KANSAI HELIOS - System supplier for Transformers

- One supplier for different types of transformer coatings
- Systems adjusted to each other
- Single Point of contact
- Global presence of the Kansai group
- Innovative systems
- Tailor made solutions for the needs of the customers



Current GO coatings

- Segments of grain oriented steel are used to form the transformer core
- The coils are usually coated with a mill applied GO varnish before punching
- Up until today most **GO varnishes** contain chromium
- Chromium (Cr6) is hazardous to the human health
- It can cause lung cancers in people breathing airborne chromium, irritation or damage to the nose and throath, cause allergies and asthma



Source: www.osha.gov/sites/default/files/publications/hexavalent_chromium.pdf



Legislation regarding Chromium

The European Commission has taken measure to restrict the use of Chromium VI (Cr(VI)) substances under the REACH regulation

Key dates in the Restriction Process

- **27 September 2023:** The European Commission issued a mandate to the European Chemicals Agency (ECHA) to start the process of developing a document aimed at restricting Cr(VI) substances under REACH
- **29 April 2024:** The initial mandate was revised, extending the timeline from 12 to 18 months to accommodate additional work
- **End of 2026:** The anticipated timeline for the adoption of the restriction, approximately three years after the mandate was issued

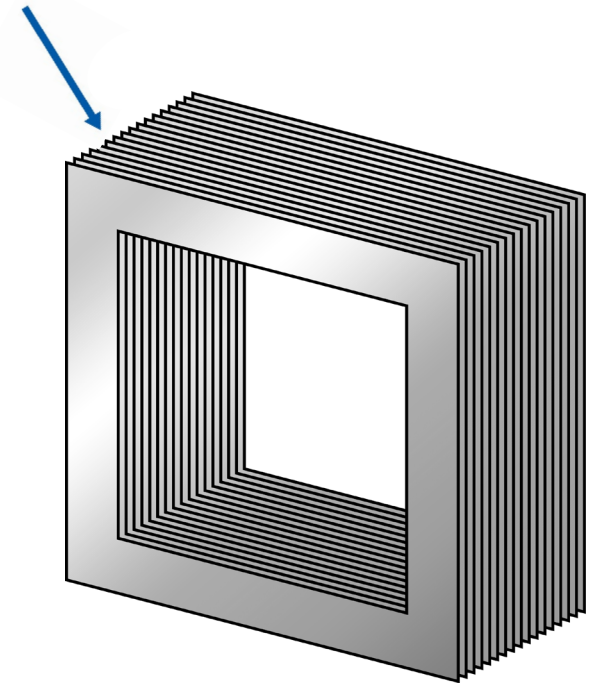
Source: [Foresight | The future of chemical policy monitoring](#)



Chromium-free coatings for GO steel

- KANSAI HELIOS has been committed to chromium free varnishes for many decades
- Remisol EB 5320 is the latest development in the field of chromium free GO coatings
- Available in different versions, especially in a clear and pigmented version
- The pigmented coating was specifically designed to guarantee superior control of coating thickness consequently excellent insulating values
- Performance in different aspects is not so far from the chromium coating
- Remisol EB 5320 can be modified for the substrate of the customers as well as for the underlying specification which needs to be fulfilled

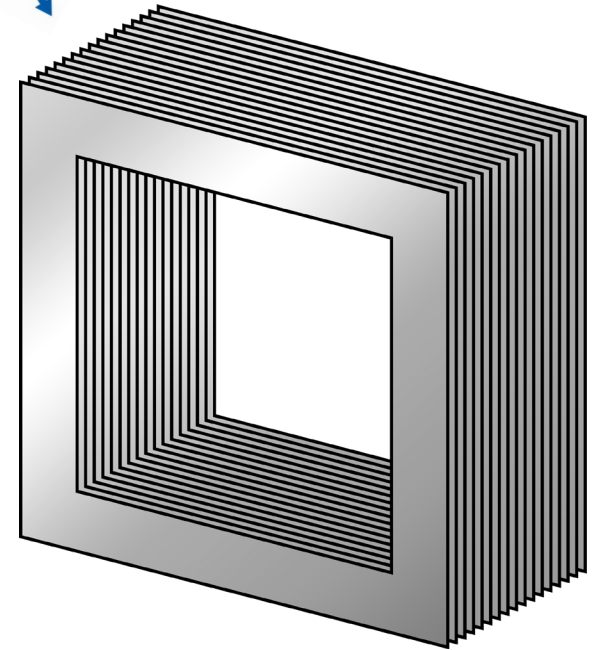
EB 5320 - already coated on the coil



Insulating adhesive varnish

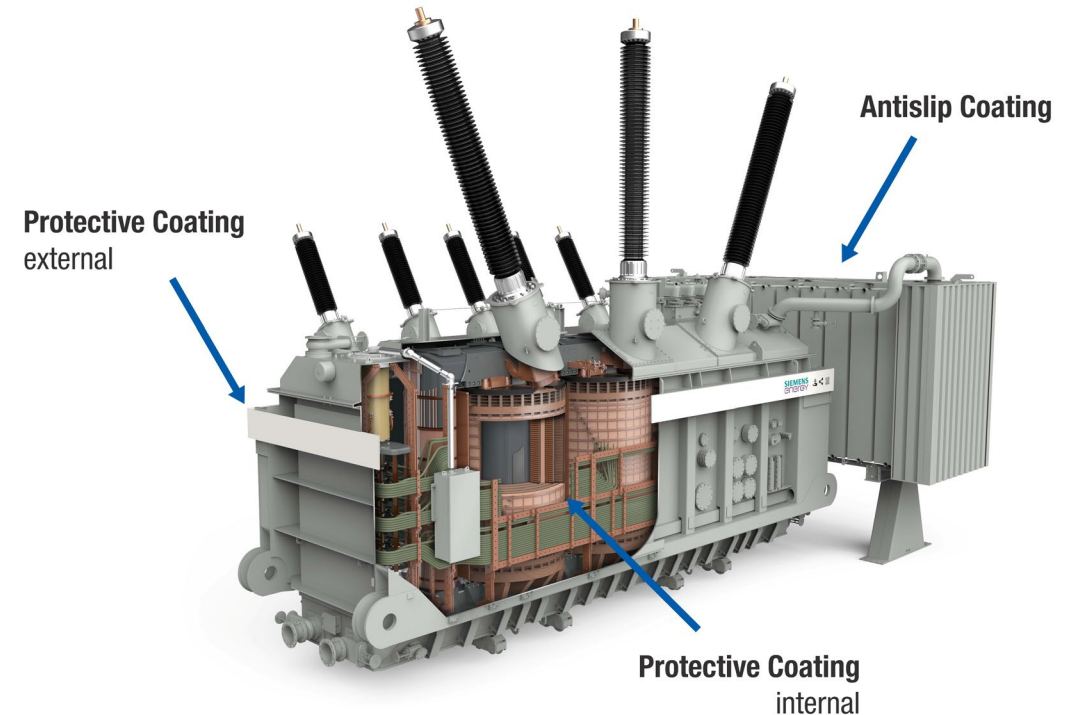
- Remisol RL 810 is an insulating adhesive varnish
- It is used for the cut edges of the transformer core as corrosion protection as well as to bond the laminations together
- It is globally very widely used from transformer producers as well as transformer core producers

RL 810 – coating for the edges



Protective Coatings external

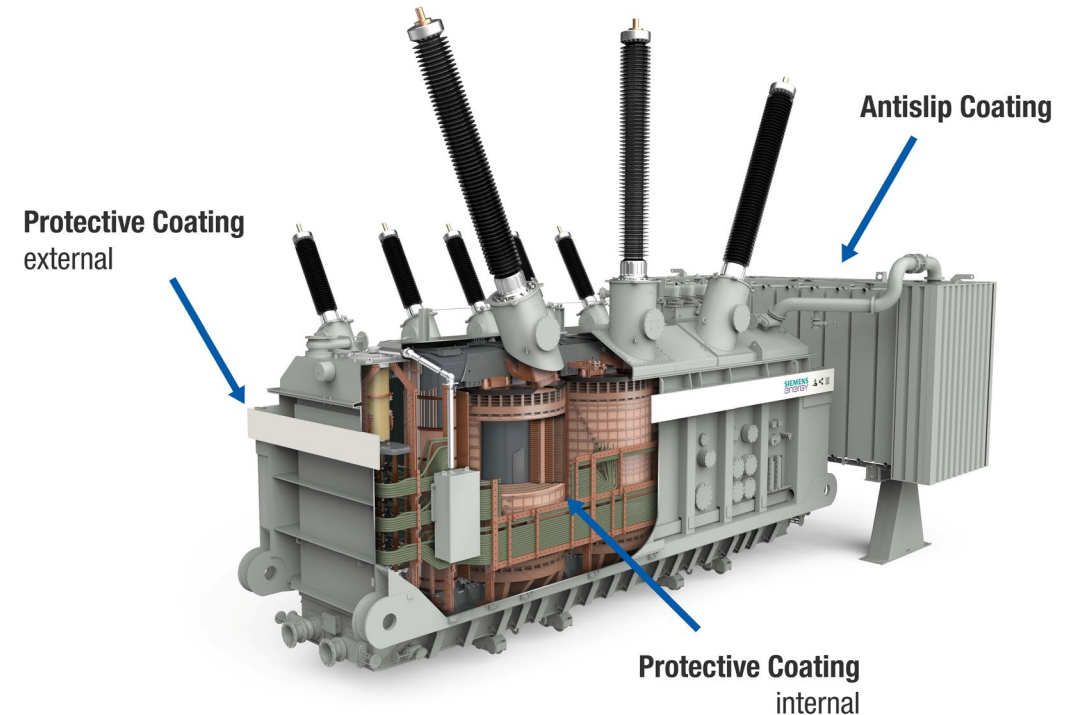
- KANSAI HELIOS Group has coating systems for external surfaces
- waterbased and solvent based systems
- High solid system for C5H with 240 μm
- approved acc. to ISO 12944:2018 from C3 to C5
- SIEMENS and ZTR / Ukraine approvals
- approved antislip system for walkable areas
- easy repair systems for site – own repair kits
- over 25 years experience in transformer business



Protective Coatings internal

KANSAI HELIOS Group has

- Coating system for internal surfaces which are in contact with oil
- High solid solvent borne system
- Resistance against mineral oil, syntethic oil (ester)
- Temperature resistance up to 130°C
- Easy to repair – repair kits



Summary



KANSAI HELIOS is your system supplier for transformer coatings with a global footprint



KANSAI HELIOS is highly committed to sustainability and ESG



KANSAI HELIOS can offer Product Carbon Footprint Analysis as well as Lifecycle Analysis



Contact Details



Petra Gomez Alfaro-Kalteis
KANSAI HELIOS Austria GmbH
Head of Sales
Petra.gomez@kansai-helios.at



Stefan Kobar
KANSAI HELIOS Austria GmbH
Director of Protective Coatings
and Freight Wagons Europe
stefan.kobar@kansai-helios.eu

Follow us on
LinkedIn

