

**INNOVATION
PROTECTION
FUTURE**

VIA NT® COATING TECHNOLOGY

Stal-West: The System Supplier offers a smarter way to corrosion protection

VIA NT



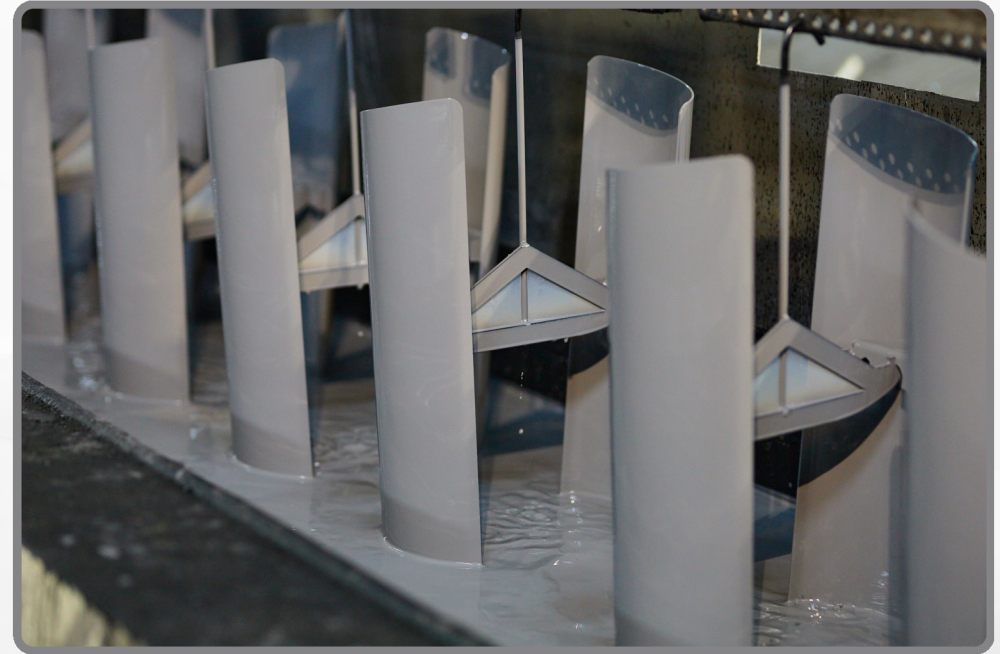
STAL - West Zrt.
THE SYSTEM SUPPLIER

A smarter way to corrosion protection

The newly created coating technology for higher coverage and increased corrosion protection on edges and inner surfaces.

The VIANT® process combines conversion coating and primer paint in just one coating layer. This new technology is easy to operate and enables reliable corrosion protection on edges and inner surfaces. It does not need high voltage, special equipment, or a constant coating temperature for the coating process step. Instead, VIANT® leads to a shorter process chain, resource savings and reduced running costs.

VIANT® is a user-friendly and more sustainable way to improve your coating process – and a big step towards greater usability, increased efficiency, and lower environmental impact. Follow our new way to pretreat and coat: the VIANT® way.



A giant leap in coating



Reduce your carbon footprint

- Lower electricity, water, and chemical consumption
- Just one process step for conversion coating and primer paint
- Free of heavy metals



Simplify your coating process

- No electricity for coating deposition
- Enhanced process stability
- Minimized maintenance effort



Enhance your corrosion protection

- Higher edge coverage
- Homogenous dry films also on inner surfaces
- Superior chemical resistance

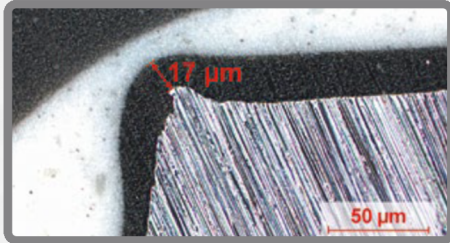


Improve your total cost of ownership

- Increased productivity
- Complete surface treatment in one place

Simply stronger coatings

Pioneering corrosion protection



Higher coverage on edges and corners

The VIANT® process builds a unique wet coating film driven by liberating ions from the metal surface rather than applying electricity. The film itself has a high viscosity, is robust, and adheres even on sharp edges. This ensures consistent and significantly higher corrosion protection.



Consistent corrosion protection - outside and inside

No matter how complex a product structure might be: As long as the coating liquid is in contact with the metal surface, the VIANT® process ensures that a wet coating film is built up. Therefore, as a Faraday effect is avoided, even the inner surfaces of pipes can be fully coated with a homogenous dry film.



Corrosion protection and primer paint in one

The VIANT® process combines conversion coating and primer paint in just one coating layer – with excellent performance on complex structures. It is directly applied onto the steel surface, so no extra conversion coating is needed. Compared with other methods, which typically require at least one additional coating layer, VIANT® saves you an entire process step and reduces your resource demand.



Superior chemical resistance

The coating is based on an innovative epoxy-based binder system, offering broad chemical resistance against most solvents and acids. The result: the coated metal parts are protected, even in harsh environmental conditions.

Free of heavy metals – and worries!

VIANT[®] Coating Technology

a sustainable solution



Zero Pollution

Reduced waste to prevent eutrophication



Climate Neutrality

GHG reduction through less energy & VOC



Health and safety

Eco-friendly & human-friendly process



Resource efficiency

Less chemical consumption



We have an obligation to pass on clean air, water and healthy forest to our next generations

Relative to a traditional PT/CED process

🌿 Overall Environmental Impact → **55% reduction**

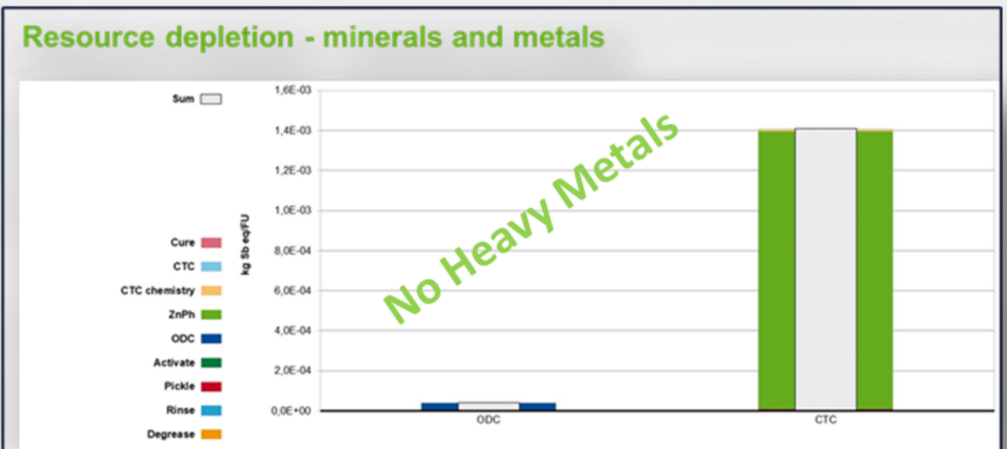
🌿 Climate Change impact (CO2) → **45% reduction**

🌿 Water Usage (with ultrafiltration) → **70% reduction**

🌿 Electricity Usage → **50-75% reduction**

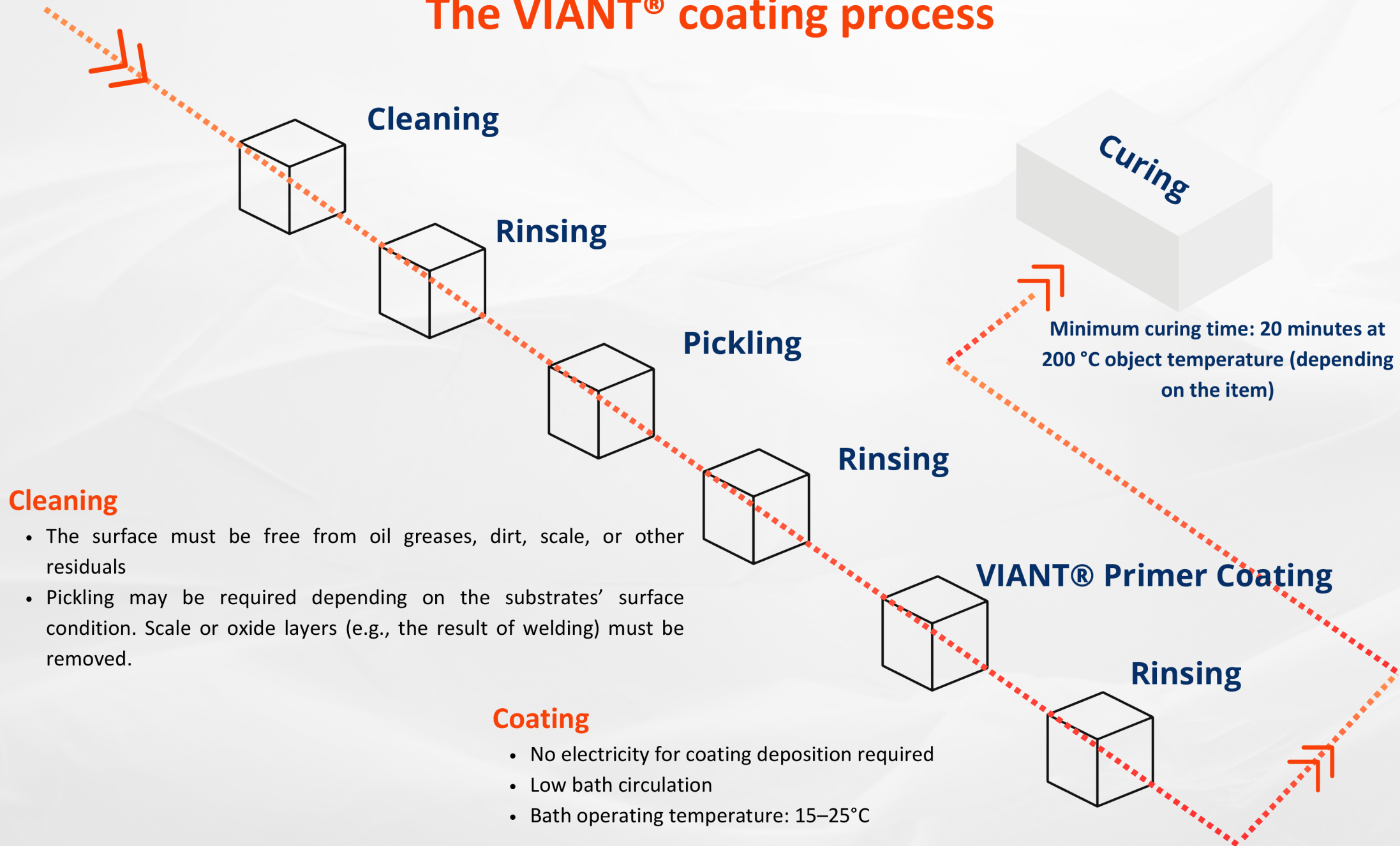
🌿 Process footprint → **30-40% reduction**

🌿 Powder Paint Topcoat Usage → **20% reduction**

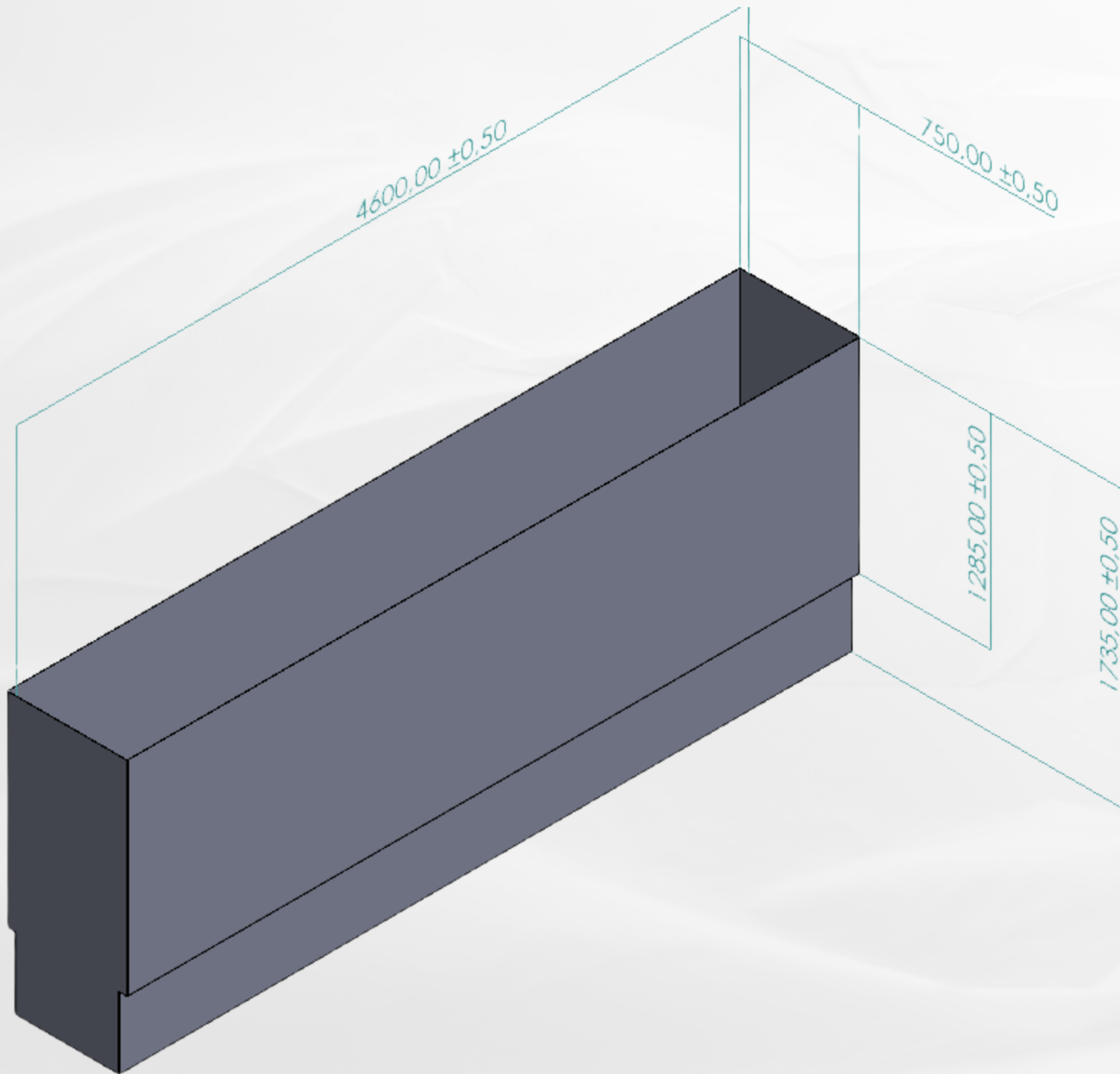


Forrás: Eco-Efficiency-Analysis of steel coating with low UV stability, Dr. Peter Saling, CDS/S, April 2019

The VIANT[®] coating process



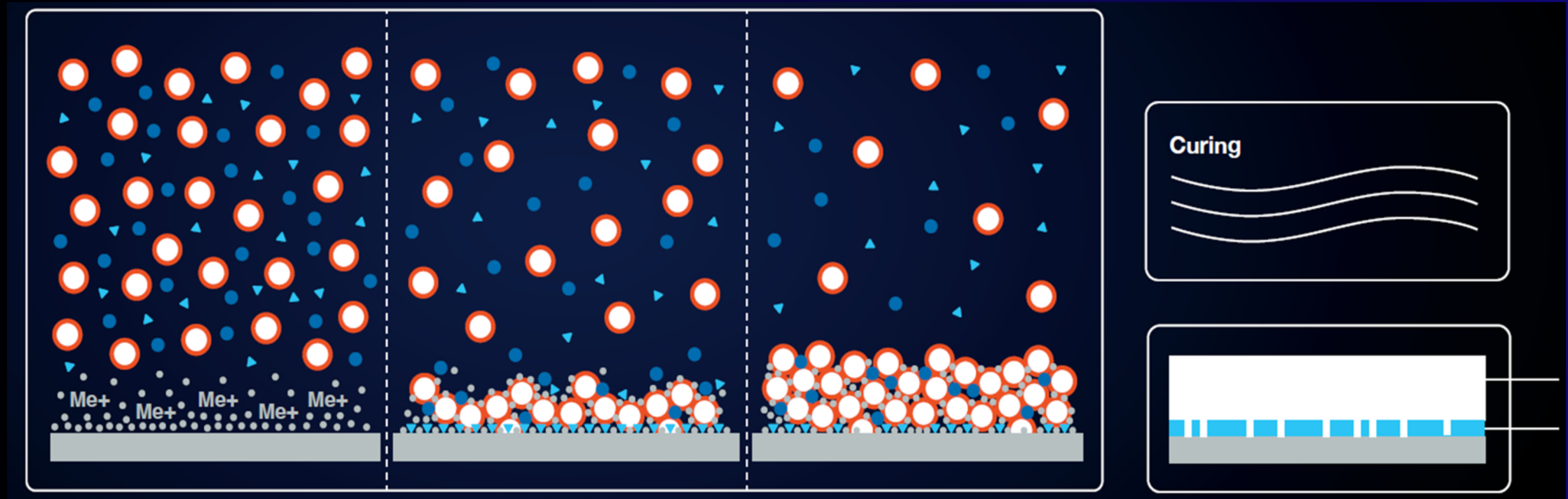
VIANT[®] tub size ranges in our company



| | |
|---------------------------------------|---------|
| Length: | 4600 mm |
| Total height: | 1735 mm |
| Top Opening Width: | 750 mm |
| Top Opening Depth: | 1285 mm |
| Narrowed Bottom Section Width: | 650 mm |

VIANT[®] Mechanism

The smarter way to corrosion protection



PHASE 1: Dissolving metal ions due to acidic pH of the coating chemical






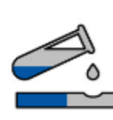









PHASE 2: Primer paint deposition, triggered by metal ions

PHASE 3: Forming of the wet coating layer

PHASE 4: Dry coating film after curing

○ Agent ● Binder, solids ● Promoter ▲ Accelerator Adhesion ■ Metal/Substrate ● Dissolved metal ions

Corrosion resistance with **VIANT®** technology and powder coatings

| Corrosivity category | Interior | Exterior | Humidity level | Chemical/Polution/ Salinity level | Expected Corrosivity | Durability | Protection period (years) | ISO 9227 NSST** In hours |
|----------------------|--|--|--|--|--|------------|------------------------------|--------------------------------|
| C1 | Heated buildings with clean atmospheres e.g. offices, shops, schools, hotels | |  |  |  | | | |
| C2 | Unheated buildings e.g. storage facilities, sport halls | Rural areas |  |  |  | Low | <7 | - |
| | | | | | | Medium | 7-15 | - |
| | | | | | | High | 15-25 | - |
| | | | | | | Very high | >25 | 480 |
| C3 | Production hall with high humidity and air pollution e.g. laundries, dairies, food processing plants | Industrial and inshore areas with low salinity |  |  |  | Low | <7 | 120 |
| | | | | | | Medium | 7-15 | 240 |
| | | | | | | High | 15-25 | 480 |
| | | | | | | Very high | >25 | 720 |
| C4 | Chemical plants, swimming pools, coastal ship and boatyards | Industrial and inshore areas with medium salinity |  |  |  | Low | <7 | 240 |
| | | | | | | Medium | 7-15 | 480 |
| | | | | | | High | 15-25 | 720 |
| | | | | | | Very high | >25 | 1440 |
| C5 | Areas with almost permanent condensation and high pollution | Coastal areas with high salinity / Industrial areas with high humidity and aggressive atmosphere |  |  |  | Low | <7 | 480 |
| | | | | | | Medium | 7-15 | 720 |
| | | | | | | High | 15-25 | 1440 |
| | | | | | | Very high | >25 | - |

The ISO 12944 standard defines the parameters for the corrosion protection of steel structures. This guideline assists contractors, engineers, designers, and architects in determining the appropriate environmental classification, protective coating systems, laboratory test methods, and structural systems.

The corrosion resistance marked in orange in the table is fully guaranteed by STAL-West Zrt.'s advanced manufacturing process.



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Leading companies trusting

VIANT technology

HITACHI®



Bobcat®

IKEA®



Why choose VIANT[®]coating technology?

Summary:

- Higher edge coverage
- 100% (true) internal coating
- Coating with enhanced mechanical properties (e.g., flexibility)
- Excellent compatibility with conventional powder and liquid coatings
- Environmentally conscious technology design

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