

ANTI-CORROSION COATINGS FOR THE BRIDGE INDUSTRY



✓ Øresund Bridge Renovation Project, Denmark-Sweden



Most advanced
waterborne anti-corrosion
coating technology



Environmentally
friendly solutions



Suitable for
marine and industrial
environments

RD Coatings offers a superior line of water-based protective coatings for engineered structures, equipment, commercial and industrial facilities.

Our coating systems consist of highly innovative, and cost-effective long-term solutions for anti-corrosion, concrete preservation and waterproofing. These solutions comply with strict standards including ISO 12944, EN 13501, EN 1504, Leed v4 and many more.

We focus 100% of our Research & Development on waterborne solutions which provide unequalled performance worldwide, which contributes to safer and more environmentally friendly applications.

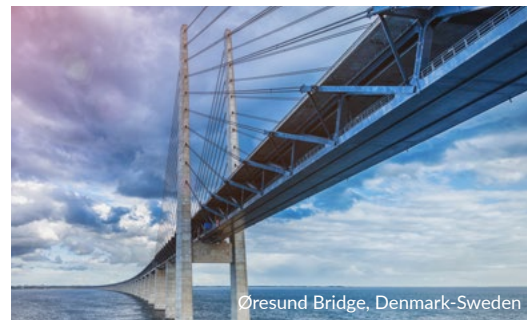
Experts in **Water-based** Technology



STATE OF THE ART WATER-BASED TECHNOLOGY



Bryghus Bridge - Denmark



Øresund Bridge, Denmark-Sweden

RD-MONOGUARD

RD-Monoguard is the next generation in water-based anti-corrosion coatings providing long-term protection equal to traditional zinc-rich systems!

A unique formulation combining key performances required for bridge coating: high adhesion and anti-corrosion, high resistance to water and erosion, high UV resistance and durability.

RD-Monoguard can be applied in C5 marine or industrial environments and protect steel for more than 15 years according to ISO 12944.



WATER-BASED



1 COMPONENT



RAL, NCS, BS ...



20+ High lifespan



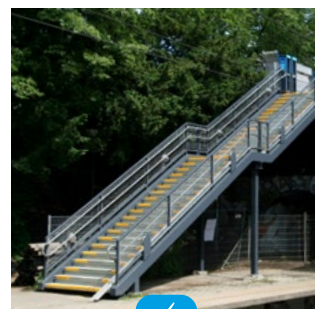
Flexible



Dry fall



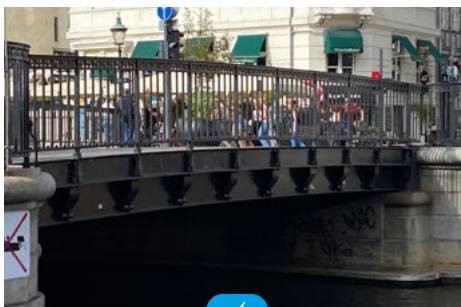
Surface tolerant



RD-HYDROGRAFF HP

Water-based polyurethane coating specially formulated for the long-term protection of surfaces against wear, abrasion, chemical spills, and weathering.

RD-Hydrograff HP is THE solution to protect surfaces that are subject to severe strains. Whether it is industrial equipment, floors, decks, etc. **RD-Hydrograff HP** offers unmatched performance. Combined with **RD-Monoguard** as a finish coat, the system reaches new heights in the category of anticorrosion systems for C5 industrial or marine environments according to the ISO 12944-6 standard, with HIGH durability, over 15 years!



WATER-BASED



2 COMPONENTS



RAL, NCS, BS ...



Anti-graffiti



High abrasion resistance



Resistant to chemical spills



Flexible



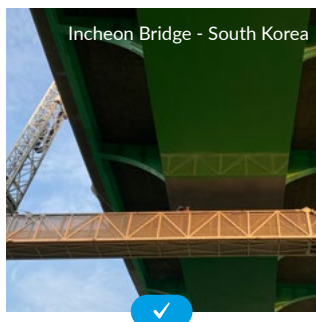
Gouritz River Bridge - South Africa



Vilsund Bridge - Denmark



Incheon Bridge - South Korea



RD-ELASTOMETAL

High performance elastomeric coating combining superior anti-corrosion and waterproofing properties.

Its permanent elasticity allows it to adhere to surfaces subject to elongation and to perfectly protect complex metal objects made up of bolts, sharp edges and fittings, among other things. DTM (Direct-To-Metal) type of coating, it is used as a primer and finish. **RD-Elastometal** has a long track record of protecting metal constructions even in the most severe weather conditions.



WATER-BASED



1 COMPONENT



RAL, NCS, BS ...



20+High lifespan



Permanent elasticity



Dry fall



Surface tolerant

3 PRODUCTS, MULTIPLE COMBINATIONS...

SCS SYSTEMS

COMBINED

RD-MONOGUARD x 2

Or

RD-ELASTOMETAL x 2

RD-ELASTOMETAL - RD-MONOGUARD

Or

RD-MONOGUARD - RD-HYDROGRAFF HP

Or

RD-ELASTOMETAL - RD-HYDROGRAFF HP



Water-based coatings



High performance



Limited CO₂ and VOC emissions



Safe, No hazards



Tested by accredited laboratories

PROTECTING BRIDGES MADE EASY

Systems for C5 environments with minimum
15- or 25-years durability before major maintenance:

ISO 12944:2018-5
ISO 12944:2018-9

	PAINT SYSTEM		PRIMING & SUBSEQUENT COAT (S)			TOPCOAT (S)		
	NDFT	MNOC	Product	MNOC	NDFT	Product	MNOC	NDFT
C5 High	200	2	✓ RD-Monoguard	2	200	Unnecessary		
C5 High	350	2	✓ RD-Elastometal	2	350	Unnecessary		
C5 High	150	2	✓ RD-Monoguard	1	100	✓ RD-Hydrograff HP	1	50
C5 High	300	2	✓ RD-Elastometal	1	220	✓ RD-Monoguard	1	80
C5 Very High	350	3	✓ RD-Elastometal	1	200	✓ RD-Monoguard	2	150
C5 Very High	425	3	✓ RD-Elastometal	2	350	✓ RD-Monoguard	1	75

NDFT: Nominal Dry Film Thickness MNOC: Minimum Number Of Coats

Systems are easy to adapt, contact your **RD Coatings** representative to obtain the right specification according to the specific needs of the project.

Examples of typical C5 high coating systems:

1. Flat regular steel sections:

- Fast drying system, full system can be applied the same day
- Smooth and semi-gloss high resistance finish

Step	Description	Detail
Surface preparation	✓ High Pressure wash	✓ Wa4 (ISO) or WJ-4 (SSPC/NACE)
First coat	✓ RD-Monoguard	✓ 100 µ / 4 mils dft
Second coat	✓ RD-Monoguard	✓ 100 µ / 4 mils dft
	✓ Dry total thickness	✓ 200 µ / 8 mils dft



2. Flat regular steel sections with needs of greater protection against chemicals, graffiti, abrasion and scratches: walkways, handrails, decks:

- High anti-corrosion properties, exceptional adherence values
- Higher resistance against wear, weathering, chemicals, etc.

Step	Description	Detail
Surface preparation	✓ High Pressure wash	✓ Wa4 (ISO) or WJ-4 (SSPC/NACE)
First coat	✓ RD-Monoguard	✓ 100 µ / 4 mils dft
Second coat	✓ RD-Hydrograff HP	✓ 50 µ / 2 mils dft
	✓ Dry total thickness	✓ 150 µ / 6 mils



3. Flat regular steel sections with remaining paint and tightly adhering foreign matter:

- Surface tolerant coating system with incredible covering properties
- Smooth and semi-gloss high resistance finish.

Step	Description	Detail
Surface preparation	✓ High Pressure wash	✓ Wa4 (ISO) or WJ-4 (SSPC/NACE)
First coat	✓ RD-Elastometal	✓ 220 µ / 9 mils dft
Second coat	✓ RD-Monoguard	✓ 80 µ / 3,5 mils dft
	✓ Dry total thickness	✓ 300 µ / 12,5 mils

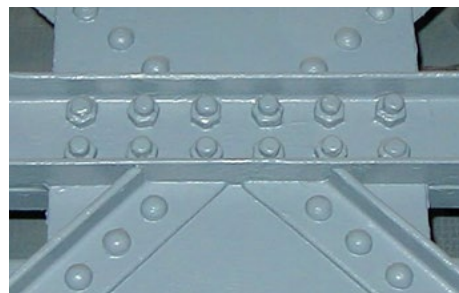


TYPICAL COATING SYSTEMS FOR BRIDGES

4. Bolts, rivets, thin edges and hard to reach areas:

- Very high sealing and covering properties
- Combination of waterproofing and anti-corrosion properties.

Step	Description	Detail
Surface preparation	✔ High Pressure wash ✔ Hand or Power tool	✔ Wa4 (ISO) or WJ-4 (SSPC/NACE) ✔ ST2/ST3 - SSPC SP2/SP3
First coat	✔ RD-Elastometal	✔ 175 μ / 7 mils dft
Second coat	✔ RD-Elastometal	✔ 175 μ / 7 mils dft
	✔ Dry total thickness	✔ 350 μ / 14 mils



Other specific solutions:

5. Empty spaces and gaps



6. Pillars



7. Rebars



Systems for concrete protection

8. New Concrete surfaces - Existing sound concrete surfaces:

Step	Description	Detail
Surface preparation	✔ High Pressure wash	✔ Minimum 300 bar / 4000 psi
First coat	✔ RD-Elastoflex	✔ 150 μ / 6 mils dft
Second coat	✔ RD-Elastoflex	✔ 150 μ / 6 mils dft
	✔ Dry total thickness	✔ 300 μ / 12 mils



9. Concrete surfaces with active cracks:

Step	Description	Detail
Surface preparation	✔ High Pressure wash	✔ Minimum 300 bar / 4000 psi
Impregnation coat	✔ RD-Unifix	✔ +/- 0,10 L/m ² / 400 ft ² /gal.
First coat with reinforcement fleece	✔ RD-Elastoflex + RD-Mur Fleece	✔ 150 μ / 6 mils dft
Second coat	✔ RD-Elastoflex	✔ 150 μ / 6 mils dft
	✔ Dry total thickness	✔ 300 μ / 12 mils



PREPARING THE SURFACE USING RD-ECO POWERCLEAN

The future success of any coating system depends for the most on the quality of the surface preparation.

- RD-Eco PowerClean is a powerful biodegradable 2 in 1 alkaline concentrate formulated with special anti-flash rust additives for cleaning and degreasing surfaces before painting.
- RD-Eco PowerClean' special additives help to prevent contamination from chlorides during surface preparation and risks of flash rust during application, by leaving a temporary protective layer against salinity contained in the air.
- RD-Eco PowerClean is easy to use by simply diluting it into water to clean and degrease most kinds of surfaces prior to painting with high pressure device or spraying.
- RD-Eco PowerClean is an innovative and eco-friendly cleaning solution, highly recommended in marine and industrial environments.



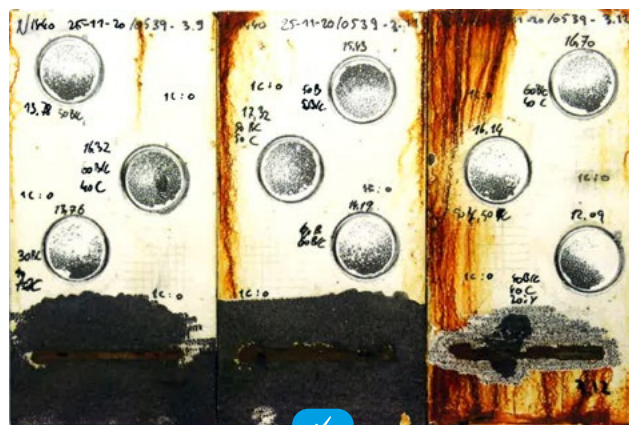
INTENSIVE TESTING & FIELD EXPERIENCE



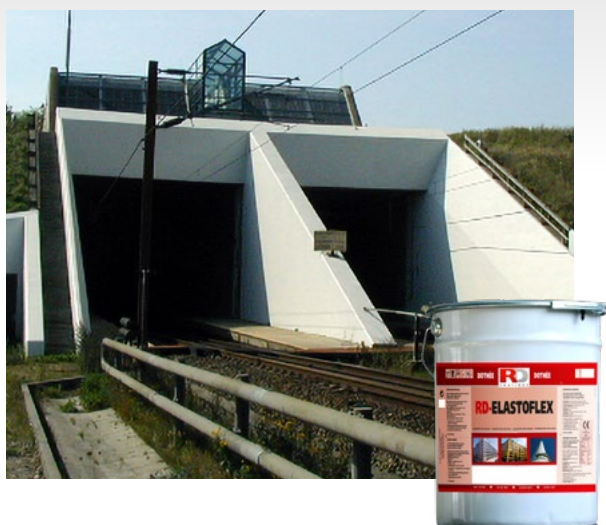
YOUR ASSETS ARE IN SAFE HANDS!

RD Coatings water-based protective coatings have been intensively tested and are continuously monitored on the field. These High Performance coatings are protecting various industrial and architectural constructions worldwide.

- ISO 12944 – Corrosion protection of steel structures by protective paint systems
- EN 13501 – Fire classification
- ASTM D 4060 – Abrasion resistance of organic coatings (Taber)
- ISO 2409 – Pull off test
- ISO 3231 – Determination of resistance to humid atmospheres containing sulphur dioxide (Kesternich)
- Field monitoring – Danish highway agency
- Accelerated corrosion test – RH & H and Danish Technological Institute
- Performance testing of Organic Coatings for the Corrosion Protection of Railway Bridges – Transnet, South Africa.



PROTECTING CONCRETE WITH **RD-ELASTOFLEX**:



Breathable and crack-bridging waterproofing system for concrete structures, walls and façades; protects against weathering, carbonation and water ingress.

Solution with humidity regulation properties preventing internal condensation and rusting of metal reinforcement bars. Thanks to its high quality resin and pigments, elasticity, and dirt pickup resistance, **RD-Elastoflex** maintains assets for years with an impeccable appearance.

RD-Elastoflex complies with the requirements of EN 1504-2 as a protective coating for concrete and has a CE marking.



Anti-carbonation



Permanent elasticity



Crack bridging



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