

Galvatech2000.com

PROTECTION SPECIALIST

AGAINST CORROSION



**GALVANIZING COMPOUNDS AVAILABLE IN AMERICA**



**RUST-ANODE® Technology**

**Towers  
Bridges  
Structures  
Marine  
Transport**

[See video presentation here](#)

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Refurbishment old galv anized  
or metalized structures →  
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# WHAT WE DO

Since 1954 the RUST-ANODE® products are known and applied in more than 50 countries! Their superior characteristics have placed them at the forefront of anti-corrosion solutions. Approved by the main official laboratories in Europe and adopted by NATO forces from its beginnings, the RUST-ANODE® Technology has established itself as a World leader to guarantee active protection and life extension of current assets.

Our technology provides active cathodic protection to steel structures. Galvatech zinc compounds are single component products that merge with old zinc layers that recharge the cathodic protection of galvanized and metallized steel. Our revolutionary solution is perfectly adapted to be used at coating facilities and for on-site work.

They are proven anti-corrosive treatments that act as an active layer on metallic surfaces. The performance of the technology against corrosion is comparable to the Hot-Dip-Galvanization (HDG) process and significantly reduces maintenance costs of your assets compared to standard paints, allowing a low cost and effective solution.



## We offer ;

- Technical support with qualified AMPP (NACE) trained technicians
- Collaboration with project managers for the preparation of technical documents
- Customer's team training for a better understanding of corrosion control mechanisms
- On-site and remote technical support for the RUST-ANODE® Technology application.

## Our unique technology provides ;

- Superior corrosion protection
- Excellent barrier and sacrificial corrosion protection
- Extended lifetime of maintenances programs
- Increases asset's integrity lifetime and reduces maintenance costs
- Unique zinc rich galvanizing compound
- Extra fine pure zinc atomized (99.995% purity) resulting in a greater zinc density and a performing anode
- One component that eases the application
- Provides protection in the same range as HDG
- Low VOCs; it contains an extremely low concentration of volatile organic making it more environmentally friendly
- Zinc color mouse grey

# WHO WE ARE

Galvatech 2000 is the Master Distributor in America for Rust-Anode SPRL in Europe, a well-known galvanizing compound manufacturer. The 50 000 sq. ft facility includes a state-of-art specialized laboratory.



## EXPERTISE

**TOWERS** Electric power transmission and telecommunication

**MARINE ENVIRONMENTS** Ships / Barges / Docks

**BRIDGES** DOT infrastructures / Dams

**STRUCTURAL** Roofs / Stairs / Ramps / Water treatment plants / Water towers

Silos / Tanks / Various structures

**MILITARY** Vehicles / Boats / Armored -

**TRANSPORT** Trucks / Trailers

**INDUSTRIAL PLANTS** Paper mills / Chemical plants / Refineries / Mines / Food factories / Colling Towers

## FREE ENGINEERS AND TECHNICIANS CORROSION WEBINAR

TOPICS link [Formation / Presentation](#)

Visit our Website: [Galvatech2000](#)



# TECHNICAL ADVANTAGES ET BENEFITS

## APPLICATIONS

- A surface tolerant technology that allows either hand/ power tool cleaning or water pressure cleaning
- One coat galvanizing compound
- Application by brush, roller, spray and electrostatic
- Application in duplex system for new/old HDG and/or metallization
- Application on copper, aluminum and stainless without sandblast
- Application over new and old weathering steel (Corten)
- Application over well-adhered rust-free of contaminants
- Application methods with standard paint equipment (no particular investment)
- Recoatable by itself at any time without abrasion. Perfectly adapted to touch-up maintenance.
- Application on concrete and rebars
- No dew point restriction, applicable up to 99% of relative humidity
- Perfectly adapted to be used at coating facilities and for on-site work.



# TECHNICAL ADVANTAGES ET BENEFITS

## PERFORMANCES

- Lifetime performances comparable to hot-dip galvanization under the same environmental conditions
- Acts as a corrosion protection over all types of metals.
- Rust-Anode Primer has exceptional adhesion to all type of metals without sandblasting.
- Penetrates surface irregularities without leaving air voids
- Anticorrosive protection suitable to UV exposure
- Withstands wide range of pH
- RUST-ANODE® primer technology passed 10,000 hours of cyclic corrosion ASTM D5894
- The Electric Power Research Institute (EPRI) conducted an evaluation of the Rust-Anode to transmission towers application.
- Rust-Anode Primer has demonstrated outstanding performances in salted water immersion





# TECHNICAL ADVANTAGES ET BENEFITS

## CHARACTERISTICS

- Acts as an active coupling to the steel and creates an electrochemical bond which results in active protection (mV) in the same range as hot-dip galvanization or metallization
- Real active and sacrificial protection as hot-dip galvanization
- Applicable from T° -5°C to 37°C (23°F to 98°F)
- Temperature exposition -62°C to +120°C (-80°F to + 250°F)
- Moisture cured no dew point restriction
- No substrates distortion effects comparatively to hot dip-galvanizing
- Weldable
- Dry fast
- High flexibility
- Can be top-coated by most paints, even by powder coatings
- Successfully tested for toxicity under fire
- Zinc thickness can be controlled during the application or after with additional coats if required
- Extra fine pure zinc atomized (99.995% purity) resulting in a greater zinc density and a performing anode



# CORROSION CYCLING TEST AS PER ASTM D5894-10 WITH ADDITIONAL COLD PERIOD

*" Standard Practice for Cyclic Salt Fog/UV Exposure of Painted Metal, (Alternating Exposure in Fog/Dry Cabinet and a UV/Condensation Cabinet) "*

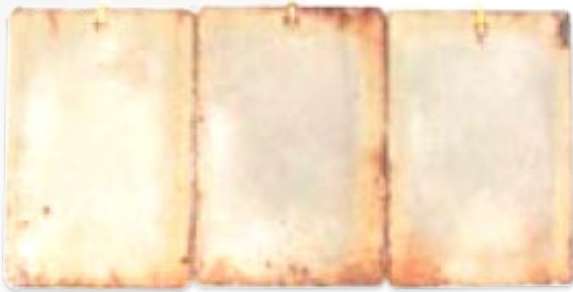
A cycle is defined as below:

168 hrs of QUV exposure (4hrs UVA 340 nm @ 0.89W/m<sup>2</sup> at 60°C followed by 4hrs of condensation at 50 °C and repeat)

24 hrs at -23 °C

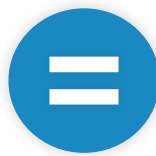
168 hrs of Fog/Dry cabinet (1 hrof salt Fog @ 0.05% NaCl+ 0.35% (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub> followed by 1 hrof dry-off at 35 °C and repeat)

1 full cycle is 360 hrs



**RUST-ANODE®**  
10000 Hours

**RUST: NONE - CLASSIFIED 10**  
**BLISTER: NONE - CLASSIFIED 10**



**Hot-Dip Galvanized**  
10000 Hours

**RUST: NONE - CLASSIFIED 10**  
**BLISTER: NONE - CLASSIFIED 10**







**OUR TECHNOLOGY PROTECTS  
MORE THAN 10 000  
TRANSMISSION TOWER  
STRUCTURES ACROSS CANADA  
AND THE UNITED STATES**

## **CLAUDE DUPONT**

Director R&D Americas

Corrosion Specialist

Zinc strategies & Solutions, All New & Corroded Metals

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# INDEPENDENT LAB TESTS

Test name	Standard	Rust-Anode Tecnology	Hot-Dip Galvanized
		Evaluated by ASTM D610 (rust) and ASTM D714 (blister)	
Cyclic corrosion 10, 000 hours	ASTM D5894-10 (cold period)	Rust: none - Classified 10 Blister: none - Classified 10	Rust: none - Classified 10 Blister: none - Classified 10
Immersion Corrosion (salt water) Result at 90 days	ASTM G44-99 (2013) sodium chloride 3,5%	Rust: <0,03% - Classified 9 Blister: none - Classified 10	Rust: 33% - Classified 2 Blister: none - Classified 10
Steel samples used for tests			
Surface preparation: SSPC-SP10 / NACE 2 / SA 2,5			
Products tested: Rust-Anode Primer versus Hopt Dip Galvanization			
Application of a single coat of Rust-Anode Primer without any paint coating			

<u>Test name</u>	<u>Standard</u>	<u>Rust-Anode Primer</u>
Pull-off adhesion	ASTM D4541	1775 PSI, 12,24 Mpa
Organic zinc rich	ONGC-1,181/CAN/CGSB-1,181-92	Conform
Abrasion	ASTM D4060-14 1000 cycles CS10, weight 1000g	116mg
Adhesion	ASTM D3359	5B
Hardness	ASTM D3363	5H
Impact	ASTM D2794, 100 inch-pounds	No crack
Flexibility - Folding - Plasticity	ASTM D522, Conical Mandrel 1/4", 180°	Elongation: 15%



# INDEPENDENT LAB TESTS

Test name	Standard	Rust-Anode Primer
Combustion toxicity	DEF STAN 02-713	Conform
UV	ASTM G154-12a	Little effect
Salt Spray	ASTM B117	Excellent
Corrosion resistance	ISO 12944-6/7253	C5-VH

Chemical Resistance / Immersion 30 days	
Diesel	Blister : none Corrosion : none Adhesion: 100% Hardness: H
Gaz	Blister : none Corrosion : none Adhesion: 100% Hardness: 2H
Acetone / Urea	Blister : none Corrosion : none Adhesion: 100% Hardness: H
Hydraulic Fluid (Skydrol)	Blister : very little Corrosion : none Adhesion: 100%
Brake Fluid	Blister : none Corrosion : none Adhesion: 100%