Galvatech2000.com PROTECTION SPECIALIST AGAINST CORROSION

#### GALVANIZING COMPOUND AVAILABLE IN AMERICA



### **RUST-ANODE®** Technology

STEEL STRUCTURES EXPERTISE

BRIDGES, STEEL CABLES, RETAINING WALLS, TANKS, WALKWAYS, CULVERTS, DAMS

See video presentation here

### OUR UNIQUE GALVANIZING TECHNOLOGY, AN EFFECTIVE SOLUTION FOR THE PROTECTION OF STRUCTURES.

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## WHAT WE DO

Since 1954 the RUST-ANODE® products have been known and applied in more than 50 countries! Their superior characteristics have placed them at the forefront of anti-corrosion solutions. Approved by the leading official laboratories in Europe and adopted by NATO forces from its beginnings, the RUST-ANODE® Technology has established itself as a World leader in guaranteeing 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 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 maintenance 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 (RAL 7005)





## WHO WE ARE

Galvatech 2000 is the master distributor for Rust-Anode. For Americas and Europes. SPRL is the wellknown manufacturer of galvanizing compounds. With their he 50,000 square foot facility includes a stateof-the-art specialized laboratory.



- FREE ENGINEERS AND TECHNICIANS FORMATION PROGRAM BY VIRTUAL CLASS.
- ALTERNATIVE TO HOT DIP GALVANIZING, METALLIZATION AND CORROSION BASICS.
- APPROVED BY MANY ENGINEERS ASSOCIATIONS

Click to see the topics



Develop your knowledge, according to your availability in virtual class and receive an attestation









#### **Contact François Bellefleur to reserve your formation date**

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### THE IMPORTANCE OF MAINTENANCE

A study conducted by the AMPP (Association for Materials Protection and Performance) in 2021 estimated that the annual cost of corrosion in Canada at \$70.2 billions (CDN). This represents a hefty cost to the Canadian economy and highlights the importance of preventing corrosion in our infrastructures and industrial equipments.

Corrosion can have serious consequences on the safety, reliability and durability of our assets, as well as on the environment. It is therefore crucial to implement effective and preventive measures to minimize the impact of corrosion.

Galvatech and its unique galvanizing technology, is the solution for your needs and ensures the longevity protection of your infrastructures.

Investing in a maintenance solution, at the first signs of corrosion, or before, is essential and much less expensive in the long term.

We are delighted and convinced to be able to offer you a very beneficial solution for your assets.

### Let's Act Now !



## BRIDGES

Rust-Anode technology is one of the homologated products by the Ministry of Transportations of Quebec and Ontario.

Refurbishment of a steel-wood bridges



Jacques-Cartier bridge, Montréal, Canada



Bromptonville, Canada





Re-galvanizing of metallized bridges, Ste-Adèle, Canada



## BRIDGES

Rust-Anode technology is one of the homologated products by the Ministry of Transportations of Quebec and Ontario.

New structures with Rust-Anode Primer technology

Petite-Rivière St-François, Canada





Snowmobiles bridge Amqui, Canada



### **PEDESTRIAN WALKWAYS** Québec-Lévis ferry, Canada





Sept-Îles harbor, Canada



# **ST-WENCESLAS BRIDGE (1968-2022)**

Ministery of Transportations of Québec (MTQ)

**Re-galvanizasion: 2017** 

Length: 752 ft

Total footage: 102 000 ft<sup>2</sup>

Presence of zinc oxide, rust, and corrosion

Preparation:SSPC-SP16 Brush-off Blast Cleaning Non-Ferrous Metals

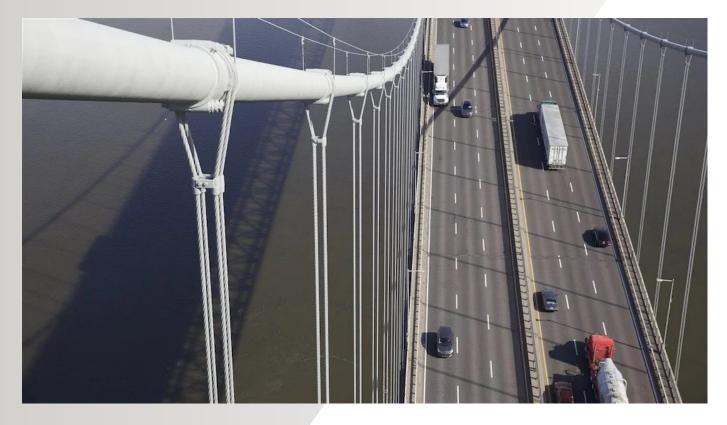
Re-Galvanized on-site with the Rust-Anode technology





# **STEEL CABLES (SUPPORTS)**

### Pierre-Laporte bridge, Canada









## **RETAINING WALLS**

### **Sheet piles**



### Retaining walls, Ontario, Canada



### **TANKS**

Project realized in 2010, Sept-Îles, Canada Picture taken in 2022







### **DAMS AND EQUIPMENTS**

#### (Harness of rivers)



#### **Dams structures**





#### Hydro-Québec, Control post structure, Great North





#### Portage des Roches dam, Ville de Saguenay, Canada



# **HISTORICAL STRUCTURES**

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## **PARKING CANOPIES**

International Airport Jean-Lesage, Quebec city, Canada



## PERGOLA

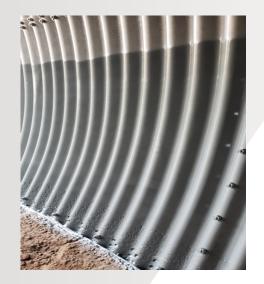
Frédérick-Back Park, Montreal, Canada, architecture award





### **CULVERTS** Ministery of Transportations of Québec (MTQ) , Canada





## **MINE STRUCTURES**









# **TECHNICAL ADVANTAGES AND BENEFITS**

- One component compound
- Easy to apply with brush, roller, spray

- Minimal surface preparation, hand or power tools
- Comparable to hot-dip galvanizing or metallization under the same environmental conditions
- No additional coat needed
- Quick-drying
- Can be applied on non-friable rust
- Increases cathodic protection, by zinc re-charging
- Can go in immersion, even in salt water
- Moisture cured without dew point restriction

### Maritime structures

#### before



after



### **INDEPENDENT LAB TESTS**

Test name	Standard	Rust-Anode® Primer	Hot-Dip Galvanized		
		Evaluated by ASTM D-610 (rust) and ASTM D-714 (blister)			
Cyclic corrosion	ASTM D-5894-10	Rust: none - Classified 10	Rust: none - Classified 10		
10,000 hours	(cold period)	Blister: none - Classified 10	Blister: none - Classified 10		
Immersion	ASTM G44-99				
corrosion	(2013)	Rust: <0.03% - Classified 9	Blister: None - Classified 10		
(salt water)	Sodium chloride	Blister: None - Classified 10	Rust: 33% - Classified 2		
Results at 90 days	3.5%				
Steel samples used for tests					
Surface preparation: SSPC-SP10 / NACE 2 / SA 2.5					
Products tested: Rust-Anode® Primer versus Hot Dip Galvanization					

Application of a single coat of Rust-Anode® Primer without any paint coating

<u>Test name</u>	<u>Standard</u>	Rust-Anode® Primer
Pull-off adhesion	ASTM D4541	1775 PSI12,24 MPa
organic zinc rich	ONGC -1,181/CAN/CGSB-1.181-92	Conform
Abrasion	ASTM D4060-14 1000 cycles CS10, charge 1000g	116 mg
Adhesion	ASTM D3359	5B
Hardness	ASTM D3363	5H
Impact	ASTM D2794, 100 lbs, impactor 0,625 po	No cracks
Flexibility - Folding - Plasticity	ASTM D522, mandrin conique 1/4", 180°	Elongation: 15%
Combustion toxicity	DEF STAN 02-713	Conform
UV	ASTM G154-12a	Little effect
Salt Spray	ASTM B117/ISO 12944-6/7253	Excellent

## PROTECTION SPECIALIST AGAINST CORROSION



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#### **CONCLUSION**

- Rust-Anode is a unique galvanizing compound for new or old (galvanized or not) structures.
- Rust-Anode, a one coat galvanizing system.
- A trusted product, when recoating is required such as on bridges and structures in marine environments.
- Imagine the expected life of a such system in less corrosive environments.
- Traditional paint systems are offering a limited life protection.

Our experienced team offers unparalleled technical service, that supports you before, during and after your projects.