

Galvatech2000.com

PROTECTION SPECIALIST

AGAINST CORROSION



GALVANIZING COMPOUND AVAILABLE IN AMERICA



GALVATECH²⁰⁰⁰

RUST-ANODE® Technology

**EXPERTISE WITH
ELECTRICAL AND
COMMUNICATION
STRUCTURES**

TOWERS, SUB-STATIONS AND DAMS

[See video presentation here](#)



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

INDEX

3	What we do
4	Who we are / Formation program
5	The importance of maintenance
6	Deterioration phases
7	Galvatech 2000 Participation
8	Electric Towers
9	Telecom
10	Dams and equipments
11	Radiators and distribution stations
12	Technical advantages and benefits
13	Independent laboratory tests



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.

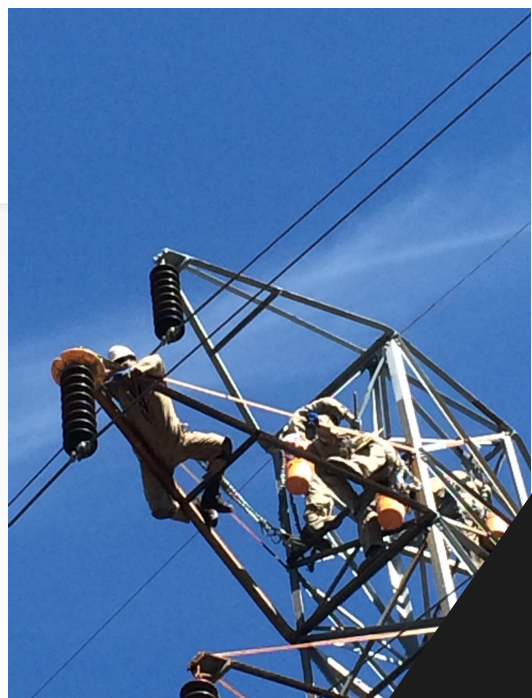


We offer ;

- 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.



WHO WE ARE

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

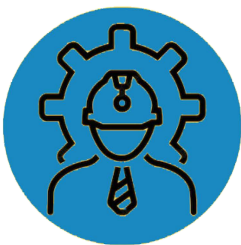


- **FREE ENGINEERS AND TECHNICIANS FORMATION PROGRAM BY VIRTUAL CLASS.**
- **ALTERNATIVE TO HOT DIP GALVANIZING, METALLIZATION AND CORROSION BASICS.**
- **APPROVED BY MANY ENGINEERS ASSOCIATIONS**

[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

francoisbellefleur@galvatech2000.com

THE IMPORTANCE OF MAINTENANCE

The electricity demand is growing, and electric vehicles are becoming a more viable alternative to fossil fuels. Consequently, the production of green energy, such as hydropower, solar, and wind energy, is becoming increasingly popular.

Although new equipment must be built, it is essential that we do not neglect the existing infrastructure. Regular evaluation and maintenance of aging distribution networks are necessary to ensure optimal operation. Investing in a maintenance solution, such as Galvatech and its galvanizing compound technology, from the first signs of corrosion is essential and cost-effective in the long run.

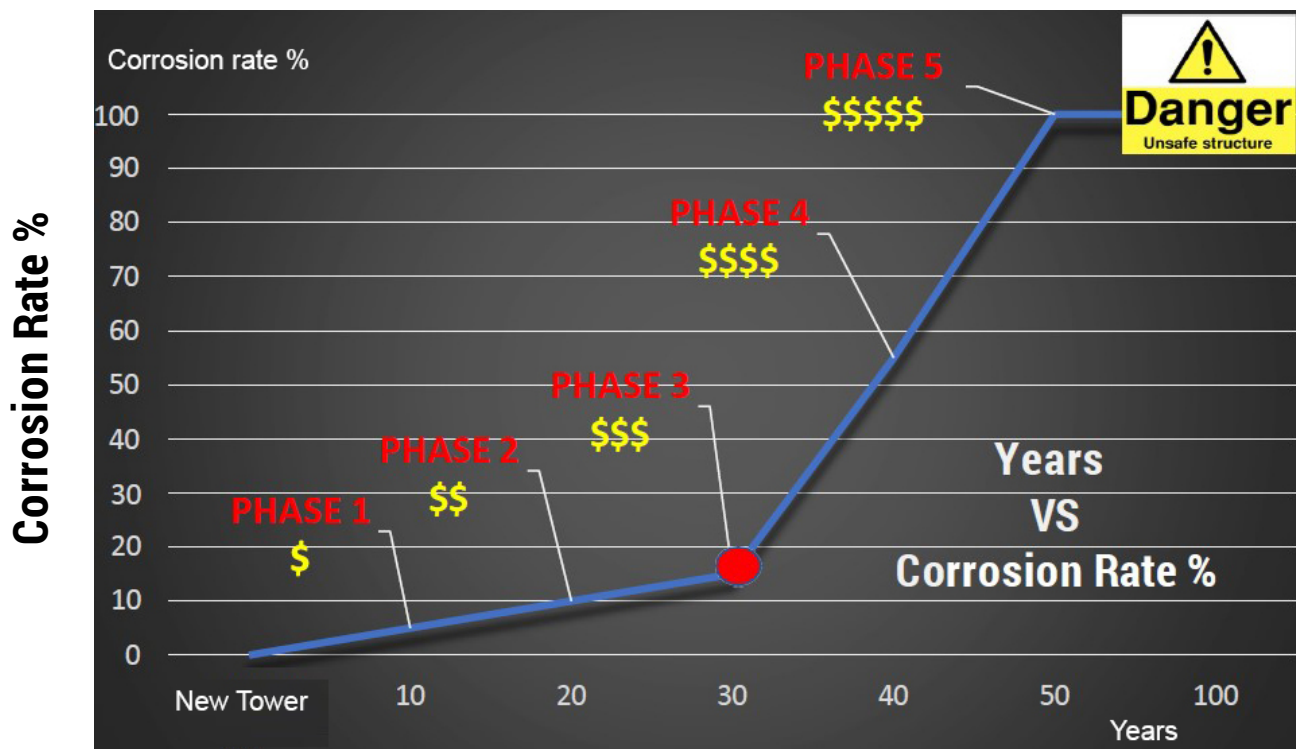
We are thrilled to offer this solution and are confident it will be highly beneficial.

Let's Act Now !



Surface preparations are directly related to the scale of deterioration phases

Phase 1 \$	<ul style="list-style-type: none"> Low thickness of zinc left (2.0 - 3.0 MILS) Low maintenance cost (minimal surface preparation)
Phase 2 \$\$	<ul style="list-style-type: none"> Zinc thickness (0 - 2.0 MILS) Beginning of rust spots (brown) on bolts, edges and horizontal flat areas > 5% Light surface preparation costs and <u>labour</u>
Phase 3 \$\$\$	<ul style="list-style-type: none"> Zinc thickness (0 - 2.0 MILS) General rust (brown) > 50% Beginning of corrosion on bolts (black), edges and horizontal flat areas Moderate surface preparation costs and <u>labour</u>
Phase 4 \$\$\$\$	<ul style="list-style-type: none"> Hot-dip galvanized thickness protection is almost gone General rust (brown) > 75% Interfaces pack corrosion Heavy surface preparation costs and labor
Phase 5 \$\$\$\$\$	<ul style="list-style-type: none"> Lack of steel thickness caused by heavy rust and corrosion High level of structure failures Consider structures replacement



GALVATECH 2000 PARTICIPATION

- Helps to develop pilot programs
- Trains supervisors, inspectors and applicators every year
- Provides technical support and planning solutions
- Galvatech 2000 trains line technicians to evaluate the corrosion severity on their towers each year

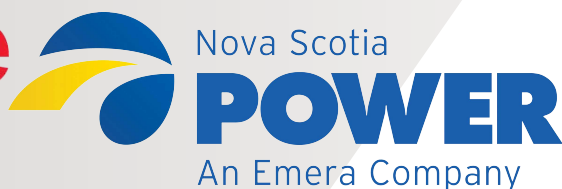
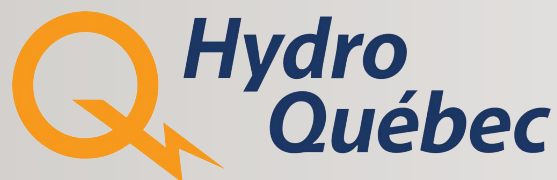


ON SITE



IN CLASS

ELECTRIC TOWERS



Énergie NB Power



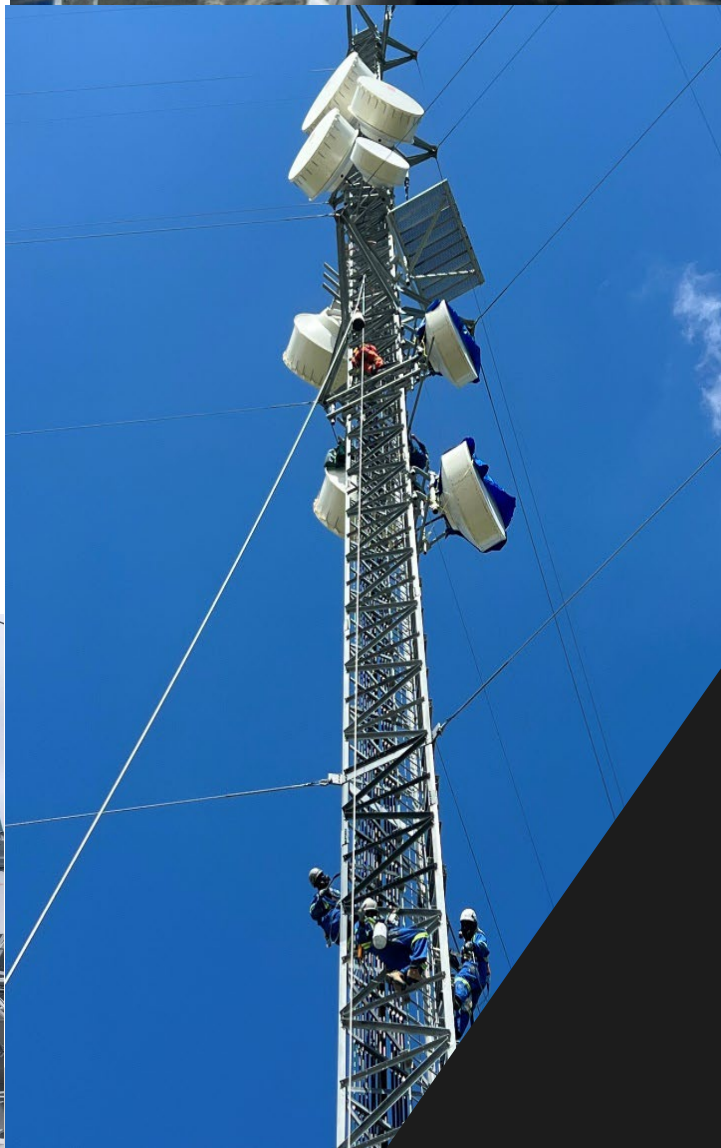
TELECOM

CBC  Radio-Canada

PEMBINA 

Bell


Télé-Québec



DAMS AND EQUIPMENTS

(Harness of rivers)

Centre d'expertise
hydraulique
Québec



RADIATORS AND DISTRIBUTION STATIONS



Before



After

Galvatech galvanizing compound is used to galvanize radiators and substation equipments



10

TECHNICAL ADVANTAGES AND BENEFITS

- One component compound
- Easy to apply with brush, roller, paint mits
- Minimal surface preparation, hand or power tools
- Comparable to hot-dip galvanizing under the same environmental conditions
- No additional coat needed
- Quick-drying, dry to climb the tower the same day
- Can be applied on non-friable rust
- Cathodic protection, by zinc recharging
- High UV resistance
- Moisture cured without dew point restriction



INDEPENDENT LAB TESTS

TESTED BY E.P.R.I.

ELECTRIC POWER RESEARCH INSTITUTE (USA)

«In summary we may expect the benefits of an organic coating system but the performance of hot dip galvanizing if we adhere to good application and quality control procedures. »

Test name	Standard	Rust-Anode® Primer	Hot-Dip Galvanized
		Evaluated by ASTM D-610 (rust) and ASTM D-714 (blister)	
Cyclic corrosion 10,000 hours	ASTM D-5894-10 (cold period)	Rust: none - Classified 10 Blister: none - Classified 10	Rust: none - Classified 10 Blister: none - Classified 10
Immersion corrosion (salt water) Results at 90 days	ASTM G44-99 (2013) Sodium chloride 3.5%	Rust: <0.03% - Classified 9 Blister: None - Classified 10	Blister: None - Classified 10 Rust: 33% - Classified 2
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>	<u>Rust-Anode® Primer</u>
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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All New & Corroded Metals

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CONCLUSION

- Rust-Anode, one coat system, is a trusted product when in need of a high corrosion resistance coating on bridges and marine environments.
- Imagine the expected lifetime of such a system in less corrosive environments.
- Rust-Anode reloads in zinc your worn-out galvanized structures to sustain the original cathodic protection.
- Traditional paint systems are only a passive barrier protections.

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