

Galvatech2000.com
PROTECTION SPECIALIST
AGAINST CORROSION



GALVANIZING COMPOUND AVAILABLE IN AMERICA



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.

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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.



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 that it will be highly beneficial.

Let's Act Now !



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.

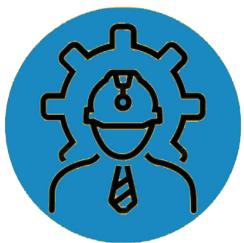


- **FREE ENGINEERS AND TECHNICIANS CORROSION FORMATION PROGRAM BY VIRTUAL CLASS.**
- **ALTERNATIVE TO HOT DIP GALVANIZING, METALLIZATION AND CORROSION BASICS.**
- **APPROVED BY MANY ENGINEERS ASSOCIATIONS**

[Click to see the topics](#)



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



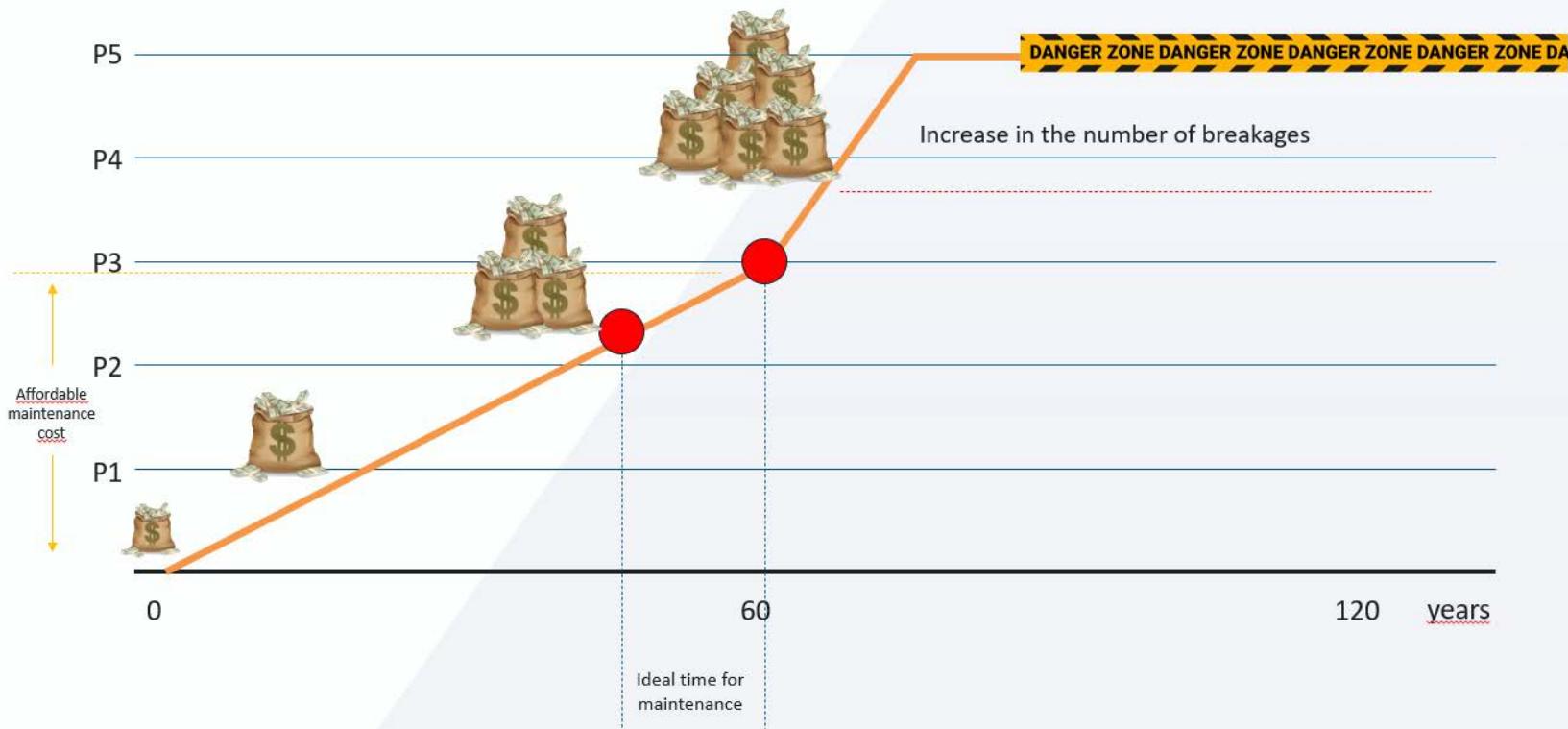
Contact François Bellefleur to reserve your formation date

francoisbellefleur@galvatech2000.com

Surface preparations are directly related to the scale of deterioration phases

PHASE 1 \$	Low thickness of zinc left (2.0-3.0 mils) Low maintenance cost (minimal surface preparation)
PHASE 2 \$\$	Zinc thickness (0-2,0 mils) Beginning of rust spots (brown) on bolts, edges and horizontal flat areas > 5% Light surface preparation costs and labor
PHASE 3 \$\$\$	Zinc thickness (0-2,0 mils) General rust (brown) > 50% Beginning of corrosion (black) on bolts, edges and horizontal flat areas Moderate surface preparation costs and labor
PHASE 4 \$\$\$\$	Hot-dip galvanized thickness protection is almost gone General rust (brown) > 75% Interfaces pack corrosion Heavy surface preparation costs and labour
PHASE 5 \$\$\$\$\$	Lack of steel thickness caused by heavy rust and corrosion High level of structure failures consider structure replacement

Phases of the life of a galvanized steel structure (Zone C2-C3 iso 12944)



GALVATECH 2000 PARTICIPATION

- EVj X'eVZ'td pilot programs YZkZdeb Zci
- D[[Zgig/¢¢\ ¢dg supervisors, inspectors and applicators every year
- Provides technical support and planning solutions
- ; dgþ Vi ãdc id ZkVj Vi Z Xdgþdhdc hZkZgtn dc h1Z



ON SITE



IN CLASS

ELECTRIC TRANSMISSION TOWERS



nationalgrid

hydro One

NEWFOUNDLAND
POWER
A FORTIS COMPANY

Nova Scotia
POWER
An Emera Company



Énergie NB Power



ELECTRIC TRANSMISSION TOWERS APPLICATION



ELECTRIC TRANSMISSION TOWERS - BEFORE - AFTER



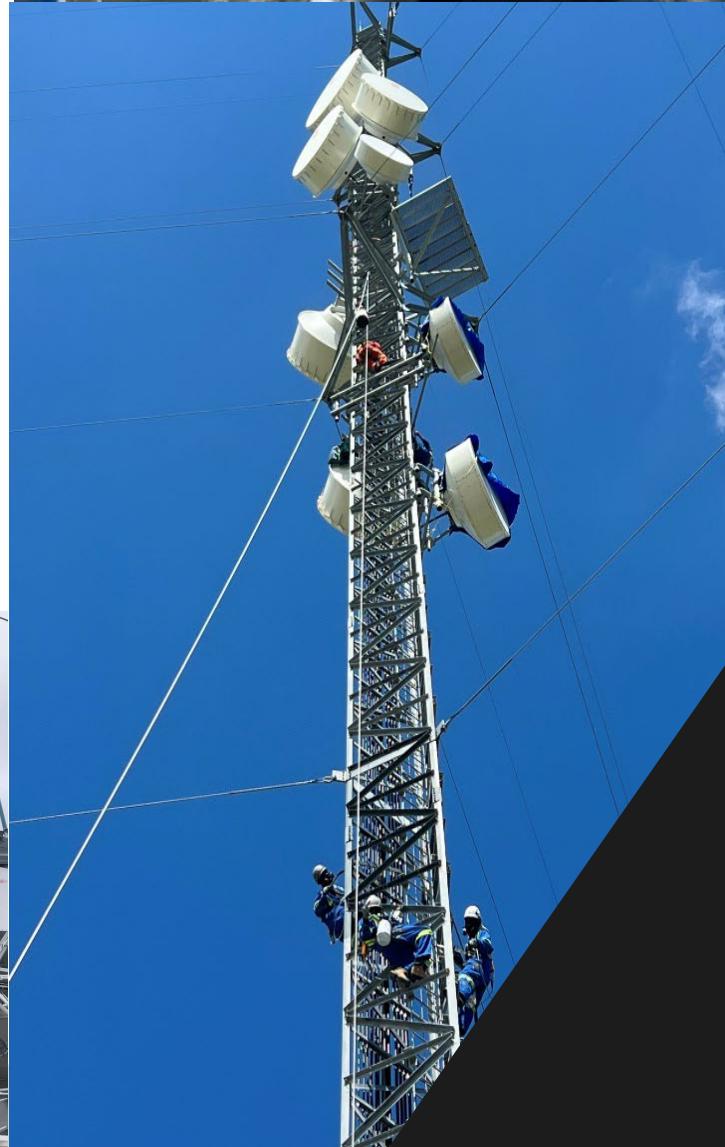
COMMUNICATION TOWER - ENCAPSULATION



Wind Turbine



TELECOM



DAMS AND EQUIPMENTS

(Harness of rivers)

Centre d'expertise
hydraulique

Québec



Doors Dams

(River harnessing)

Direction générale
des barrages



DISTRIBUTION STATIONS



Before



After



RADIATORS

Galvatech galvanizing compound is used to refurbish radiators and substation equipments



TOWER LEGS

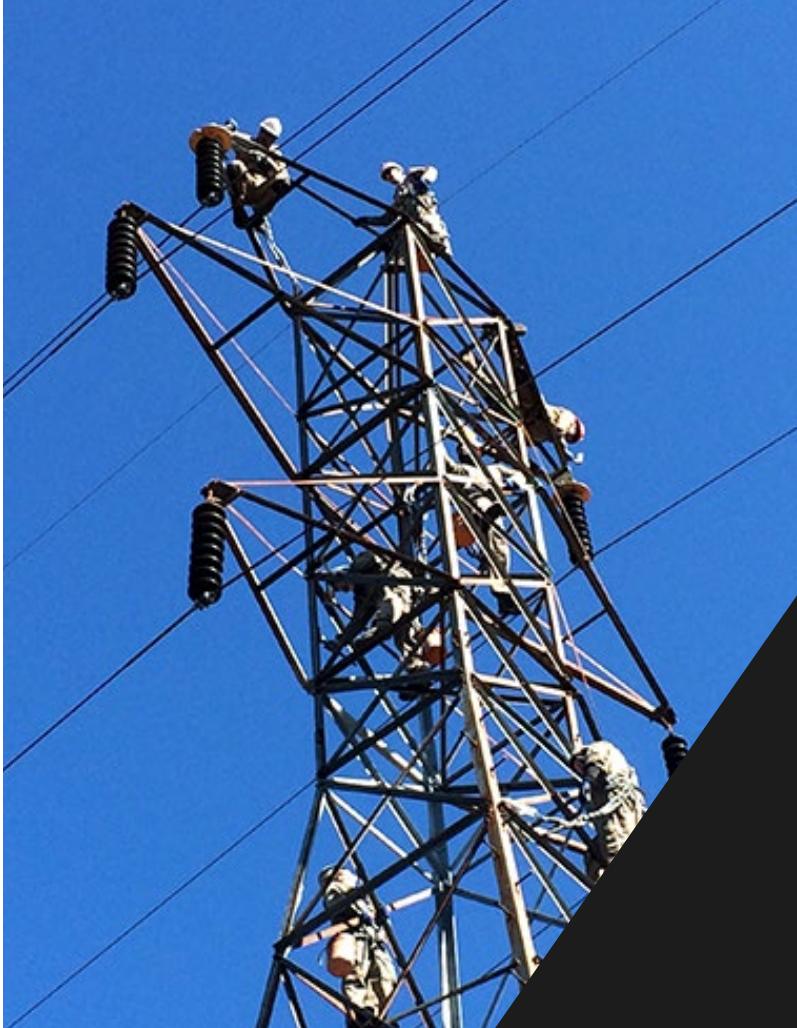
Galvatech galvanizing compound recreate a zinc protection in humid environments



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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 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 Hot Dip Galvanization Application of a single coat of Rust-Anode Primer without any paint coating			

Test name	Standard	Rust-Anode Primer
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%
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

PROTECTION SPECIALIST AGAINST CORROSION



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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.