

INNOVATIVE COATINGS-NEW BUSINESS OPPORTUNITIES TO GENERAL GALVANIZERS

Didier Caneilles- Business Developer



BRUGAL[®] Sustainable Surface Treatment Technology



SOME ABOUT PROCOAT, AN INNOVATIVE COMPANY

Spanish chemical company, based in Barcelona area with more than 40 years of experience on **metal surface treatments** to avoid any kind of corrosion.

First company in Europe who designed chemical treatments for metal surfaces based on **organic** (acrylic resins) and **inorganic** compounds: **Film Forming Treatments**, also named **Thin Organic Coatings**, in order to achieve:

**High Corrosion Protection +
Excellent Paintability.**

On 1972 it was a great innovation versus the traditional **inorganic** treatments!

Our own Technology is well known around the world under the brand name of:

BRUGAL®



WORLDWIDE ACTIVITY

We are selling our **BRUGAL**[®] products in all continents through our:

Distributors:

- France, Benelux, Algeria, Morocco, Turkey,.... (**VCD Floridienne**)
- Russia.
- Former Russian countries.
- Poland, Czech Rep, Slovakia.
- Saudi Arabia & UAE.
- Thailand, Malaysia & Singapore.
- Australia & New Zealand.
- Vietnam.
- Mexico.
- Argentina.
- Chile.
- Brazil.
- Taiwan.
- China.



Own Affiliate companies:

- **TecCoat** (Charlotte-NC/USA)
It covers all **North America**.
- **GreenCoat Chemicals Pvt. Ltd.**
(Pune-Maharashtra/India)
- **ProCoat Deutschland GmbH**
(Düsseldorf-Germany).
It covers Central Europe and Nordic Countries.
- **ProCoat Latam** (Colombia):
It covers Central & South West America and Caribbean Countries.

Export Ratio > 90%

It is only possible with top quality products besides an excellent service.

ProCoat's contribution to this industrial sector

The vast majority of companies that supply chemical products to the hot dip galvanization industry provide necessary solutions to be used **before the zinc kettle**, in order to provide to the parts to be galvanized a suitable surface because the zinc is properly alloyed with the steel.

However, at ProCoat we are strongly focused on the development of **innovative chemical products**, under the **BRUGAL® brand**, which are applied **after the zinc kettle**, that is, **on the surface of zinc**, aiming to:

- offer a **high added value** to galvanized steel, and
- **open new business opportunities** for the galvanized steel, galvanizers, architects, engineers and end steel good manufacturers.

ProCoat participates very actively in all events organized by several **National Galvanizers Associations** in order to contribute on extending the use of the hot-dip galvanized steel.



Weak Points

It is clear that zinc is an exceptional protector of steel. However, there are engineers, architects and manufacturers of end steel goods who are still reluctant to use galvanized steel on certain projects because of the following limitations:

- The **premature appearance of white rust** that tarnishes your projects shortly after being executed.
- Its **traditional industrial aspect**, metallic grey, which discards it in projects where the intention is to offer a very different appearance.
- Its **poor adhesion with paints**, requiring a suitable previous treatment of the surface, that many professional people ignore.
- Its **difficult weldability**.
- **Fire resistance**.

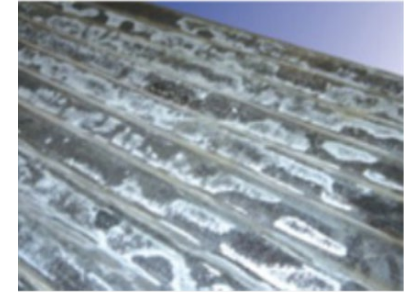


Figure 1 Peeling paint from galvanized door



ProCoat's Solutions

At ProCoat we have developed **Innovative Solutions** to solve some of these Weak Points.

LIMITATION	SOLUTION	PRODUCT
Early white rust appearance	Passivation	BRUGAL [®] GALVAPAS 320
Industrial aspect	TOC	BRUGALCOLOR [®] 018
	Multifunctional coating	BRUGAL [®] ColorShield [®]
Low weldability	Zinc masker	ProCoat [®] GalvBloc [®]

BRUGAL[®], THE ADDED VALUE FOR GALVANIZED STEEL

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BRUGAL[®], THE ADDED VALUE FOR GALVANIZED STEEL

Is the passivation process necessary?

Today companies related to the **construction, automotive** and **general industry** are not only demanding to their suppliers (hot-dip galvanizers) a high corrosion protection, but also, a **nice and durable aesthetic**. Therefore, they are **requesting a galvanized surface that remains bright for an extended period of time**. **Moreover, if the appearance of White Rust is delayed, the Red Rust also.**

But, **the Passivation is also necessary** for the hot-dip galvanizers **to avoid the white rust during:**

- **the storage time** at the galvanizer factory.
- **The overseas transportation** for export sales or long transport by road under severe weather conditions.

These requirements have provoked a **significant increased use of passivations by hot-dip galvanizers**.

With BRUGAL® GALVAPAS® 320



Result: 1 year after installation

Without
BRUGAL



Some of our References



ProCoat's Solutions

What about the **INDUSTRIAL APPEARANCE?**

LIMITATION	SOLUTION	PRODUCT
Early white rust appearance	Passivation	BRUGAL® GALVAPAS 320
Industrial appearance	Thin Organic Coating	BRUGALCOLOR® 018
	Multifunctional coating	BRUGAL® ColorShield®
Low weldability	Zinc masker	ProCoat® GalvBloc®



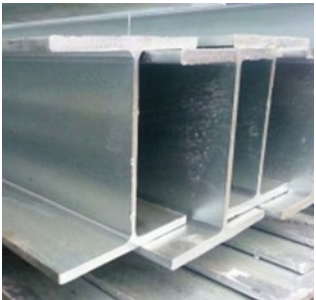
BRUGAL® , THE ADDED VALUE FOR GALVANIZED STEEL

Coloured coatings: BRUGALCOLOR® & BRUGAL® ColorShield®

DUPLEX SYSTEM



Hot Steel
+ paint →



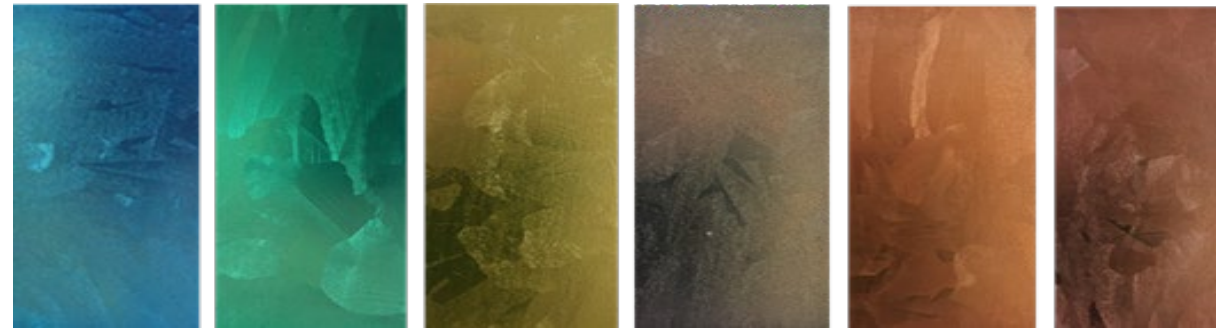
Galvanized
Steel +
paint →



Is this structure galvanized or
not?
Nobody knows!!

The **DUPLEX SYSTEM** hides the work done by the galvanizer.

INNOVATIVE COLOURED COATINGS SPECIALLY DESIGNED FOR HOT-DIP GALVANIZED STEEL



**BRUGALCOLOR® & BRUGAL® ColorShield®
PROMOTES THE GALVANIZED STEEL and
offer a NON INDUSTRIAL FINISH!**

Project with BRUGALCOLOR®

Parking Lot
Fitchburg (Massachusetts-USA)
Produced by Duncan Galvanizing



Built in 2007



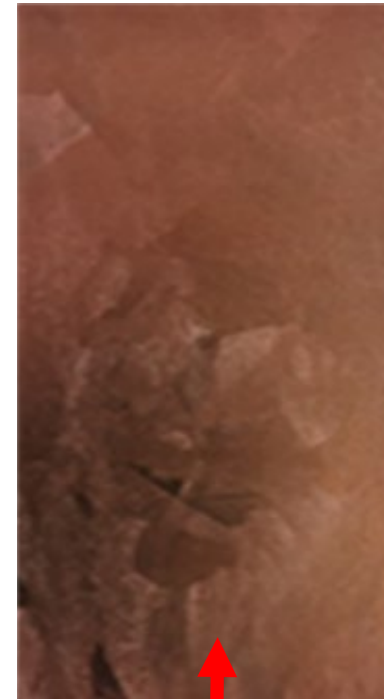
2022-After 15 years it remains perfectly preserved!!

COMPETITION WITH OTHER MATERIALS: COR-TEN® STEEL

COR-TEN STEEL



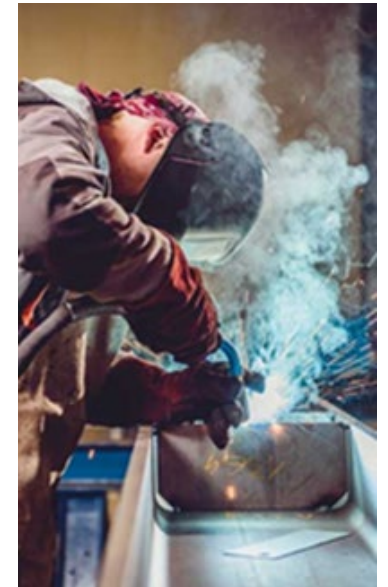
OUR BRUGAL® SOLUTION!!



Hot-Dip Galvanized Steel
coated with BRUGALCOLOR
Corten Steel Colour

What about its WELDABILITY?

LIMITATION	SOLUTION	PRODUCT
Early white rust appearance	Passivation	BRUGAL® GALVAPAS 320
Industrial aspect	TOC	BRUGALCOLOR® 018
	Multifunctional coating	BRUGAL® ColorShield®
Low weldability	Zinc masker	ProCoat® GalvBloc®

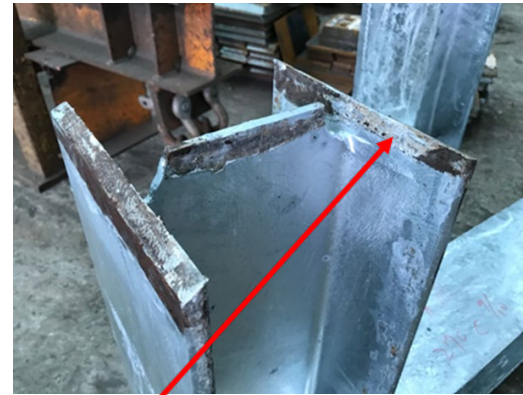
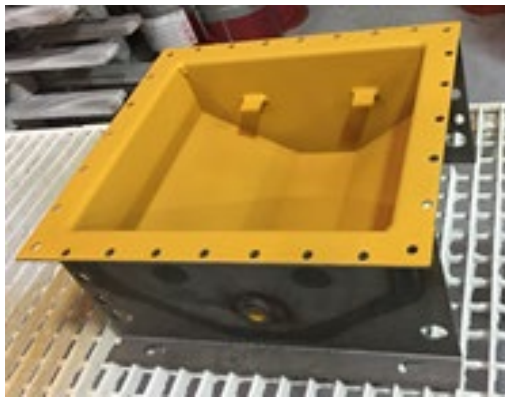


BRUGAL®, THE ADDED VALUE FOR GALVANIZED STEEL

ProCoat® GalvBloc®: Zinc Masker

Sometimes, during the hot-dip galvanizing process, it's necessary to **avoid the deposition of zinc** on certain areas of one element, such as: welding areas, screw threads,...

- ✓ **ProCoat® GalvBloc®** is a special yellow paint that works as an **inhibitor agent** in the Hot-Dip Galvanizing process, so this coating prevents zinc from adhering to the parts of a piece where it has been applied.
- ✓ Simple application using a brush, by dipping and **even with a spray gun**.



Uncoated areas with zinc to allow the weldability.



Before the zinc kettle



After the zinc kettle



ProCoat

SURFACE TREATMENTS

ProCoat

DEUTSCHLAND

*A WORLD OF INNOVATIONS
FOR HOT-DIP GALVANIZED STEEL*

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