

Salt spray assay references 30-02-04

STANDARD ISO 12944-6

STANDARD ISO 7253

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A. GOAL OF THE ASSAY : Evaluate the long term protection performance of the **Rust-Anode®** product.

B.MATERIAL and METHODS :

1) Samples :

-1. Basic steel sample for test comparison :	Basic steel sheet without any paint as comparison in same test.
-2. Steel sample protected with hot galvanization for test comparison:	Commercial thickness
-3. Steel sample protected by Rust-anode® :	Commercial sheet steel with Rust-Anode® having zinc powder pure to 99,995% ; after drying, the coat contains 96% zinc, with a thickness of 120 µm.

Preparation of samples :

Rust-Anode® was applied on sanded steel plates (Sa ½) in order to obtain a DTF of 120 µ by applying 2 layers of (60 µ each).

Drying time between the 2 layers: 48 hours, at ambient room temperature of ± 20°C.

Samples where tested in triplicate.

Time laps before testing, was 2 weeks @15°C

C. RESISTANCE TO THE NEUTRAL SALT SPRAY :

TESTING CONDITIONS :

(Done according to the standard ISO 7253 « To determine the resistance to neutral salt spray »)

Temperature in the salt spray room	34,3°C
Na Cl Concentration of the salt spray solution	5%
pH of the solution in the salt spray	Between pH 6,7 and pH 7,0
Test duration	4200 hours
Salt spray solution volume/hours	Between 1,02 and 1,90 ml / hours
Air pressure of the salted fog	0,99 bar

D. RESULTS :

INTERPRETATION SCALE OF THE STANDARD iso 4626 (for assay réf iso 7253)						
	Very good	Good	Medium	Poor	Very Poor	None
S/Ri	0	1	2	3	4	5

SUMMARY RESULTS :

TESTS	CLASSIFICATIONS (Standard ISO 4626)
1. For comparison. Sanded Basic steel sample :	- Rusty : Ri = 5
2. Sanded steel sample protected by hot galvanization. NB : Aspect 'crocodile', total matting, white haloes	- Blisters : S = 0 - Rusty : Ri = 0/1 - Cracks : S = 0 - Peel off : S = 0
3. Sanded steel sample protected by Rust-Anode® dry thickness film of 120 µm	- Blisters : S = 0 - Rusty : Ri = 0 - Cracks : S = 0
4. - NB : General whitish aspect	- Peel off : S = 0

This test followed ISO 12944-6 /7253 Standard, and samples with the Rust-Anode coating where found to meet the classifications as per ISO4626 :

Average Atmospheric Corrosivity.

Superior durability exceeding or equal to 10 years.