

CERTIFIED
FRENCH
STANDARD

IRON AND STEEL PRODUCTS
STEELS FOR HOT DIP
GALVANIZING

NF
A 35-503
June 1984

1. SCOPE AND FIELD OF APPLICATION

The purpose of this standard is to define the special requirements relating to the chemical analysis and the surface condition to which iron and steel products shall conform (sheets, universal flats - rolled sections and bar , strip) in structural steel for general purposes in Grades E24, E28, E36 as defined by the standards NF A 35 501 and NF A 36-101 which shall be hot dip galvanized.

2. REFERENCES

- NF A 35-501 Structural steels for general purposes - grades and qualities - sheets, medium and heavy plates universal flat, rolled sections and bars.
- NF A 36-101 Iron and steel - hot-rolled strip in structural steels for general purposes.
- NF A 91-121 Hot galvanizing (dipping in molten zinc) - Characteristic properties and test methods.
- NF A 91-122 Finished products in hot-galvanized steel - specifications for the zinc coating and manufacturing recommendations for galvanizing products.

3. DESIGNATION

The designation of steels required to meet the specifications of this standard shall be made by placing the number of the standard defining the grade and the quality beside the number of this standard.

Example:

Sheet E24 - 2NE in accordance with NF A 35-501 and NF A 35-503.

Certified by
decision of
20.5.1984 to take
effect on
20.6.1984

PRODUITS SIDERURGIQUES - ACIERS POUR GALVANISATION
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4. CHEMICAL COMPOSITION REQUIREMENTS (Silicon content)

In accordance with agreements made at the time of ordering the steels to be hot dip galvanized may be

- either rimming
- or non-rimming, in this case the two classes having different suitability for galvanization as specified in standards NF A 91-121 and A 91-122 (1) are provided for according to the guaranteed product values for the silicon content and the total Si + 2.5 P.

Content on product	Class I	Class II
Si	$\leq 0,030$	$\leq 0,040$
Si + 2,5 P	$\leq 0,090$	$\leq 0,110$

5. SURFACE CONDITION

The surface of the products for galvanization shall be free from physical defects such as scales, cracks, lines, etc liable to impair the appearance and the continuity of the zinc coating. In addition it shall bear no trace of grease, paint or other indelible products.

On the other hand if the galvanizer does not carry out a prior degreasing process the order shall specify in the case of sheets: "non-oiled sheet".

6. IMPORTANT NOTES

6.1. The guaranteed chemical composition specified in 4 is not sufficient to ensure good galvanization; this depends on the composition and the temperature of the baths and on the time of immersion.

6.2. Certain products which meet the tolerance requirements may show after galvanization, because of the release of stresses, some

(1) Undergoing revision

twisting and straightness or flatness values greater than those given for iron and steel products.