

RECURRENT QUESTIONS:

1) *What does the symbol "+ C" mean ?*

It indicates the delivery condition DRAWN.

This symbology has been adopted by the European standard EN 10277.

A symbol is available for each delivery condition of a cold finished steel product.

+ SH : PEELED ROLLED

+ SL : GROUND

+ PL : POLISHED

2) *Does drawing determine any changes in a steel chemical composition ?*

No, it doesn't. Drawing changes size, surface look and mechanical features of a steel product, but not its chemical composition.

3) *What do mechanical features of a drawn product depend on?*

They essentially depend on the starting features of the rolled steel and on the drawing reduction.

4) *What's the difference between test report 2.2 and inspection certificate 3.1?*

Both documents show that the product meets the order requirements in compliance with the standards in force and with the technical specifications.

The test report 2.2 provides the customer with test results on the basis of non specific tests. This means that the checked samples do not necessarily belong to the supplied batch; the check can be carried out on a similar product that has undergone the same production process.

The inspection certificate 3.1 provides the customer with test results on the basis of specific tests.

The test units are taken from the supplied batch.

For more details see the European standard EN 10204.

5) *Is it possible to use the steel grade 36SMnPb14 for the production of screws with resistance class 8.8 ?*

No, it isn't.

The ISO 898-1 standard forbids the use of steel grade 36SMnPb14 for the 8.8 class resistance.

6) *Is it possible to guarantee "freedom from defects" on a drawn product ?*

No, it isn't as defects like cracks, scales, laps cannot be completely eliminated during production of warm rolled products and cannot even be removed by drawing, a processing not involving chip-removal.

The EN 10277-1 standard settles some surface quality classes fixing for each of them the allowable defect depth and the allowable mass percentage of product showing defects exceeding the settled level.

7) *What's the difference between the steel designations "CF 9SMnPb36" and "11SMnPb37" ?*

It's the same steel grade.

The designation CF 9SMnPb36 is the old name mentioned in the old standards UNI 4838 and UNI 10233.

The standards actually in force EN 10087 and EN 10277-3 indicate the designation 11SMnPb37.

8) *What does the symbol "MPa" represent?*

The pressure unit of measurement in the International system is pascal (Pa).

1 Megapascal (MPa) is equivalent to 1 N/mm^2 .

In the steel field you can find it as unit of measurement of resistance to tensile stress R_m or of the yield point $R_{p0,2}$.

9) *How can I check the bar straightness?*

The EN 10278 standards provides for two types of evaluation.

The B.1 method prescribes the use of a rule with 1 m length and of a thickness gauge.

According to the B.2 method the bar lies on a sufficient number of supports placed at a distance of 1 m from each other and a gauge is used for measurement.

For more details see the a.m. standard.

10) *Where can I find some information about steel grade Fe 430 B ?*

The steel grade Fe 430 B is mentioned in the old standards UNI 7070 and UNI 10233.

It is a non-alloy steel for structural purposes.

The designation Fe 430 B has been replaced by S275JR of the EN 10025 standard.