



## STANDARD

## CLASSIFICATION

## FEATURES

**UNI EN ISO 683-1: 2018**

Steel rods, bars and wire for cold heading and cold extrusion - case hardening steels

*Alloy special steel*

**C25 - Nr. 1.0406**

B, Mn-B Mn < 1.65 %

## CHEMICAL ANALYSIS

| C                 | Si                | Mn                | P         | S         | Cr       | Other             |
|-------------------|-------------------|-------------------|-----------|-----------|----------|-------------------|
| from 0,22 to 0,29 | from 0,10 to 0,40 | from 0,40 to 0,70 | 0,045 max | 0,045 max | 0,40 max | Cr+Mo+Ni = < 0,63 |
| Mo                | Ni                | B                 | Cu        | Al        | Pb       |                   |
| 0,10 max          | 0,40 max          | -                 | 0,30 max  | -         | -        |                   |

## MECHANICAL PROPERTIES

| Diameter |     | As Hot Rolled (+U) or Rolled and peeled (+U +PE) |           | Annealed (+AC) or Annealed + Peeled (+AC +PE) |           | Cold Drawn (+U +C) |           | Cold Drawn and Annealed (+U +C +AC) |           | Cold Drawn then Annealed and Skin passed (+U +C +AC + LC) |           | Annealed and Cold Drawn (+AC +C) |           |
|----------|-----|--------------------------------------------------|-----------|-----------------------------------------------|-----------|--------------------|-----------|-------------------------------------|-----------|-----------------------------------------------------------|-----------|----------------------------------|-----------|
| from     | to  | Rm (Mpa) max                                     | Z (%) min | Rm (Mpa) max                                  | Z (%) min | Rm (Mpa) max       | Z (%) min | Rm (Mpa) max                        | Z (%) min | Rm (Mpa) max                                              | Z (%) min | Rm (Mpa) max                     | Z (%) min |
| 2        | 16  | -                                                | -         | 470                                           | 22        | -                  | -         | -                                   | -         | -                                                         | -         | -                                | -         |
| 16       | 100 | -                                                | -         | 440                                           | 23        | -                  | -         | -                                   | -         | -                                                         | -         | -                                | -         |

In case of specific needs, contact our sales offices to evaluate feasibility and agree on the values of Rm.

## EQUIVALENT STEEL GRADES

| EUROPE (EN) | GERMANY (DIN, WNr) | FRANCE (AFNOR) | ITALY (UNI) | CHINA (GB)  | FINLAND (SFS) | INTERN (ISO) |
|-------------|--------------------|----------------|-------------|-------------|---------------|--------------|
| C25         | C25                | C25            | -           | 25          | -             | C25          |
| USA (SAE)   | JAPAN (JIS)        | UK (BS)        | SPAIN (UNE) | SWEDEN (SS) | RUSSIA (GOST) |              |
| 1025        | S22C               | 070M26         | -           | -           | 25            |              |

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