



STANDARD

CLASSIFICATION

FEATURES

UNI EN 10263-3: 2017

Non Alloy Steel Wire Rod For Conversion to Wire - wire rod for specials applications

Non Alloy Steel

18B2 - Nr. 1.5503

Structural pressure vessel and engineering steels with C
< 0,5%

CHEMICAL ANALYSIS

| C | Si | Mn | P | S | Cr | Other |
|-------------------|----------|----------------------|-----------|-----------|----|-------|
| from 0,16 to 0,20 | 0,30 max | from 0,60 to 0,80 | 0,025 max | 0,025 max | - | - |
| Mo | Ni | B | Cu | Al | Pb | |
| - | - | from 0,0008 to 0,005 | 0,25 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 | 5 | - | - | - | - | - | - | 450 | 67 | 490 | 65 | - | - |
| 5 | 10 | 520 | 58 | 460 | 64 | 610 | 56 | 440 | 67 | 480 | 65 | 550 | 62 |
| 10 | 40 | 520 | 58 | 460 | 64 | 600 | 56 | 430 | 67 | 480 | 65 | 540 | 62 |

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) |
|-------------|--------------------|----------------|-------------|-------------|---------------|--------------|
| 18B2 | 18B2 | - | - | - | - | - |
| USA (SAE) | JAPAN (JIS) | UK (BS) | SPAIN (UNE) | SWEDEN (SS) | RUSSIA (GOST) | |
| 1018 | - | - | - | - | - | |

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