

STEELS TABLE

MECHANICAL PROPERTIES

| Steel grade | Delivery condition | Yield strength min. (ReH) (N/mm ² = Mpa) | | | | | | Tensile strength min./max. (Rm) (N/mm ² = Mpa) | | | | Longitudinal elongation min. % | | | | Longitudinal impact value (J min.) | | | |
|--|---------------------------|--|--------------|--------------|--------------|---------------|----------------|--|--------------|----------------|----------------------|--------------------------------|---------------|----------------|-----|------------------------------------|----|-----|--|
| | | For nominal w.t. in mm | | | | | | | | | | | | | | Temperature °C | | | |
| | | ≤ 16 | > 16 ≤ 40 | > 40 ≤ 63 | > 63 ≤ 80 | > 80 ≤ 100 | > 100 ≤ 120 | ≤ 3 | > 3 ≤ 100 | > 100 ≤ 120 | ≤ 40 | > 40 ≤ 63 | > 63 ≤ 100 | > 100 ≤ 120 | -50 | -20 | 0 | +20 | |
| S235JRH | Untreated | 235 | 225 | 215 | 215 | 215 | 195 | 360-510 | 360-510 | 350-500 | 26 (24) ¹ | 25 | 24 | 22 | - | - | - | 27 | |
| S275J0H S275J2H | Untreated | 275 | 265 | 255 | 245 | 235 | 225 | 430-580 | 410-560 | 400-540 | 23 (20) ¹ | 22 | 21 | 19 | - | - | 27 | - | |
| S355J0H S355J2H S355K2H | Untreated | 355 | 345 | 335 | 325 | 315 | 295 | 510-680 | 470-630 | 450-600 | 22(20) ¹ | 21 | 20 | 18 | - | - | 27 | - | |
| S275NH S275NLH | Normalized | 275 | 265 | 255 | - | - | - | 370-510 | 370-510 | - | 24 | 24 | - | - | - | 40 | - | - | |
| S355NH S355NLH | Normalized | 355 | 345 | 335 | - | - | - | 470-630 | 470-630 | - | 22 | 22 | - | - | - | 40 | - | - | |
| S420NH S420NLH | Normalized | 420 | 400 | 390 | - | - | - | 520-680 | 520-680 | - | 19 | 19 | - | - | - | 40 | - | - | |
| S460NH S460NLH | Normalized | 460 | 440 | 430 | - | - | - | 540-720 | 540-720 | - | 17 | 17 | - | - | - | 40 | - | - | |
| S275MH S275MLH | Thermomechanically rolled | 275 | 265 | - | - | - | - | 360-510 | 360-510 | - | 24 | - | - | - | - | 40 | - | - | |
| S355MH S355MLH | Thermomechanically rolled | 355 | 345 | - | - | - | - | 450-610 | 450-610 | - | 22 | - | - | - | - | 40 | - | - | |
| S420MH S420MLH | Thermomechanically rolled | 420 | 400 | - | - | - | - | 500-660 | 500-660 | - | 19 | - | - | - | - | 40 | - | - | |
| S460MH S460MLH | Thermomechanically rolled | 460 | 440 | - | - | - | - | 530-720 | 530-720 | - | 17 | - | - | - | - | 40 | - | - | |

(¹) According to EN 10219.

The impact test for steel grades JR and J0 is optional according to the norm, if required, it has to be explicitly stated in the order sheet.

Note: in case of cold finished sections, the heat treatments are effected on the base coil, not on the finished sections.