| TYPE | STANDARD | GRADE | Thickness ( mm. ) | CHEMICAL COMPOSITION ( MAX ) | | | | | | | | | Tension Test | | | | | | Impact Test | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | Yield Point | | Tensile Strength | | Elongation | | Temp | Absorbtion energy |
| | | | | C | Si | Mn | P | S | Cu ( min ) | N | Nb | V | Thick ( mm.) | Kgf / $mm^2$ [ N / $mm^2$ ] | Thick ( mm.) | Kgf / $mm^2$ [ N / $mm^2$ ] | Thick ( mm.) | Transverse | ( $^0$C ) | ( Joule ) |
| Hot rolled products of non-alloy structural steels - Techical delivery condition | EN10025 ( 1993 ) | S235JR | T ≤ 16 | 0.21 | - | 1.50 | 0.055 | 0.055 | - | 0.011 | - | - | T ≤ 16 | 24 [ 235 ] | 3 ≤ T ≤ 100 | 35 - 48 [ 340 - 470 ] | 3 ≤ T ≤ 40 | L = 26 T = 24 | 20 (JR) 0 (J0) | 27 10<t≤150 |
| | | | 16 < T ≤ 40 | 0.25 | | | | | | | | | 16 < T ≤ 40 | 23 [ 225 ] | | | | | | |
| | | | T > 40 | - | | | | | | | | | 40 < T ≤ 63 | 22 [ 215 ] | | | 40 < T ≤ 63 | L = 25 T = 23 | | |
| | | S235JO | ALL | 0.19 | | | | | | | | | | | | | | | | |
| | | S275JR | T ≤ 16 | 0.24 | - | 1.60 | 0.055 | 0.055 | - | 0.011 | - | - | T ≤ 16 | 28 [ 275 ] | 3≤ T ≤ 100 | 42 - 57 [ 410 - 560] | 3 ≤ T ≤ 40 | L = 22 T = 20 | | |
| | | | 16 < T ≤ 40 | 0.24 | | | | | | | | | 16 < T ≤ 40 | 27 [ 265 ] | | | | | | |
| | | | T > 40 | 0.25 | | | | | | | | | 40 < T ≤ 63 | 26 [ 255 ] | | | 40< T ≤ 63 | L = 21 T = 19 | | |
| | | S275JO | ALL | 0.21 | | | 0.050 | 0.050 | | | | | | | | | | | | |
| | | S355JR | ALL | 0.27 | 0.60 | 1.70 | 0.055 | 0.055 | - | 0.011 | - | - | T ≤ 16 | 36 [ 355 ] | 3≤ t ≤ 100 | 50 - 64 [ 490 - 630] | 3 ≤ T ≤ 40 | L = 22 T = 20 | | |
| | | S355JO * | T ≤ 16 | 0.23 | 0.60 | 1.70 | 0.050 | 0.050 | - | 0.011 | - | - | 16 < T ≤ 40 | 35 [ 345 ] | | | | | | |
| | | | 16 < T ≤ 40 | 0.23 | | | | | | | | | 40< T ≤ 63 | 34 [ 335 ] | | | 40< T ≤ 63 | L = 21 T = 19 | | |
| | | | T > 40 | 0.24 | | | | | | | | | | | | | | | | |

NOTE * A maximum content of 0.20 %C for T≤30 mm. If the products contain more than 0.02% Nb or 0.02% Ti or 0.03%V ladle analysis or 0.03 % Nb or 0.04%Ti or 0.05% V product analysis.