

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	
S235JR	Untreated	235	225	215	215	215	195	360-510	360-510	350-500	26 (24) ¹	25	24	22	-	-	-	27	
S275J0	Untreated	275	265	255	245	235	225	430-580	410-560	400-540	23 (20) ¹	22	21	19	-	-	27	-	
S275J2H															-	27	-	-	
S355J0	Untreated	355	345	335	325	315	295	510-680	470-630	450-600	22(20) ¹	21	20	18	-	-	27	-	
S355J2H															-	27	-	-	
S355K2H															-	40	-	-	
S275NH	Normalized	275	265	255	-	-	-	370-510	370-510	-	24	24	-	-	-	40	-	-	
S275NLH															27	-	-	-	
S355NH	Normalized	355	345	335	-	-	-	470-630	470-630	-	22	22	-	-	-	40	-	-	
S355NLH															27	-	-	-	
S420NH	Normalized	420	400	390	-	-	-	520-680	520-680	-	19	19	-	-	-	40	-	-	
S420NLH															27	-	-	-	
S460NH	Normalized	460	440	430	-	-	-	540-720	540-720	-	17	17	-	-	-	40	-	-	
S460NLH															27	-	-	-	
S275MH	Thermomechanically rolled	275	265	-	-	-	-	360-510	360-510	-	24	-	-	-	-	40	-	-	
S275MLH															27	-	-	-	
S355MH	Thermomechanically rolled	355	345	-	-	-	-	450-610	450-610	-	22	-	-	-	-	40	-	-	
S355MLH															27	-	-	-	
S420MH	Thermomechanically rolled	420	400	-	-	-	-	500-660	500-660	-	19	-	-	-	-	40	-	-	
S420MLH															27	-	-	-	
S460MH	Thermomechanically rolled	460	440	-	-	-	-	530-720	530-720	-	17	-	-	-	-	40	-	-	
S460MLH															27	-	-	-	

(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.