

**Mechanical properties at ambient temperature for flat and long products of steel grades and qualities with values for the impact strength**  
(concluded)

Designation		Position of test pieces  a	Minimum percentage elongation after fracture <sup>a</sup>										
			L <sub>o</sub> = 80 mm Nominal thickness mm					L <sub>o</sub> = 5,65 √ S <sub>o</sub> Nominal thickness mm					
According EN 10027-1 and CR 10260	According EN 10027 - 2		≤ 1	> 1 ≤ 1,5	> 1,5 ≤ 2,5	> 2,5 < 3	≥ 3 40	≤ 3 ≤ 40	> 40 ≤ 63	> 63 ≤ 100	> 100 ≤ 150	> 250 ≤ 250	> 250 <sup>c</sup> ≤ 400 only for J2 and K2
S235JR	1.0038	l	17	18	19	20	21	26	25	24	22	21	-
S235JO	1.0114												-
S235J2	1.0117	t	15	16	17	18	19	24	23	22	22	21	21 (l and t)
S275JR	1.0044	l	15	16	17	18	19	23	22	21	19	18	-
S275JO	1.0143												-
S275J2	1.0145	t	13	14	15	16	17	21	20	19	19	18	18 (l and t)
S355JR	1.0045	l	14	15	16	17	18	22	21	20	18	17	-
S355JO	1.0553												-
S355J2	1.0577												17(l and t)
S355K2	1.0596	t	12	13	14	15	16	20	19	18	18	17	17(l and t)
S450JO <sup>d</sup>	1.0590	l	-	-	-	-	-	17	17	17	17	-	-

<sup>a</sup> For plate, strip and wide flats with widths ≥ 600 mm the direction transverse (t) to the rolling direction applies. For all other products the values apply for the direction parallel (l) to the rolling direction.

<sup>c</sup> The values apply to flat products.

<sup>d</sup> Applicable for long products only.