

Technical information

Norm SS EN 10219-1, steel grade S235JRH

Chemical properties

The table below applies to material with wall thickness ≤ 40 mm

Steel grade	Chemical composition in percentage weight, max.					
	C%	Si%	Mn%	P%	S%	N%
S235JRH	0.17	0.04	1.4	0.045	0.45	0.009

* The tube is suitable for hot dip galvanizing

Mechanical characteristics

The table below is for information only. For a complete presentation, refer to the standard

Steel grade	Yield strength MPa Wall mm		Tensile strength MPa Wall mm		Extension %	Impact strength J	
	≤ 16	$> 16 \leq 40$	< 3	$\geq 3 \leq 40$		Test temp.	Energy
S235JRH	235	225	360-510	340-470	24	20	27

Measurement deviations

Characteristics	Circular construction tube
Outer dimension (D)	$\pm 1\%$ with min. ± 0.5 mm and max. ± 10 mm
Wall thickness (T)	For $D \leq 406.4$ $T \leq 5$ mm $\pm 10\%$ $T > 5$ mm $\pm 10\%$ For $D > 406.4$ mm 10% but max. 2 mm
Roundness (O)	2% for construction tubes with diameter in relation to thickness, not exceeding 100 ¹⁾
Straightness	0.2% of whole length
Weight	+ 6 % on individual lengths
1) when the diameter in relation to the thickness exceeds 199, the tolerance for deviation from roundness must be agreed upon.	