

Technical Specification References

Classification	Specification	Designation of Grade	Mechanical Properties			Chemical Composition %					Bend Test		Flattening Test H
			Tensile Strength Min.	Yield Strength Min.	Elongation Min.	C	Si	Mn	P	S	Bending Angle	Bending Radius	
			N/mm ²	N/mm ²	%	Max	Max	Max	Max	Max			
Carbon Steel Tubes For Machine Structural Purposes	JIS G 3445	STKM11A	290min.	-	(N1) Test Piece No. 11 & 12 - 35min. (N1) Test Piece No. 5 - 30min.	0.12	0.60	0.035	0.04	0.04	180°	4D	1/2 D
Cold Rolled Square & Rectangular Hollow Section	APM S 001		270min.	170min.	Gauge Length Lo = 50mm - 20min.	0.20	-	1.20	0.045	0.045	-	-	-

NOTES : (N1) - Elongation values in Table above only applied to tubes over 40mm in outside diameter.
(N1) - When the tensile test is carried out on No. 12 or No. 5 test piece for the tube under 8mm in wall thickness, the minimum value elongation shall be determined by reducing 1.5% per 1mm of decrease in wall thickness from the values given in the Table above and rounding off the value obtained to integer in accordance with JIS Z 8401.

H - Distance between flat plates
D - Outside diameter of the tube
APM S 001 - Manufacturer Standard

