

## Carbon Steel Tubes for Machine Structural Purposes – JIS G3445

Application: Tubes used for machinery, automobiles, bicycles, furniture, appliances and other machine parts.

Mechanical Properties			
Grade	Yield Strength (Mpa)	Tensile Strength (Mpa)	Elongation (%)
STKM11A	/	≥ 290	≥ 35
STKM12A	≥ 175	≥ 340	≥ 35
STKM12B	≥ 275	≥ 390	≥ 25
STKM12C	≥ 355	≥ 470	≥ 20
STKM13A	≥ 215	≥ 370	≥ 30
STKM13B	≥ 305	≥ 440	≥ 20
STKM13C	≥ 380	≥ 510	≥ 15
STKM14A	≥ 245	≥ 410	≥ 25
STKM14B	≥ 355	≥ 500	≥ 15
STKM14C	≥ 405	≥ 550	≥ 15

Chemical Compositions(%)					
Grade	C	Si	Mn	P	S
STKM11A	≤ 0.12	≤ 0.35	≤ 0.60	≤ 0.040	≤ 0.040
STKM12A	≤ 0.20	≤ 0.35	≤ 0.60	≤ 0.040	≤ 0.040
STKM12B	≤ 0.20	≤ 0.35	≤ 0.60	≤ 0.040	≤ 0.040
STKM12C	≤ 0.20	≤ 0.35	≤ 0.60	≤ 0.040	≤ 0.040
STKM13A	≤ 0.25	≤ 0.35	0.30-0.90	≤ 0.040	≤ 0.040
STKM13B	≤ 0.25	≤ 0.35	0.30-0.90	≤ 0.040	≤ 0.040
STKM13C	≤ 0.25	≤ 0.35	0.30-0.90	≤ 0.040	≤ 0.040
STKM14A	≤ 0.30	≤ 0.35	0.30-1.00	≤ 0.040	≤ 0.040
STKM14B	≤ 0.30	≤ 0.35	0.30-1.00	≤ 0.040	≤ 0.040
STKM14C	≤ 0.30	≤ 0.35	0.30-1.00	≤ 0.040	≤ 0.040

Size:

- Outer Dimensions.: 19.05 mm ~ 114.3 mm
- Wall Thickness: 2.0 mm ~ 14 mm
- Length: max 16 meters

Protection:

Pipes are supplied:

- Black and bear
- External varnished with black or clear lacquer

Upon request, pipes ends are protected by plastic caps

Marking:

Pipes are supplied with marking according to standard and customer request.

Marking is paint on the ends of pipes. The same data, as well as additional information per customer's request, is indicated on the bundle's tags.

Delivery:

Pipes are supplied in hexahedral bundles or round bundles tied with steel strip.

Weight of bundle - up to 5000 kg upon request of customer.

Each bundle is furnished with three tags.