Seamless Ferritic and Austenitic Alloy-Steel Boiler, Superheater, and Heat-Exchanger Tubes – ASTM A213

Mechanical Properties									
Grade	Yield Strength (Mpa)	Tensile Strength (Mpa)	Elongation (%)						
T11	≥ 170	≥ 415	20						
T12	≥ 205	≥ 415	20						
T22	≥ 205	≥ 415	20						

Application: Boiler, Superheater, and Heat-Exchanger

Chemical	Compositio	ns (%)

Grade	С	Si	Mn	Р	S	Cr	Мо	Cu	Ni	V
T11	0.05-0.15	0.50-1.00	0.30-0.60	≤0.025	≤0.025	1.00-1.50	0.44-0.65	/	/	/
T12	0.05-0.15	≤0.50	0.30-0.61	≤0.025	≤0.025	0.80-1.25	0.44-0.65	/	/	/
T22	0.05-0.15	≤0.50	0.30-0.60	≤0.025	≤0.025	1.90-2.60	0.87-1.17	/	/	/

Size:

- Outer Dimensions.: 19.05mm ~ 114.3mm

- Wall Thickness: 2 mm ~ 14 mm

- Length: max 17 meters

Protection:

Pipes are supplied:

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

Upon request, pipes ends are protected by plastic caps

Marking:

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

Marking is paint and/or die stenciled 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.