

Tolerance

Types of steel tubes	Outer Diameter		Wall Thickness
	Tube sizes(mm)	Tolerances(mm)	Tolerances(mm)
Cold-rolled tubes	<114.3	±0.79	-12.5%

Chemical Composition

Standard	Grade	Chemical compositions (%)						
		C	Si	Mn	P	S	Cr	Ni
API SPEC 5CT	J55							
	K55	0.34~0.39	0.20~0.35	1.25~1.50	≤0.020	≤0.015	≤0.15	≤0.20
	N80	0.34~0.38	0.20~0.35	1.45~1.70	≤0.020	≤0.015	≤0.15	/
	L80	0.15~0.22	≤1.00	0.25~1.00	≤0.020	≤0.010	12.0~14.0	≤0.20
	P110	0.26~0.395	0.17~0.37	0.40~0.70	≤0.020	≤0.010	0.80~1.10	≤0.20

Mechanical Properties

Grade	Type	Total elongation under load (%)	Yield strength (min)	Yield strength (max)	Tensile strength min Mpa	Hardness Max (HRC)	Hardness Max(HB W)
J55	-	0.5	379	552	517	-	-
K55	-	0.5	379	552	655	-	-
N80	1	0.5	552	758	689	-	-
N80	Q	0.5	552	758	689	-	-
L80	1	0.5	552	655	655	23	241
L80	9Cr	0.5	552	655	655	23	241
L80	13Cr	0.5	552	655	655	23	241
C90	-	0.5	621	724	689	25.4	255
C95	-	0.5	655	758	724	-	-
T95	-	0.5	655	758	724	25.4	255
P110	-	0.6	758	965	862	-	-
Q125	All	0.65	862	1034	931	-	-

Cu	Mo	V
≤0.20	/	/
/	/	0.11~0.16
≤0.20	/	/
≤0.20	0.15~0.25	≤0.08