

TUBING AND CASING PIPE

- **STANDARD:**
API SPEC 5CT, API SPEC 5B, ISO 11960
- **APPLICATION:**
Tubing is used to extracting petroleum and natural gas from a well.
Casing serves as walls of well.
- **TECHNOLOGY DATA:**



○ Tolerance

Item		Tolerance
Outside Diameter	Pipe Body	$D \leq 101.60\text{mm} \pm 0.79\text{mm}$ $D \geq 114.30\text{mm} + 1.0\%D, -5\%D$
	Coupling	$\pm 1\%D$
Wall Thickness		$0, -12.5\%t$
Weight	Single Lengths	$+6.5\% - 3.5\%$
	Carload Lots	$0, -1.75\%$

○ Mechanical Properties

Grade	Yield Strength				Tensile strength		Hardness		Allcvable Hardness Variation
	min		max		min		max		
	Psi	Mpa	Psi	Mpa	Psi	Mpa	Hrc	Bhn	
J55	55,000	379	80,000	552	75,000	517	-	-	-
K55	55,000	379	80,000	552	95,000	655	-	-	-
N80	80,000	552	80,000	758	100,000	689	-	-	-

○ Chemical Composition(%)

Grade	Chemical Composition%									
	C	Si	Mn	P	S	Cr	Ni	Cu	V	Als
J55/K55	0.34-	0.20-	1.25-	≤	≤	≤	≤	≤		≤
(37Mn5)	0.39	0.35	1.50	0.020	0.015	0.15	0.20	0.20		0.020
N80	0.34-	0.25-	1.45-	≤	≤	≤	≤	≤		≤
(36Mn2V)	0.38	0.40	1.70	0.020	0.015	0.15	0.20	0.20	0.11-0.16	0.020

⊙ Length

	(Range 1)	(Range 2)	(Range 3)
Tubing	6.10-7.32m	8.53-9.75m	11.58-12.80m
Casing	4.88-7.62m	7.62-10.36m	10.36-14.63m
Pup Joint	0.5m-6.0m(2FEET-20FEET)		

⊙ Available size of tubing

Size Designation	Weight Designation		OD		WT		Type Of End Finish					
							Steel Grade					
							J55	L80-1	N80	C90	T95	P110
N	U	in	mm	in	mm							
1.900"	2.4	-	1.9	48.26	0.125	3.18	PI	-	-	-	-	-
	2.75	2.9	1.9	48.26	0.145	3.68	PNUI	PNUI	PNUI	PNUI	PNUI	-
	3.65	-	1.9	48.26	0.2	5.08	PU	PU	PU	PU	PU	PU
2 3/8"	4	-	2.375	60.32	0.167	4.24	PN	PN	PN	PN	PN	-
	4	4.7	2.375	60.32	0.19	4.83	PNU	PNU	PNU	PNU	PNU	-
	5.8	5.95	2.375	60.32	0.254	6.45	-	PNU	PNU	PNU	PNU	PNU
	6.6	-	2.375	60.32	0.259	7.49	-	P	-	P	P	PNU
2 7/8"	7.35	7.45	2.375	60.32	0.336	8.53	-	PU	-	PU	PU	-
	6.4	6.5	2.875	73.02	0.217	5.51	PNU	PNU	PNU	PNU	PNU	-
	7.8	7.9	2.875	73.02	0.276	7.01	-	PNU	PNU	PNU	PNU	PNU
	8.6	8.7	2.875	73.02	0.308	7.82	-	PNU	PNU	PNU	PNU	PNU
	9.35	9.45	2.875	73.02	0.34	8.64	-	PU	-	PU	PU	PNU
	10.5	-	2.875	73.02	0.392	9.96	-	P	-	P	P	-
3 1/2"	11.5	-	2.875	73.02	0.44	11.18	-	P	-	P	P	-
	7.7	-	3.5	88.9	0.216	5.49	PN	PN	PN	PN	PN	-
	9.2	9.3	3.5	88.9	0.254	6.45	PNU	PNU	PNU	PNU	PNU	-
	10.2	-	3.5	88.9	0.289	7.34	PN	PN	PN	PN	PN	PNU
	12.7	12.95	3.5	88.9	0.375	9.52	-	PNU	PNU	PNU	PNU	-
	14.3	-	3.5	88.9	0.43	10.92	-	P	-	P	P	PNU
	15.5	-	3.5	88.9	0.476	12.09	-	P	-	P	P	-
4"	17	-	3.5	88.9	0.53	13.46	-	P	-	P	P	-
	9.5	-	4	101.6	0.226	5.74	PN	PN	PN	PN	PN	-
4 1/2"	10.7	11	4	101.6	0.262	6.65	PU	PU	PU	PU	PU	-
	12.6	12.75	4.5	114.3	0.271	6.88	PNU	PNU	PNU	PNU	PNU	-
	15.2	-	4.5	114.3	0.337	8.56	-	P	-	P	P	-
	17	-	4.5	114.3	0.38	9.65	-	P	-	P	P	-
	18.9	-	4.5	114.3	0.43	10.92	-	P	-	P	P	-
	21.5	-	4.5	114.3	0.5	12.7	-	P	-	P	P	-
	23.7	-	4.5	114.3	0.56	14.22	-	P	-	P	P	-
	26.1	-	4.5	114.3	0.63	16	-	P	-	P	P	-

Note: P--Plain End; N--Non External Upset; U--External Upset; T&C--Threading&Coupling; I--Integral Connector.

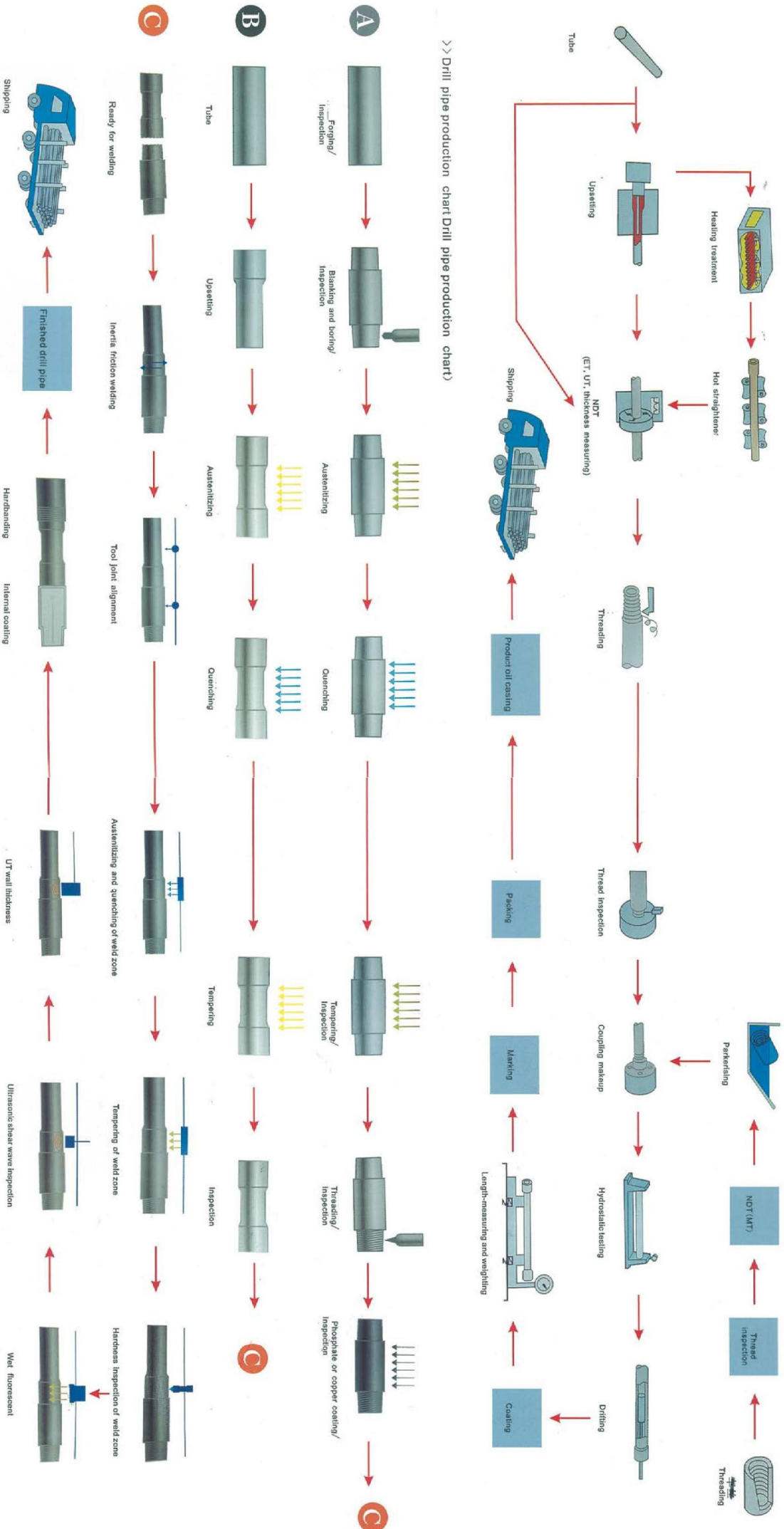
Available Size Of Casing Pipe

Size Designation	Weight Designation	OD		WT		Type Of End Finish								
		in	mm	in	mm	Steel Grade								
						J55 K55	L80-1	N80	C90	C95	T95	P110	M65	
4 1/2"	9.5	4.5	114.3	0.205	5.21	PS	-	-	-	-	-	-	-	-
	10.5	4.5	114.3	0.224	5.69	PSB	-	-	-	-	-	-	-	-
	11.6	4.5	114.3	0.25	6.35	PSLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	13.5	4.5	114.3	0.29	7.37	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	15.1	4.5	114.3	0.337	8.56	-	-	-	-	-	-	PLB	-	-
5"	11.5	5	127	0.22	5.59	PS	-	-	-	-	-	-	-	-
	13	5	127	0.253	7.52	PSLB	-	-	-	-	-	-	-	-
	15	5	127	0.296	9.19	PSLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	18	5	127	0.362	9.19	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	21.4	5	127	0.437	11.1	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	23.2	5	127	0.478	12.14	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB
5 1/2"	24.1	5	127	0.5	12.7	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	14	5.5	139.7	0.244	6.2	PS	-	-	-	-	-	-	-	-
	15.5	5.5	139.7	0.275	6.98	PSLB	-	-	-	-	-	-	-	-
	17	5.5	139.7	0.304	7.72	PSLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	20	5.5	139.7	0.361	9.17	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	23	5.5	139.7	0.415	10.54	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	26.8	5.5	139.7	0.5	12.7	-	-	-	P	-	P	P	P	P
	29.7	5.5	139.7	0.562	14.27	-	-	-	P	-	P	P	P	P
	32.6	5.5	139.7	0.625	15.88	-	-	-	P	-	P	P	P	P
	35.3	5.5	139.7	0.687	17.45	-	-	-	P	-	P	P	P	P
	38	5.5	139.7	0.75	19.05	-	-	-	P	-	P	P	P	P
6 5/8"	40.5	5.5	139.7	0.812	20.62	-	-	-	P	-	P	P	P	P
	43.1	5.5	139.7	0.875	22.22	-	-	-	P	-	P	P	P	P
	20	6.625	168.28	0.288	7.32	PSLB	-	-	-	-	-	-	-	-
	24	6.625	168.28	0.352	8.94	PSLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	28	6.625	168.28	0.417	10.59	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	32	6.625	168.28	0.475	12.06	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	7"	20	7	177.8	0.272	6.91	PS	-	-	-	-	-	-	-
23		7	177.8	0.317	8.05	PSLB	PLB	PLB	PLB	PLB	-	-	-	PLB
26		7	177.8	0.362	9.19	PSLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB
29		7	177.8	0.408	10.36	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB
32		7	177.8	0.453	11.51	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB
35		7	177.8	0.498	12.65	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB
7 5/8"	38	7	177.8	0.54	13.72	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	26.4	7.625	193.68	0.328	8.33	PSLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB	-
	29.7	7.625	193.68	0.375	9.52	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	33.7	7.625	193.68	0.43	10.92	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	39	7.625	193.68	0.5	12.7	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	42.8	7.625	193.68	0.562	14.27	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB
7 7/8"	45.3	7.625	193.68	0.595	15.11	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	47.1	7.625	193.68	0.625	15.88	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB

Note: P--Plain End; S--Short round thread; L--Long round thread; B--Buttress thread.

Size Designation	Weight Designation	OD		WT		Type Of End Finish							
						Steel Grade							
		in	mm	in	mm	J55 K55	L80-1	N80	C90	C95	T95	P110	M65
8 5/8"	24	8.625	219.08	0.264	6.71	PS	-	-	-	-	-	-	-
	28	8.625	219.08	0.304	7.72	-	-	-	-	-	-	-	-
	32	8.625	219.08	0.352	8.94	PSLB	-	-	-	-	-	-	-
	36	8.625	219.08	0.4	10.16	PSLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	40	8.625	219.08	0.45	11.43	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	44	8.625	219.08	0.5	12.7	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	49	8.625	219.08	0.557	14.15	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB
9 5/8"	32.3	9.625	244.48	0.312	7.92	-	-	-	-	-	-	-	-
	36	9.625	244.48	0.352	8.94	PSLB	-	-	-	-	-	-	PSLB
	40	9.625	244.48	0.395	10.03	PSLB	PLB	PLB	PLB	PLB	PLB	-	PSLB
	43.5	9.625	244.48	0.435	11.05	-	PLB	PLB	PLB	PLB	PLB	PLB	-
	47	9.625	244.48	0.472	11.99	-	PLB	PLB	PLB	PLB	PLB	PLB	-
	53.5	9.625	244.48	0.545	13.84	-	PLB	PLB	PLB	PLB	PLB	PLB	-
	58.4	9.625	244.48	0.595	15.11	-	PLB	PLB	PLB	PLB	PLB	PLB	-
	59.4	9.625	244.48	0.609	15.47	-	-	-	P	-	P	-	-
	64.9	9.625	244.48	0.672	17.07	-	-	-	P	-	P	-	-
	70.3	9.625	244.48	0.734	18.64	-	-	-	P	-	P	-	-
	75.6	9.625	244.48	0.797	20.24	-	-	-	P	-	P	-	-
10 3/4"	32.75	10.75	273.05	0.279	7.09	-	-	-	-	-	-	-	-
	40.5	10.75	273.05	0.35	8.89	PSB	-	-	-	-	-	-	PSB
	45.5	10.75	273.05	0.4	10.16	PSB	-	-	-	-	-	-	PSB
	51	10.75	273.05	0.45	11.43	PSB	PSB	PSB	PSB	PSB	PSB	PSB	PSB
	55.5	10.75	273.05	0.495	12.57	-	PSB	PSB	PSB	PSB	PSB	PSB	PSB
	60.7	10.75	273.05	0.545	13.34	-	-	-	PSB	-	PSB	PSB	-
	65.7	10.75	273.05	0.595	15.11	-	-	-	PSB	-	PSB	PSB	-
	73.2	10.75	273.05	0.672	17.07	-	-	-	P	-	P	-	-
	79.2	10.75	273.05	0.734	18.64	-	-	-	P	-	P	-	-
	85.3	10.75	273.05	0.797	20.24	-	-	-	P	-	P	-	-
	11 3/4"	42	11.75	298.45	0.333	8.46	-	-	-	-	-	-	-
47		11.75	298.45	0.375	9.53	PSB	-	-	-	-	-	-	PSB
54		11.75	298.45	0.435	11.05	PSB	-	-	-	-	-	-	PSB
60		11.75	298.45	0.489	12.42	PSB	PSB	PSB	PSB	PSB	PSB	PSB	PSB
65		11.75	298.45	0.534	13.56	-	P	P	P	P	P	P	-
71		11.75	298.45	0.582	14.78	-	P	P	P	P	P	P	-
13 3/8"		48	13.375	339.72	0.33	8.38	-	-	-	-	-	-	-
	54.5	13.375	339.72	0.38	9.65	PSB	-	-	-	-	-	-	PSB
	61	13.375	339.72	0.43	10.92	PSB	-	-	-	-	-	-	PSB
	68	13.375	339.72	0.48	12.19	PSB	PSB	PSB	PSB	PSB	PSB	PSB	PSB
	72	13.375	339.72	0.514	13.06	-	PSB	PSB	PSB	PSB	PSB	PSB	-

Note: P--Plain End; S--Short round thread; L--Long round thread; B--Buttress thread.



>> Drill pipe production chart (Drill pipe production chart)