

JIS G3454

Carbon Steel Pipe for Pressure Service

MATERIAL OF GRADE	CHEMICAL COMPOSITION (%)					MECHANICAL PROPERTIES			COLOR CODE
	C Max	Si Max	Mn Max	P Max	S Max	Yield Strength	Tensile Strength	Elongation	Material of Grade
						N/mm2 (min)	N/mm2 (min)	% (min)	
STPG370	0.25	0.35	0.30 - 0.90	0.04	0.04	215	370	30	-
STPG410	0.300	0.35	0.30 - 1.00	0.04	0.04	245	410	25	-

NOMINAL SIZE		THICKNESS MM			OUTSIDE DIAMETER MM			WEIGHT (PLAIN END) KG/M	TEST PRESSURE(bar)	SCHEDULE
in	mm	Std.	Min	Max	Std.	Min	Max	STD		
1/2"	21.70	2.80	2.50	3.10	21.70	21.40	22.00	1.31	60	40
3/4"	27.20	2.90	2.60	3.20	27.20	26.90	27.50	1.74	60	40
1"	34.00	3.40	3.06	3.74	34.00	33.70	34.30	2.57	60	40
1-1/4"	42.70	3.60	3.24	3.96	42.70	42.36	43.04	3.47	60	40
1-1/2"	48.60	3.70	3.33	4.07	48.60	48.21	48.99	4.10	60	40
2"	60.50	3.90	3.51	4.29	60.50	60.02	60.98	5.44	60	40
2-1/2"	76.30	5.20	4.68	5.72	76.30	75.69	76.91	9.12	60	40
3"	89.10	5.50	4.95	6.05	89.10	88.39	89.81	11.30	60	40
3-1/2"	101.60	5.70	5.13	6.27	101.60	100.79	102.41	13.50	60	40
4"	114.30	6.00	5.40	6.60	114.30	113.39	115.21	16.00	60	40
5"	139.80	6.60	5.94	7.26	139.80	138.68	140.92	21.70	60	40
6"	165.20	7.10	6.39	7.81	165.20	163.88	166.52	27.70	60	40

Dimension Tolerances

Outside Diameter $\leq 34 \text{ mm} : \pm 0.3 \text{ mm}$
 $\geq 42.7 \text{ mm} : \pm 0.8 \%$

Thickness $< 3.00 \text{ mm} : \pm 0.30 \text{ mm}$
 $\geq 3.00 \text{ mm} : \pm 10 \%$

Weight N/A