

COLD DRAWN STEEL TUBES (DRILL ROD & CASING)



Introduction

DONGYEUN Steel manufactures cold-drawn steel tubes for drill rods, casings, inner and outer tubes specifically for mining exploration. DONGYEUN Steel is one of the largest manufacturers of drill rods in the world and certainly outperform our competitors in mining.

Our production capability covers all sizes between OD 40mm to 150mm in which they are most commonly used sizes in mining exploration.

Our rods with low hoop stress guarantee their performance out in the field and their straightness when heat treated as well.

Product

Product	Method	Grade	Unit	Size	OD	ID	WT	Length
Drill Rod	Seamless	SAE1541 SAE4130	INCH	B	2.187	1.813	0.187	118~126 ft (or longer)
				BT	2.230	1.90	0.162	
				N	2.750	2.380	0.188	
				H	3.500	3.063	0.219	
				P	4.500	4.000	0.25	
			MM	B	55.55	46.05	4.75	3.0m~3.2m (or longer)
				BT	56.67	48.41	4.13	
				N	69.85	60.33	4.76	
				H	88.9	77.8	5.55	
				P	114.3	101.6	6.35	
Casing		SAE1026 SAE1541	MM	N-I	55.58	50.02	2.78	1.5m~3.8m
				N-O	73.03	60.33	6.35	
				N-C	88.9	76.2	6.35	
				H-O	92.08	77.8	7.14	
				H-C	114.3	101.6	6.35	
				P-O	117.48	102.8	7.34	
				P-C	139.7	127	6.35	

* I – INNER TUBE / O – OUTER TUBE / C - CASING

Technical specification

▷ Dimension Tolerances

Unit	Size	OUTER Diameter			INNER Diameter			
		Nom.	Tolerance		Nom.	Tolerance		
			min	max		min	max	
INCH	B	2.187	-0.005	+0.005	1.813	-0.005	+0.005	-0~+3/16 Upon Request
	BT	2.230			1.90			
	N	2.750			2.380			
	H	3.500			3.063			
	P	4.500	-0.008	+0.008	4.000	-0.008	+0.008	
MM	B	55.55	-0.127	+0.127	46.05	-0.127	+0.127	-0~+4.76 Upon Request
	BT	56.67			48.41			
	N	69.85			60.33			
	H	88.9			77.8			
	P	114.3	-0.20	+0.20	101.6	-0.20	+0.20	
MM	N-I	55.58	-0.127	+0.127	50.02	+0.0	-0.25	-0~+5.0 Upon Request
	N-O	73.03			60.33			
	N-C	88.9			76.2			
	H-O	92.08			77.8			
	H-C	114.3	101.6	+0.0	-0.40			
	P-O	117.48	-0.20			+0.20	102.8	
	P-C	139.7					127	

* Tolerances can be changed as customers' requirements.

▷ Mechanical properties

Grade	Mechanical Properties		
	Yield Strength	Tensile Strength	Elongation
	Min (Mpa)	Min (Mpa)	Min(%)
SAE1541	590	720	15
SAE4130	690	800	15
SAE1026	590	690	15

Technical specification

Characteristics

Item	Specification	
Eccentricity	Max. 5%	
Residual Stress	Standard	Max. 100MPa
	Special Requirement	Max. 80Mpa
Staightness	Max. 1.0 ~ 3.0mm (T.I.R)	
Decarbonaization	Max. 0.127mm	
Delivery Condition	Seamless Cold drawn / Stress Relieved Rust prevent oiled (Inside & Outside surface)	

Chemical Composition (wt%)

Grade		C	Si	Mn	P	S	Cr	Mo
SAE1541	MIN	0.38	0.15	1.40	-	-	-	-
	MAX	0.43	0.30	1.60	0.02	0.015	0.2	-
SAE4130	MIN	0.28	0.15	0.40	-	-	0.8	0.15
	MAX	0.33	0.30	0.60	0.03	0.04	1.10	0.25
SAE1026	MIN	0.22	0.15	0.60	-	-	-	-
	MAX	0.28	0.30	0.90	0.03	0.04	-	-

* Packing Quantity can be changed as customers' requirements.

