

*Tubular Sales Services  
Reference Guide  
Technical Specifications*





## *Tubular Sales*

- 1.0 *Drill Pipe*
- 2.0 *Tool Joints*
- 3.0 *Drill Collars – Standard and Spiral*
- 4.0 *Drill Collars – Special features*
- 5.0 *Non Magnetic Drill Collars*
- 6.0 *Heavy Weight Drill Pipe*
- 7.0 *Casing and Casing Couplings*
- 8.0 *Tubing and Tubing Couplings*
- 9.0 *Sucker Rods*

## *Down Hole Tools and String Components*

- 1.0 *Integral Spiral Blade Stabilizers*
- 2.0 *Non – rotating Stabilizers*
- 3.0 *Replaceable Sleeve Stabilizers*
- 4.0 *Stabilizers Hard Facing*
- 5.0 *Fixed Diameter Hole Openers*
- 6.0 *Roller Reamers*
- 7.0 *Casing scrapers*
- 8.0 *Key seat Reamers*
- 9.0 *Rotary Subs*
- 10.0 *Oriented Bent subs*
- 11.0 *Circulating Subs*
- 12.0 *Wear Subs*
- 13.0 *Kelly Valve*
- 14.0 *FOSV*
- 15.0 *FT Type Drop-in-check valve*
- 16.0 *IBOP*
- 17.0 *Type FJ Arrow Back Pressure Valve*
- 18.0 *Float Valve Subs*
- 19.0 *Drill string Bypass Valves*
- 20.0 *Rotary Kelly*

## Drill Pipe

---

A full range of drill pipe from 2 3/8 – 6 5/8 manufactured under strict ISO9001, API and NS1 standards.

### Specifications Table

Size (inch)	Wt Designation	Plain End Wt	OD (inch)	OD (mm)	Wall (inch)	Wall (mm)	Grade	Upset End for Weld on Tool Jt
2 3/8	6.65	6.27	2 3/8	60.3	0.280	7.11	E/X/G/S	External
2 7/8	10.4	9.72	2 7/8	73	0.362	9.19	E/X/G/S	Int or Ext
3 1/2	9.5	8.81	3 1/2	88.9	0.254	6.45	E	Int or Ext
3 1/2	13.3	12.32	3 1/2	88.9	0.368	9.35	E/X/G/S	Int or Ext
3 1/2	15.5	14.64	3 1/2	88.9	0.449	11.4	E	Int or Ext
3 1/2	15.5	14.64	3 1/2	88.9	0.449	11.4	X/G/S	Ext or Int - Ext
4	14	12.95	4	101.6	0.330	8.38	E/X/G/S	Int or Ext
4 1/2	13.75	12.25	4 1/2	114.3	0.271	6.88	E	Int or Ext
4 1/2	16.6	15	4 1/2	114.3	0.337	8.56	E/X/G/S	Ext or Int - Ext
4 1/2	20	18.71	4 1/2	114.3	0.430	10.92	E/X/G/S	Ext or Int - Ext
5	16.25	14.88	5	127	0.296	7.52	X/G/S	Int
5	19.5	17.95	5	127	0.362	9.19	E	Int - Ext
5	19.5	17.95	5	127	0.362	9.19	X/G/S	Ext or Int - Ext
5	25.6	24.05	5	127	0.500	12.7	E	Int - Ext
5	25.6	24.05	5	127	0.500	12.7	X/G/S	Ext or Int - Ext
5 1/2	21.9	19.83	5 1/2	139.7	0.361	9.17	E/X/G/S	Int - Ext
5 1/2	24.7	22.56	5 1/2	139.7	0.415	10.54	E/X/G/S	Int - Ext
6 5/8	25.2	22.21	6 5/8	168.3	0.330	8.38	E/X/G/S	Int - Ext
6 5/8	27.72	24.24	6 5/8	168.3	0.362	9.19	E/X/G/S	Int - Ext

# Tool Joints

## Specifications Table

Tool Jt	Size & Style	Nom Wt	Grade	OD Pin & Box	ID Pin (inch)	Total Length Tool Joint Pin (in)	Pin Tong Space (in)	Box Tong Space	Total Pin & Box Space	OD @ Upset	Box Elev.
NC26 2 3/8 IF	2 3/8 EU	6.65	E	3 3/8	1.750	10	7	8	15	2.563	
			X	3 3/8	1.750	10	7	8	15	2.563	
			G	3 3/8	1.750	10	7	8	15	2.563	
NC31 2 7/8 IF	2 7/8 EU	10.4	E	4 1/8	2.125	10.5	7	9	16	2.563	
			X	4 1/8	2.000	10.5	7	9	16	3.188	
			G	4 1/8	2.000	10.5	7	9	16	3.188	
			S	4 3/8	1.625	10.5	7	9	16	3.188	
NC38	3 1/2 EU	9.5	E	4 3/4	2.688	11.5	8	10.5	18.5	3.875	
NC38 3 1/2 IF	3 1/2 EU	13.30	E	4 3/4	2.688	12	8	10.5	18.5	3.875	
			X	5	2.563	12	8	10.5	18.5	3.875	
			G	5	2.438	12	8	10.5	18.5	3.875	
			S	5	2.125	12	8	10.5	18.5	3.875	
		15.5	E	5	2.563	12	8	10.5	18.5	3.875	
			X	5	2.438	12	8	10.5	18.5	3.875	
			G	5	2.125	12	8	10.5	18.5	3.875	
NC 40 4 FH	3 1/2 EU	15.5	S	5 1/2	2.250	11.5	7	10	17	3.875	
	4 IU	14.0	E	5 1/4	2.813	11.5	7	10	17	4.188	
			X	5 1/4	2.688	11.5	7	10	17	4.188	
			G	5 1/2	2.438	11.5	7	10	17	4.188	
S			5 1/2	2.000	11.5	7	10	17	4.188		
NC46 4 IF	4 EU	14.0	E	6	3.250	11.5	7	10	17	4.500	
			X	6	3.250	11.5	7	10	17	4.500	
			G	6	3.250	11.5	7	10	17	4.500	
			S	6	3.000	11.5	7	10	17	4.500	
	4 1/2 IU	13.75	E	6	3.375	11.5	7	10	17	4.667	
			E	6 1/4	3.250	11.5	7	10	17	4.667	
		16.6	X	6 1/4	3.000	11.5	7	10	17	4.667	

NC 46 4 IF		16.6	G	6 1/4	3.000	11.5	7	10	17	4.667		
			S	6 1/4	2.750	11.5	7	10	17	4.667		
	4 1/2 IEU	20.0	E	6 1/4	3.000	11.5	7	10	17	4.667		
			X	6 1/4	2.750	11.5	7	10	17	4.667		
			G	6 1/4	2.500	11.5	7	10	17	4.667		
			S	6 1/4	2.250	11.5	7	10	17	4.688		
Tool Jt	Size & Style	Nom Wt	Grade	OD Pin & Box	ID Pin (inch)	Total Length Tool Joint Pin (in)	Pin Tong Space (in)	Box Tong Space	Total Pin & Box Space	OD Box @ Elev. Upset		
NC50 4 1/2 IF	4 1/2 EU	13.375	E	6 5/8	3.750	11.5	7	10	17	5.000		
			E	6 5/8	3.750	11.5	7	10	17	5.000		
			X	6 5/8	3.750	11.5	7	10	17	5.000		
		16.60	G	6 5/8	3.750	11.5	7	10	17	5.000		
			S	6 5/8	3.500	11.5	7	10	17	5.000		
	20.00	E	6 5/8	3.625	11.5	7	10	17	5.000			
		X	6 5/8	3.500	11.5	7	10	17	5.000			
		G	6 5/8	3.500	11.5	7	10	17	5.000			
		S	6 5/8	3.000	11.5	7	10	17	5.000			
		5 IEU	19.5	E	6 5/8	3.750	11.5	7	10	17	5.125	
X	6 5/8			3.500	11.5	7	10	17	5.125			
G	6 5/8			3.250	11.5	7	10	17	5.125			
S	6 5/8			2.750	11.5	7	10	17	5.125			
25.60	E		6 5/8	3.500	11.5	7	10	17	5.125			
	X		6 5/8	3.000	11.5	7	10	17	5.125			
	G		6 5/8	2.750	11.5	7	10	17	5.125			
	5 1/2 FH		5 IEU	19.50	E	7	3.750	13	8	10	18	5.125
					X	7	3.750	13	8	10	18	5.125
					G	7	3.750	13	8	10	18	5.125
S		7 1/4			3.500	13	8	10	18	5.125		
25.60		E	7	3.500	13	8	10	18	5.125			
		X	7	3.500	13	8	10	18	5.125			
		G	7 1/4	3.500	13	8	10	18	5.125			
		S	7 1/4	3.250	13	8	10	18	5.125			
			E	7	4.000	13	8	10	18	5.688		

	5 ½ IEU	21.9	X	7	3.750	13	8	10	18	5.667
			G	7 1/4	3.500	13	8	10	18	5.667
			S	7 1/4	3.000	13	8	10	18	5.667
		24.7	E	7	4.000	13	8	10	18	5.667
			X	7	3.500	13	8	10	18	5.667
			G	7 1/4	3.500	13	8	10	18	5.667
			S	7 1/2	3.000	13	8	10	18	5.667
6 5/8 FH	6 5/8 IEU	25.2	E	8	5.000	13	8	10	18	5.667
			X	8	5.000	13	8	11	19	6.938
			G	8 1/4	4.750	13	8	11	19	6.889
			S	8 1/4	4.250	13	8	11	19	6.889
		22.7	E	8	5.000	13	8	11	19	6.889
			X	8 1/4	4.750	13	8	11	19	6.889
			G	8 1/4	4.750	13	8	11	19	6.889
			S	8 1/2	4.250	13	8	11	19	6.889

## Drill Collars -Standard and Spiral

- Hardness Range 285 – 341 BHN
- Charpy impact value of 40 ft-lbs guaranteed
- Connections phosphate coated
- Manufactured to NS1 standard using 4145H modified quenched and tempered steel

### Specifications Table

Number and Connection Table	Nom OD (in)	Nom ID (in)	Length (mm)	Bevel Diameter (mm)	Bend Strength Ratio
NC23-31	3 1/8	1.5	9150	76.2	2.57 : 1
NC26-35 (2 3/8 IF)	3 1/2	1.5	9150	82.9	2.42 : 1
NC31-41 (2 7/8 IF)	4 1/8	2	9150	100.4	2.43 : 1
NC35-47	4 3/4	2	9150	114.7	2.58 : 1
NC38-50 (3 1/2 IF)	5	2.25	9150	121	2.38 : 1
NC44 - 60	6	2.25	9150 OR 9450	144.5	2.49 : 1
NC44 - 60	6	2 4/5	9150 OR 9450	144.5	2.84 : 1
NC44 - 62	6 1/4	2.25	9150 OR 9450	149.2	2.91 : 1
NC46 – 62 (4 IF)	6.5	2 4/5	9150 OR 9450	150	2.63 : 1
NC46 – 65 (4 IF)	6.5	2 1/4	9150 OR 9450	154.8	2.76 : 1
NC46 – 65 (4 IF0	6.5	2 4/5	9150 OR 9450	154.8	3.05 : 1
NC46 – 67 (4 IF)	6.75	2.25	9150 OR 9450	159.5	3.18 : 1
NC50 – 67 ( 4 1/2 IF)	6.75	2 4/5	9150 OR 9450	159.5	2.37 : 1
NC50 – 70 (4 1/2 IF)	7	2.25	9150 OR 9450	164.7	2.54 : 1
NC50 – 70 (4 1/2 IF)	7	2 4/5	9150 OR 9450	164.7	2.73 : 1
NC50 – 72 (4 1/2 IF)	7.25	2 4/5	9150 OR 9450	169.5	3.12 : 1
NC56 – 77	7.75	2 4/5	9150 OR 9450	185.3	2.70 : 1
NC56 - 80	8	2 4/5	9150 OR 9450	190.1	3.02 : 1
6 5/8 REG	8.25	2 4/5	9150 OR 9450	195.7	2.93 : 1
NC61 - 90	9	2 4/5	9150 OR 9450	212.7	3.17 : 1
7 5/8 REG	9.5	3	9150 OR 9450	223.8	2.81 : 1
NC70 - 97	9.75	3	9150 OR 9450	232.6	2.57 : 1
NC70 - 100	10	3	9150 OR 9450	237.3	2.81 : 1
8 5/8 REG	11	3	9150 OR 9450	266.7	2.84 : 1
SLIPS AND ELEVATOR GROOVES CAN BE PRODUCED UPON REQUEST					

## Drill Collars – Special Features

---

### Specifications Table

Spiral Grooved Drill Collars – Standard Sizes									
OD (in)	4.75"	6.25"	6 3/4"	7 1/4"	7 1/2"	8"	9 1/2"	10"	11"
Depth of Cut (in)	7 / 32"	9 / 32"	5 / 16"	11/32"	11/32"	3/8"	13/32"	7/16"	15/32"
	+/- 1/32"	+/- 1/16"	+/- 1/16"	+/- 1/16"	+/- 1/16"	+/- 1/16"	+/- 1/4"	+/- 3/32"	+/- 3/32"
Spiral Pitch (in)	38	42	46	64	64	68	72	76	80



## **Non – Magnetic Drill Collars**

---

*Available in 3 types – slick, spiral and flex.*

*All manufactured from non-magnetic steel bar utilizing proprietary chemical analysis and rotary hammer forging process.*

*All supplied with full inspection certifications from mill to client.*

*Manufactured by ISO9001, API and NS1 certified supplier.*

# Heavy Weight Drill Pipe

---

## Specifications Table

Size (in)	OD (in)	ID (in)	Tool Joint OD (in)	Tool Joint ID (in)	Connection Type	Max Elevator Diameter (in)	Central Upset Diameter (in)	Min. Drift Size (in)
3 1/2	3 1/2	2.250	4.75	2.250	NC38	3 7/8	4.000	2.000
		2.063	4 7/8 / 5	2.063				1.813
4	4	2.500	5.25	2.500	NC40	4 3/16	4.500	2.250
		2.563		2.563				2.313
4.5	4.5	2.688	6.25	2.688	NC46	4 11/16	5.000	2.438
		2.750		2.750				2.500
		2.813		2.813				2.563
5	5	3.000	6 5/8	3.000	NC50	5.125	5.500	2.750
5 1/2	5 1/2	3.250	7, 7.25, 7.5	3.250	5 1/2 FH	5 11/16	6.000	3.000
		3.375		3.375				3.125
		3.875		3.875				3.625
		4.000		4.000				3.750
6 5/8	6 5/8	4.000	8, 8.25, 8.5	4.000	6 5/8 FH	6 15/16	7.125	3.750
		4.500		4.500				4 1/4
		5.000		5.000				4 3/4

# Casing

---

Available in steel grades H40, J55, K55, L80, N80, C95, P110, Q125

Manufactured to API Spec 5CT

Available with API threaded couplings

## Casing Specifications Table

Size Designation (in)	Weight lb/ft	Outside Diameter		Wall Thickness	
		inches	mm	inches	mm
4 1/2	9.5 – 15.1	4.500	114.3	0.205 – 0.337	5.21 – 8.56
5	11.5 – 24.1	5.000	127	0.220 – 0.500	5.59 – 12.70
5 1/2	14.00– 43.1	5.500	139.7	0.244 – 0.875	6.20 – 22.23
6 5/8	20.00 – 32.00	6.625	168.28	0.288 – 0.475	7.32 – 12.06
7	17.00 – 57.10	7.000	177.8	0.231 – 0.875	5.87 – 22.23
7 5/8	24.00 – 55.30	7.625	193.68	0.300 – 0.687	7.62 – 19.05
7 3/4	46.1	8.625	219.08	0.595	15.11
8 5/8	24.00 – 49.00	8.625	219.08	0.264 – 0.557	6.71 – 14.15
9 5/8	32.30 – 75.60	9.625	244.48	0.312 – 0.797	7.92 – 20.24
10 3/4	32.75 – 85.30	10.750	273.05	0.279 – 0.797	7.09 – 20.24
11 3/4	42.00 – 71.00	11.750	298.45	0.333 – 0.582	8.46 – 14.78
13 3/8	48.00 – 72.00	13.375	339.73	0.330 – 0.514	8.38 – 13.06

# Casing Couplings

---

Casing couplings and threads available include STC, LTC, BTC

Manufactured to API Spec 5CT

## Coupling Specifications Table

Size (in)	Pipe Body OD (mm)	Coupling OD (mm)	Min Length (mm)		Bore (mm)	Support Width (mm)	Weight (kg)	
			STC	LTC			STC	LTC
4 1/2	114.3	127	158.75	177.8	116.68	3.97	3.62	4.15
5	127	141.3	165.1	196.85	129.38	4.76	4.66	5.75
5 1/2	139.7	153.67	171.45	203.2	142.08	3.18	5.23	6.42
6 5/8	168.26	187.71	184.15	222.25	170.66	6.35	9.12	11.34
7	177.8	194.46	184.15	228.6	180.18	4.76	8.39	10.83
7 5/8	193.7	215.9	190.5	234.95	197.64	5.56	12.3	15.63
8 5/8	219.08	244.48	196.85	254	223.04	6.35	16.23	21.67
9 5/8	244.48	269.88	196.85	266.7	248.44	6.35	18.03	25.45
10 3/4	273.05	296.45	203.2	273	277.02	6.35	20.78	28.2
11 3/4	298.45	323.85	203.2	273.05	302.42	6.35	22.64	29.84
13 3/8	339.72	365.12	203.2	273.05	343.69	5.56	25.66	33.08
16	406.4	431.8	228.6	298.45	411.96	5.56	34.91	42.33
18 5/8	473.08	508	228.6	298.45	478.63	5.56	54.01	61.43
20	508	533.4	228.6	298.45	513.56	5.56	43.42	57.04

# Tubing

---

Available in steel grades H40, J55, K55, L80, N80, C95, P110, Q125

Manufactured to API Spec 5CT

Available with API threaded couplings

## Tubing Specifications Table

Size Designation (in)	Weight lb/ft		Outside Diameter		Wall Thickness	
	Nonupset T&C	Ex-upset T&C	in	mm	in	mm
2 3/8	4.00 – 7.35	4.7 – 7.45	2.38	60.33	0.167 – 0.336	4.24 – 8.53
2 7/8	6.40 – 11.5	6.5 – 9.45	2.88	73.03	0.217 – 0.440	5.51 – 11.18
3 1/2	7.7 – 17.0	9.3 – 12.95	3.5	88.9	0.216 – 0.530	5.49 – 13.46
4	9.5 – 22.2	11	4	101.6	0.226 – 0.610	5.74 – 15.49
4 1/2	12.6 – 26.1	12.75	4.5	114.3	0.271 – 0.630	6.88 – 16.00

# Tubing Couplings

Casing couplings and threads available include EUE, NUE

Manufactured to API Spec 5CT

## Specifications Table - NUE

Size Designation (in)	Pipe Body OD (mm)	Coupling OD (mm)	Coupling Length (mm)	Coupling Bore (mm)	Support Width (mm)	Bearing Face (mm)	Weight (kg)
1.05	26.67	33.35	80.96	28.27	1.59	30	0.23
1.32	33.4	42.16	82.55	35	2.38	37.8	0.38
1.66	42.16	52.17	88.9	43.76	3.18	47.17	0.59
1.9	48.26	55.88	95.25	49.86	1.59	52.07	0.56
2 3/8	60.32	73.02	107.95	61.93	4.76	66.68	1.28
2 7/8	73.02	88.9	130.18	74.63	4.76	80.98	2.34
3 1/2	88.9	107.95	142.88	90.6	4.76	98.42	3.71
4	101.6	120.65	146.05	103.2	4.76	111.12	4.35
4 1/2	114.3	132.08	155.58	115.9	4.76	123.19	4.89

## Specifications Table - EUE

Size Designation (in)	Pipe Body OD (mm)	Coupling OD (mm) Reg. Bevel	Coupling OD (mm) Special Clearance	Coupling Length (mm)	Coupling Bore (mm)	Support Width (mm)	Bearing Face (mm) Reg Bevel	Bearing Face (mm) Special Clear	Weight (kg)
1.05	26.67	42.16	-	82.55	35	2.38	37.8	-	0.38
1.32	33.4	48.26	-	88.9	38.89	2.38	42.77	-	0.57
1.66	42.16	55.88	-	95.25	47.63	3.18	50.95	-	0.68
1.9	48.26	63.5	-	98.42	54.76	3.18	58.34	-	0.84
2 3/8	60.32	77.8	73.91	123.82	67.46	3.97	71.83	69.9	1.55 / 1.07
2 7/8	73.02	93.17	87.88	133.35	80.16	5.56	85.88	83.24	2.40 / 1.55
3 1/2	88.9	114.3	106.17	146.05	96.85	6.35	104.78	100.71	4.10 / 2.38
4	101.6	127	-	152.4	109.55	6.35	117.48	-	4.82
4 1/2	114.3	141.3	-	158.75	122.25	6.35	130.96	-	6.05

ERA Oilfield Services (Thailand) Co. Ltd., 23<sup>rd</sup> Floor, 2 Pacific Place, Sukhumvit Road, Klongtoey, Bangkok, Thailand. 10110  
Tel: 66 8 4345 8730 (24 hrs)

Email: [salesandrentals@eraoilfieldservices.com](mailto:salesandrentals@eraoilfieldservices.com)  
[www.eraoilfieldservices.com](http://www.eraoilfieldservices.com)

# Sucker Rods

## Specification Table – Hollow Sucker Rods

Type	Rod OD (mm)	Nominal OD Thread (in)	Width for spanner (mm)	Rod Length	
				mm	ft
KG32	32	1.4375	41	7000	23
				7500	25
KG36	36	1.563	44	8000	26
KG38	38	1.75	49		
KG42	42	1.88	54	8500	28
Length of pony rod : 20, 40, 60, 79, 112 inches					

## Specification Table – Solid Sucker Rod

Nominal Size (in)	Rod OD (mm)	Nominal Thread OD (in)	Spanner Width		Rod Length	
			mm	in	mm	ft
0.625	15.88	1.313	22.2	0.88	7518	25
0.750	19.05	1.063	25.4	1		
0.875	22.23	1.188	25.4	1	9042	30
1.000	25.4	1.375	33.3	1.313		
1.125	28.58	1.563	38.1	1.5		

## Integral Blade Stabilizers

---

### Available in:

- Alloy steel and non magnetic materials
- Spiral Integral Blade / Straight Integral Blade / Non Magnetic Integral Blade
- 3 or 4 blades are standard designs
- 5 hard facing options
- String or near bit application

### Specifications Table

Bit Size (in)	OD (mm)	Body OD (mm)	ID (mm)	Length (mm)	String Type Connections		Near Bit Type Connections	
					Top	Down	Top	Down
6	152.2	121	51	1200	NC38	NC38	NC38	3 ½ REG
6.25	158.7	121	51	1200	NC38	NC38	NC38	3 ½ REG
6.5	165.1	121	51	1200	NC38	NC38	NC38	3 ½ REG
7.5	190.5	159	57	1600	NC46	NC46	NC46	4 ½ REG
7.88	200	159	57	1600	NC46	NC46	NC46	4 ½ REG
8.5	215.2	165	71	1800	NC50	NC50	NC46	4 ½ REG
9.5	241.3	197	71	1800	NC50	NC50	NC50	6 5/8 REG
12.25	311.2	203	76	1800	6 5/8 REG	6 5/8 REG	6 5/8 REG	6 5/8 REG
16	406	229	76	2200	7 5/8 REG	7 5/8 REG	7 5/8 REG	7 5/8 REG
17.5	444.5	241.3	76	2200	7 5/8 REG	7 5/8 REG	7 5/8 REG	7 5/8 REG
24	609.6	241.3	76	2540	7 5/8 REG	7 5/8 REG	7 5/8 REG	7 5/8 REG
26	660.4	241.3	76	2540	7 5/8 REG	7 5/8 REG	7 5/8 REG	7 5/8 REG
28	711.2	254	76	2540	7 5/8 REG	7 5/8 REG	7 5/8 REG	7 5/8 REG



## Non – Rotating Stabilizers

---

### Features:

- rubber sleeve stabilizer reduces blade wear and wall damage

### Specifications Table

Size (in)	Sleeve			Mandrel			Total Length (mm)
	Length (mm)	OD (mm)	Blade Qty	ID (mm)	Fishing OD (mm)	Connections	
13 3/8 casing	500	313	4	71	165	4 ½ IF	2000
10 ¾ casing	500	255	4	71	165	4 ½ IF	2000
9 5/8 casing	500	220	4	71	165	4 ½ IF	2000
7 casing	380	157	4	44	127	3 ½ IF	1600
12 ¼	523	310	4	76	215	6 5/8 REG	2010
16	543	405	4	76	241	7 5/8 REG	2210
17	543	430	4	76	241	7 5/8 REG	2210
22	635	558	4	76	241	7 5/8 REG	2210
28	715	711	5	76	241	7 5/8 REG	2210

# Replaceable Sleeve Stabilizer

---

## Features:

- single mandrel size covers multiple sleeves with easy change out

## Sleeve Specifications Table

Hole Size (in)	Mandrel Series	Drill Collar Size Range (in)	Sleeve Length (in)	Make up Torque (ft-lbs)
8 1/2	62	6.25 – 6.75	14	4500 - 5400
	65	6.5 – 7.75	14	3500 - 4500
8 3/4	62	6.25 – 6.75	14	4500 - 5400
	65	6.5 – 7.75	14	3500 - 4500
9 7/8	62	6.25 – 6.75	19	4500 - 5400
	65	6.5 – 7.75	19	3500 - 4500
12 1/4	77	7.75 – 8.25	22	6900 - 8000
	85	8.5 – 9.00	22	8000 - 9000
	96	9.00 – 10.00	22	10100 - 11900
14 3/4	77	7.75 – 8.25	23	6900 - 8000
	85	8.5 – 9.00	23	8000 - 9000
	96	9.00 – 10.00	23	10100 - 11900
17 1/2	77	7.75 – 8.25	23	6900 - 8000
	85	8.5 – 9.00	23	8000 - 9000
	96	9.00 – 10.00	23	10100 - 11900
22	96	9.00 – 10.00	27	10100 - 11900
24	96	9.00 – 10.00	27	10100 - 11900
26	96	9.00 – 10.00	27	10100 - 11900
28	96	9.00 – 10.00	27	10100 - 11900

## Mandrel Specifications Table

Mandrel Series	Sleeve Size Range (in)	Fish Neck Range (in)	Upset OD (in)	Upset Length (in)	Bottom Neck OD (in)	Overall Length (in)	Fish Neck Length (in)
62	8 1/2 – 9 7/8	6 1/4 – 6 3/4	7 1/2	7 7/8	6 1/4	65	22
65	8 1/2 – 9 7/8	6 1/2 – 7 1/4	7 3/4	7 7/8	6 1/2	65	22
77	12 1/4 – 17 1/2	7 3/4 – 8 1/4	9 1/4	7 7/8	7 3/4	67	22
85	12 1/4 – 17 1/2	8 1/2 - 9	9 7/8	7 7/8	8 1/2	67	25
96	14 3/4 - 20	9 1/2 - 10	11	7 7/8	9 5/8	80	27
	22 - 28	9 1/2 - 10	11	7 7/8	9 5/8	90	27

## **Stabilizer Hard Facing Types**

---

*All stabilizers can be banded with the following hard facings:*

- HF1000**      *Crushed tungsten carbide held in nickel bronze matrix. 3Mm grain ensures greater concentration of carbide ideal for soft formation types.*
- HF2000**      *Trapezoidal tungsten carbide inserts held in a sintered carbide nickel bronze matrix. Greater depth of carbide coverage suitable for high deviation in abrasive formations.*
- HF3000**      *Tungsten carbide inserts set in a powder spray deposit suitable for abrasive formations. 97% bonding guaranteed, certified by ultrasonic report. Recommended for non-magnetic stabilizers.*
- HF4000**      *Tungsten carbide button type inserts. Developed to allow cold insertion and maintain close fit. A greater concentration of inserts on bottom 1/3 of blade and leading edge will increase surface contact to reduce wear in highly abrasive formations.*
- HF5000**      *Oxy - acetylene process applies molten carbide held in nickel chrome matrix. Surface hardness 40+ HRC. Suitable for HPHT over 350 degrees.*

## Fixed Diameter Hole Openers

---

### Specifications Table

Model	Hole Open Diameter (in)	Qty of cutters	Min Pilot Hole (in)	Fish neck Diameter (in)	ID (in)	Top Connection (pin)	Bottom Connection (box)	Length (in)
KKQ311	12.25	3	8.5	8	1.5	6 5/8 REG	6 5/8 REG	55
KKQ406	16	3	10	9.5	2.25	7 5/8 REG	6 5/8 REG	59
KKQ444	17 1/2	3	10	9.5	2.25	7 5/8 REG	6 5/8 REG	59
KKQ559	22	3	12 3/4	9.5	2.25	7 5/8 REG	6 5/8 REG	69
KKQ584	23	3	12.75	8	3	7 5/8 REG	6 5/8 REG	69
KKQ610	24	3	14	10	3	7 5/8 REG	7 5/8 REG	69
KKQ660	26	3	17.5	10	3	7 5/8 REG	7 5/8 REG	69
KKQ4-914	36	4	26	10	3.5	7 5/8 REG	7 5/8 REG	87

## Roller Reamer

---

Roller Types available:

Type B      *Hard Formations*

Type F      *Medium to Hard Formations*

Type T      *Soft Formations*

### Specifications Table

Model	OD (mm)	ID (mm)	Connection	Hole Size (in)
WG155	155	31.7	NC38	6 1/8
WG200	200	38	NC46	7 7/8
WG212	212	44	NC50	8 3/8
WG215	215	44	NC50	8 1/2
WG244	244	57	NC50	9 5/8
WG311	311	71	6 5/8 REG	12 1/4
WG444	444	76	7 5/8 REG	17 1/2
WG558	558	76	7 5/8 REG	22
WG660	660	76	7 5/8 REG	26
WG711	711	76	7 5/8 REG	28
WG914	914	76	7 5/8 REG	36

# Casing Scraper

---

## Specifications Table

Type	Max OD of blade sprung out (mm)	Min OD of blade sprung in (mm)	Connection	Casing Size (in)
GX114	106	95	NC26	4 1/2
GX127	118	105	NC26	5
GX140	130	117	NC31	5 1/2
GX168	158	141	3 ½ REG	6 5/8
GX178	166	149	3 ½ REG	7
GX245	230	212	4 ½ REG	9 5/8

## Key Seat Wiper

---

### Specifications Table

Model	OD Sub (mm)	OD Blade (mm)	ID (mm)	Sliding Sleeve Stroke (mm)	Connection	Max work temp (C)
JKQ125	115	125	38	117	NC31	<200
JKQ178	165	178	70	325	NC50	<200
JKQ203	188	203	70	325	NC50	<200
JKQ207	192	207	70	325	NC50	<200



## **Rotary Subs and Others**

---

### **Features Include:**

- *Manufactured from 4145H quenched and tempered material*
- *Carry API monogram*
- *Manufactured to size requirement and API spec*

### **Sub Ty      Availab**

- *Lift Subs*
- *Lift Plugs*
- *Saver Subs*
- *Straight OD Subs*
- *Reduced Section Subs*

## Oriented Bent Subs

---

### Specifications Table

Model	OD mm (in)	Connection		Bent Angle Degrees	ID Oriented Sleeve (mm)
		Box	Pin		
DZT89	89 ( 3 1/2)	NC26	NC26	1.5	36
				2	
DZT140	140 (5 1/2)	NC38	NC38	0 – 3.5	36
DZT159	159 (6 1/4)	NC46	4 ½ REG		50
DZT165	165 (6 1/2)	NC50	NC50		50
DZT178	178 (7)	5 ½ FH	5 ½ FH		50
DZT203	203 (8)	6 5/8 REG	6 5/8 REG		50
					50

## Circulating Subs

---

Available in:

- Drill pipe thread and hammer union

### Specifications Table

Thread / Model		ID (mm)	Length (mm)
Drill Pipe Box Connection	Casing Thread Pin		
NC38	5 BTC	57	500
	5 LTC		
	5 ST & C		
NC38	5 ½ BTC	57	580
	5 ½ LTC		
	5 ½ ST & C		
NC50	7 BTC	71	600
	7 LTC		
	7 ST & C		
NC50	9 5/8 BTC	71	620
	9 5/8 LTC		
	9 5/8 ST & C		
NC50	10 ¾ BTC	71	670
	10 ¾ LTC		
	10 ¾ ST & C		
NC50	13 3/8 BTC	71	670
	13 3/8 LTC		
	13 3/8 ST & C		

## Wear Subs

---

### Specifications Table

Specification	Body OD (mm)	Sub OD (mm)	ID (mm)	Connection
7 casing	121	143	38	3 ½ IF
9 5/8 casing	168	190	57	4 ½ IF
	178	197	71	5 ½ FH
10 ¾ casing	180	225	71	4 ½ IF
				5 ½ FH
13 3/8 casing	228	285	71	5 ½ FH

## Kelly Valves

---

### Upper Kelly Valve – Specifications Table

Model	OD (mm)	Connection	ID (mm)	Max Seal Pressure (Mpa)
CS146	146	4 ½ REG	50	68.6
CS200	200	6 5/8 REG	76.2	68.6

### Lower Kelly Valve – Specifications Table

Model	OD (mm)	Connection	ID (mm)	Max Seal Pressure (Mpa)
XS105	105	NC31	41.3	68.6
XS121	121	NC38	50	68.6
XS127	127	NC38	50	68.6
XS165	165	NC46	61	68.6
XS178	178	NC50 / 5 ½ FH	71.4	68.6

## Full Opening Safety Valve (FOSV)

---

### Specifications Table

Model	XS105-T44	XS110-T51	XS124-T62	XS127-T62	XS133-T57	XS133-T57	XS134-T62
OD (mm)	105	110	124	127	133	133	134
ID (mm)	44	51	62	62	57	57	62
Connection	2 3/8 IF (b) x 2 3/8 IF (p)	2 7/8 IF (b) x 2 7/8 IF (p)	2 7/8 EUE	2 7/8 EUE	XT39	4 ½ VAM	3 ½ IF
Length (mm)	732	726	578	578	773	1173	800

### Specifications Table Continued

Model	XS134-T62	XS146-T50.8	XS152-T76	XS152-T76	XS178-T76	XS178-T76.2	XS190-T82.6
OD (mm)	134	146	152	152	178	178	190
ID (mm)	60	50.8	76	76	76	76.2	82.6
Connection	4 ½ NU	NC31	3 ½ NU	3 ½ EUE	3 ½ EUE	4 IF	4 ½ IF
Length (mm)	580	832	640	617	675	885	895

## Drop In Check Valve

---

### Specification Table

Specification	Check Valve assembly	Landing Sub	Stop Ring	Working Pressure (Mpa)	Connection API
	OD (mm)	OD (mm)	ID (mm)		
FT89	33	89	30	35 (70)	NC26
FT105	36	105	33		NC31
FT121	50	121	46		NC38
FT159	54	159	50		NC46
FT168	68	168	64		NC50
FT178	68	178	64		5 ½ FH
FT203	68	203	64		6 5/8 REG

## Inside BOP (IBOP)

---

### Specifications Table

Inside Blow Out Preventer			
Connection	OD (in)	ID (in)	Length (in)
2 3/8 IF	3 3/8 – 3 3/4	1.500	26
2 7/8 IF	4 1/8 – 4 1/4	1.750	28 - 30
3 1/2 IF	4 3/4 – 5 1/4	2.000	30 -31
4 IF	6 1/4 – 6 3/4	2.500	33 - 34
4 1/2 IF	6 3/8 - 7	2.813	33 - 34
5 1/2 IF	7 – 7 1/2	2.813	33 - 34
6 5/8 REG	8	2.813	34
7 5/8 REG	9 1/2	2.813	34



## Arrow Type Back Pressure Valve

---

### Specifications Table

Model	OD (mm)	Connection	ID (mm)	Working Pressure (Mpa)
FJ229	229	7 5/8 REG	82	70 (35)
FJ203	203	6 5/8 REG	82	70 (35)
FJ178	178	5 ½ FH	82	70 (35)
FJ168	168	NC50	82	70 (35)
FJ165	165	NC50	82	70 (35)
FJ159	159	NC46	70	70 (35)
FJ121	121	NC38	56	70 (35)
FJ105	105	NC31	44	70 (35)
FJ89	89	NC26	33	70 (35)

## Float Valve Sub

---

Features either flapper (Model G) or spring actuated (Model F) style of float valve.

### Specifications Table – Float Valve Sub

Model	Sub OD (mm)	Connection	Valve OD (mm)	Valve ID (mm)
FFJT241	241.3	7 5/8 REG	121	76
FFJT228	228.6	7 5/8 REG	121	76
FFJT209	209.6	6 5/8 REG	121	76
FFJT203	203.2	6 5/8 REG	121	71
FFJT178	177.8	4 ½ IF	98	71
FFJT165	165.1	4 ½ REG	88	57
FFJT146	146	4 ½ REG	88	57
FFJT121	121	3 ½ REG	61	51
FFJT108	108	3 ½ REG	61	38

# Bypass Valve

---

## Specifications Table

Model	OD (mm)	Seal Sleeve (mm)	Top Connection (box)	Bottom Connection	Shear Pressure of pin (Mpa)	OD Steel Ball (mm)
PTF105	105	32	NC31	NC31 (P)	3 – 10 Mpa	35
PTF121A	121	38	NC38	NC38 (P)	3 – 10 Mpa	45
PTF127	127	38	NC38	NC38 (P)	3 – 10 Mpa	45
PTF127C	127	38	NC38	3 ½ REG (B)	3 – 10 Mpa	45
PTF159	159	49	NC46	NC46 (P)	3 – 10 Mpa	54
PTF159B	159	49	NC46	4 ½ REG (B)	3 – 10 Mpa	54
PTF168	168	50.8	NC50	NC50 (P)	3 – 10 Mpa	57
PTF203	203	62	6 5/8 REG	6 5/8 REG (B)	3 – 10 Mpa	65

# Rotary Kelly

Features square or hexagonal.

Manufactured from AISI 4145H-modified, fully heat treated alloy steel.

BHR = 285 – 341

Charpy Impact Value minimum average 40 ft-lbs

API and NS1 specifications

## Specifications Table

Nom. Size (in)	Top Connection (LH)				Bottom Connection				ID (in)		Drive Cross Section (in)	
	Stdnd	OD	Optional	OD	Square	OD	Hex	OD	Square	Hex	Square	Hex
2 1/2	6 5/8 REG	7.75	4 1/2 REG	5.75	NC26	3.375			1.250		3.286	
3	6 5/8 REG	7.75	4 1/2 REG	5.75	NC31	4.125	NC26	3.375	1.750	1.250	4.000	3.375
3 1/2	6 5/8 REG	7.75	4 1/2 REG	5.75	NC38	4.750	NC31	4.125	2.250	1.750	4.500	4.000
4 1/4	6 5/8 REG	7.75	4 1/2 REG	5.75	NC46	6.250	NC38	4.750	2.813	2.250	5.563	4.781
	6 5/8 REG	7.75	4 1/2 REG	5.75	NC50	6.375	NC38	4.750	2.813	2.250	5.563	4.781
5 1/4	6 5/8 REG	7.75			5 1/2 FH	7.000	NC46	6.250	3.250	3.000	7.000	6.000
	6 5/8 REG	7.75			NC56	7.000	NC50	6.375	3.250	3.250	7.000	6.000
6	6 5/8 REG	7.75					5 1/2 FH	7.000		3.500		6.813
	6 5/8 REG	7.75					NC56	7.000		3.500		6.813

## Contact Us

---

**For further information on any equipment regarding pricing, lead times and availability or to discuss how we can assist your project please contact:**

**ERA Oilfield Service (Thailand) Co. Ltd.,**

**23<sup>rd</sup> Floor, Pacific Place 2,**

**142 Sukhumvit Road,**

**Bangkok, Thailand. 10110**

**OR speak directly to:**

**Jim Reid,**

**Director**

**Tel +66 2 684 6966 (Office) / +66 8 4345 8730 (Mob)**