

## New Tool Joints and New Drill Pipe

Pipe		Tool Joint						Pipe	Tool Joint	Pipe	Tool Joint	
API Label 1 (Pipe OD) (in)	API Label 2 (Nominal Weight) (lbs/ft)	Grade	Connection Size and Style RSC Type	OD (mm)	ID (mm)	Make-Up Torque (Nm)	Drift Diameter (mm)	Tensile Yield (kg)	Tensile Yield (kg)	Torsional Yield Strength (Nm)	Torsional Yield Strength (Nm)	Torsional Ratio
5	19.50	E	NC 50	168,28	95,25	30 317	92,08	179 439	425 923	55 815	50 530	0.91
		X	NC 50	168,28	88,90	36 165	85,73	227 289	503 442	70 698	60 274	0.85
		X	TSDS 50	168,28	88,90	55 114	85,73	227 289	566 355	70 698	91 857	1.30
		G	NC 50	168,28	82,55	41 664	79,38	251 214	575 563	78 140	69 441	0.89
		G	TSDS 50	168,28	82,55	66 056	79,38	251 214	647 503	78 140	110 093	1.41
		S	NC 50	168,28	88,90	36 165	85,73	322 990	503 442	100 466	60 274	0.60
		S	TSDS 50	168,28	88,90	55 114	85,73	322 990	566 355	100 466	91 857	0.91
		S	NC 50	168,28	69,85	51 570	66,68	322 990	703 839	100 466	85 949	0.86
		S	TSDS 50	168,28	69,85	85 281	66,68	322 990	791 791	100 466	142 131	1.41
	25.60	E	NC 50	168,28	95,25	30 317	92,08	240 469	425 923	70 851	50 530	0.71
		X	NC 50	168,28	88,90	36 165	85,73	304 594	503 442	89 744	60 274	0.67
		X	TSDS 50	168,28	88,90	55 114	85,73	304 594	566 355	89 744	91 857	1.02
		G	NC 50	168,28	82,55	41 664	79,38	336 657	575 563	99 190	69 441	0.70
		G	TSDS 50	168,28	82,55	66 056	79,38	336 657	647 503	99 190	110 093	1.11
		S	NC 50	168,28	76,20	46 803	73,03	432 845	642 378	127 531	78 006	0.61
		S	TSDS 50	168,28	76,20	76 116	73,03	432 845	722 663	127 531	126 851	0.99
		S	NC 50	168,28	69,85	51 570	66,68	432 845	703 839	127 531	85 949	0.67
		S	TSDS 50	168,28	69,85	85 281	66,68	432 845	791 791	127 531	142 131	1.11

**b - Torsional yield values shown in yellow indicate the connection is box weak in torsion.**

The torsional yield strength is based on a shear strength of 57.7% of the minimum yield strength and nominal wall thickness.

TSDS Values based on 930,8 MPa Material Yield Strength. API NC Values based on 827,4 MPa Material Yield Strength.

Pin tensile yield values are based on tensile loading conditions only, and do not include the combined effect of torsional and tensile loading.