

Texas Steel Conversion TSDS comparison with API Drill Pipe Connections

Connection Size and Style RSC Type	Box OD (mm)	Pin ID (mm)	Make-Up Torque (Nm)	Torsional Yield (Nm)	Pin Tensile Yield (kg)
Values in green indicate the improved performance of TSDS over API					
TSDS 38	123,83	61,91	26 886 + 50%	44 823 + 50%	361 286 + 13%
API NC 38			17 925	29 875	321 143
TSDS 40	133,35	65,09	33 543 + 49%	55 914 + 49%	427 738 + 13%
API NC 40			22 528	37 548	380 201
TSDS 46	158,75	69,85	57 297 + 59%	95 490 + 59%	604 094 + 12%
API NC 46			36 085	60 143	537 008
TSDS 50	168,28	82,55	66 056 + 59%	110 093 + 59%	647 503 + 12%
API NC 50			41 664	69 441	575 563
TSDS 55	184,15	88,90	93 823 + 60%	156 367 + 60%	826 264 + 13%
API 5 1/2 FH			58 745	97 908	734 457
TSDS 65	209,55	120,65	107 313 + 54%	178 873 + 54%	856 337 + 13%
API 6 5/8 FH			69 526	115 878	761 173

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

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

Torsional values are based on using a thread compound with a 1.0 API friction factor.

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