

Texas Steel Conversion PTECH+ and TSDS comparison with API Drill Pipe Connections

Connection Size and Style RSC Type	Box OD (in)	Pin ID (in)	Make-Up Torque (ft-lbs)	Torsional Yield (ft-lbs)	Pin Tensile Yield (lbs)
Values in GOLD indicate the improved performance of PTECH+ over API.					
PTECH 39+	4 7/8	2 11/16	23,300 + 76%	38,850 + 76%	732,800 + 4%
TSDS 38	4 7/8	2 7/16	19,830 + 50%	33,060 + 50%	796,500 + 13%
API NC 38			13,221	22,035	708,000
PTECH 41+	5 1/4	2 15/16	26,900 + 62%	44,800 + 62%	796,200 -5%
TSDS 40	5 1/4	2 9/16	24,740 + 49%	41,240 + 49%	943,000 + 13%
API NC 40			16,616	27,694	838,200
PTECH 48+	6 1/8	3 7/16	42,800 + 61%	71,400 + 61%	1,121,600 -5%
TSDS 46	6 1/4	2 3/4	42,260 + 59%	70,430 + 59%	1,331,800 + 12%
API NC 46			26,615	44,359	1,183,900
PTECH 51+	6 1/2	3 3/4	49,500 + 61%	82,500 + 61%	1,222,800 -4%
TSDS 50	6 5/8	3 1/4	48,720 + 59%	81,200 + 59%	1,427,500 + 12%
API NC 50			30,730	51,217	1,268,900
PTECH 59+	7 1/4	4 1/4	67,600 + 56%	112,700 + 56%	1,528,900 -6%
TSDS 55	7 1/4	3 1/2	69,200 + 60%	115,330 + 60%	1,821,600 + 13%
API 5 1/2 FH			43,328	72,213	1,619,200
PTECH 68+	8 1/4	5 1/2	86,100 + 68%	143,500 + 68%	1,633,800 -3%
TSDS 65	8 1/4	4 3/4	79,150 + 54%	131,930 + 54%	1,887,900 + 13%
API 6 5/8 FH			51,280	85,467	1,678,100

PTECH+ Values and TSDS Values based on 135Ksi Material Yield Strength. API NC Values based on 120Ksi 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.