

API Drill Pipe Numbered Connections (NC)

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)
NC 31	4 1/8	1 5/8	8,513	14,188 b	623,800
		2	7,895	13,158	495,700
		2 1/8	7,074	11,790	447,100
	4 3/8	1 5/8	10,086	16,809	623,800
		2	7,895	13,158	495,700
		2 1/8	7,074	11,790	447,100

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

The tensile strength of the tool joint pin is based on 120,000 psi yield and the cross sectional area at the root of the thread 5/8" from the shoulder.