

DUO™

PREMIUM DOUBLE SHOULDER CONNECTION

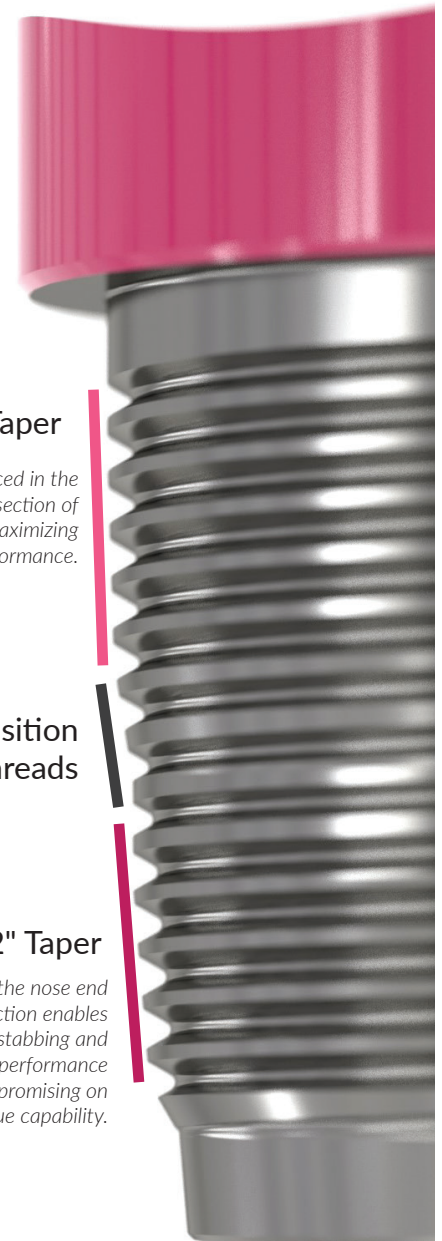
Complete Group has designed and developed the **DUO** family of high torque rotary shouldered connections to address the need for **durability** and performance in **deep stabbing** and **rapid spin-up**.

Industry standard V-038R threadform is time proven and ensures repairs can be performed globally, quickly, and economically. The end result is a high performance connection that enables **lower costs** through fewer repairs and reduced non-productive time (NPT).

The **DUO** multi-taper connection design **stabs 3x deeper** than shallow taper alternatives, resulting in as few as **4.5 revolutions** to makeup, compared to 11+ revolutions for similar single-taper high torque connections. Reduced threading times result in significant **operating cost savings** for your rig.

The entire range of DUO connections encompass a wide variety of drilling solutions, all featuring the **industry-first multi-taper design**, torque capabilities rivaling other single-taper high torque connections, and unparalleled handling performance.

Pipe OD (in)	Connection	Tool Joint OD (in)	Tool Joint ID (in)	Rec. Makeup Torque (ft-lb)	Max Makeup Torque (ft-lb)
4.000	390 DUO	4.875	2.688	21,200	23,000
4.500	400 DUO	5.250	2.688	29,200	31,600
4.500	430 DUO	5.250	3.000	26,000	28,200
4.500	433 DUO	5.250	3.250	21,000	22,800
4.500	450 DUO	5.375	3.000	29,400	31,800
4.500	450 DUO	5.500	3.000	32,500	35,300
4.500	450 DUO	5.500	3.250	26,800	29,100
4.500	480 DUO	5.625	3.750	25,500	27,600
4.500	490 DUO	6.250	3.250	47,800	51,800
5.000	530 DUO	6.500	3.750	50,000	54,200
5.000	550 DUO	6.625	3.750	55,000	59,600
5.500	550 DUO	6.625	4.000	50,300	54,500
5.500	580 DUO	7.000	4.250	59,700	64,700



.75" Taper

Strategically placed in the load-bearing cross section of the connection, maximizing mechanical performance.

Transition Threads

2" Taper

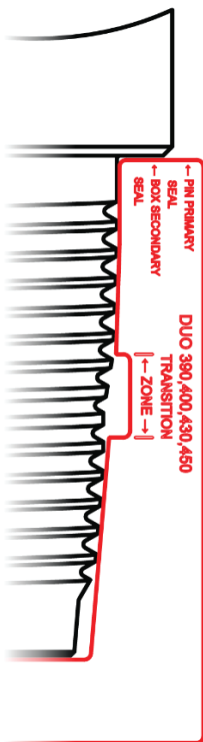
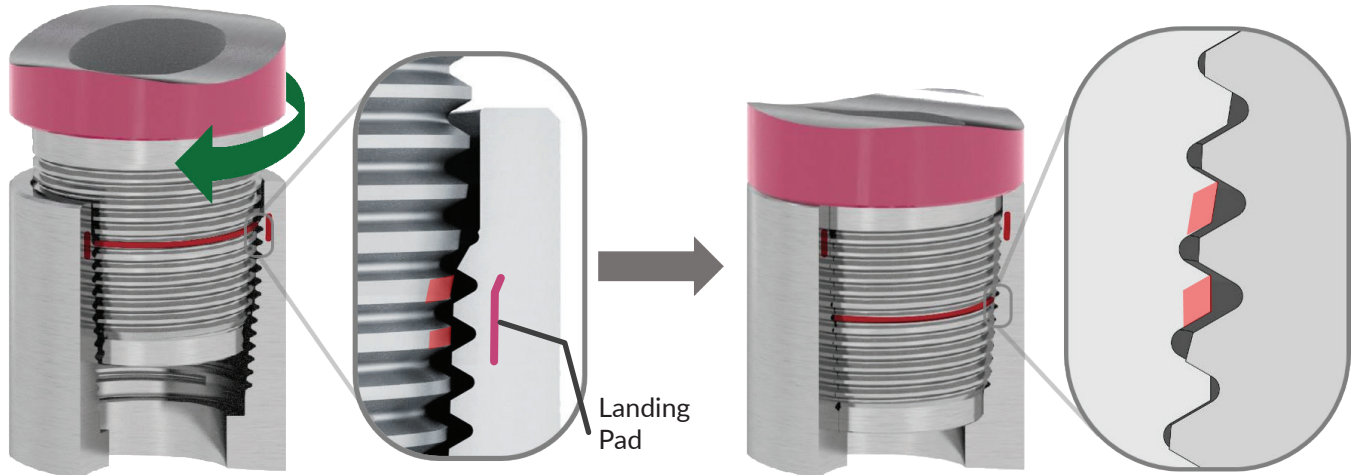
Located at the nose end of the connection enables incredible stabbing and spin-up performance without compromising on torque capability.

COMPLETE GROUP

ROTARY SHOULDERED CONNECTIONS

DUO™

PREMIUM DOUBLE SHOULDER CONNECTION



DUO
Transition Tool

The **transition threads** between the two tapers have been designed as **Landing Pad** threads; assisting the connection to self-center and absorb the minor damages resulting from stabbing. During make up, the unique geometry of the Landing Pad threads minimizes contact between damaged thread flanks.

In most cases, the landing pad is safely excluded from detailed inspection. The **DUO Transition Tool** quickly identifies which threads may be safely field dressed without fear of compromising the mechanical capabilities of the connection, **saving time and money** on costly shop repairs.



Landing Pad Wear



Field Dressed



Anti-gall treated, ready for use