



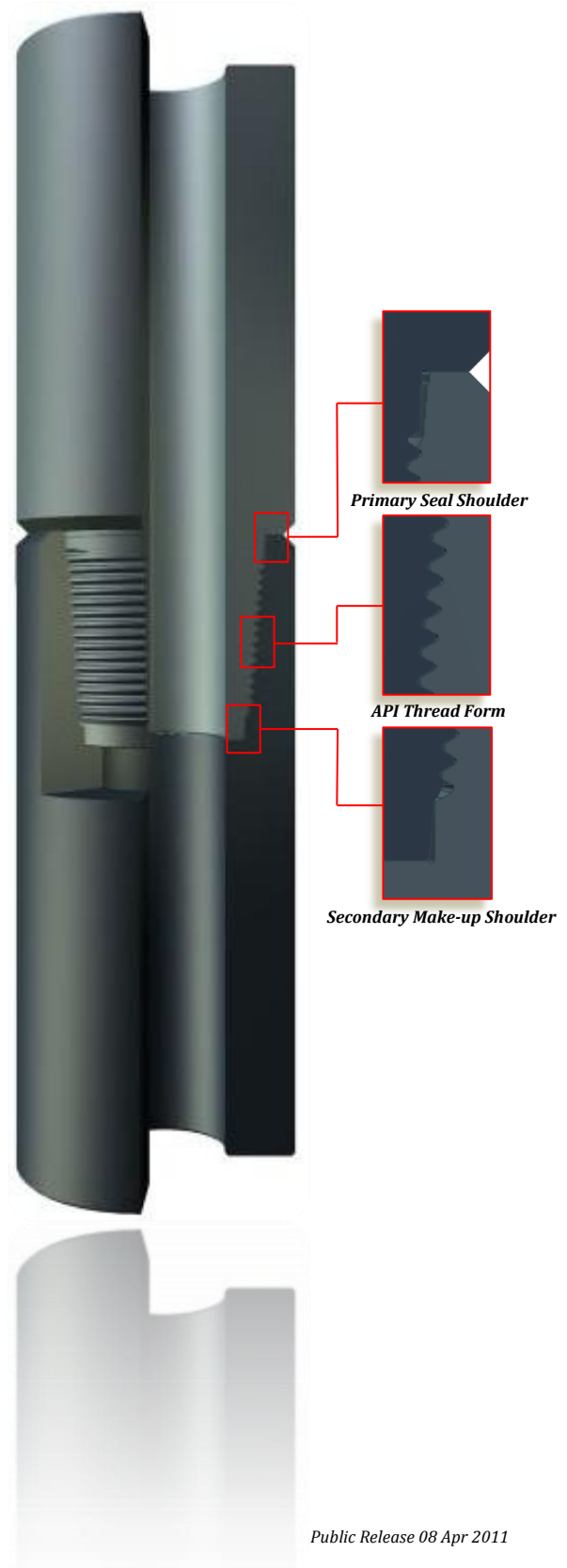
DP-Master DS Connection

The DP-Master DS connection is a generic API double-shouldered connection which is well established and field proven around the world. The DS connection makes up similarly to an API connection and is therefore very user friendly. When the connections are spun up to the hand tight position the primary external shoulder engages just like an API connection. This is the primary sealing shoulder for the connection.

As you make up the connection to the recommended make-up torque, the secondary torque shoulder engages. Due to this secondary torque shoulder the connection benefits from enhanced load distribution and increased torsional capacity when you compare to similar geometry API connections.

Benefits of the DS connections:

- Greater Torsional Strength than API
- Streamlined OD/ID geometry
- Improved hydraulic efficiency
- Flush ID connection
- Interchangeable with API

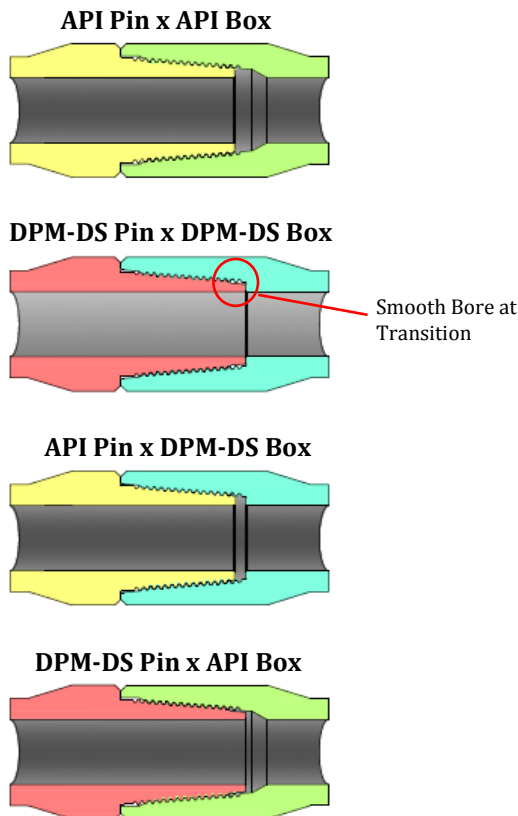




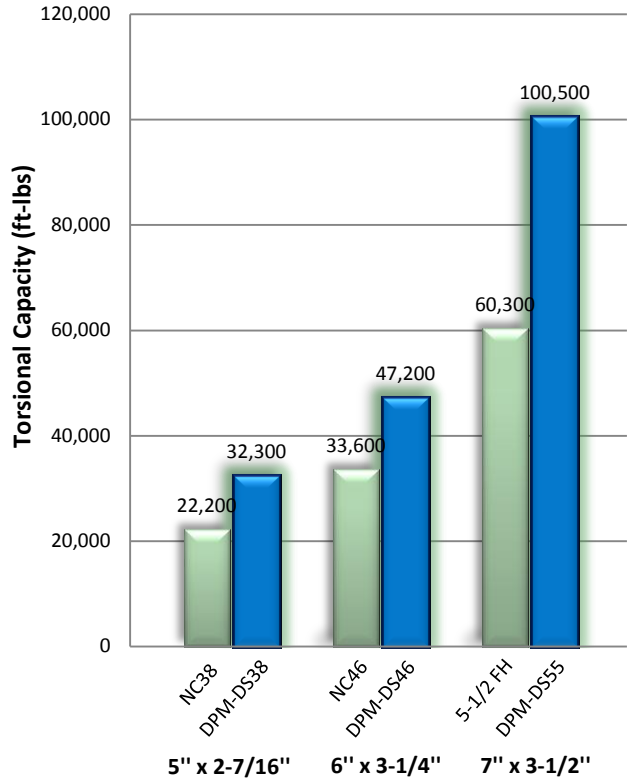
Greater Torsional Strength

DP-Master DS connections incorporate API thread form with high strength double shoulder design. The pin nose makes contact with secondary make-up shoulder at torquing up where it absorbs the high frictional load allowing greater torsional capacity than the standard API connections of similar sizes.

The increased torsional strength allows significant performance in any challenging well conditions such as deep well or highly deviated well drilling.



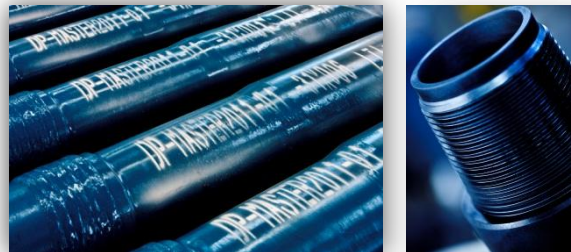
**Torsional Yield Strength
API vs DPM-DS**



** Data comparison based on API RP 7G & DPM-DS connections

Flexibility

DPM-DS is fully interchangeable with API connections, new or used on all kind of accessories and drill pipe with API connections.



Interchangeability Table

DPM-DS	DPM-DS26	DPM-DS38	DPM-DS40	DPM-DS46	DPM-DS50	DPM-DS55	DPM-DS65
Equivalent API Connection	NC26	NC38	NC40	NC46	NC50	5-1/2 FH	6-5/8 FH



Streamlined Profile

One of the many benefits of DPM-DS connection is the ability to configure changes for smaller OD or larger ID for improved hydraulic performance or fishing ability without compromising torsional capacity. This configuration is possible due to DPM-DS increased torsional strength when compare with standard API connections.

DPM-DS pin and box connection made up to a smooth bore, without gap or change in ID transition at the secondary make-up shoulder. This allows smoother fluid flow with minimized turbulence and energy loss inside the connection. The tendency for mud or cement trap in crevices are eliminated as well.

DPM-DS Mechanical Characteristics

Connection	OD		ID		Tensile Capacity		Torsional Capacity		Make-up Torque Maximum	
	(in)	(mm)	(in)	(mm)	(lbs)	(daN)	(ft-lbs)	(N-m)	(ft-lbs)	(N-m)
DPM-DS38	5	127	2-7/16	62	767,100	341,206	32,300	43,793	21,000	28,472
DPM-DS40	5-1/4	133	2-9/16	65	907,800	403,789	39,500	53,555	25,000	33,895
	5-1/4	133	2-11/16	68	841,100	374,121	35,400	47,996	22,600	30,641
DPM-DS46	6	152	3-1/4	83	976,300	434,258	47,200	63,995	30,700	41,624
DPM-DS50	6-5/8	168	3-1/4	83	1,374,700	611,467	77,400	104,940	50,300	68,198
DPM-DS55	7	178	4	102	1,371,300	609,954	78,500	106,432	50,300	68,198

** Kindly contact DP-Master for other OD & ID combinations