



GULF ENGINEERING SERVICES LTD. DRILL PIPE PERFORMANCE SHEET

Size and Weight: 6.625" 27.70 ppf 0.362" wall IEU
Grade: S-135
Range: 2
Tool Joint: 8.500" x 4.250" 6 5/8" FH

PIPE BODY:

	Nominal 100% RBW	95% RBW	Ultra Class 90% RBW	Premium 80% RBW
OD (in):	6.625	6.589	6.553	6.480
Wall Thickness (in):	0.362	0.344	0.326	0.290
Nominal ID (in):	5.901	5.901	5.901	5.901
Tensile Strength (lbs):	961 555	910 838	860 398	760 352
Torsional Strength (ft-lbs):	137 330	130 007	122 735	108 344
Burst Capacity (psi):	12 909	14 016	13 278	11 803
Collapse Capacity (psi):	7 813	6 731	6 010	4 562

Notes: Body Properties are calculated based on uniform OD and wall thickness. Burst capacity for Nominal (100% RBW) based on 87.5% RBW per API.

CONNECTION: 6 5/8" FH

Tool Joint OD (in): **8.500**
 Tool Joint ID (in): **4.250**
 Connection MYS (ksi): **120**

Maximum MUT (ft-lbs): **65 000**
 Tension at Shoulder Separation @ Max MUT (lbs): **Tensile Limited**
 Tension at Connection Yield @ Max MUT (lbs): **1 843 000**

Minimum MUT (ft-lbs): **54 200**
 Tension at Shoulder Separation @ Min MUT (lbs): **1 934 090**
 Tension at Connection Yield @ Min MUT (lbs): **2 102 266**

N/A Tool Joint Torsional Strength (ft-lbs): **108 353**
 N/A Tool Joint Tensile Strength (lbs): **2 102 266**

Note: MUT values are based on a friction factor of 1.0. There is no published pressure rating for this connection.

TUBULAR ASSEMBLY:

Adjusted Weight (lbs/ft):	36.18	Fluid Displacement (gal/ft):	0.55
Approximate Length (ft):	31.9	Fluid Displacement (bbls/ft):	0.0132
Box TJ Length (in):	14	Fluid Capacity w/IPC (gal/ft):	1.33
Pin TJ Length (in):	12	Fluid Capacity w/IPC (bbls/ft):	0.0318
Upset Type:	IEU	Fluid Capacity w/o IPC (gal/ft):	1.34
Max Upset OD (in):	6.906	Fluid Capacity w/o IPC (bbls/ft):	0.0320
Drift Size (in):	4.125		

Note: These are OEM values that may vary with actual values due to mill tolerances, IPC tolerances, OEM rounding, and other factors. Pipe is purchased at a guaranteed 95% RBW. IPC is applied to a nominal thickness of 0.009".

ELEVATOR SHOULDER:

Smooth Edge Height (in):	3/32
Smooth Edge OD (in):	8.688
SE Elevator Shoulder Capacity (lbs):	2 251 500
Nominal TJ OD (in):	8.500
Nominal TJ OD Elevator Shoulder Capacity (lbs):	1 972 800
Assumed Elevator Bore (in):	7.031

Note: Elevator capacity based on assumed elevator bore, no wear factor, and contact stress of 110 100 psi. An increased elevator shoulder OD increases elevator capacity without affecting make-up torque.