GULF ENGINEERING SERVICES LTD.
HEAVY WEIGHT DRILL PIPE PERFORMANCE CHARACTERISTICS

Pipe Size and Weight:	**5.000” x 3.000” Heavy Weight**
Pipe Grade:	**55ksi Standard Heavy Weight**
Range:	**2**
Tool Joint:	**6.625” x 3.000” XT50**

PIPE BODY:

	New (Nominal)
OD (in):	5.000
Wall Thickness (in):	1.000
ID (in):	3.000
Calculated Plain End Weight (lbs/ft):	42.720
Tensile Strength (lbs):	691 200
Torsional Strength (ft-lbs):	56 500
80% Torsional Strength (ft-lbs):	45 200
Burst Pressure (psi):	19 250
Collapse Pressure (psi):	17 600

	New (Nominal)
Cross Sectional Area of Pipe Body (in^2):	12.566
Cross Sectional Area of OD (in^2):	19.635
Cross Sectional Area of ID (in^2):	7.069
Section Modulus (in^3):	10.681
Polar Section Modulus (in^3):	21.363

TOOL JOINT 120 000 psi MATERIAL YIELD STRENGTH: XT50

OD (in):	6.625
ID (in):	3.000
Pin Tong Length (in):	24.0
Box Tong Length (in):	24.0
Torsional Strength (ft-lbs):	105 300
Max Recommended Make-up Torque (ft-lbs):	63 200
Min Recommended Make-up Torque (ft-lbs):	35 100
Tensile Strength (lbs):	1 562 600
Tool Joint/ Drill Pipe Torsional Ratio (New Pipe):	1.86

DRILL PIPE ASSEMBLY WITH GRANT PRIDECO XT50 eXtreme TORQUE CONNECTION:

Adjusted Weight (lbs/ft):	49.77
Approximate Length (ft):	31.00
Fluid Displacement (gal/ft):	0.760
Fluid Capacity (gal/ft):	0.367
Fluid Capacity (bbls/ft):	0.00874
Drift Size (in):	2.750

Note: Minimum make-up is based on shoulder separation caused by bending

The technical information contained herein, including the product performance sheet and other attached documents, has been extracted from information available from the manufacturer and is for reference only and not a recommendation. The user is fully responsible for the accuracy and suitability of use of the technical information. Gulf Engineering Services Ltd. cannot assume responsibility for the results obtained through the use of this material. No expressed or implied warranty is intended. Drill pipe assembly properties are calculated based on uniform OD and wall thickness. No safety factor is applied. The information provided for various inspection classes and for various wear conditions (remaining body wall) is for information only and does not represent or imply acceptable operation limits. It is the responsibility of the customer and the end user to determine the appropriate performance ratings, acceptable use of the product, maintain safe operational practices, and to apply a prudent safety factor suitable for the application. For API connections that have different pin and box IDs, tool joint ID refers to the pin ID. Per Chapter B, Section 4 VII of the IADC drilling manual, it is recommended that drilling torque should not exceed 80% of MUT.