



## GULF ENGINEERING SERVICES LTD. TUBING PERFORMANCE SHEET

**Size and Weight:** 3.500" 12.95 ppf 0.375" wall  
**Grade:** P-110  
**Range:** 2  
**Tool Joint:** 3.500" x 2.687" TS-HD

### PIPE BODY:

	Nominal 100% RBW	87.5% RBW	Premium 80% RBW
OD (in):	3.500	3.406	3.350
Wall Thickness (in):	0.375	0.328	0.300
Nominal ID (in):	2.750	2.750	2.750
Tensile Strength (lbs):	404 971	349 034	316 201
Torsional Strength (ft-lbs):	27 557	23 607	21 314
Burst Capacity (psi):	20 625	20 625	18 857
Collapse Capacity (psi):	21 046	19 151	17 937

### TUBULAR ASSEMBLY:

Approximate Length (ft):	31.0
Nominal Weight (lbs/ft):	12.95
Material Grade:	P-110
Drift Size (in):	2.625
Compression Strength (lbs)	405 000
Max Bending (degrees/100ft):	144.0

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: TS-HD

Connection OD (in):	3.500	Threads per inch:	6	Maximum MUT (ft-lbs):	8 800
Connection ID (in):	2.687	Make-up Loss (in):	3.347	Optimum MUT (ft-lbs):	7 900
Special Clearance OD (in):	Not Reported	Internal Pressure Rating (psi):	20 630	Minimum MUT (ft-lbs):	7 000
		Connection Torsional Strength (ft-lbs):	21 700		
		Connection Tensile Strength (lbs):	405 000		

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.