

# Tubing Data & Performance Sheet

## 3-1/2" 12.95# P-110 3-1/2" PH-6 Type

### TUBE BODY DATA

Tube OD	3.500 in.
Wall Thickness	0.375 in.
Tube ID	2.75 in.
Tensile Yield Strength	316,200 lbs. (API Premium 80% Inspection Class)
Torsional Yield Strength	21,300 ft-lbs. (API Premium 80% Inspection Class)
Tube Burst	18,900 psi. (API Premium 80% Inspection Class)
Tube Collapse	17,900 psi. (API Premium 80% Inspection Class)

### TUBULAR ASSEMBLY

Approximate Length	30 ft.
Nominal Weight	12.95 lbs./ft.
Material Grade	110,000 psi.
Drift Diameter	2.625 in.
Displacement	0.1912 gal./ft.   0.0046 bbls./ft.
Capacity	0.3085 gal./ft.   0.0073 bbls./ft.
Compression Yield Strength	405,000 lbs.
Max Bending	144.0 degrees/100 ft.

### CONNECTION DATA

Connection	PH-6 Type
Connection OD	4.313 in.
Connection ID	2.687 in.
Threads per inch	6
Make-Up Loss	3.350 in.

### MAKE-UP TORQUE

Make-Up Torque - Minimum	7,100 ft-lbs.
Make-Up Torque - Optimum	8,000 ft-lbs.
Make-Up Torque Maximum	8,900 ft-lbs.

### CONNECTION PERFORMANCE

Connection Torsional Strength	Not Reported
Connection Tensile Strength	405,000 lbs.
External Pressure Capacity	21,000 psi.
Internal Pressure Capacity	20,600 psi.

### FEATURES

Hardbanding	None
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#### Notes:

- Referenced tube size, wall and assembly length are nominal, unless indicated otherwise. Values shown may vary with actual values due to OEM tolerances, rounding and other factors. Tubing is manufactured to API 5CT 87-1/2% RBW and inspected to minimum Premium Class (80% RBW).
- Maximum make-up torque is that value above which there is no additional benefit, or reason to exceed. It is not meant to indicate the maximum torque the connection can withstand.

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. Patterson Services, Inc. cannot assume responsibility for the results obtained through the use of this material. No expressed or implied warranty is intended. Tubular assembly properties are calculated based on uniform OD and wall thickness. No safety factor is applied. Weight, displacement, and capacity are approximate and can vary by ± 10% (or more) depending on OD, specified wall, wall tolerance, and internal coating options. 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.