



CASING TECHNICAL DATA SHEET
4.5 x 0.25 HPP110 GBCD

Reviewed by: Sr. Quality Engineer
Approved by: Corporate Director-QEHS

TDS Date (MM/DD/YY) 12-18-25

PIPE BODY DATA

Nominal Outside Diameter
Nominal Wall Thickness
Remaining Body Wall (RBW)
Type of Thread
Grade
Coupling Type

Label Weight
Plain End Weight
Pipe Minimum Yield
Pipe Maximum Yield
Pipe Minimum Tensile
Standard Drift Diameter (min)
Alternate Drift Diameter (min)
Pipe Body Plain End Yield
Pipe Body Internal Yield
Collapse Pressure - Standard
Collapse Pressure - High

CONNECTION DATA

Coupling Minimum Yield
Coupling Maximum Yield
Coupling Minimum Tensile
Coupling or Joint Outside Diameter (nom)
Coupling Thread Fracture Strength
Pipe Thread Fracture Strength
Pull Out Strength
Nominal Make-Up Torque or Make-up Torque Range
Coupling Internal Yield
Internal Yield of Joint

WELDED TUBE GENERAL INPUT CRITERIA

Coupling Color Code
Coupling Color Code for the Band
Pipe Color Code Identification
Additional Color Band (approx.10' from box end)

Note:

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Unit	Imperial	Metric	Unit
in	4.500	114.30	mm
in	0.250	6.35	mm
	95.0%	95.0%	
	GBCD	GBCD	
	HPP110	HPP110	
	11th Edition	11th Edition	
	11.60	17.26	
lb/ft	11.36	16.91	kg/m
ksi	125	862	MPa
ksi	140	965	MPa
ksi	125	862	MPa
in	3.875	98.42	mm
in	N/A	N/A	mm
lb	417,000	189,150	kg
psi	13,190	90,940	kPa
psi	N/A	N/A	kPa
psi	9,540	65,780	kPa

ksi	See Next Page	See Next Page	MPa
ksi	See Next Page	See Next Page	MPa
ksi	See Next Page	See Next Page	MPa
in	See Next Page	See Next Page	mm
lb	See Next Page	See Next Page	kg
lb	See Next Page	See Next Page	kg
lb	See Next Page	See Next Page	kg
ft-lb	See Next Page	See Next Page	N-m
psi	See Next Page	See Next Page	kPa
psi	See Next Page	See Next Page	kPa

	White
	None
2" Band(s)	One White
	Orange

GB Connection Performance Properties Sheet

Rev. 0 (12/19/2025)

ENGINEERING THE RIGHT CONNECTIONS™

Casing: 4.5 OD, 11.6 ppf
Casing Grade: WTC HP P-110 (95%RBW)

Connection: GB CD Butt 5.250
Coupling Grade: API P-110

PIPE BODY GEOMETRY					
Nominal OD (in.)	4 1/2	Wall Thickness (in.)	0.250	Drift Diameter (in.)	3.875
Nominal Weight (ppf)	11.60	Nominal ID (in.)	4.000	API Alternate Drift Dia. (in.)	N/A
Plain End Weight (ppf)	11.36	Plain End Area (in. ²)	3.338		

PIPE BODY PERFORMANCE**					
Material Specification	WTC HP P-110 (95%RBW)	Min. Yield Str. (psi)	125,000	Min. Ultimate Str. (psi)	125,000
Collapse		Tension		Pressure	
API (psi)	8,000	Pl. End Yield Str. (kips)	417	Min. Int. Yield Press. (psi)	13,190
High Collapse (psi)	9,540	Torque		Bending	
		Yield Torque (ft-lbs)	40,430	Build Rate to Yield (°/100 ft)	127.3

GB CD Butt 5.250 COUPLING GEOMETRY			
Coupling OD (in.)	5.250	Makeup Loss (in.)	4.0625
Coupling Length (in.)	8.125	Critical Cross-Sect. (in. ²)	6.570

GB CD Butt 5.250 CONNECTION PERFORMANCE RATINGS/EFFICIENCIES					
Material Specification	API P-110	Min. Yield Str. (psi)	110,000	Min. Ultimate Str. (psi)	125,000
Tension		Efficiency		Bending	
Thread Str. (kips)	394	Internal Pressure (%)	100%	Build Rate to Yield (°/100 ft)	96.0
Min. Tension Yield (kips)	687	External Pressure (%)	100%	Yield Torque	
Min. Tension Ult. (kips)	780	Tension (%)	100%	Yield Torque (ft-lbs)	12,890
Joint Str. (kips)	394	Compression (%)	100%		
		Ratio of Areas (Cplg/Pipe)	1.97		

MAKEUP TORQUE					
Min. MU Tq. (ft-lbs)	4,280	Max. MU Tq. (ft-lbs)	8,560	Running Tq. (ft-lbs)	See GBC RP
				Max. Operating Tq. (ft-lbs)*	12,240

Units: US Customary (lbm, in., °F, lbf)

1 kip = 1,000 lbs

* See Running Procedure for description and limitations.

See attached: Notes for GB Connection Performance Properties.

GBC Running Procedure (GBC RP): www.gbconnections.com/resources/running-procedures/

Blanking Dimensions: www.gbconnections.com/resources/documentation/#blanking-dimensions

Connection yield torque rating based on physical testing or extrapolation therefrom

** Casing properties applicable to WTC HP P-110 (95%RBW) grade with min. yield 125 ksi.

