



FuchsRohr® AluDrill400™ High Performance Pipe (HPP)

Pipe configuration 4 internal upset			
Tool Joint	Tool Joint NC40		
Dimensions and weights	New	Premium	Class 2
OD nominal (in)	4.15	3.95	3.85
ID nominal (in)	3.15	3.15	3.15
ID min (in)	2.44	2.44	2.44
Wall Thickness (in)	0.50	0.40	0.35
Remaining Body Wall (%)	100	80	70
Reduction in OD (%)	0	4.8	7.2
Cross Section Area (in ²)	5.73	4.46	3.84
Weight Pipe (lb)	222.0		

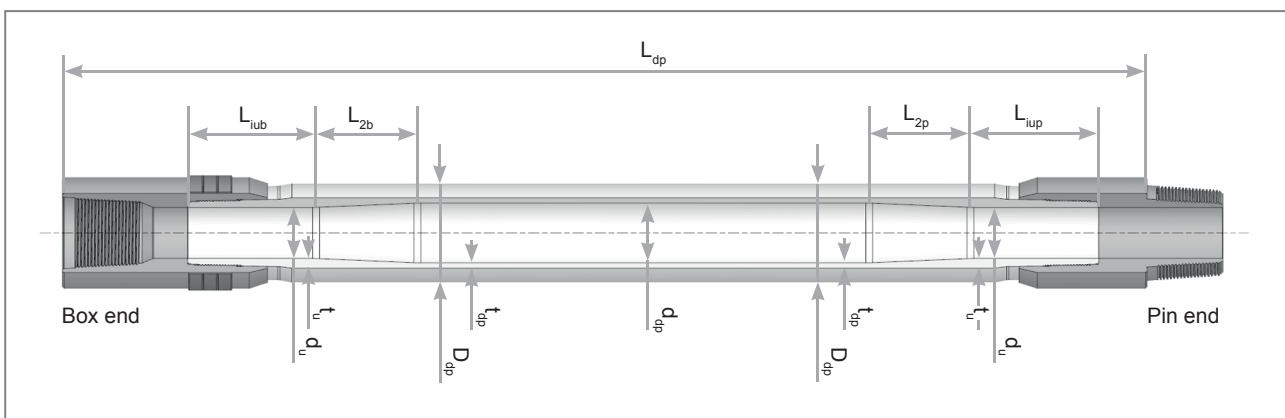
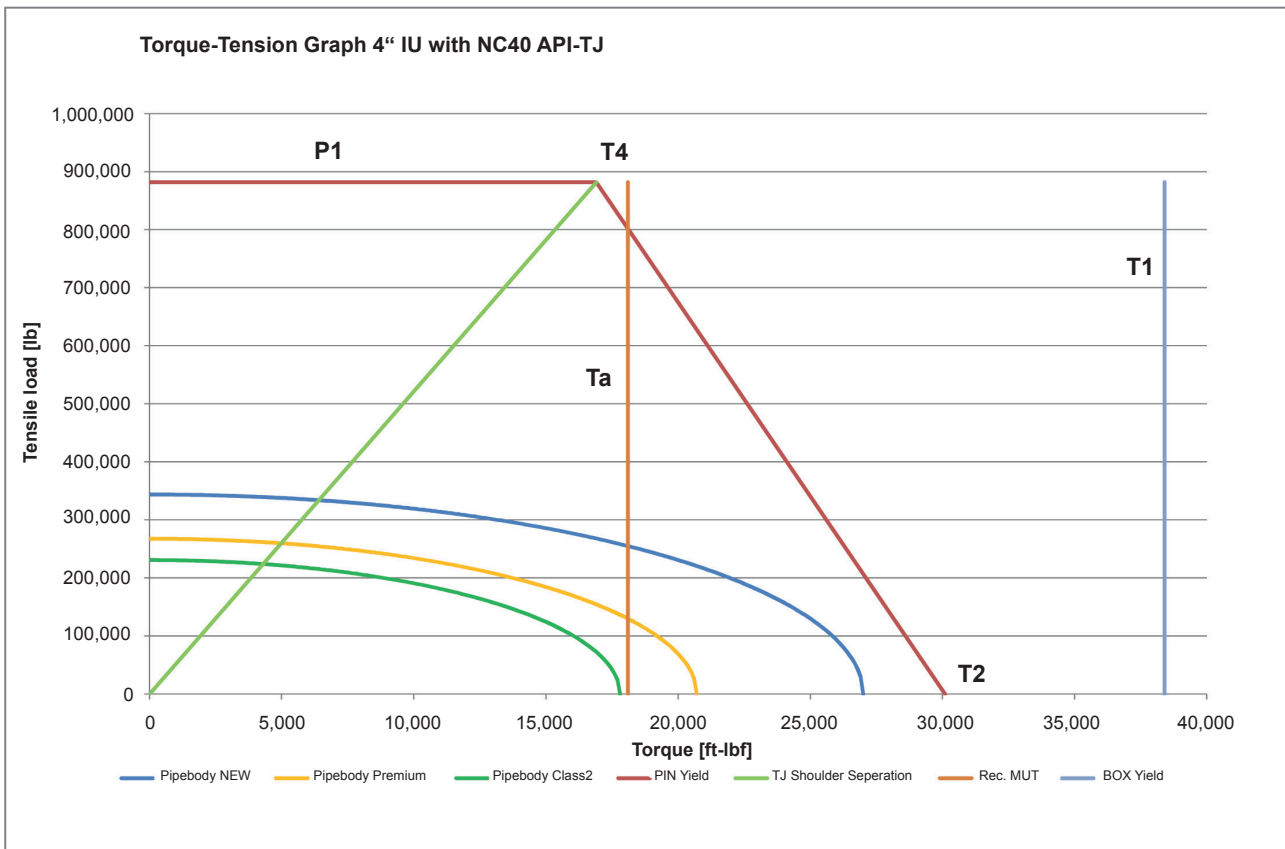
Pipe Body Alloy HPP K60 R _{p0,2} = 60 ksi (415 N/mm ²)			
Tensile Strength (lb)	343,600	267,400	230,600
Modulus (msi)	10.60	10.60	10.60
Torsional Yield Strength (ft-lbf)	27,000	20,700	17,800
80% Torsional Yield Strength (ft-lbf)	21,600	16,560	14,240
Collapse Resistance (psi)	13,700	10,900	9,300
Internal Yield Pressure (psi)	14,500	12,200	10,900

Tool Joint	NC40
OD Tool Joint (in)	5 ½
ID Tool Joint (in)	2 7/16
Box Tong Length, Lb (in)	17
PIN Tong Length, Lp (in)	14
Yield Strength (ksi)	120
Weight Tool Joint (lb)	144.00
Tensile Yield Strength (lbf)	881,800
Torsional Yield Strength (ft-lbf)	30,100
Recommended Make-Up-Torque (ft-lbf)	18,100

Assembly TJ + Pipe	
Weight Tool Joint + Pipe (lb)	366
Adjusted Weight Air (lb/ft)	11.60
Adjusted Weight In 12 lb/gal mud (lb/ft)	7.20
Torsional Ratio TJ/Pipe	1.11
Shoulder To Shoulder Length (ft)	31.50
Open Displacement (US gal/ft)	0.37
Closed Displacement (US gal/ft)	0.75
Capacity (US gal/ft)	0.38



FuchsRohr® AluDrill400™ High Performance Pipe (HPP)



L_{dp}	pipe length with tool joint (shoulder - shoulder)	378.00 in
L_{iub}	length of internal upset end (Box end)	32.00 in
L_{iup}	length of internal upset end (Pin end)	13.00 in
L_{2b}	length of internal upset end transition zone (Box end)	9.50 in
L_{2p}	length of internal upset end transition zone (Pin end)	9.50 in
D_{dp}	outside diameter of the pipe body	4.15 in
d_{dp}	inside diameter of the pipe body	3.15 in
d_u	minimum inside diameter of the pipe	2.44 in
t_u	wall thickness of upset end	0.85 in
t_{dp}	wall thickness of pipe body	0.50 in

