



Moose Dokter Ltd.

Welded Drill Pipe Datasheet

Nominal Data		Label 1	4 1/2 in		Ø114.3×8.56 mm				
		Label 2	16.60 lbs/ft						
		Upset Style & Grade		IEU		G105			
		Length Range		R2		R2			
				from Shoulder to Shoulder					
		RSC Type		HLIDS40					
		OD of Tool Joint		5 1/4 in		Ø133.4 mm			
		ID of Tool Joint		2 11/16 in		Ø68.26 mm			
		Pin Tong Length		12 in		304.8 mm			
		Box Tong Length		12 in		304.8 mm			
Elevator Taper		18°							
Calculated Parameters			USC			SI			
			New	Premium	Unit	New	Premium	Unit	
Drill Pipe Body	Dimension	Outside Diameter	4.500	4.365	in	114.3	110.88	mm	
		Wall Thickness	0.337	0.270	in	8.56	6.85	mm	
		Inside Diameter	3.826	3.826	in	97.18	97.18	mm	
		Section Area	4.407	3.469	in ²	2843	2238	mm ²	
		Section Modulus	4.271	3.347	in ³	69989	54848	mm ³	
		Polar Section Modulus	8.543	6.694	in ³	139995	109695	mm ³	
	Performance	Material Yield Strength	105000		psi	724		MPa	
		Tensile Strength	462800	364200	lbs	2061	1622	kN	
		Torsional Strength	43100	33800	ft-lbs	58436	45827	N·m	
		80%Torsional Strength	34500	27000	ft-lbs	46700	36700	N·m	
Pressure Capacity		13761	12581	psi	94.9	86.7	MPa		
Collapse Capacity	13825	9466	psi	95.3	65.3	MPa			
Tool Joint	Dimension	Outside Diameter	5.250	5.031	in	133.4	127.8	mm	
		Inside Diameter	2.6875	2.8125	in	68.26	71.44	mm	
		Box Tong Length	12	7.915	in	304.8	201.041	mm	
		Pin Tong Length	12	6	in	304.8	152.4	mm	
		Make-up Loss	4.915		in	124.841		mm	
	Performance	Material Yield Strength	120000		psi	827		MPa	
		Tensile Strength	776400	711600	lbs	3458	3169	kN	
		Torsional Strength	33400	28000	ft-lbs	45284	37963	N·m	
		Max Make-up Torque (Recommended)	20000	16800	ft-lbs	27200	22800	N·m	
		Min Make-up Torque	15500	13200	ft-lbs	21000	17900	N·m	
Balance Outside Diameter	5.1388	—	in	130.5	—	mm			
Drill Pipe	Torsional Ratio (Tool Joint / Pipe Body)		0.77	0.83		0.77	0.83		
	Adjusted Weight		18.160	16.839	lbs/ft	27.05	25.08	kg/m	
	Fluid Displacement		0.2772	0.2571	gal/ft	3.45	3.20	dm ³ /m	
	Fluid Capacity		0.5768	0.5858	gal/ft	7.16	7.27	dm ³ /m	
	Drift Size		2.5625	—	in	65.1	—	mm	

Recommendations Only