COMPI	DRILL PIPE PERFORMANCE DATA SHEET									
COMIL		-		Pipe Size: 4.500 in (114mm) Pipe Weight: 16.6lb/ft (24.70kg/			Grade:	S135	Range:	2
GRUUF							Upset:	IEU	Connection:	DS40
Pipe										CDN
							NEW		API PREMIUM	
Pipe size	in	4.500	mm	114.3	OD	mm	114.3		110.9	
Pipe weight	lb/ft	16.60	kg/m	24.70	Thickness	mm	8.6		6.8	
Upset Type		IEU			X-Sec Area	cm ²	28.4		22.4	
Tube grade		S135	Section Modulus			cm³	70.0		54.8	
Range		2	Polar Section Modulus			cm³	140.0		109.7	
Tube Yield	МРа	931	Tensile Yield		kdaN	265		208		
ID	mm	97.2		Tor	sional Yield	ft-lbs	55,500		43,500	
				80% To	sional Yield	ft-lbs	44,400		34,800	
				Internal Pr	essure Yield	МРа	122.0		111.7	
				Co	llapse Yield	МРа	115.8		75.8	
					D/t		13.35		16.19	
			Connect	tion/Tube Tor	sional Ratio		0.638			
Tool Joint										CDN
							NEW		REC MIN OD	
Connection Type		DS40			OD	mm	133.4		123.8	
Material Yield Strength	МРа	896	Tensile Yield Strength		kdaN	374		374		
OD	mm	133.4	Torsional Yield Strength		ft-lbs	35,400		26,200		
ID	mm	68.3	Recommended Makeup Torque		ft-lbs	21,200		15,700		
Pin Shoulder Angle	deg	18								
Pin Tool Joint Length	mm	356								
Box Tool Joint Length										
Box roorsome Eengen	mm	356								
Box roorsome tength	mm	356								
Drill Pipe Assembly	mm	356								CDN
	mm	356	S	Shoulder-Shou	lder Length	m	9.60			CDN
	mm	356	S		lder Length ted Weight	m kg/m	9.60 27.99			CDN
	mm	356			ted Weight					CDN
	mm	356		Adjus	ted Weight	kg/m	27.99			CDN
	mm	356		Adjus Closed End Di Open End Di	ted Weight	kg/m L/m	27.99 10.57			CDN

The information contained in this data sheet and other attached documentation is for reference use only. It is not intended to imply any explicit recommendation regarding processes, procedures, or performance of the end product. It is the responsibility of the end user to verify and determine the appropriate use of the technical information - no expressed or implied warranty by Complete Group is intended.

Calculations are based on uniform wall thickness and outside diameter – no safety factor has been applied. The information provided for inspection classes is based on uniform wear and is not intended to recommend or confirm operational limits of any used product. It is recommended that drilling torque not exceed 80% of the makeup torque, however it is the responsibility of the end user to determine the acceptable use of the end product including appropriate performance ratings and safety factors where applicable. All connection torque calculations have been performed using a thread compound friction factor of 1.0. Complete Group does not endorse any specific thread compound and waives all responsibility in determining appropriate makeup torque values for any specific drilling circumstance. Modifying makeup torque values for any reason shall be done at the end users discretion and risk.

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COMPLETE GROUP

DRILL PIPE PERFORMANCE DATA SHEET

40,000

Tube Yield

Box Yield

50,000

- Prem Tube Yield

60,000

Pipe Size: (114mm) 0 Grade: S135 Range: 2

DS40 Pipe Weight: 4.70kg/m) 0 Upset: IEU **Connection: Makeup Torque Then Tension Chart** 400 350 300 250 **AXIAL TENSION (kdaN)** 200 150 100 50 0

30,000

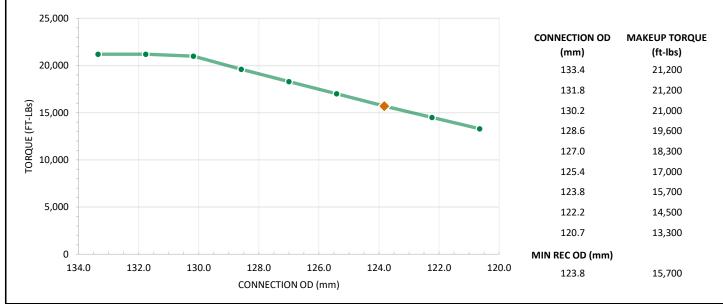
TORQUE (FT-LBS)

Pin Yield — —

Connection Wear Chart

0

— — Makeup Torque



20,000

Shoulder Separation

10,000

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