

TECHNICAL SPECIFICATIONS

Equipment No's: Ref. Enclosed page

Spec. No.: DP-5.875-01

5-7/8" OD Drill Pipe, S-135, XT-57 Conn's.

New

Premium

80% remaining Body Wall

DESCRIPTION

Type IEU, 26.30 #
 Range 2
 Conventional=welded T-J. / Integral=Monoblock Conventional

TUBE DATA

Material grade		S-135			
Internal plastic coating		TK-34P			
Tube body OD x ID	inch	5,875	5,045	5,709	5,045
Wall thickness, nominal	inch	0,415		0,332	
Cross Sectional Area	inch ²	7,119		5,608	
Polar Sectional Modulus	inch ³	18,165		14,255	
Tensile yield pipe	lbf <i>kN</i>	961 000 <i>4 275</i>		757 100 <i>3 368</i>	
Torsional yield pipe	lbf-ft <i>kNm</i>	117 900 <i>159,9</i>		92 500 <i>125,4</i>	
80% Torsional Yield	lbf-ft <i>kNm</i>	94 320 <i>127,9</i>		74 000 <i>100,3</i>	

CONNECTION DATA

Connection type		XT-57			
Material grade		120ksi			
Hardbanding		Arnco-300XT / TCS Titanium			
OD x ID	inch	7,000	4,250	6,762	4,250
B.S.R.	x : 1	NA		NA	
Tensile yield tooljoint	lbf <i>kN</i>	1 200 500 <i>5 340</i>		1 200 500 <i>5 340</i>	
Torsional yield tooljoint	lbf-ft <i>kNm</i>	94 300 <i>127,9</i>		72 100 <i>97,8</i>	
Make up torque (Max.)	lbf-ft <i>kNm</i>	56 600 <i>76,7</i>		50 300 <i>68,2</i>	

OPERATIONAL DATA

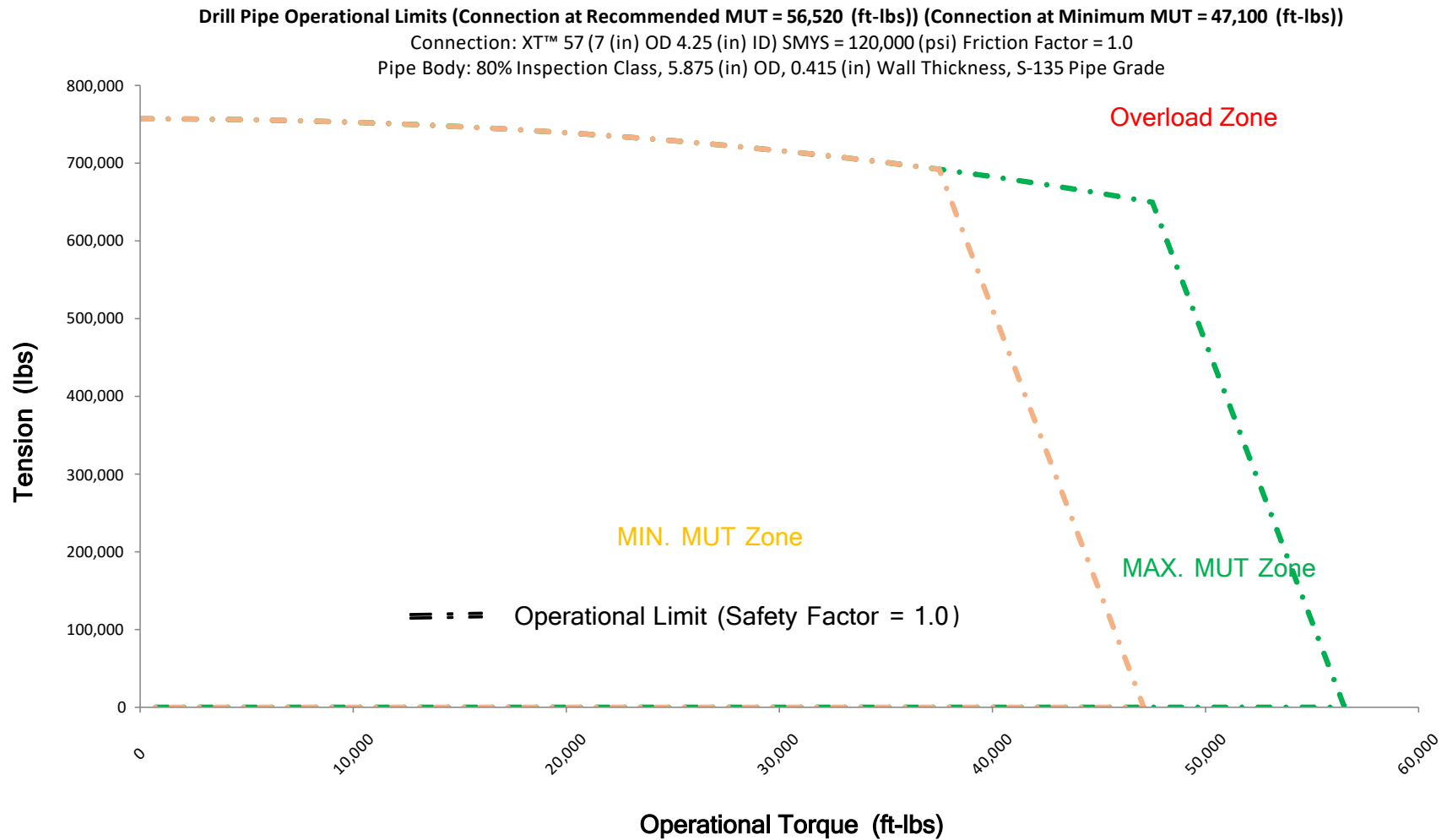
Tool joint/Drill pipe torsional ratio	=> 0.80	0,80		1,02	
Drift diameter	inch			4,125	
Type of elevator shoulder:				18°	
Burst pressure	psi <i>Mpa</i>	16 690 <i>115</i>		15 260 <i>105</i>	
Collapse pressure	psi <i>MPa</i>	14 890 <i>103</i>		9 370 <i>65</i>	
Adjusted weight	lbs/ft <i>kg/mtr</i>			30,6 <i>45,6</i>	
Approx weight each joint	lbs <i>kg</i>			976 <i>443</i>	
Capacity	gal/ft <i>ltr/mtr</i>			0,99 <i>12,30</i>	
Open end displacement	gal/ft <i>ltr/mtr</i>			0,47 <i>5,84</i>	
Closed end displacement	gal/ft <i>ltr/mtr</i>			1,46 <i>18,13</i>	
Built In Length (shoulder to shoulder)	ft <i>mtr</i>			31,90 <i>9,72</i>	

Calculated using nominal OD & ID. Safety & Dope friction factor used: 1.0

Values herein is meant as guidelines only. Odfjell will not be held liable for any damage or injuries !

<i>String number:</i>	<i>Joints:</i>	<i>Individual serial numbers:</i>
OWS-DP-5783	705	NT95076 to NT95780
OWS-DP-5786	788	OWS-2100 TO OWS-2887
OWS-DP-5787	59	OWS-1970 TO OWS-2028
OWS-DP-5788	100	OWS-2900 to OWS-2999
OWS-DP-5789	395	OWS-3001 to OWS-3395
OWS-DP-57810	533	OWS-3400 to OWS-3952

3/24/2021

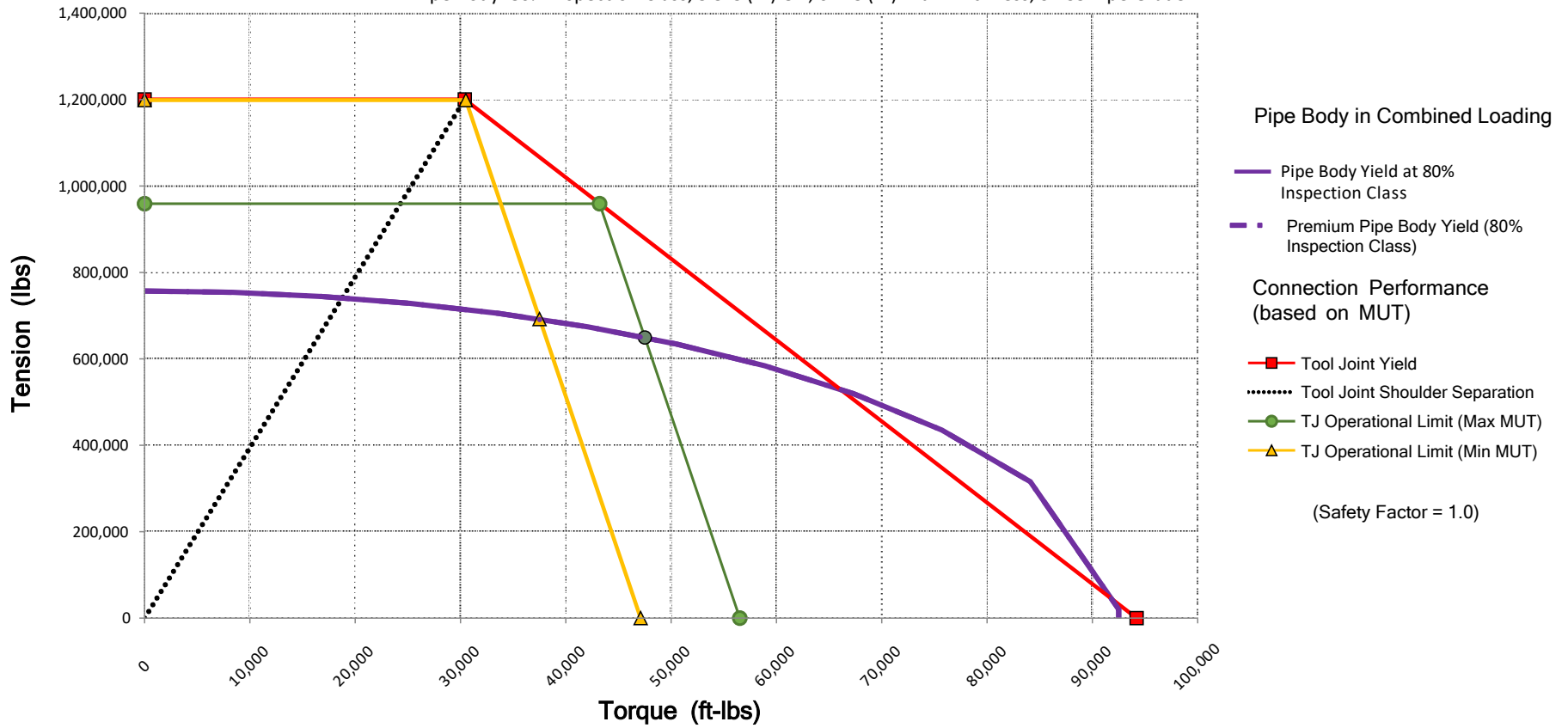


All references to any internal standards or specifications are per the current edition/revision at the point of manufacturing, unless otherwise stated. All references to any external standards or specifications are per the current edition/revision at the original purchase order (P.O.) date, unless otherwise stated.

3/24/2021

Torque-Tension Graph

Connection: XT™ 57 (7 (in) OD 4.25 (in) ID) SMYS = 120,000 (psi) Friction Factor = 1.0
 Pipe Body: 80% Inspection Class, 5.875 (in) OD, 0.415 (in) Wall Thickness, S-135 Pipe Grade



All references to any internal standards or specifications are per the current edition/revision at the point of manufacturing, unless otherwise stated. All references to any external standards or specifications are per the current edition/revision at the original purchase order (P.O.) date, unless otherwise stated.

Drill Pipe Performance Sheet

3/24/2021

Combined Loading for Drill Pipe			
Connection: XT™ 57 7.0" x 4.25" (120 KSI SMYS) Friction Factor: 1.0			
Pipe: 5.875" OD 0.415" Wall Thickness S135 80% Inspection Class			
At Max MUT (56500 ft-lbs)		At Min MUT (47100 ft-lbs)	
Operational Torque(ft-lbs)	Assembly Max Tension(lbs)	Operational Torque(ft-lbs)	Assembly Max Tension(lbs)
0	757100	0	757100
2500	756800	2000	756900
5000	756000	3900	756400
7500	754600	5900	755600
10000	752700	7900	754400
12500	750200	9900	752800
15000	747100	11800	750900
17500	743500	13800	748600
20000	739200	15800	746000
22500	734400	17800	743000
25000	729000	19700	739800
27500	722900	21700	736000
30000	716200	23700	731900
32500	708900	25700	727300
35000	700900	27600	722700
37500	692200	29600	717300
40000	682700	31600	711600
42500	672500	33600	705400
45000	661600	35500	699200
47500	649800	37500	692200

The Technical information contained herein, including the product performance sheet and other attached documents, is for reference only and should not be considered as a recommendation. The user is fully responsible for the accuracy and suitability of use of the technical information. NOV Grant Prideco cannot assume responsibility for the results obtained through the use of this material. No expressed or implied warranty is intended. Drill pipe assembly properties are calculated based on uniform OD and wall thickness. No safety factor is applied. The information provided for various inspection classes and for various wear conditions (remaining body wall) is for information only and does not represent or imply acceptable operating limits. It is the responsibility of the customer and the end user to determine the appropriate performance ratings, acceptable use of the product, maintain safe operating practices, and to apply a prudent safety factor suitable for the application. For API connections that have different pin and box IDs, tool joint ID refers to the pin ID. Per Chapter DS, Section DS-16 of the drilling manual, it is recommended that drilling torque should not exceed 80% of MUT.

Connection Wear Table		
Connection: XT™ 57 7.0" x 4.25" (120 KSI SMYS) Friction Factor: 1.0		
Tool Joint OD (in)	Max MUT(ft-lbs)	Min MUT(ft-lbs)
7.0	56500	47100
6.96	56500	47100
6.921	56200	46800
6.881	54700	45600
6.841	53200	44300
6.801	51700	43100
6.762	50300	41900
6.722	48800	40700
6.682	47400	39500
6.642	45900	38300
6.603	44600	37100
6.563	43200	36000

Elevator Capacity		
Elevator Bore Diameter: 6.125" Elevator SMYS: 110,100 psi Box Taper Angle: 18 deg		
Connection: XT™ 57 5.875" 0.415" wall IEU S135		
Tool Joint OD (in.)	Elevator Hoist Capacity (lbs)	
	No Wear	1/32" Wear Factor
7.1875	1223100	1189900
7.131	1153200	1120000
7.074	1083100	1050000
7.017	1013700	980500
6.96	944800	911600
6.904	877700	844500
6.847	809900	776700
6.79	742700	709500
6.733	676000	642800
6.677	611100	577900
6.62	545500	512300
6.563	480600	447400

All references to any internal standards or specifications are per the current edition/revision at the point of manufacturing, unless otherwise stated. All references to any external standards or specifications are per the current edition/revision at the original purchase order (P.O.) date, unless otherwise stated.