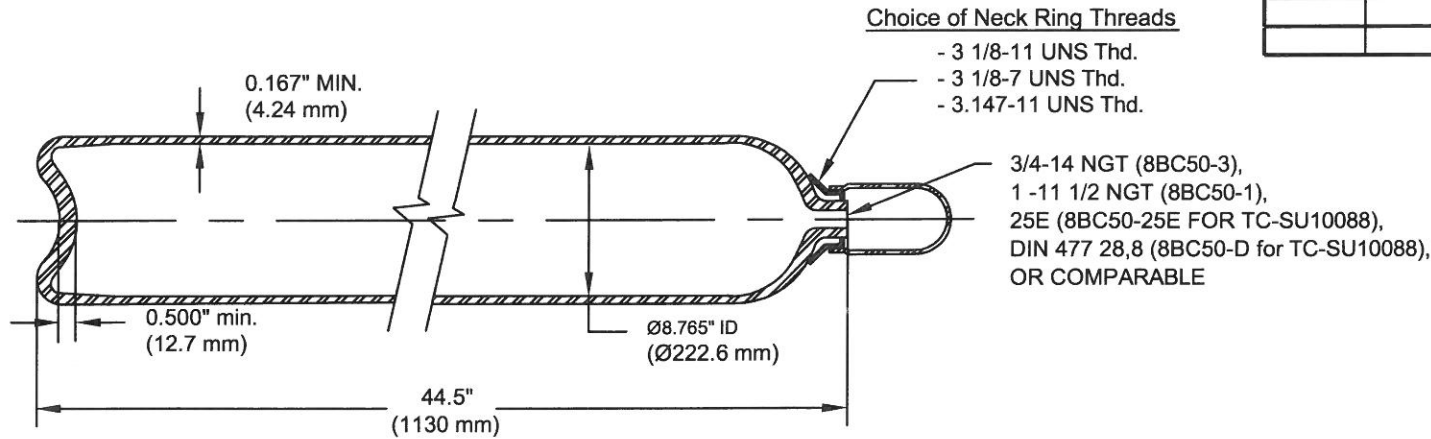



DRAWING FOR REFERENCE ONLY

REV.	ECN - DESCIP.	DATE	DRWN.	CHKD.	APP.
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SPECIFICATION: DOT 3AA 1800 / TC3AAM138 or TC-SU10088-138	
MODEL: 8BC50	
1. Principal Elements:	3. Manufacture:
- Min. water capacity: 81.8 lbs (37.1 kg)	Hot billet pierce followed by hot drawing.
- Min. water volume: 2270 in (37.1 liter)	
- Approx. tareweight: 86 lbs (39 kg)	4. Heat Treatment: Q & T
- DOT Service pressure: 1800psi (124 bar)	5. Norris Standard Mechanical Properties:
- TC Service pressure: 138 bar	- Tensile: ≥ 105,000 psi (724 MPa)
- Test pressure: 3000psi (207 bar)	- Elong.: ≥ 20% (on 2" gauge)
2. Material:	- Flattening: to 6xt without cracks
Chrome-Moly steel, (A.I.S.I. 4130X)	
D.O.T. Wall Stress Calculations: $S = P(1.3D^2 + 0.4d^2) / (D^2 - d^2)$	
S = Maximum wall stress, psi	$S = \frac{3000 [1.3(9.100)^2 + 0.4(8.765)^2]}{(9.100)^2 - (8.765)^2}$
P = Test pressure, psi	
D = Outside diameter, inch	
d = Inside diameter, inch	S = 69,367.6 psi (478.4 MPa)
Required Minimum tensile:	= $\frac{69,367.6}{0.67} = 103,533.7$ psi (714.0 MPa)

 NORRIS CYLINDER COMPANY 4818 WEST LOOP 281 LONGVIEW, TX 75603 USA		SEAMLESS STEEL CYLINDER FOR CO2 AND OTHER GASES MODEL 8BC50		
		SCALE	NOT TO SCALE	DRAWING NO.
DWN. BY	JJM	2/3/12	901A-A-9923	00
CHK'D BY			SHEET NO. 1	OF 1 SHEETS
APP'D BY				