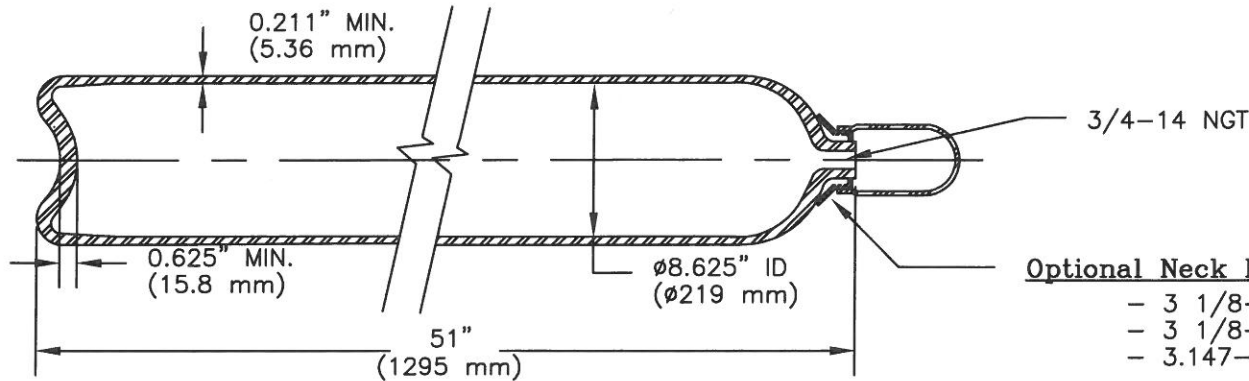


REV.	ECN - DESCRIPT.	DATE	DRWN.	CHKD.	APP.
01	1187 TC	1/10/93	SJ	RS	BA
02	ECN # 1517	6/17/97			
03	2796	10/21/08	JJM	JJM	



DRAWING FOR REFERENCE ONLY

Optional Neck Ring Threads

- 3 1/8-11 UNS Thd.
- 3 1/8-7 UNS Thd.
- 3.147-11 UNS Thd.

SPECIFICATION: DOT-SP 9370-3280/TC-SU4210-226		3. Manufacture:
MODEL: 8BC360		Hot billet pierce followed by hot drawing.
1. Principal Elements: - Min. water capacity: 95.2 lbs (43.2 kg) - Min. water volume: 2640 in ³ (43.2 liter) - Approx. tareweight: 115 lbs (52.2 kg) - DOT Service pressure: 3280 psi - TC Service pressure: 226 bar - Test pressure: 4920 psi (339.3 bar)	2. Material: Chrome-Moly steel, (A.I.S.I. 4137)	4. Heat Treatment: Q & T
		5. Norris Standard Mechanical Properties: - Tensile: 135,000-155,000psi (930-1069 MPa) - Elong.: ≥ 16% (on 2" gauge) - Hardness ≤ R _c 36 - Charpy: 25.0 ft-lbs (avg. 3 specimen) 21.0 ft-lbs (individual minimum) (AT -60°F, 1/2 size, longitudinal specimen)

D.O.T. Wall Stress Calculations: $S = P(1.3D^2 + 0.4d^2)/(D^2 - d^2)$

$S = \text{Maximum wall stress, psi}$
 $P = \text{Test pressure, psi}$
 $D = \text{Outside diameter, inch}$
 $d = \text{Inside diameter, inch}$

$$S = \frac{4920 [1.3(9.047)^2 + 0.4(8.625)^2]}{(9.047)^2 - (8.625)^2}$$

$$s = 89,829 \text{ psi (619.4 MPa)}$$

$$\text{Required Minimum tensile: } = \frac{89,829}{0.67} = 134,074 \text{ psi (924.4 MPa)}$$



NORRIS CYLINDER COMPANY

P.O. BOX 7486 LONGVIEW, TEXAS 75607

ULTRALIGHT, REFILLABLE SEAMLESS STEEL
GAS CYLINDER, MODEL 8BC360

SCALE	NOT TO SCALE	DRAWING NO.	REV.
DWN. BY	M BENHAM	12/10/91	901A-B-9114 03
CHK'D BY	R. SHAFKEY	1/28/92	
APP'D BY	B. ARNOLD	1/28/92	SHEET NO. 1 OF 1 SHEETS