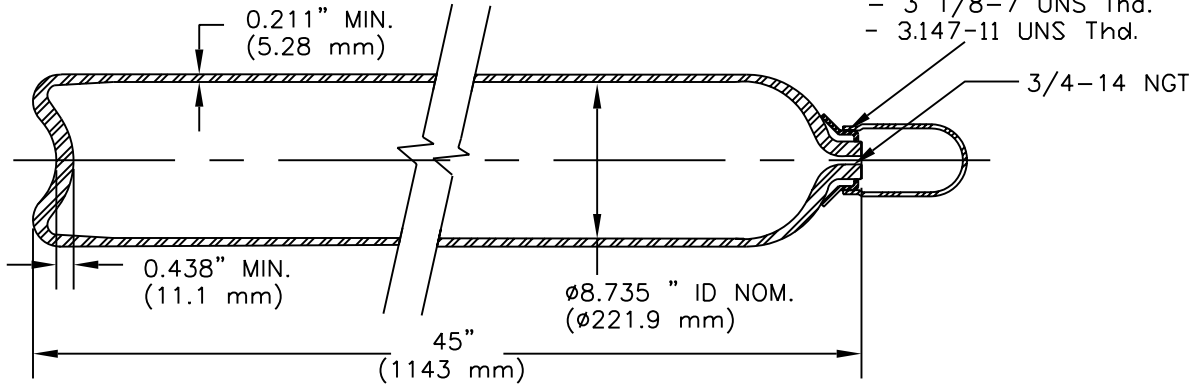


REV.	ECN - DESCRIPT.	DATE	DRWN.	CHKD.	APP.
01	1187 TC	12/4/93	SJ	RS	BA
02	2306	6/18/03			
03	2457	1/21/05	RS		


Choice of Neck Ring Threads

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



DRAWING FOR REFERENCE ONLY

SPECIFICATION: DOT 3AA 2265/TC3AAM173	
MODEL: 8BC220S	
1. Principal Elements: - Min. water capacity: 81.8 lbs (37.1 kg) - Min. water volume: 2270 in ³ (37.1 liter) - Approx. tareweight: 104 lbs (47.2 kg) - DOT Service pressure: 2265psi (156.2 bar) - TC Service pressure: 173 bar - Test pressure: 3775psi (260.3 bar)	3. Manufacture: Hot billet pierce followed by hot drawing.
2. Material: Chrome-Moly steel, (A.I.S.I. 4130X)	4. Heat Treatment: Q & T 5. Norris Standard Mechanical Properties: - Tensile: ≥ 105,000 psi (724 MPa) - Elong.: ≥ 20% (on 2" gauge) - Flattening: to 6xt without cracks
D.O.T. Wall Stress Calculations: $S = P(1.3D^2 + 0.4d^2)/(D^2 - d^2)$	
S = Maximum wall stress, psi P = Test pressure, psi D = Outside diameter, inch d = Inside diameter, inch Required Minimum tensile:	$S = \frac{3775 [1.3 (9.157)^2 + 0.4 (8.735)^2]}{(9.157)^2 - (8.735)^2}$ $S = 69,759 \text{ psi (481 MPa)}$ $= \frac{69,759}{0.67} = 104,118 \text{ psi (717.9 MPa)}$

		NORRIS CYLINDER COMPANY			
		P.O. BOX 7486 LONGVIEW, TEXAS 75607			
REFILLABLE SEAMLESS STEEL GAS CYLINDER, MODEL 8BC220S					
SCALE	NOT TO SCALE	DRAWING NO.		REV.	
DWN. BY	S. JOHNSON	1/28/92	901A-B-9108		03
CHK'D BY	R. SHAFKEY	1/28/92			
APP'D BY	B. ARNOLD	1/28/92	SHEET NO. 1	OF 1	SHEETS