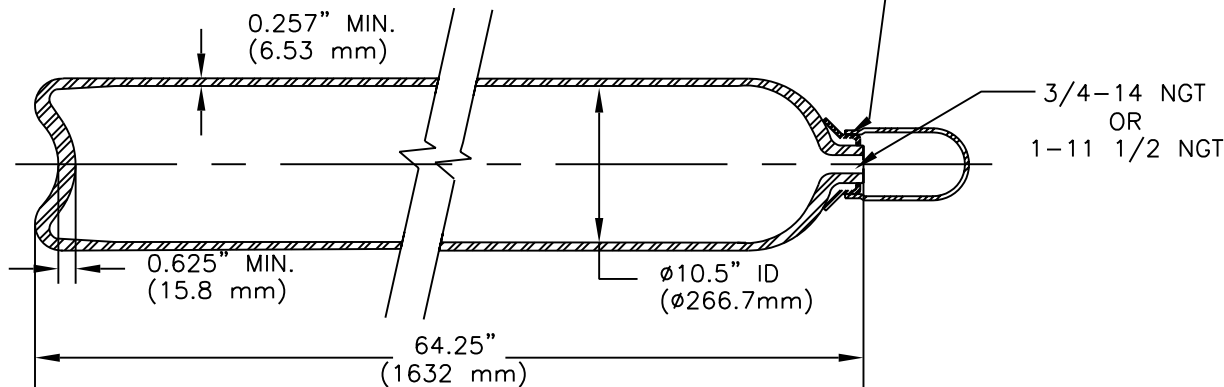


REV.	ECN - DESCRIP.	DATE	DRWN.	CHKD.	APP.
01	1274	1/5/96	BN	RS	BA
02	1305	4/12/96	DL	RS	BA
03	1824	9/13/99			

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 2300 / TC 3AAM 176

MODEL: 11BC439

1. Principal Elements: - Min. water capacity: 180.3 lbs (81.8 kg) - Min. water volume: 5000 in ³ (81.8 liter) - Approx. tareweight: 210 lbs (95.3 kg) - DOT Service pressure: 2300psi (158.6 bar) - TC Service pressure: 176 bar - Test pressure: 3835psi (264.5 bar)	3. Manufacture: Hot billet pierce followed by hot drawing.
	4. Heat Treatment: Q & T
2. Material: Chrome-Moly steel, (A.I.S.I. 4130X)	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: $S = P(1.3D^2 + 0.4d^2)/(D^2 - d^2)$

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

$$S = \frac{3835 [1.3 (11.014)^2 + 0.4 (10.5)^2]}{(11.014)^2 - (10.5)^2}$$

$$S = 69,985 \text{ psi (482.5 MPa)}$$

Required Minimum tensile: $= \frac{69,985}{0.67} = 104,455 \text{ psi (720.2 MPa)}$



NORRIS CYLINDER COMPANY

P.O. BOX 7486 LONGVIEW, TEXAS 75607

SEAMLESS STEEL INERGEN CYLINDER, MODEL 11BC439

SCALE	NOT TO SCALE	DRAWING NO.	REV.
DWN. BY	MBENHAM	1/5/96	901A-B-9264 03
CHK'D BY	RSHAFKEY	1/5/96	
APP'D BY	BARNOLD	1/5/96	
		SHEET NO. 1	OF 1 SHEETS