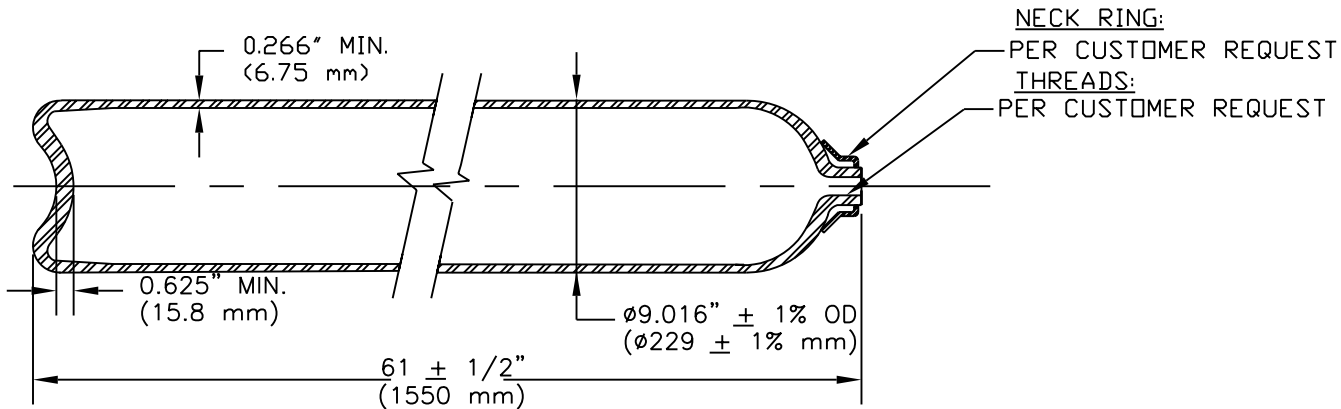


REV.	ECN - DESCIP.	DATE	DRWN.	CHKD.	APP.
01	1187 TC	12/4/93	S. JOHNSON	R.S.	B.A.
02	ECN # 1544	7/23/97	T.CRAVEN	R.S.	B.A.
03	ECN # 1545	7/23/97			



**DRAWING FOR  
REFERENCE ONLY**

SPECIFICATION: DOT 3AA 2900/TC3AAM222

MODEL: 8BC370

**1. Principal Elements:**

- Min. water capacity: 110.2 lbs (50.0 kg)
- Min. water volume: 3058 in<sup>3</sup>(50.0 liter)
- Approx. tareweight: 161 lbs (73 kg)  
(w/o valve & cap)
- DOT Service pressure: 2900 psi (200 bar)
- TC Service pressure: 222 bar
- Test pressure: 4835 psi (333.5 bar)

**2. Material:**

Chrome-Moly steel, (A.I.S.I. 4130X)

**3. Manufacture:**

Hot billet pierce followed by  
hot drawing.

**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       $S = \frac{4835 [ 1.3 (9.016)^2 + 0.4 (8.484)^2 ]}{(9.016)^2 - (8.484)^2}$

P = Test pressure, psi

D = Outside diameter, inch

d = Inside diameter, inch

$S = 69,833 \text{ psi ( 481.5 MPa)}$

Required Minimum tensile:  $= \frac{69,833}{0.67} = 104,229 \text{ psi (718.7 MPa)}$



**NORRIS CYLINDER COMPANY**

P.O. BOX 7486 LONGVIEW, TEXAS 75607

REFILLABLE SEAMLESS STEEL  
GAS CYLINDER, MODEL 8BC370

SCALE	NOT TO SCALE	DRAWING NO.	REV.
DWN. BY	S. JOHNSON	1/28/92	901A-B-9129 03
CHK'D BY	R. SHAFKEY	1/28/92	
APP'D BY	B. ARNOLD	1/28/92	
		SHEET NO. 1	OF 1 SHEETS