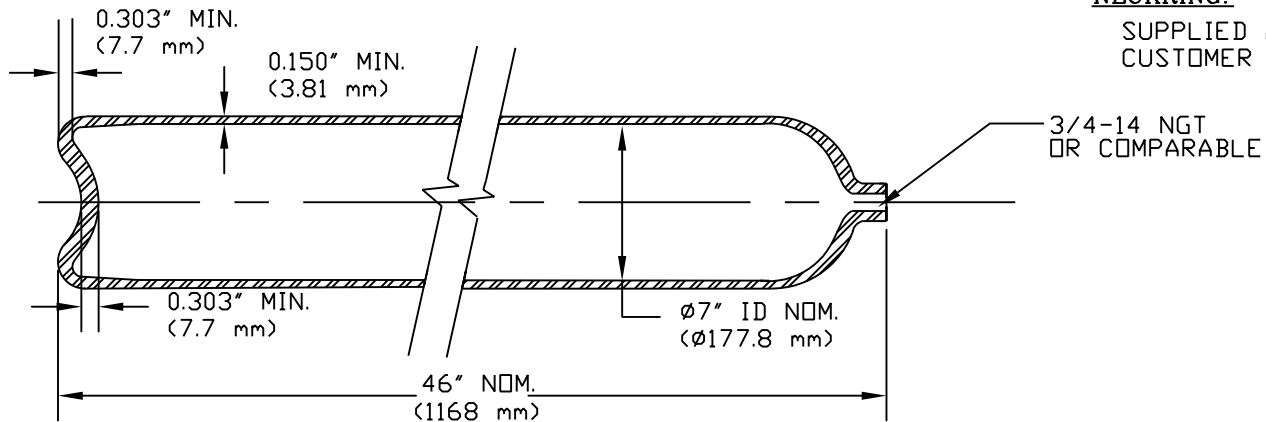


REV.	ECN - DESCRIPT.	DATE	DRWN.	CHKD.	APP.
01	ECN # 1456				



NECKRING:
 SUPPLIED AT
 CUSTOMER REQUEST

**DRAWING FOR
 REFERENCE ONLY**

SPECIFICATION: DOT 3AA 2015 / TC 3AAM154

MODEL: 7BC150

1. Principal Elements: - Min. water capacity: 58.7 lb (26.6 kg) - Min. water volume: 1630 in ³ (26.6 liter) - Approx. Cyld. weight: 65 lbs (29.5 kg) (w/o fittings) - DOT Service pressure: 2015 psi (138.9 bar) - TC Service pressure: 154 bar - Test pressure: 3360 psi (231.7 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: $S = P(1.3D^2 + 0.4d^2)/(D^2 - d^2)$

$$S = \text{Maximum wall stress, psi} \quad S = \frac{3360 [1.3 (7.30)^2 + 0.4 (7.0)^2]}{(7.30)^2 - (7.0)^2}$$

$$s = 69,610 \text{ psi (479.9 MPa)}$$

$$\text{Required Minimum tensile:} = \frac{69,610}{0.67} = 103,896 \text{ psi (716.4 MPa)}$$

P = Test pressure, psi
 D = Outside diameter, inch
 d = Inside diameter, inch



NORRIS CYLINDER COMPANY

P.O. BOX 7486 LONGVIEW, TEXAS 75607

REFILLABLE SEAMLESS STEEL
 GAS CYLINDER, MODEL 7BC150/TC

SCALE	NOT TO SCALE	DRAWING NO.	REV.
DWN. BY	S. JOHNSON	10/30/91	901A-B-9210 01
CHK'D BY	R.S.	10/30/91	
APP'D BY	B.A.	10/30/91	SHEET NO. 1 OF 1 SHEETS