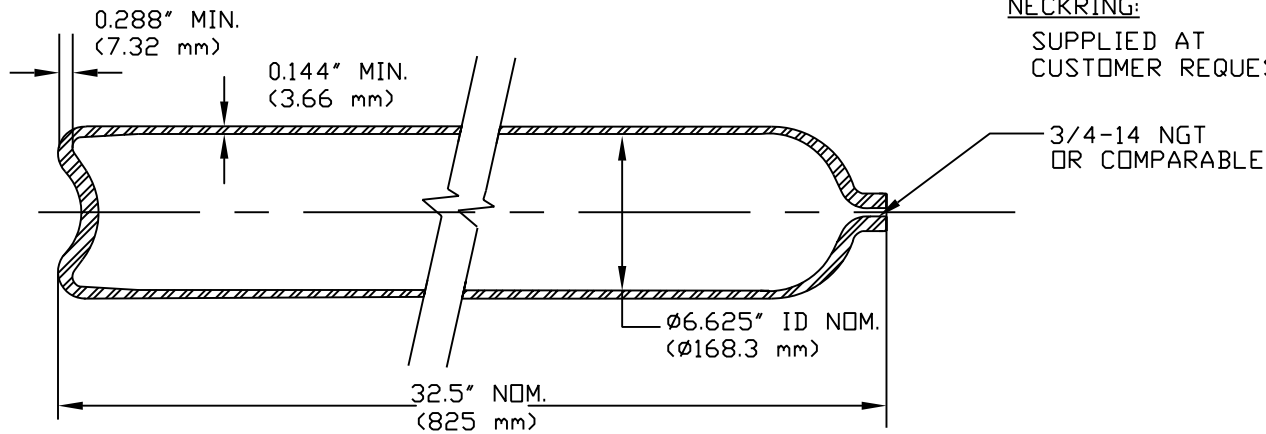


REV.	ECN - DESCRIP.	DATE	DRWN.	CHKD.	APP.
01	1056 DUAL DOT TC	1/20/93	MB	RS	BA
02	1232	1/20/93	MB	RS	BA
03	ECN # 1457				



DRAWING FOR REFERENCE ONLY

SPECIFICATION: DOT 3AA 2015 / TC 3AAM154

MODEL: 6BC80

1. Principal Elements: - Min. water capacity: 34.6 lb (15.7 kg) - Min. water volume: 960 in ³ (15.7 liter) - Approx. Cyld. weight: 46 lb (20.8 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 Mechanicals: - 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	$S = \frac{3360 [1.3 (6.913)^2 + 0.4 (6.625)^2]}{(6.913)^2 - (6.625)^2}$ $S = 68,669 \text{ psi (473.5 MPa)}$
Required Minimum Tensile:	$= \frac{68,669}{0.67} = 102,491 \text{ psi (706.7 MPa)}$



NORRIS CYLINDER COMPANY

P.O. BOX 7486 LONGVIEW, TEXAS 75607

REFILLABLE SEAMLESS STEEL
GAS CYLINDER, MODEL 6BC80 / TC

SCALE	NOT TO SCALE	DRAWING NO.	REV.
DWN. BY	M.BENHAM	1/21/93	901A-B-9100 03
CHK'D BY	R.S.	1/21/93	
APP'D BY	B.A.	1/21/93	
		SHEET NO. 1	OF 1 SHEETS