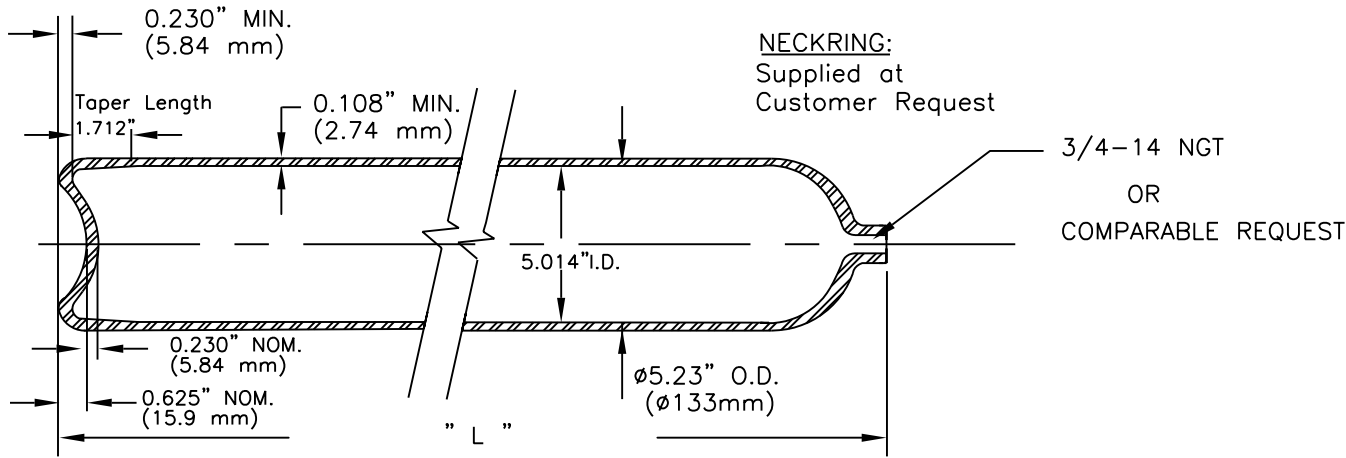


REV.	ECN - DESCRIPT.	DATE	DRWN.	CHKD.	APP.



# DRAWING FOR REFERENCE ONLY

SPECIFICATION: DOT 3AA 2015/ TC 3AAM 154

**1. Service Conditions:**

- DOT Service pressure: 2015Psi (138.9 bar)
- TC Service pressure: 154 bar
- Test pressure: 3360psi (231.7 bar)

**3. Manufacture:** Plate drawn

**4. Heat Treatment:** Q & T

**2. Material:**

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

**5. Mechanical Properties:**

Tensile, Elongation and Flattening tests in accordance with DOT 3AA specification requirements.

**D.O.T. Wall Stress Calculations:**

$$S = P(1.3D^2 + 0.4d^2)/(D^2 - d^2)$$

$$S = \frac{3360 [1.3 (5.230)^2 + 0.4 (5.014)^2]}{(5.230)^2 - (5.014)^2}$$

S = Maximum wall stress, psi

P = Test pressure, psi

D = Outside diameter, inch

d = Inside diameter, inch

$$S = 69,267 \text{ psi (477.6 MPa)}$$

$$\text{DOT required Minimum tensile: } \frac{69,267}{0.67} = 103,384 \text{ psi (712.8 MPa)}$$

MODEL	MIN. VOLUME		LENGTH 'L'		APPRX. WGT	
	in <sup>3</sup>	liter	in	mm	lbs	kg
6BC20	214	3.5	14.0	356	9.6	4.4



**NORRIS CYLINDER COMPANY**

P.O. BOX 7486 LONGVIEW, TEXAS 75607

## SMALL HIGH PRESSURE SEAMLESS STEEL CYLINDER, MODEL 6BC20

SCALE	NOT TO SCALE		DRAWING NO.		REV.
DWN. BY	RS	12/1/04	901A-A-9655		00
CHK'D BY			SHEET NO. 1		OF 1 SHEETS
APP'D BY					