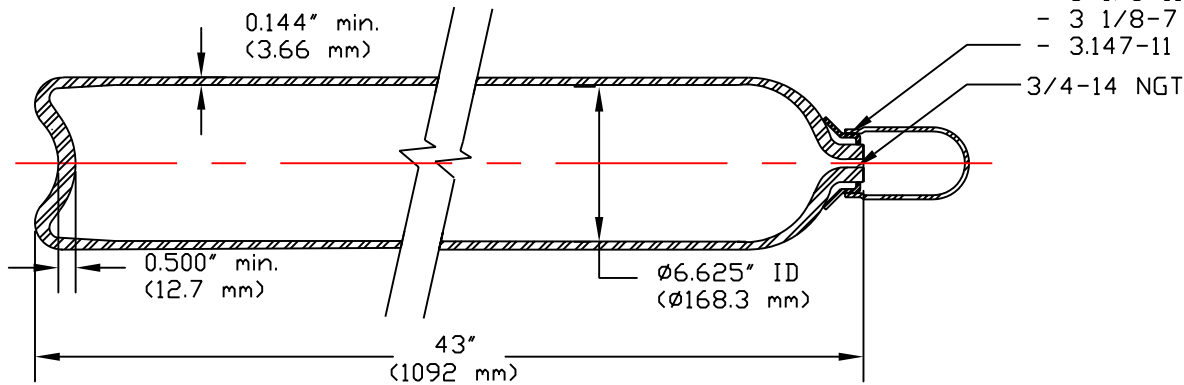


REV.	ECN - DESCRIPT.	DATE	DRWN.	CHKD.	APP.
01	1141-DDT/TC	6/25/93	MB	RS	BA
02	2303	5/30/03			

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: DDT 3AA 2015 /TC3AAM154

MODEL: 6BC110 /TC

1. Principal Elements:

- Min. water capacity: 47.6 lb (21.6 kg)
- Min. water volume: 1320 in³ (21.6 liter)
- Approx. tareweight: 61 lb (27.6 kg)
- DDT Service pressure: 2015psi (138.9 bar)
- TC Service pressure: 154 bar
- Test pressure: 3360psi (231.7 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: \geq 105,000 psi (725 MPa)
- Elong: \geq 20% (on 2" gauge)
- Flattening: to 6xt without cracks

D.O.T. Wall Stress Calculations: $S = P(1.3D^2 + 0.4d^2)/(D^2 - d^2)$

$S = \text{Maximum wall stress, psi}$ $S = \frac{3360[1.3(6.913)^2 + 0.4(6.625)^2]}{(6.913)^2 - (6.625)^2}$

$P = \text{Test pressure, psi}$

$D = \text{Outside diameter, inch}$

$d = \text{Inside diameter, inch}$

$s = 68,669 \text{ psi (473.5 MPa)}$

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 6BC110/TC

SCALE	NOT TO SCALE		DRAWING NO.	REV.
DWN. BY	S. JOHNSON	10/30/91	901A-B-9101	02
CHK'D BY	R SHAFKEY	10/30/91		
APP'D BY	B ARNOLD	10/30/91	SHEET NO. 1	OF 1 SHEETS