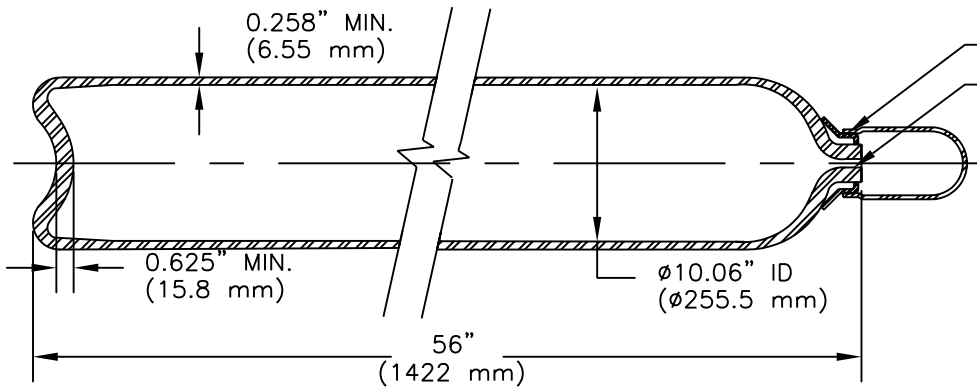


REV.	ECN - DESCRIPT.	DATE	DRWN.	CHKD.	APP.
01	1026-STAR STAMPING	08/06/92	M.BENHAM	REFAAT	BALDUR
02	1072 REDESIGN ID	1/26/93	M.BENHAM	REFAAT	BALDUR
03	1247 Change OD	3/27/95			

**Choice of Neck Ring Threads**


- 3 1/8-11 UNS Thd.
  - 3 1/8-7 UNS Thd.
  - 3.147-11 UNS Thd.
- 3/4-14 NGT



SEE DUAL DOT/TC MARKING FOR 10BC400/TC

**DRAWING FOR REFERENCE ONLY**

<b>SPECIFICATION:</b> DOT 3AA 2400 / TC3AAM183	
<b>MODEL:</b> 10BC400	
<b>1. Principal Elements:</b> - Min. water capacity: 142.8 lbs (64.7 kg) - Min. water volume: 3960 in <sup>3</sup> (64.7 liter) - Approx. tareweight: 186 lbs (84.4 kg) -DOT Service pressure: 2400psi (165.5 bar) -TC Service pressure: 183 bar - Test pressure: 4000psi (275.8 bar)	<b>3. Manufacture:</b> Hot billet pierce followed by hot drawing.
<b>2. Material:</b> Chrome-Moly steel, (A.I.S.I. 4130X)	<b>4. Heat Treatment:</b> Q & T <b>5. Norris Standard Mechanical Properties:</b> - Tensile: ≥ 105,000 psi (724 MPa) - Elong.: ≥ 20% (on 2" gauge) - Flattening: to 6xt without cracks
<b>D.O.T. Wall Stress Calculations:</b> $S = P(1.3D^2 + 0.4d^2)/(D^2 - d^2)$	
S = Maximum wall stress, psi P = Test pressure, psi D = Outside diameter, inch d = Inside diameter, inch	$S = \frac{4000 [1.3 (10.576)^2 + 0.4 (10.06)^2]}{(10.576)^2 - (10.06)^2}$ $S = 69,830 \text{ psi (481.5 MPa)}$
Required Minimum tensile:	$= \frac{69,830}{0.67} = 104,224 \text{ psi (718.6 MPa)}$

 <b>NORRIS CYLINDER COMPANY</b> P.O. BOX 7486 LONGVIEW, TEXAS 75607			
<b>REFILLABLE SEAMLESS STEEL GAS CYLINDER, MODEL 10BC400/TC</b>			
SCALE	NOT TO SCALE	DRAWING NO.	REV.
DWN. BY	SALLY JOHNSON	10/31/91	<b>901A-B-9107</b> <b>03</b>
CHK'D BY	REFAAT SHAFKEY	11/15/91	
APP'D BY	BALDUR ARNOLD	11/25/91	SHEET NO. 1 OF 1 SHEETS