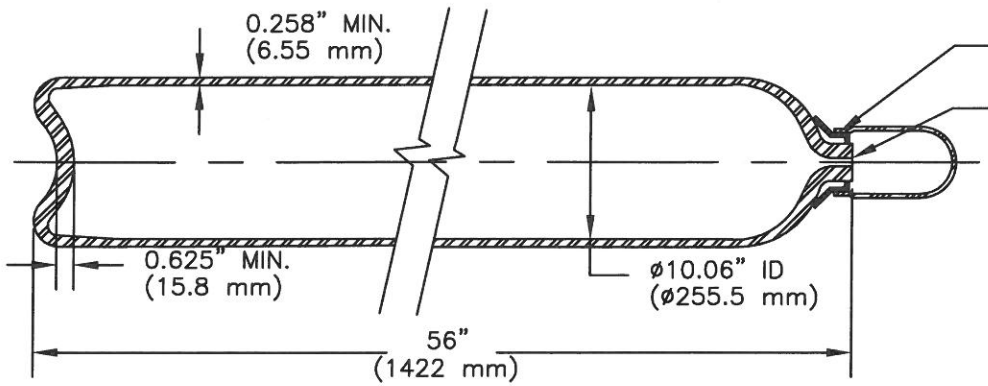
REV.	ECN – DESCRIP.	DATE	DRWN.	CHKD.	APP.
01	1026–STAR STAMPING	08/06/92	M.BENHAM	REFAAT	BALDUR
02	1072 REDESIGN ID	1/26/93	M.BENHAM	REFAAT	BALDUR
03	1247 Change OD	3/27/95			
04	2896	9/02/09	JJM		



Optional Neck Ring Threads

- 3 1/8–11 UNS Thd.
- 3 1/8–7 UNS Thd.
- 3.147–11 UNS Thd.

3/4–14 NGT (10BC400–3),
1 –11 1/2 NGT (10BC400–1),
25E (10BC400–25E FOR TC–SU10088),
DIN 477 28,8 (10BC400–D for TC–SU10088),
OR COMPARABLE

DRAWING FOR REFERENCE ONLY

SPECIFICATION: DOT 3AA 2400 / TC3AAM183 or TC–SU10088–183
MODEL: 10BC400

1. **Principal Elements:**
   - Min. water capacity: 142.8 lbs (64.7 kg)
   - Min. water volume: 3960 in^3 (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)
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: ≥ 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

$$S = \frac{4000\ [1.3\ (10.576)^2 + 0.4\ (10.06)^2]}{(10.576)^2 - (10.06)^2}$$

$S = 69{,}830$ psi (481.5 MPa)

Required Minimum tensile: $= \frac{69{,}830}{0.67} = 104{,}224$ psi (718.6 MPa)

NORRIS CYLINDER COMPANY
4818 WEST LOOP 281 LONGVIEW, TEXAS 75603 USA

REFILLABLE SEAMLESS STEEL GAS CYLINDER, MODEL 10BC400/TC

SCALE	NOT TO SCALE		DRAWING NO.	REV.
DWN. BY	SALLY JOHNSON	10/31/91	901A–B–9107	04
CHK'D BY	REFAAT SHAFKEY	11/15/91		
APP'D BY	BALDUR ARNOLD	11/25/91	SHEET NO. 1 OF 1 SHEETS	