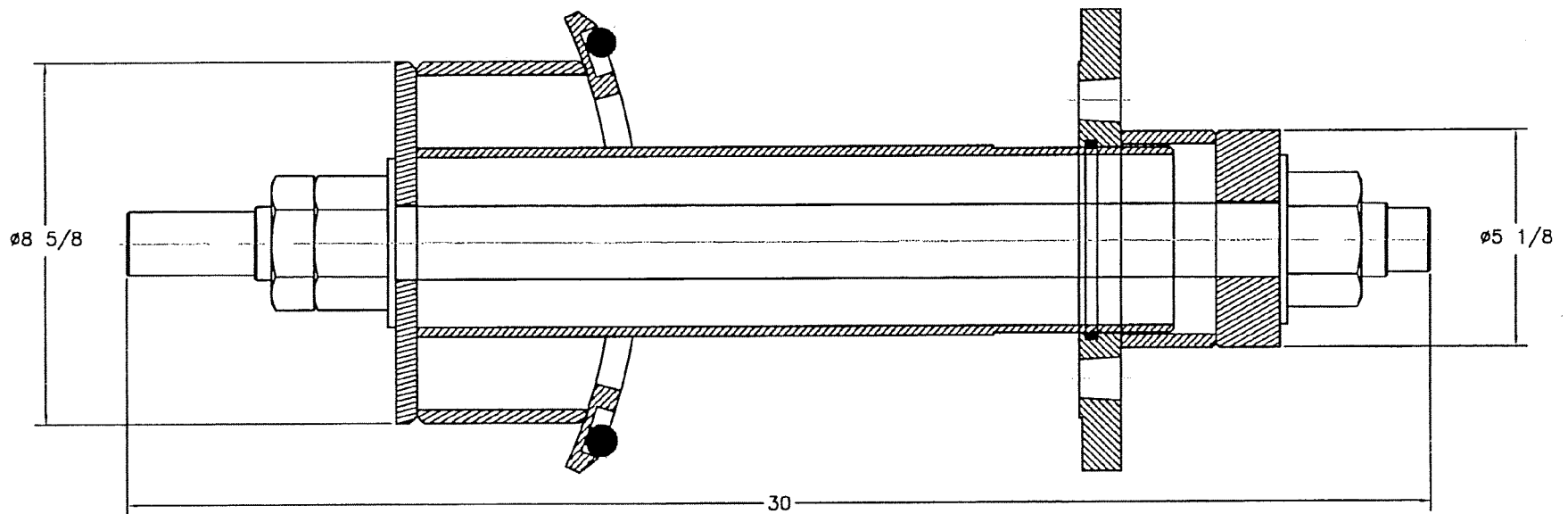


DWG NO: PRAS6616-TNT06-PAGE2

PATENT PENDING



Design Specs for TNT		
Nozzle Size	6	inches
Tank OD	30	inches
Tank ID	28.25	inches
Flange Class	150	lbs.
Max. Test Pressure	450	psi
Total Nozzle Length (incl. Flange thk.)	12.842	inches
Nozzle Length inside of Tank	3	inches
Bolting Torque req'd for shaft	344	ft-lbs
Weight of Inner Weld Subassembly	53	lbs.
Weight of Modified Flange	36	lbs.
Weight of Outer Weld Subassembly	10	lbs.

DWG NO: PRAS6616-TNT06-PAGE1

UNLESS SPECIFIED		<div> <div>ES T GROUP INC</div> <div> Expansion Seal Technologies 334 Godshall Drive Harleysville, PA 19438-2008 U.S.A. </div> </div>	
TOLERANCES	.XX ± .015" .XXX ± .005" FRAC. ± 1/32" ANG. ± 1/2°	DRAWN BY JHM	DATE 3/27/02
BREAK SHARP EDGES .010 MAX. DO NOT SCALE DRAWING	125/		
SURFACE FINISH	✓	APPROVED	DATE
MFG APPROVAL		TITLE TANK NOZZLE TESTER FULL ASSEMBLY	
MATERIAL	N/A	PART NUMBER	PRAS6616-TNT06-PAGE1
		SHEET	SIZE
		1 OF 2	B
		SCALE	REV
		NONE	NONE



World Headquarters:
Expansion Seal Technologies
 2701 Township Line Road
 Hatfield, PA 19440-1770 USA
 Tel: 1-215-721-1100 Fax: 1-215-721-1101
 Toll-Free: 1-800-355-7044

Expansion Seal Technologies - Europe
 Utrechtaven 11e
 3433 PN Nieuwegein, The Netherlands
 Tel: +31-30-600-6180
 Fax: +31-30-600-6188

Expansion Seal Technologies Asia Pte Ltd.
 35 Tannery Rd, #11-10 Tannery Block
 Ruby Industrial Complex
 Singapore 347740
 Tel: +65-6745-8560 Fax: +65-6742-8700

SPECIALISTS IN TUBE TESTING, SLEEVING AND PLUGGING TECHNOLOGY

AN ISO-9001 REGISTERED COMPANY

DATE: _____ DATE NEEDED: _____
 QTY REQ'D: _____
 CUSTOMER: _____
 CONTACT NAME: _____

YOUR INITIALS: _____
 QUOTE #: _____
 PO #: _____
 TEL. #: _____

TABLE 1: TANK NOZZLE TESTER DESIGN SPECS		
	Max. Test Pressure (psi)	
ID	Tank ID (inches) or List OD and Wall Thickness Below	
OD	Tank OD (inches)	
WALL	Tank Wall Thickness (inches)	
D	Total Nozzle Length (inches)	
E	Max. Length of Nozzle inside of Tank (inches)	
	Max. DIA. of Nozzle Hole Cutout on Inside side of Tank (inches)	
	Pipe Nozzle Size (ex. 6" SCH 40)	
G	Pipe Nozzle OD (inches)	
H	Pipe Nozzle ID (inches)	
	Flange Size (inches)	
	Flange Class (lbs)	
	Existence of Residual Chemicals? (Yes & Describe / No)	
	Is Nozzle centerline on same centerline as the Tank? (Yes/No)	
	If "NO", Continue to Table 2	

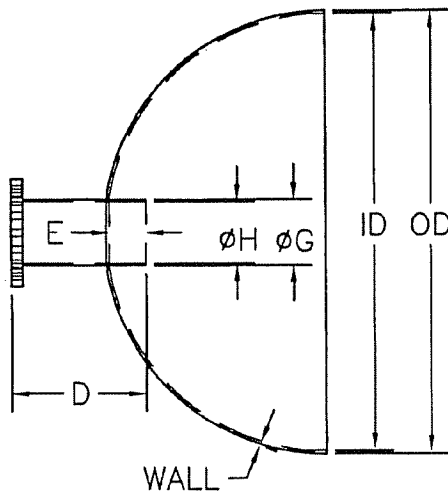


FIGURE 1: SIDE VIEW OF VESSEL AND NOZZLE

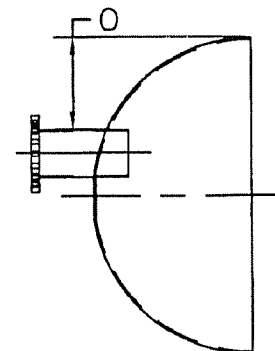


FIGURE 2: NOZZLE CONNECTION NOT ON VESSEL CENTERLINE

TANK NOZZLE TESTER IS
 PATENT PENDING.

TABLE 2: NOZZLE CONNECTION NOT ON VESSEL CENTERLINE (SPHERICAL HEAD)		
O	Shortest Length from Tangent line of sphere to outer edge of pipe nozzle (inches). To obtain this length: 1) Place a level or straight edge along OD of spherical head so that it is parallel to the pipe nozzle. 2) Move level around OD of sphere until it is at the closest point to the OD of the pipe nozzle. 3) Measure the perpendicular distance from pipe OD to level	



World Headquarters:
Expansion Seal Technologies
 2701 Township Line Road
 Hatfield, PA 19440-1770 USA
 Tel: 1-215-721-1100 Fax: 1-215-721-1101
 Toll-Free: 1-800-355-7044

Expansion Seal Technologies - Europe
 Utrechtaven 11e
 3433 PN Nieuwegein, The Netherlands
 Tel: +31-30-600-6180
 Fax: +31-30-600-6188

Expansion Seal Technologies Asia Pte Ltd.
 35 Tannery Rd, #11-10 Tannery Block
 Ruby Industrial Complex
 Singapore 347740
 Tel: +65-6745-8560 Fax: +65-6742-8700

SPECIALISTS IN TUBE TESTING, SLEEVING AND PLUGGING TECHNOLOGY

AN ISO-9001 REGISTERED COMPANY

DATE: _____ DATE NEEDED: _____ YOUR INITIALS: _____
 QTY REQ'D: _____ QUOTE #: _____
 CUSTOMER: _____ PO #: _____
 CONTACT NAME: _____ TEL #: _____

TABLE 1: TANK NOZZLE TESTER DESIGN SPECS		
	Max. Test Pressure (psi)	
ID	Tank ID (inches) or List OD and Wall Thickness Below	
OD	Tank OD (inches)	
WALL	Tank Wall Thickness (inches)	
D	Total Nozzle Length (inches)	
E	Max. Length of Nozzle inside of Tank (inches)	
	Max. DIA. of Nozzle Hole Cutout on Inside side of Tank (inches)	
	Pipe Nozzle Size (ex. 6" SCH 40)	
G	Pipe Nozzle OD (inches)	
H	Pipe Nozzle ID (inches)	
	Flange Size (inches)	
	Flange Class (lbs)	
	Existence of Residual Chemicals? (Yes & Describe / No)	
	Is Nozzle centerline on same centerline as the Tank? (Yes/No)	
	If "NO", Continue to Table 2	

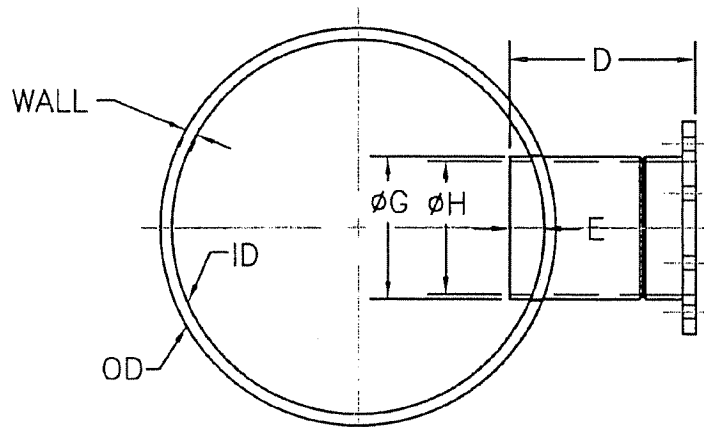


FIGURE 1- TOP VIEW OF TANK AND NOZZLE

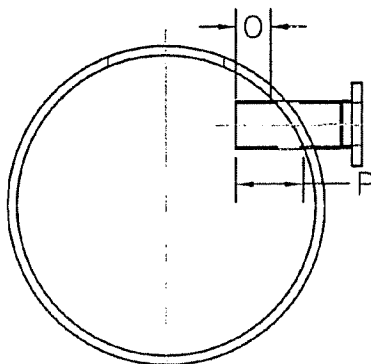


FIGURE 2- NOZZLE CONNECTION NOT ON TANK CENTERLINE

TABLE 2: NOZZLE CONNECTION NOT ON TANK CENTERLINE (CYLINDRICAL TANK)		
O	Short Side Length of Nozzle inside of Tank (inches)	
P	Long Side Length of Nozzle inside of Tank (inches)	

PATENT PENDING