DATE 04/25/2007 Columbia County This Permit Expires One Y	Building Permit PERMIT  Gear From the Date of Issue 000025745
APPLICANT KEVIN MAY	PHONE 904 237-8450
ADDRESS 650 TALLEYRAND AVE	JACKSONVILLE FL 32202
OWNER STAFFORD SCAFF	PHONE 752-7344
ADDRESS 3519 N HIGHWAY 441	LAKE CITY FL 32024
CONTRACTOR KC PETROLEUM	PHONE 904 237-8450
LOCATION OF PROPERTY 441 N & INTERSTATE-10	
TYPE DEVELOPMENT TANKS/PIPING ES	STIMATED COST OF CONSTRUCTION 127000.00
HEATED FLOOR AREA TOTAL AR	EA HEIGHT STORIES
FOUNDATION WALLS	ROOF PITCH FLOOR
LAND USE & ZONING CHI	MAX. HEIGHT
Minimum Set Back Requirments: STREET-FRONT 20.00	REAR 15.00 SIDE 5.00
NO. EX.D.U. 0 FLOOD ZONE NA	DEVELOPMENT PERMIT NO.
PARCEL ID 08-3S-17-04909-000 SUBDIVISION	ON
LOT BLOCK PHASE UNIT	0 TOTAL ACRES
Culvert Permit No. Culvert Waiver Contractor's License Nu  EXISTING P07-152 BK	mber Applicant/Owner/Contractor  JH N
Driveway Connection Septic Tank Number LU & Zon:  COMMENTS: NOC ON FILE	ing checked by Approved for Issuance New Resident
COMMENTS: NOC ON FILE	Check # or Cash 5526
COMMENTS: NOC ON FILE	ing checked by Approved for Issuance New Resident
COMMENTS: NOC ON FILE  FOR BUILDING & ZONII	Check # or Cash  Check # or Cash  (footer/Slab)
FOR BUILDING & ZONI  Temporary Power Foundation date/app. by  Under slab rough-in plumbing Slab	Check # or Cash  Check # or Cash  Check # or Cash  Monolithic  date/app. by  Sheathing/Nailing
FOR BUILDING & ZONII  Temporary Power Foundation  date/app. by  Under slab rough-in plumbing Slab  date/app. by	Check # or Cash  Check # or Cash  Monolithic  date/app. by  Approved for Issuance  New Resident  (footer/Slab)
FOR BUILDING & ZONI  Temporary Power Foundation  date/app. by  Under slab rough-in plumbing Slab  date/app. by  Framing Rough-in plumbing a  date/app. by	Check # or Cash  Check # or Cash  Check # or Cash  Check # or Cash  Monolithic  date/app. by  Sheathing/Nailing  date/app. by  date/app. by
FOR BUILDING & ZONII  Temporary Power Foundation  date/app. by  Under slab rough-in plumbing Slab  date/app. by  Framing Rough-in plumbing a  date/app. by  Electrical rough-in Heat & Air Duct	Check # or Cash  Check # or Cash  Check # or Cash  Check # or Cash  Solution  Monolithic  date/app. by  Sheathing/Nailing  date/app. by  date/app. by  shove slab and below wood floor
FOR BUILDING & ZONII  Temporary Power Foundation  date/app. by  Under slab rough-in plumbing Slab  date/app. by  Framing Rough-in plumbing a  date/app. by  Electrical rough-in Heat & Air Duct  date/app. by	Check # or Cash  Check # or Cash  Check # or Cash  Check # or Cash  S526  MG DEPARTMENT ONLY  (footer/Slab)  Monolithic  date/app. by  Sheathing/Nailing  date/app. by  date/app. by  date/app. by  Peri. beam (Lintel)  date/app. by
FOR BUILDING & ZONI  Temporary Power Foundation  date/app. by  Under slab rough-in plumbing Slab  date/app. by  Framing Rough-in plumbing a  date/app. by  Electrical rough-in Air Duct  date/app. by  Permanent power C.O. Final	Check # or Cash  Check # or Cash  Check # or Cash  Check # or Cash  S526  MG DEPARTMENT ONLY  (footer/Slab)  Monolithic  date/app. by  Sheathing/Nailing  date/app. by  date/app. by  date/app. by  Peri. beam (Lintel)  date/app. by  Culvert
FOR BUILDING & ZONI  Temporary Power Foundation  date/app. by  Under slab rough-in plumbing Slab  date/app. by  Framing Rough-in plumbing a  date/app. by  Electrical rough-in Rough-in plumbing a  date/app. by  Permanent power C.O. Final  date/app. by  M/H tie downs, blocking, electricity and plumbing	Check # or Cash  Check # or Cash  Check # or Cash  Check # or Cash  S526  MG DEPARTMENT ONLY  (footer/Slab)  Monolithic  date/app. by  Sheathing/Nailing  date/app. by  date/app. by  chove slab and below wood floor  date/app. by  Peri. beam (Lintel)  date/app. by  Culvert  date/app. by  Pool
FOR BUILDING & ZONI  Temporary Power Foundation  date/app. by  Under slab rough-in plumbing Slab  date/app. by  Framing Rough-in plumbing a  date/app. by  Electrical rough-in Rough-in plumbing a  date/app. by  Permanent power C.O. Final  date/app. by  M/H tie downs, blocking, electricity and plumbing	Check # or Cash 5526  NG DEPARTMENT ONLY (footer/Slab)  Monolithic date/app. by date/app. by  Sheathing/Nailing date/app. by  Shove slab and below wood floor date/app. by  Peri. beam (Lintel) date/app. by  Culvert date/app. by  Pool Pool
FOR BUILDING & ZONII  Temporary Power Foundation  date/app. by  Under slab rough-in plumbing Slab  date/app. by  Framing Rough-in plumbing adate/app. by  Electrical rough-in Heat & Air Duct  date/app. by  Permanent power C.O. Final  date/app. by  M/H tie downs, blocking, electricity and plumbing  Reconnection Pump pole	Check # or Cash 5526  NG DEPARTMENT ONLY (footer/Slab)  Monolithic date/app. by date/app. by  Sheathing/Nailing date/app. by  Ibove slab and below wood floor date/app. by  Peri. beam (Lintel) date/app. by  Culvert date/app. by  Pool Pool  P. by  Utility Pole
FOR BUILDING & ZONI  Temporary Power Foundation  date/app. by  Under slab rough-in plumbing Slab  date/app. by  Framing Rough-in plumbing a  date/app. by  Electrical rough-in Heat & Air Duct  date/app. by  Permanent power C.O. Final  date/app. by  M/H tie downs, blocking, electricity and plumbing  Reconnection Pump pole  date/app. by  M/H Pole Travel Trailer	Check # or Cash 5526  NG DEPARTMENT ONLY (footer/Slab)  Monolithic date/app. by date/app. by  Sheathing/Nailing date/app. by  Shove slab and below wood floor date/app. by  Peri. beam (Lintel) date/app. by  Culvert date/app. by  Pool Pool  Pool  Dutility Pole

NOTICE: IN ADDITION TO THE REQUIREMENTS OF THIS PERMIT, THERE MAY BE ADDITIONAL RESTRICTIONS APPLICABLE TO THIS PROPERTY THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY. AND THERE MAY BE ADDITIONAL PERMITS REQUIRED FROM OTHER GOVERNMENTAL ENTITIES SUCH AS WATER MANAGEMENT DISTRICTS, STATE AGENCIES, OR FEDERAL AGENCIES.

ZONING CERT. FEE \$ 50.00 FIRE FEE \$ 0.00

FLOOD ZONE FEE \$ 25.00 CULVERT FEE \$

- CLERKS OFFICE

WASTE FEE \$

**TOTAL FEE** 710.00

MISC. FEES \$

0.00

FLOOD DEVELOPMENT FEE \$\infty\$

INSPECTORS OFFICE

"WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT."

#### This Permit Must Be Prominently Posted on Premises During Construction

PLEASE NOTIFY THE COLUMBIA COUNTY BUILDING DEPARTMENT AT LEAST 24 HOURS IN ADVANCE OF EACH INSPECTION, IN ORDER THAT IT MAY BE MADE WITHOUT DELAY OR INCONVIENCE, PHONE 758-1008. THIS PERMIT IS NOT VALID UNLESS THE WORK AUTHORIZED BY IT IS COMMENCED WITHIN 6 MONTHS AFTER ISSUANCE.

CK# 1526 18 Columbia County Building Permit Application For Office Use Only Application # 0704-12 Date Received 45/07 By G Removal - 25 Application Approved by - Zoning Official 62K Date 29.04.07 Plans Examiner 0K 77H Date 4-9-07 Flood Zone WA Development Permit MA Zoning CHT Land Use Plan Map Category Comments Applicants Name : Kevin May Phone 904-693-3200 Address 650 Talley RAND Ave. Jacksowille, FL 32202 Owners Name Stafford L. Scaff JR. 911 Address 3519 N. Hwy. 441, Lake City Fl 32024 Address 650 Talleyeard Ave., Tackson ville, FL 32202 Fee Simple Owner Name & Address\_\_\_\_ Bonding Co. Name & Address Architect/Engineer Name & Address K.C. Petroleum, INC. 650 Talleyrand Ave, Jax, Fl 32202 Mortgage Lenders Name & Address Circle the correct power company - FL Power & Light - Clay Elec. - Suwannee Valley Elec. - Progressive Energy Property ID Number 08-35-17-04909-000 Estimated Cost of Construction 127,000.00 Lot Block Unit Phase Subdivision Name Driving Directions Go North on 441 at corner of I-10 and 441 Type of Construction Replace existing storage tanksupiping Number of Existing Dwellings on Property / Total Acreage \_\_\_\_\_ Lot Size \_\_\_\_\_ Do you need a - <u>Culvert Permit</u> or <u>Culvert Waiver</u> or <u>Have an Existing Drive</u> Actual Distance of Structure from Property Lines - Front\_\_\_\_\_\_ Side \_\_\_\_\_ Side \_\_\_\_\_ Rear \_\_\_\_ Total Building Height Number of Stories Heated Floor Area Roof Pitch Application is hereby made to obtain a permit to do work and installations as indicated. I certify that no work or installation has commenced prior to the issuance of a permit and that all work be performed to meet the standards of all laws regulating construction in this jurisdiction. OWNERS AFFIDAVIT: I hereby certify that all the foregoing information is accurate and all work will be done in compliance with all applicable laws and regulating construction and zoning. WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCMENT MAY RESULT IN YOU PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT. Contractor Signature Contractors License Number PCC 125 6768

Owner Builder or Agent (Including Contractor)

STATE OF FLORIDA **COUNTY OF COLUMBIA** 

Swom to (or affirmed) and subscribed before me

Personally known or Produced Identification

Competency Card Number

NOTARY STAMP/SEAL

JOYCE COLLISON Notary Signature Notary Public - State of Florida My Commission Expires Aug 7, 2009 Commission # DD 457577

Bonded By National Notary Assn.

#### LIMITED POWER OF ATTORNEY

4 // -2		
DATE_ 4-4-07		
	e: 20	
Theret.		
I hereby name and appoint Kevin May	of K.C. Petroleus	m Ino m
lawful attorney in fact to		in inc. II
lawful attorney in fact to act for me and apply to	olumbia County	
for a Permitting and Pickup for w		_
for w	vork to be performed at a	
location described as:		(4.)
PARCEL # 08-35-17-04909-000		
· · · · · · · · · · · · · · · · · · ·		
3519 1/ 11		
1. Hwy. 441 Lake City, Fl 32024	2	
3519 N. Hwy. 441, Lake City, Fl 32024 (Address of Job)	7	
		14
S4S Food Stores, 134 S.E. Colburn Ave. L. (Owner of Property and Ad		24
134 S.E. Colburn Ave, L.	Ake City, Fl 32025	
(Owner of Property and Ad	ldress)	-
nd to sign my name and do all things necessary to t	this appointment.	
27 // .		
Scott Lamberson Co	80059001	4 8
Type or Print name of Certified Contra	actor License #	
	actor, Dicense #	
and the land		
Scoll Jan Vel		
Signature of Certified Contr	ractor	15
knowledged:		
form to and and and a state of the	0	_
orn to and subscribed before me this .476 day of	anil A.D.	2007
rida JOYCE COLLISON	Notary Public, State	of .
Notary Public - State of Florida		in the second
My Commission Expires Aug 7, 2009		
a.1) Commission # DD 457577		
Bonded By National Notary Assn.		
	: * * * * * * * * * * * * * * * * * * *	

My Commission Expires: 8-7-200 9

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# NOTICE OF COMMENCEMENT FORM COLUMBIA COUNTY, FLORIDA

# \*\*\*THIS DOCUMENT MUST BE RECORDED AT THE COUNTY CLERKS OFFICE BEFORE YOUR FIRST INSPECTION.\*\*\*

THE UNDERSIGNED hereby gives notice that improvement will be made to certain real property, and in accordance with Chapter 713, Florida Statutes, the following information is provided in this Notice of Commencement.

Tax Parcel ID Number <u>08 - 35 - 17 - 04909 - 000</u>

	s *
1.	Description of property: (legal description of the property and street address or 911 address)
	Comm NW Cor of E 1/2 of SW 14 RAN E 90.5 FT to C/L US-441, Run 5 Along C/L 13580
	Ft, E100 Ft to E RIW US-441 FOR POB, RUN S Along RO 598,04, W SO FT, S 198, 28 FT, E617.44
	Ft. N 1182.88 Ft To S RIW of SE RAMP of I-10, SW + 5 Along RD 808.92 Ft TO POB Being in E hat
	5W 4 ORB 534-478, 616-792, 3519 N Hwy 441, Lake City, Fl 32024
2.	General description of improvement: Replace existing storage tasks and piping
3.	Owner Name & Address Stafford L. Scaff JR., 134 S.E. Colburn Ave., Lake City Fl 32025
	Interest in Property Owner
4.	Name & Address of Fee Simple Owner (if other than owner):
5.	Contractor Name K. C. Petroleum Juc. Phone Number 904-693-3 200
	Address 650 Talley Rand Ave. James 17 202 STATE OF FLORIDA, COUNTY OF COLUMBIA
6.	Surety Holders Name  N/A  STATE OF FLORIDA, COUNTY OF COLUMBIA  Phone Number ERBY CERTIFY, that the above and foregoing is a true copy of the original filed in this office.
	Address P. DeWITT CASON CLERK OF COURTS
	Amount of Bond Flavor Ferge
7.	Lender Name W/A Phone Number Date 04-05-200
	Address
8. ser	Persons within the State of Florida designated by the Owner upon whom notices or other documents may be ved as provided by section 718.13 (1)(a) 7; Florida 5
	Name
	Address DC, P. DeWitt Cason, Columbia County B: 1115 P: 2033
9.	In addition to himself/herself the owner designate:
	to receive a copy of the Lienor's Notice as provided in Section 713.13 (1) -
	(a) 7. Phone Number of the designee
10.	Expiration date of the Notice of Commencement (the expiration date is 1 (one) year from the date of recording,
	(Unless a different date is specified)
10	TICE AS PER CHAPTER 713, Florida Statutes:
Γhe	owner must sign the notice of commencement and no one else may be permitted to sign in his/her stead.
	Sworn to (pr affirmed) and subscribed before
	day of April 5 , 2007
	NOTARY STAMP/SEAL
	Signature of Owner

Netary Public State of Florida
Leslie Cadmus
My Commission DD403185
Expires 03/06/2009

Signature of Notary

Deslie Cas



# 2006-2007 OCCUPATION LICENSE TAX

#### CITY OF JACKSONVILLE/DUVAL COUNTY MIKE HOGAN, TAX COLLECTOR

231 E FORSYTH STREET ROOM 130 JACKSONVILLE, FL 32202-3370 PHONE: (804) 630 2080 FAX; (904) 630-1432 WEBSITE: www.coj.net/tc

Note - A penalty is imposed for failure to keep this license exhibited conspicuously at your establishment of place of business. This license is furnished pursuance of chapter 770-772 City ordinance codes.

LAMBERSON, SCOTT M LAMBERSON, SCOTT M 533 N 0017TH AV JACKSONVILLE, FL 32250-4815

ACCOUNT NUMBER:

1222080000

LOCATION ADDRESS:

650 TALLEYRAND AV

JACKSONVILLE FL 32202-0000

**DESCRIPTION:** 

QUALIFYING AGENT, CONTRACTORS

COUNTY LICENSE DESC: MUNICIPAL LICENSE DESC:

QUALIFYING AGENT, CONTRACTORS

COUNTY TAX: MUNICIPAL TAX:

0.00 100.00

TOTAL TAX PAID:

100.00

VALID FROM August 1, 2006 TO September 30, 2007

#### \*\*\*ATTENTION\*\*\*

THIS LICENSE IS FOR OCCUPATION LICENSE TAX ONLY. CERTAIN OCCUPATIONS MAY REQUIRE ADDITIONAL STATE LICENSING.

This is an occupation license tax only. It does not permit the licensee to violate any existing regulatory or zoning laws of the County or City. Nor does it exempt the licensee from any other license or permit required by law. This is not a

TAX COLLECTOR

Mike Logan

THIS BECOMES A RECEIPT AFTER VALIDATION. PAID-8322058.0002-0002 Q10 10/04/2006 100.00

#### OKSTAVE OF FEORIDA

NEGENSIE NER 07/14/2006 0600F 8480

Named below IS CERTIFIE Under the provisions of Expiration date: AUG 31

THE AVE N KSONVILLE BEACH

GOD WE T

HEIGHNSHANDRUGE 0.5/2006 0600338483

The POLATIANT STORAGE SYSTEM Named below IS CERTIFIED (2) Under the provisions of Chap Expiration date: AUG 31, 200

DISPLAY AS REQUIRED BY LAW

GOD WE TE

DD/	AC	ORD CERTIFIC					(	ATE (MM/DD/YYYY) 09/08/2006
Ce P	1io.	R (904)353-3181 W. Powell & Co. Drawer 41490 ewnan St.	FAX (904)353-5722	HOLD	AND CONFERS NO ER. THIS CERTIFIC	SUED AS A MATTER OF PRIGHTS UPON THE CI ATE DOES NOT AMENI AFFORDED BY THE PO	ERTI	IFICATE
	ks	onville, FL 32203-1490		INSURE	RS AFFORDING CO	OVERAGE		NAIC#
IN.		KC Petroleum Inc				K RETENTION GRP		
		P 0 Box 60742 Jacksonville, FL 32236			Auto Owners 3			
		Sacksonville, FL 32230			FCCI Insurance	ety Indemnity Co	_	10170
				INSURER E:	reer mourane	e Company		10178
_		AGES						
M	AY PE	DLICIES OF INSURANCE LISTED BE EQUIREMENT, TERM OR CONDITION RTAIN, THE INSURANCE AFFORDE ES. AGGREGATE LIMITS SHOWN M.	ED BY THE POLICIES DESCRIBED I	DOCUMENT WI				
NSR LTR	ADD'L INSRD		POLICY NUMBER	POLICY EFFECT	TIVE POLICY EXPIRATION (Y) DATE (MM/DD/YY)	LIMI	TS	
		X COMMERCIAL GENERAL LIABILITY	ENV010668-06-02	09/11/20	06 09/11/2007	EACH OCCURRENCE	\$	1,000,000
	1 1	X COMMERCIAL GENERAL LIABILITY  CLAIMS MADE X OCCUR		4,		DAMAGE TO RENTED PREMISES (Fa occurence)	\$	50,000
Α		- A COOOK		8		MED EXP (Any one person) PERSONAL & ADV INJURY	\$	5,000
					-	GENERAL AGGREGATE	\$	1,000,000 2,000,000
		GEN'L AGGREGATE LIMIT APPLIES PER:				PRODUCTS - COMP/OP AGG	\$	2,000,000
		X POLICY PRO- JECT LOC						
	-	X ANY AUTO ALL OWNED AUTOS	4203213900	09/11/200	06 09/11/2007	COMBINED SINGLE LIMIT (Ea accident)	\$	1,000,000
В	ļ	SCHEDULED AUTOS HIRED AUTOS	41			BODILY INJURY (Per person)	s	
	ŀ	NON-OWNED AUTOS				BODILY INJURY (Per accident)	\$	-
J	_					PROPERTY DAMAGE (Per accident)	\$	
1	-	GARAGE LIABILITY				AUTO ONLY - EA ACCIDENT	\$	
		ANY AUTO	ENWOOD TO THE			OTHER THAN AUTO ONLY: EA ACC	\$	
		X OCCUR CLAIMS MADE	ENU009058-06-03	09/11/200	6 09/11/2007	EACH OCCURRENCE	\$	2,000,000
c	-	DEDUCTIBLE			€	AGGREGATE	\$	2,000,000
		X RETENTION \$ 10,000					\$	
		ERS COMPENSATION AND	001WC06A42788	05/06/200	6 05/06/2007	X WC STATU- TORY LIMITS OTH- ER	\$	
0	ANY P	PYERS' LIABILITY ROPRIETOR/PARTNER/EXECUTIVE	li .			E.L. EACH ACCIDENT	\$	1,000,000
	If yes, o	ER/MEMBER EXCLUDED? describe under				E.L. DISEASE - EA EMPLOYEE	\$	1,000,000
$\neg$	OTHER	AL PROVISIONS below	ENVOTOGES OF OR	00 /33 /200	6 00 /27 /2007	E.L. DISEASE - POLICY LIMIT		1,000,000
A F	2011	ractor's ution-Written	ENV010668-06-02	09/11/200	6 09/11/2007	Limits of Liabil in Per Occurrence	ce 1	limit and
ESCI	IESTION	ms Made Basis	ES / EVOLUSIONS ADDED DV FUDOROST			General Aggregat	e S	hown Above
	, , ,	TO STEIN HORS / LOCATIONS / VEHICLE	ES / EXCLUSIONS ADDED BY ENDORSEM	ENT / SPECIAL PR	ovisions			
ER	TIFIC	ATE HOLDER		CANCELL	ATION			
	Bı At P	olumbia County uilding & Zoning ttention: Janice Willia O Drawer 1529		10 D/BUT FAILU	ON DATE THEREOF, THE IS AYS WRITTEN NOTICE TO IRE TO MAIL SUCH NOTIC ND UPON THE INSURER, I	RIBED POLICIES BE CANCELLE SSUING INSURER WILL ENDEAV THE CERTIFICATE HOLDER NA E SHALL IMPOSE NO OBLIGATION TS AGENTS OR REPRESENTATI	OR TO	O MAIL TO THE LEFT,
	La	ike City, FL 32056-1529	1.		REPRESENTATIVE	Susan fordan	6	
				Susan Jo	ruan/HJS	0		

ACORD 25 (2001/08)



# K.C. Petroleum, Inc.

P.O. Box 60742 Jacksonville, FL 32236 (904) 693-3200 (904) 786-8441







CBC-058001 PCC-1256768

Date: 12/14/06

Richard Scaff S&S FOOD STORES 134 S.E. COLBURN AVE LAKE CITY, FL 32025

Job #: S & S #37Tank Upgrade Hwy ギャノ@ エーノ ロ レみにさいか、ドミ

K.C Petroleum is pleased to provide the following proposal on the above referenced project:

#### **COMBINED MATERIALS & EQUIPMENT**

inufacturer	Description Galvinize Pipe and Fittings 2" Ball Valve Signs and Decals Vent Stand Petro Fiberglass DPF-42-WT-16 - Tank Sump PetroFiberglass DPF-1A - Mounting Nipple PetroFiberglass DPF-1A W - Adavantage Dispenser Sump PetroFiberglass DPF-5B W - H111B Dispenser Sump PetroFiberglass DFP-7W - H111B Dispenser Sump PetroFiberglass DPF-SB - Stabilizer Bar 36" x 6" Fabricated Pipe Guards	Quantity 1.00 5.00 1.00 1.00 2.00 4.00 1.00 21.00	Unit LS EA EA EA EA EA EA EA
FIBERGLASS F AO SMITH	PIPING & FITTINGS  3" RED THREAD IIA PIPE  2" RED THREAD IIA PIPE  2" RED THREAD IIA FITTINGS (90 ELBOW)  2" RED THREAD IIA FITTINGS-(45 ELBOW)  2" RED THREAD IIA FITTINGS (TEE)  2" RED THREAD IIA FITTINGS (SLEEVE)  2" BxM Threaded Adapters  2x1.5 Female NPT Reducer Bushing  3" RED THREAD IIA FITTINGS (90 ELBOW)  3" RED THREAD IIA FITTINGS (45 ELBOW)  3" RED THREAD IIA FITTINGS (SLEEVE)  3" RED THREAD FITTINGS (TEE)  3" BxM Threaded Adapter  3" 90 Elbow Secondary Cont. Fittings  3" Tee Secondary Cont. Fittings  3" Tee Secondary Cont. Fittings	1,300.00 1,300.00 66.00 33.00 11.00 34.00 9.00 19.00 2.00 2.00 1.00 3.00 40.00 31.00 11.00 32.00	FT FEA A A A A A A A A A A A A A A A A A A



E)	Date: 12/14/06	2		
	^O SMITH ) SMITH	3" to 2" Termination w/ Tap Secondary Cont. Fittings DS-8000 Series Adhesive	5.00 110.00	EA. EA
	FLEXIBLE PIPIN	G & FITTINGS		
	<b>OPW Pisces</b>	PCS-300 - 3" FRP Pipe Entry Fitting	23.00	EA.
FOT85	OPW Pisces	PTB-320 - 3" to 2" Test Boot	19.00	EA.
	OPW Pisces	PCEF-751 - Electrical Pipe Entry Fitting	24.00	EA.
	STP'S AND LEA	K DETECTORS		
EQ 360	VAPORLESS	LD-2000 - LEAK DETECTOR	5.00	EA
	FE PETRO FE PETRO	STP-DHI - Isolation Relays	₩.00	EA
	FE PETRO	ISTM 2 - 2HP Variable Speed STP Pump MagVFC - Variable Speed Controller	9 00	EA
	FE PETRO	STP33 VL2 - 1/3 HP Sub-Pump	<b>ో</b> ర.00 1.00	EA EA
	FE PETRO	STP-DHI-CBS - Isolation Relay w/ Control Box	1.00	EA
	SERVICE STATI			
10	OPW	634TT-7085 - Tight Fill Cap 4"	6 00	<b>-</b> ^
	OPW	633T-8076 - Fill Cap Adapter	£ .00	EA EA
ER414	<b>EMCO WHEATON</b>	A1100-056 - Straight Overfill Drop Tube	6 .00	EA
EQ654	OPW	7111SS-CSDW - 5 Gallon Double-wall Spill Bucket	6 00	EA
	OPW OPW	23-0055 - 3" Vent Cap	<b>2.</b> .00	EA
	N70070.000	23-0033 - 2" Vent Cap	2.00	EA
		ORS & SHEAR VALVES		
	FLEXING	1.5" x 18" Flexhose	19.00	EA
	FLEXING	2" x 15" Flexhose	4.00	EA
	OPW	10BF-5725 - 1.5 Shear Valve	19.00	EA
- 1	MANHOLES & C	OVERS	19	
	POMECO	44CD-PL10 - 44" Composite Manhole	<b>3</b> .00	EA
	OPW	104A-1800 - 18" CAST IRON MANHOLE	10.00	EA
(	OVERFILL PROT	TECTION		
	OPW	233-4432 - Vent Extractor Assembly	4.00	EA
	SAND FORMS	BUMPERS		
	PEMCO	21 V 101 V 12" CTAINII ECC CTDAICHT ICI AND CODA	-11	12022
	PEMCO	3' X 10' X 13" STAINLESS STRAIGHT ISLAND FORM 36" X 4" PIPE GUARD	<b>₹</b> .00 10.00	EA
			. 10.00	EA
1	DISPENSING EQ	UIPMENT & CONSOLE		
FQZZ1	Incon	T750P/4 - 4-Tank Monitor Kit w/ Printer	1.00	EA
<b>■</b> 5770	Incon	TSP-ULS - Liquid Sensor TSP-K12 - 2" Riser Interstitial Sensor Cap Kit	<b>8</b> 00	EA
	mooti	Freight	2.00 1.00	EA LS
			1.00	LO

#### SCOPE OF WORK

Job #:

Proposal, Page #:

S & S #37 Tank Upgrade

Obtain permits for our scope of work.

Remove i Gilbarco lines to each tank.

, five HB-111 dispensers and set aside for reinstall and blow back product

Remove tank pad, load in dumpsters (Provided by others), excavate, remove and dispose of storage tanks (Liquids and sludges from the existing underground storage tanks to be billed separate per attached "Exhibit B" with manifest provided for proof of volume)

Install and anchor using concrete deadmen for (\$) customer supplied 24,000 gallon double-walled underground storage tanks. (Backfill material provided by others)

Furnish and install all related tank top risers, containment sumps, sub-pumps with leak detectors, vent extractors, fill assemblies and grade level manholes.

Job #: IS & S #37 Tank Upgrade

Proposal, Page #: Date: 12/14/06

3

nish and install (4) dispenser sumps with flex hoses, shear valves, pipe entry boots, (4) 3'0' wide x 4" U-shape bumpers as concession, (5) dispenser sumps with flex hoses, shear valves, entry boots, (5) stainless steel island forms and (6) 3' wide x 6" shop fabricated U-shape bumpers at the diesel concession

Connect dispensers using double-walled fiberglass product piping.

Connect tank vent line using single-wall fiberglass piping.

Install (8) customer furnished dispensers and hanging hardware including the existing removed equipment.

Purge and calibrate dispensers on start-up.

Precision test lines only.

Paint pipe guards BP specification and tank fill boxes to API standard colors.

GLASTEEL DOUBLE WALL TANKS

# GLASTEEL, SINGLE WALL TANKS

Underground Storage Containment



# GLASTELL SINGLE WALL

#### The Ultimate Barrier Against The Elements!

GLASTEEL! It begins with a tank made of high-grade, all-welded steel which, in itself, can handle everything from gasoline, jet and diesel fuels, to the new petroleum products and additives.

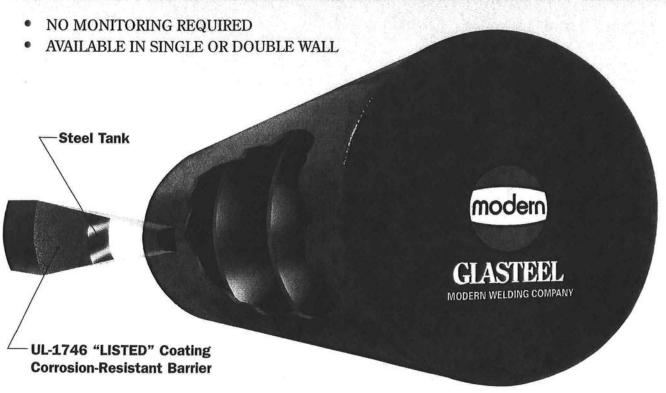
The Glasteel process completely clads the original steel tank in a corrosive resistant armor. There is no need for soil resistivity testing, or expensive cathodic protection systems, because even highly corrosive soil will not affect the Glasteel tank. Striker plates on the bottom of the tank are directly beneath all openings. This allows any opening to be used for any purpose.

Your Glasteel tank, when completed, will be delivered to you on time, by Modern's own fleet of trucks. Regional delivery could also save on freight charges.

Glasteel tanks are installation friendly and carry a 30-year limited warranty. Tanks comply with the Steel Tank Institute's ACT-100 specifications.

For over seven decades, Modern Welding has been an industry leader in fabricated steel storage tanks. Today with eight tank subsidiaries across the country, we can provide you with fast, efficient service no matter where you are located.

From 550 to 50,000 gallons, tanks may be purchased with compartment bulkheads for multiple fuel storage. Tanks come in single wall and double wall steel constructions with and without containment sumps. Call the nearest Modern subsidiary for competitive pricing and regional service. Visit our website at: www.modweldco.com.



# GASIBIL DOUBLE WALL

Secondary Containment at its BEST

Double your feeling of security with a Glasteel Double Wall Tank. We know that protecting the environment is, and will continue to be, one of the hottest topics our industry faces during the coming decades. That's why Modern Welding's GLASTEEL DOUBLE WALL is the very finest secondary containment tank available in the market today.

GLASTEEL tanks are built to EPA requirements, Underwriters Laboratories' standards 58 & 1746 and the Steel Tank Institute's ACT-100 specifications. Tanks may be purchased with openings located along the top centerline of tank, or fittings may be grouped for containment within sump collar assemblies . . . choose the configuration right for your installation.

#### Compatibility

GLASTEEL DOUBLE WALL primary UL steel tank is available with internal linings for the broadest compatibility available with all fuels, including gasoline, jet fuel, diesel fuel, ethanol, neat methanol, M-85, and E-85.

# Superior Performance; Easy Installation

- Cathodic protection, dielectric isolation not required.
- GLASTEEL DOUBLE WALL tanks come with Modern Welding's 30-year limited warranty.
- Simple installation procedures; special backfill not required to maintain structural integrity.

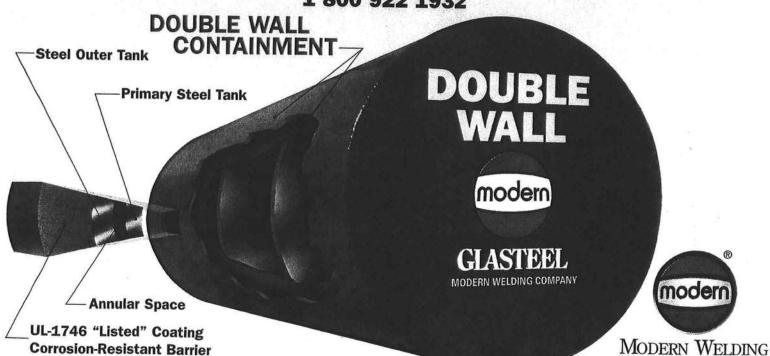
Modern Welding ... Quality and Leadership.

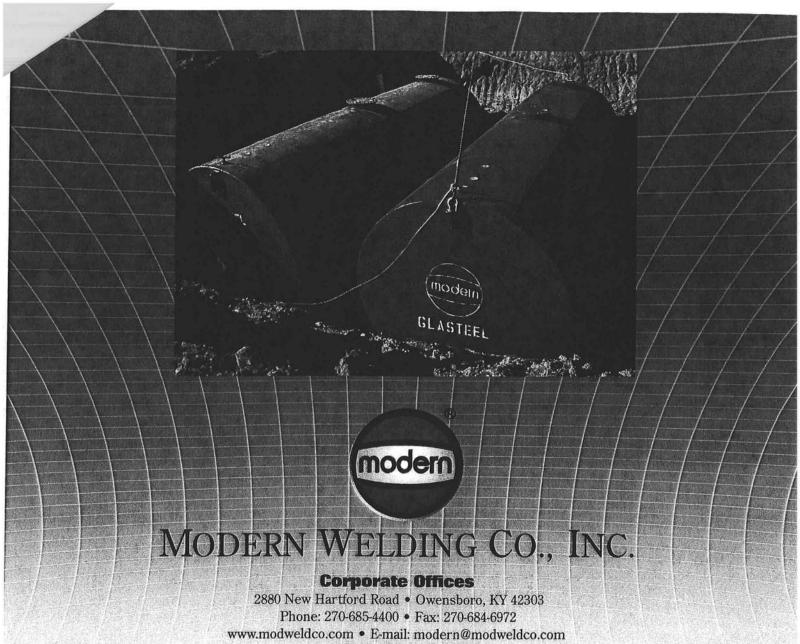
Phone: (270) 685-4400 • Fax: (270) 684-6972

modern

Co., INC.

1 800 922 1932





1 800 922 1932

#### **Manufacturing Subsidiaries**

#### Modern Welding Co. of Owensboro, Inc.

1450 E. Parrish Ave.

Owensboro, Kentucky 42303

Phone: 270-683-5323

Fax: 270-684-5245

modern1@modweldco.com

#### Modern Welding Co. of Ohio, Inc.

One Modern Way Newark, Ohio 43055

Phone: 740-344-9425

Fax: 740-344-6018

modern5@modweldco.com

#### Modern Welding Co. of Florida, Inc.

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Orlando, Florida 32806

Fax: 407-423-8187 modern6@modweldco.com

Phone: 407-843-1270

Modern Welding Co. of Texas, Inc.

2 Locations

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Phone: 713-675-4211

Fax: 713-673-4062

modern7@modweldco.com

200 N. Main St.

Rhome, Texas 76078

Phone: 817-636-2215

Fax: 817-636-2680

modern15@modweldco.com

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Burlington, Iowa 52601

Phone: 319-754-6577

Fax: 319-754-8428

modern8@modweldco.com

#### Modern Welding Co. of California, Inc.

4141 N. Brawley Ave.

Fresno, California 93722

Phone: 559-275-9353

Fax: 559-275-4381

modern10@modweldco.com

#### Modern Welding Co. of Georgia, Inc.

300 Prep Phillips Dr.

Augusta, Georgia 30901

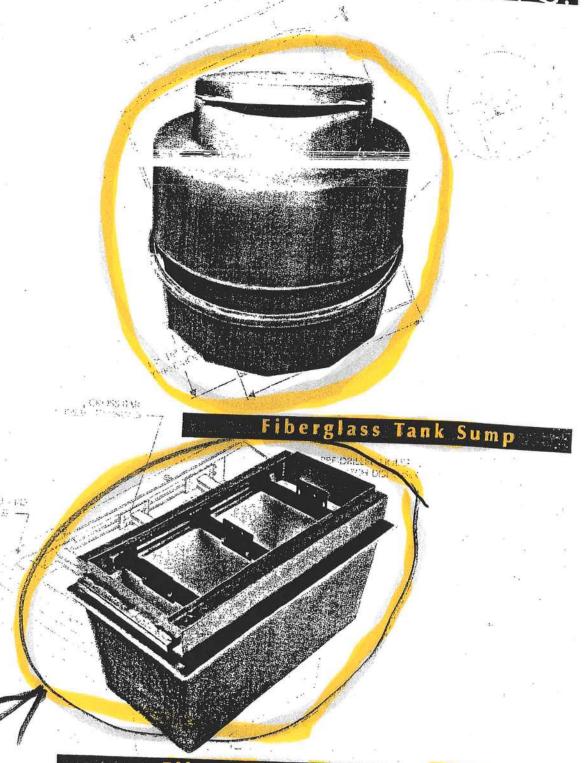
Phone: 706-722-3411

Fax: 706-724-8133

modern14@modweldco.com



# PETRO FIBERGLASS INC.



Fiberglass Dispenser Sump



The Fiberglass Advantage



#### PRODUCT & INSTALLATION DATA

#### Fiberglass Tank & Dispenser Sumps

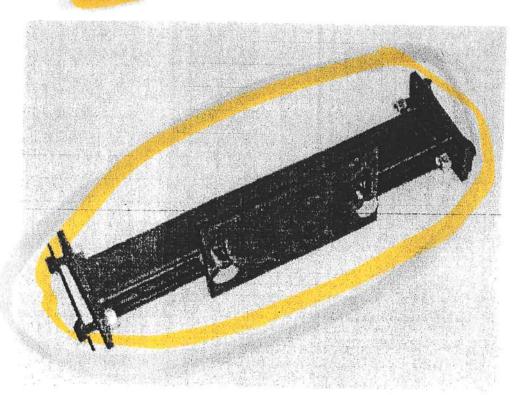
Petro Fiberglass Sumps offers fiberglass reinforced dispenser sumps and tank sumps which are designed to provide secondary containment for underground fuel systems. The sumps are manufactured for compatibility with piping systems. Both dispenser sumps and tank sumps are constructed of Isophthalic Polyester resin and 100% fiberglass reinforcement. These materials provide excellent chemical resistance to oxygenated fuels, alcohol blended fuels, and petroleum products. Stiffer than polyethylene, these stronger materials also resist soil and hydraulic forces in the buried environment resulting in fewer ecological clean-ups.

#### DISPENSER SUMPS

Dispenser sumps are available in a wide range of sizes to accommodate single, dual, and multi-product dispensers (MPD's).

- Dispenser sumps protect primary piping connections and the environment.
- Stabilizer bar kits with mounting plates are ordered with all Petro Fiberglass dispenser sumps.
- Both fiberglass and flexible entry fittings are available, from third party suppliers, for pipe entries.
- Mounting frame is independently tested for corrosion and impact.

STABILIZER BAR KIT

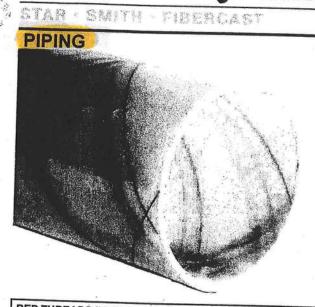


# Fiber Glass Systems \*\*\*



Bulletin No. B2193 November 1, 2006

#### SMITH FIBERCAST PETROLEUM MARKETING Suggested Price Schedule



RED THREAD® IIA Primary Piping - All pipe is supplied spigot x spigot ends in 15-ft., 22-25 ft. or 26-30 ft. random lengths. RED THREAD IIA primary pipe is UL/ULC Listed.

**ALL PRICES - U.S. DOLLARS** 

Nominal PIPE SIZE	PART NUMBER	PIPE LENGTH	PRICE PER FOOT	WEIGHT	LENGTHS PER BUNDLE
2"	011020-069-1	15'	3.90	0.4	8
2"	011020-069-2	22-25'	3.90	0.4	8
2"	011020-069-3	26-30'	3.90	0.4	8
3"	011030-069-1	15'	5.90	0.8	6
3"	011030-069-2	22-25'	5.90	0.8	6
3"	011030-069-3	26-30'	5.90	0.8	6
4"	011040-071-1	15'	7.50	1.0	
4"	011040-069-2	22-25'	7.50	1.0	4
4"	011040-071-3	26-30'	7.50	1.0	4

RED THREAD® IIA Secondary Containment Piping - All pipe is supplied plain end in 15-ft., 22-25 ft., or 26-30 ft. random lengths. Secondary Containment piping & fittings in 3" and 4" sizes are UL/ULC Listed. Note: 6" pipe and fittings are not UL/ULC Listed.

NON PIPE SIZE	PART NUMBER	PIPE LENGTH	PRICE PER FOOT	WEIGHT	T
3"	011030-069-4	15'		WEIGHT	LENGTHS PER BUNDLE
3"	011030-069-5		5.90	0.8	6
3"		22-25'	5.90	8.0	6
4"	011030-069-6	26-30'	5.90	0.8	6
	011040-077-5	15'	7.50	1.0	- 0
4"	011040-069-5	22-25'	7.50		4
4"	011040-077-6	26-30'	Total Control	1.0	4
6"	011060-120-5	15'	7.50	1.0	4
6"			13.50	2.4	2
	011060-120-4	22-25'	13.50	2.4	2
6"	011060-120-6	26-30'	13.50	2.4	2

#### PRIMARY FITTINGS

		90° PRIMAR	Y ELBOV	V, belied en	ds
4	SIZE	PART NUMBER	PRICE	WEIGHT	PARTS PER BOX
	2"	012020-360-4	34.30	1.2	20
	3"	012030-360-4	Control of the Contro	2.3	12
	4"	012040-360-4	65.80	3.3	6

45° PRIMARY ELBOW, belled ends						
SIZE	PART NUMBER	STATE OF THE PARTY	WEIGHT	PARTS PER BOX		
2"	012020-310-4	34.30	0.9	20		
3"	012030-310-4	46.80	1.6	15		
4"	012040-310-4	59.00	24	6		

2 1 4	TE	E, belled	ends	
SIZE	PART NUMBER	PRICE	WEIGHT	PARTS PER BOX
2"	012020-410-4	49.70	1.9	12
3"	012030-410-4	54.80	3.6	6
4"	012040-410-4	71.90	4.9	4

FLANGE, belled end						
SIZE	PART NUMBER		WEIGHT	PARTS PER BOX		
2"	012020-170-4	28.20	1.3	16		
3"	012030-170-4	33.30	2.6	8		
4"	012040-170-4	38.40	3.6	6		

SLEEVE COUPLING, belled ends					
SIZE	PART NUMBER	PRICE	WEIGHT	PARTS PER BOX	
2"	012020-101-8	10.20	1.2	25	
3"	012030-101-8	15.30	2.3	12	
4"	012040-101-4	21.20	3.3	5	

		END CA	P	
SIZE	PART NUMBER	PRICE	WEIGHT	PARTS PER BOX
2"	012020-180-4	42.00	1.4	16





	NIPPLE, tapered both ends						
SIZE	PART NUMBER	PRICE	PARTS PER BOX				
2" x 4"	012020-004-5	5.90	25				
2" x 6"	012020-006-5	6.60	25				
2" x 8"	012020-008-5	7.20	25				
2" x 10"	012020-010-5	8.50	12				
2" x 12"	012020-012-5	9.40	12				
3" x 6"	012030-006-5	7.20	12				
3" x 8"	012030-008-5	7.30	9				
3" x 10"	012030-010-5	9.40	5				
3" x 12"	012030-012-5	10.80	5				
4" x 6"	012040-006-4	9.20	9				
4" x 8"	012040-008-4	9.40	6				
4" x 10"	012040-010-4	10.70	4				
4" x 12"	012040-012-4	12.60	4				

	THRE	ADED AD	APTER		1
SIZE	PART NUMBER	PRICE	WEIGHT	PARTS PER BOX	1
Bell	x Male	100			460
2"	012020-191-4	15.00	0.3	25 .	
3"	012030-191-4	28.20	0.6	12	15
4"	012040-191-4	31.80	1.0	9	
Bellx	Female				
2"	012020-194-4	15.00	0.3	25	ON SHAPE
3"	012030-194-4	28.20	0.5	12	•/"
4"	012040-194-4	31.80	0.5	8	
Spigo	t x Male				OKEN
2"	012020-192-4	15.00	0.3	25	
3"	012030-192-4	28.20	0.6	12	
4"	012040-192-4	31.80	1.0	8	
Spigo	t x Female			- 0	
2"	012020-195-4	15.00	0.3	25	14 - 14 - 15 - 15 - 15 - 15 - 15 - 15 -
3"	012030-195-4	28.20	0.5	12	
4"	012040-195-4	31.80	0.6	8	
				-	

Vivia di Kan	Γ
	L
* Reduced	1
opening has	i i

female NPT threads.

REDUCER BUSHING					
SIZE	PART NUMBER	PRICE	WEIGHT	PARTS PER BOX	
*2" x 1"	012020-233-4	22.40	0.4	20	
*2" x 11/4"	012020-232-4	22.40	0.1	20	
*2" x 11/2"	012020-231-4	22.40	0.1	20	
3" x 2"	012030-231-4	23.30	0.8	24	
4" x 3"	012040-231-4	29.90	1.0	9	

	SADDL	E, female	NPT	
SIZE	PART NUMBER	PRICE	WEIGHT	PARTS PER BOX
2" x 11/2"	012020-516-4		0.5	1



# SUMP FITTINGS



	SUMP ENTRY/TE	RMINATI	ON FITTING
SIZE	PART NUMBER	PRICE	PARTS PER BOX
Bond	ed(1 Port, 3 Tapere		
3"	012030-626-0	157.70	1
4"	012040-626-0	194.00	. 1
Gaske	eted(1 Port)		
3"	012030-620-0	212.30	N/A
4"	012040-620-0	303.20	N/A

ř.	CONCENTRIC	REDUCER	
SIZE	PART NUMBER	PRICE	PARTS PER BOX
4" x 3"	012040-238-3	34.90	15
5" x 4"	012050-238-3	72.80	10



4" x 3" Concentric Reducer must be ordered when using 3" sumpentry/termination fitting.

5" x 4" Concentric Reducer must be ordered when using 4" sump entry/termination fitting.

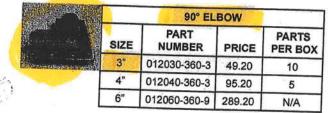
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SUMP ADAPTER				
SIZE	PART NUMBER	PRICE	PARTS PER BOX	
3"	012030-610-1	92.40	N/A	

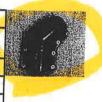
Note: 3" x 2" Termination Fitting may be used with 3" sump adapter:

TAP	PART NUMBER	PRICE	PARTS PER BOX
With 3/4" NPT Tap	012030-236-3	103.00	12
Without Tap	012030-235-3	55.60	10

# SECONDARY CONTAINMENT FITTINGS



	45° EL	BOW	
SIZE	PART NUMBER	PRICE	PARTS PER BOX
3"	012030-310-3	49.20	10
4"	012040-310-3	95.20	5
6"	012060-310-9	279.90	N/A





TEE					
SIZE	PART NUMBER	PRICE	PARTS PER BOX		
3"	012030-410-3	72.20	10		
4"	012040-410-3	118.80	5		
6"	012060-410-9	332.10	N/A		



SLEEVE COUPLING					
SIZE	PART NUMBER	PRICE	PARTS PER BOX		
3"	012030-101-3	42.20	10		
4"	012040-101-3	92.00	5		
6"	012060-101-9	251.80	N/A		



SLEEVE COUPLING, one-piece, Scarfed O.D.					
SIZE	PART NUMBER		PARTS PER BOX		
2" .	012020-101-9	20.80	25		
3"	012030-101-9	22.80	12		
4"	012040-101-9	28.80	5		



THREADED ADAPTER, Bell x Male, Scarfed O.D.					
SIZE	PART NUMBER	PRICE	PARTS PER BOX		
2"	002020-191-7	18.00	25		
3"	002030-191-7	31.40	12		
4"	002040-191-7	36.40	9		



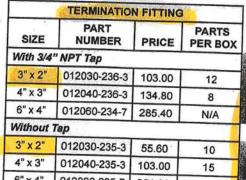
	CROSSOVER 45° ELBOW					
SIZE	PART NUMBER	PRICE	PARTS PER BOX			
3"	012030-311-3	57.50	10			
4"	012040-311-3	97.80	5			



CROSSOVER TEE					
SIZE	PART NUMBER	PRICE	PARTS PER BOX		
3"	012030-411-3	74.40	10		
4"	012040-411-3	120.30	5		



	CROSSOVER NIPPLE						
SIZE	PART NUMBER	PRICE	PARTS PER BOX				
3" x 6"	012030-006-7	8.00	12				
4" x 6"	012040-006-7	9.30	9				
6" x 8"	012060-008-7	14.20	N/A				



SADDLE

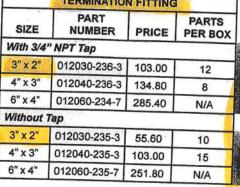
PRICE

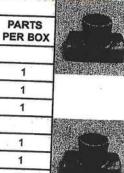
PART

NUMBER

SIZE

**Belled Outlet** 





3" x 2"	012030-521-4	47.00	1	
4" x 2"	012040-521-4	53.10	1	
4" x 3"	012040-531-4	63.90	1	
Female N	IPT Outlet		- 7	
3" x 1"	012030-511-4	34.80	. 1	
3" x 11/4"	012030-512-4	34.80	1	
3" x 1 <sup>1</sup> / <sub>2</sub> "	012030-516-4	34.80	1	
4" x 1"	012040-511-4	35.10	1	
4" x 1 <sup>1</sup> /4"	012040-512-4	35.10	1	7
4" x 11/2"	012040-516-4	35.10	1	-



**PARTS** 

N/A

N/A

N/A

SIZE NUMBER 3" x 2" 012030-231-7		PER BOX	
		2" 012030-231-7 18.80	
012040-231-7	26,30	9	
CENTRAL	IZER		
PART		PARTS PER BOX	
	012030-231-7 012040-231-7 CENTRAL PART	012030-231-7 18.80 012040-231-7 26.30 CENTRALIZER	

12.70

13.80

16.00

PART

NUMBER

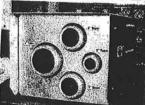
013020-650-3

013030-651-4

013040-650-6



### **TOOLS & ACCESSORIES**



	POWER TOO	LS	
DESCRIPTION	PART NUMBER	PRICE	SIZE
Model 2100 Taper/Scarf	005990-795-0	1,771.70	110V
Model 2100-I Taper/Scarf	005990-797-0	2,039.60	220/240V 50 cycle
Model 2102 Taper/Scarf	005990-790-0	2,063.90	
Model 2102-I Taper/Scarf	005990-780-0		110V
•	0-0000-700-0	2,160.90	220/240V 50 cycle

2"x3"

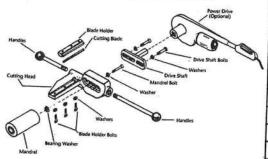
3" x 4"

4" x 6"



	т.	A.B JOINT WRENCH	SETS
SIZE	PART NUMBER	PRICE	PRICE (TWO WRENCH SET)
2"	005990-712-0	193.50	387.00
3"	005990-713-0	205.60	411.20
4"	005990-714-0	217.80	
6"	005990-716-0	269.60	435.60
		209.00	539.20

# MANUAL TOOLS & ACCESSORIES

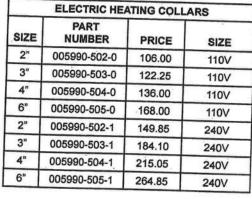


MANUAL TOOLS		
DESCRIPTION	PART NUMBER	PRICE
2" - 4" Manual Tapering Tool	005990-800-0	569.65
Cutting Head Kit	005990-810-0	336.00
Power Adapter for Cutting Head	005990-813-0	58.80
Adapter Block for 1" & 11/2"	005990-812-0	74.55
Adapter Kit for 1" & 11/2"	005990-811-0	211.05
Scarfing Adapter Kit for 3" & 4" Secondary Containment Pipe	005990-915-0	109.75
Scarfing Adapter Kit for 6" Secondary Containment Pipe	005990-922-1	148.60
1" Mandrel	005990-820-0	57.75
1 <sup>1</sup> / <sub>2</sub> " Mandrel	005990-821-0	70.90
2" Mandrel	005990-822-0	85.60
3" Mandrel	005990-823-0	122.35
4" Mandrel	005990-824-0	138.60
6" Mandrel	005990-825-0	212.65
Tapering Blade for 1" - 6" Tool	005990-814-0	3835
Scarfing Blade for Secondary Containment	005990-916-0	71.40
Blade Holder for Secondary Containment Blade	005990-917-0	73.50



SECO	NDARY CONTAINMENT	<b>GAUGE NIPPLES</b>
SIZE		PRICE
3"	012030-050-0	6.10
4"	012040-050-0	7.30
6"	012060-120-0	18.80

	SMITH HEAT PACE		
SIZE	PART NUMBER	PRICE	PACKAGING
2"	005990-400-1	6.40	20/case
3"	005990-401-1	8.70	18/case
4"	005990-402-1	11.00	16/case
6"	005990-403-1	14 60	12/0200







		ADHESIVES		
DESCRIPTION	PART NUMBER	PRICE	SIZE	PACKAGING
7014	002990-000-0	16.50	6.8 oz.	
7024	002990-040-0	22.10	2.5 oz. Twin Pack	10/Box
7069	002990-030-0	22.10	9.95 oz.	10/Box
8014	022990-000-0	16.50	6.4 oz.	10/Box
8024	022990-050-0	22.10	2.7 oz. Twin Pack	10/Box
8055	022990-020-0	11.70	1.6 oz. Small Pack	10/Box
8069	022990-033-0	22.10		20/Case
FILLER			9.3 oz,	10/Box
7014-8014	002990-004-0	2.80	For Secondary Containment	F010
7069-8069	002990-033-0		For Secondary Containment	50/Case
COLVENT		2.00	1 of Secondary Containment	50/Case
Trichloroethylene	002990-008-0	10.50	12 oz.	in the state of
			12 02.	12/Case

UL TRAINING KIT	PART NUMBER	PRICE
4-Person Training Kit	012030-000-2	330.80

1 Each - 8024 Kit

2 Each - 2" 90° Elbows, 3" S.C. Couplings, 8014 Kit, 8014 Filler Kits 4 Each - 2" x 12" Plain End Pipe & 3" x 12" Plain End Pipe, B2160

MINIMUM ORDER - Total Quantity \$250.00

NOTE: MINIMUM ORDER TO RECEIVE DISCOUNT IS \$500.00

TERMS – F.O.B. Origin. A maximum of one pipe per bundle factory coupled lengths (joiners) may be shipped. All shipments will be to the nearest random length and billings will be made to the nearest foot shipped. Prices subject to change without notice. All sales subject to Fiber Glass Systems General Terms and Conditions of Sale.

<sup>®</sup> Trademark of Varco I/P, Inc.

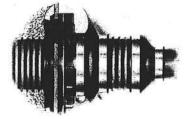
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FIBER GLASS SYSTEMS • A NATIONAL OILWELL VARCO COMPANY 2700 W. 65th St., LITTLE ROCK, AR 72209 • 501-568-4010 • FAX 501-568-4465 25 S. MAIN ST., SAND SPRINGS, OK 74063 • 918-245-6651 • FAX 918-245-7566



#### PISCES™ CONICAL SEAL ENTRY FITTINGS

PISCES™ Conical Seal Entry Fittings are installed in sump walls to seal the entry of fuel pipes, conduits, and vapor pipes. Conical seal fittings require a single entry hole to be cut in the sump wall for installation, and can be replaced without excavation from inside the sump if installed with a PISCES™ Backfill Guard.





#### **Ordering Specifications**

			Hole Saw	Wei	ight	
Model No.	Conical Seal Pipe Entry Fittings	Boot ID.	Required	lbs.	kg.	Packaging
CS-400	4" PISCES™ AP40 Access/Containment or 4" FRP Pipe Entry Fitting	4%6"	HS-600 (6")	1.5	0.7	6/box
CS-300	3" PISCES™ AP30 Access/Containment or 3" FRP Pipe Entry Fitting	3%"	HS-600 (6")	1.5	0.7	6/box
CS-200	2" PISCES™ CP20 Double-Wall Primary Pipe Entry Fitting	2%"	HS-600 (6")	1.5	0.7	6/box
CS-200F	2" FRP Pipe Entry Fitting	2%"	HS-500 (5")	1.5	0.7	6/box
CS-150	1½" PISCES™ CP15 Double-Wall Pipe Entry Fitting	2"	HS-500 (5")	1.3	0.6	6/box
CS-100	1" Rigid Conduit Entry Fitting	1%"	HS-375 (3¾")	1.3	0.6	6/box
CS-075	¾" Rigid Conduit Entry Fitting	11/46"	HS-375 (3¾")	1.3	0.6	6/box

#### **Conical Seal Entry Fittings With Integral Test Boots**

Integral Test Boots provided on these fittings isolate the interstitial space between the primary and secondary pipes for air testing. A test port is provided for use with the LTK-36 Secondary Line Test Kit, and an optional air test valve is available.





#### **Ordering Specifications**

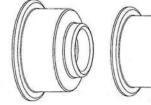
			Hole Saw	Wei	ght	
Model No.	Conical Seal Pipe Entry Fittings	Boot ID.	Required	lbs.	kg.	Packaging
CS-420	4" PISCES™ AP40 Access/Containment or 4" FRP Pipe Entry Fitting with Test Boot for 2" PISCES™ or FRP Primary Pipe	2%"	HS-600	1.5	0.7	6/box
CS-420A	4" PISCES™ AP40 Access/Containment or 4" FRP Pipe Entry Fitting with Test Boot with Air Stem for 2" PISCES™ or FRP Primary Pipe	2%"	HS-600	1.5	0.7	6/box
CS-415	4" PISCES™ AP40 Access/Containment Pipe Entry Fitting with Test Boot for 1½" PISCES™ Primary Pipe	2"	HS-600	1.5	0.7	6/box
CS-415A	4" PISCES™ AP40 Access/Containment Pipe Entry Fitting with Test Boot with Air Stem for 1½" PISCES™ Primary Pipe		HS-600	1.5	0.7	6/box
CS315	3" PISCES™ AP30 Access/Containment Pipe Entry Fitting with Test Boot for 1½" PISCES™ Primary Pipe	2"	HS-600	1.5	0.7	6/box
CS-315A	3" PISCES™ AP30 Access/Containment Pipe Entry Fitting with Test Boot with Air Stem For 1½" PISCES™ Primary Pipe	2"	HS-600	1.5	0.7	6/box

#### **Conical Seal Entry Fitting Backfill Guards**

Backfill Guards are installed with conical seal fittings and enable the fittings to be replaced without excavation from inside the pump.

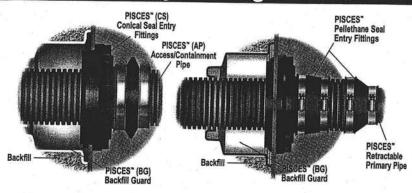
#### **Ordering Specifications**

		Wei	ght	
Model No.	<b>Used with Fittings</b>	lbs.	kg.	Packaging
BG-400	CS-400 Series	1	0.5	6/box
BG-300	CS-300 Series	1	0.5	6/box
BG-200	CS-200	1	0.5	6/box
BG-200F	CS-200F	1	0.5	6/box
BG-150	CS-150	1	0.5	6/box
BG-100	CS-100	0.5	0.2	6/box
BG-075	CS-075	0.5	0.2	6/hox





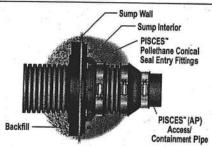
### PISCES™ Entry Fittings



#### **PISCES™ Conical Seal Entry Fittings**

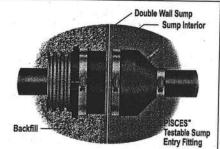
PISCES™ Conical Seal Entry Fittings provide a reliable seal for piping and conduit entries through containment sump walls, and are engineered for long-term integrity in the harsh underground environment. Featuring a single hole through the sump wall for quick installation, PISCES™ Conical Seal Entry Fittings are completely field-replaceable without excavation when installed with a PISCES™ Backfill Guard. Massive sealing forces are generated against the I.D. of the hole in the sump wall as the cone is pulled inward by tightening the nut. Molded Acme threads and a blunt starter thread provide precision "spin-on" assembly and prevent cross-threading.





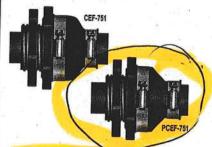
#### **PISCES™ Bolted Flange Entry Fittings**

PISCES™ Bolted Flange Entry Fittings feature a ribbed sealing surface for added sealing protection, and rubber encapsulated metallic or reinforced composite parts outside the sump for corrosion resistance. Minimum spacing between nuts ensures consistent sealing forces on uneven sump wall surfaces, and a lipped ring provides added strength and rigidity. In addition, PISCES™ Bolted Flange Entry Fittings offer a positive mechanical seal with nuts that pull the fitting body and studded ring against the outer sump wall. The boots on "BFP" fittings are replaceable from inside the sump without excavation.



#### PISCES™ Testable Dispenser **Sump Entry Fittings**

High-quality PISCES™ entry fittings provide a reliable seal for piping and conduit entries through containment sumps. PISCES™ now offers testable entry fittings specifically designed for continuous vacuum monitoring of the secondary containment system. compliant with AB-2481.



#### **Compact Electrical Conduit Fittings**

These compact, electrician-friendly conduit fittings require only one hole to be drilled in the sump wall. A captured o-ring ensures long term seal integrity. The low profile (31/2" diameter) and 15" angled entry capability preserves flexibility in conduit entry locations.



# PISCES™ Fuel Oil/Generator System Piping



The PISCES™ Fuel Oil Piping System is designed to provide a reliable, secondarily contained fuel supply system to generators and boilers from remote fuel tanks. Typical applications include both a 3/4" supply and a 1" overflow return line running from a remote AST or UST to a generator engine or boiler day tank. Both lines are typically inserted into a common PISCES™ Access/Containment Pipe to provide retractable access to, and containment of, the fuel lines.

Cincinnati, Ohio 45011 Tel: (800) 422-2525

A DOVER COMPANY

either case, without notice or obligation. For complete OPW warranty info

selection should be based on physical specifications and limitations and companies with applicable federal, state, provincial, and local laws and regul selection should be based on physical specifications and limitations and compatibility with the environment and material to be handled. OPW/P OPW, Inc. makes no warranty of fitness for a particular use. All illustrations and specifications in this literature are based on the latest production available at the time of publication. Prices, materials, and specifications are subject to change at any time, and models may be disconfished at

tion. Prices, materials, and specifications are subject to change at any time, and models may be disconting bigation. For complete OPW warranty information visit our web site at www.opw-fc.com.

9393 Princeton-Glendale Road Fax: (800) 421-3297 www.opw-fc.com Notice: OPW/PISCES™ by OPW, Inc. products must be used in compliance with applicable federal, state, provincial, and local laws and reguli selection should be based on physical specifications and limitations and compatibility with the environment and material to be handled. OPW/P

lify with the environment and material to be handled. OPW/PISCES™ by

#### **Nylon-Lined Core Tube** · Excellent fuel and chemical resistance properties.

PISCES™ Primary Fuel Oil/Generator System Pipe

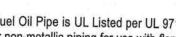
Smooth bore ensures efficient flow characteristics.

#### **Nylon Outer Jacket**

- Unparalleled resistance to microbial attack.
- · Integral braided fiber reinforcement for strength and pressure containment.

#### PISCES™ Double Wall Access/Containment Pipe

- Allows for retractability of primary pipe without excavation for inspection, repair or replacement.
- Superior crush and puncture resistance for added protection from backfill.
- Added layer of containment protection.





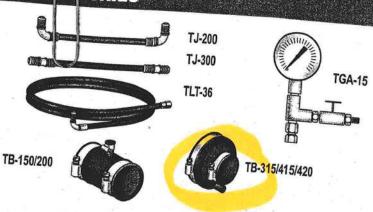
PISCES™ Fuel Oil Pipe is UL Listed per UL 971. standard for non-metallic piping for use with flammable liquids, and for use with Diesel and Fuel Oil.



# PISCES™ ENTRY FITTINGS AND ACCESSORIES

# Test Boots and Line Test Kits

PISCES™ Test Boots and Line Test Kits are used to isolate and air-test the interstitial space between the primary and secondary pipes. One (1) Test Boot is required for each pipe end. Separate Test Boots are not required when using entry fittings with integral Test Boots. One (1) Line Test Kit LTK-36 is required per pipe section. Line Test Kits are not required when using on entry fittings with an integral Test Boot with an Air Test Stem on each pipe section.



# **Ordering Specifications**

TB-150	Test Boot, PISCES" 1½" (4 cm) Coaxial Pipe Interstice	lbs	Neight	- 1 let 1
TB-200	Total Book, Figure 7" In cmi Cassi-I Pr		200	, aonayini
TB-315	Tool Dool, Floured St. (8 cm) Access Division In the state of the stat	0.2	2500	- INON
TB-315A	Test Boot, PISCES" 3" (8 cm) Access Pipe to 1½" (4 cm) Primary Pipe	0.2	<b>© 0.1</b>	- HOUN
TB-320	Test Boot, PISCES" 3" (8 cm) Access Pipe to 1½" (4 cm) Primary Pipe  Test Boot, PISCES" 3" (8 cm) Access Pipe to 1½" (4 cm) Primary Pipe with Air Stem  Test Boot, PISCES" 3" (8 cm) Access Pipe to 2" (5 cm) Primary Pipe, or 3" (8 cm) FRP to 2" (5 cm) FRP Pipe  Test Boot, PISCES" 3" (8 cm) Access Pipe to 2" (5 cm) Primary Pipe with Air Stem  Test Boot, PISCES" 3" (8 cm) Access Pipe to 2" (5 cm) Primary Pipe with Air Stem	0.2	3 0.1	
TB-320A	Test Boot, PISCES" 3" (8 cm) Access Pipe to 2" (5 cm) Primary Pipe, or 3" (8 cm) FRP to 2" (5 cm) FDP By	0.2	0.1	6/box
TB-415	Test Boot, PISCES" 3" (8 cm) Access Pipe to 2" (5 cm) Primary Pipe, or 3" (8 cm) FRP to 2" (5 cm) FRP Pipe Test Boot, PISCES" 4" (10 cm) Access Pipe to 1/4" (4 cm) Primary Pipe with Air Stem	0.2	性0.1	
TB-415A	Test Boot, PISCES" 4" (10 cm) Access Pipe to 1½" (4 cm) Primary Pipe with Air Stem  Test Boot, PISCES" 4" (10 cm) Access Pipe to 1½" (4 cm) Primary Pipe	0.2	0.1	
TB-420	Test Boot, PISCES" 4" (10 cm) Access Pipe to 1½" (4 cm) Primary Pipe  Test Boot, PISCES" 4" (10 cm) Access Pipe to 1½" (4 cm) Primary Pipe with Air Stem	0.2	0.1	6/box
B-420A	Test Boot, PISCES" 4" (10 cm) Access Pipe to 1½" (4 cm) Primary Pipe with Air Stem  Test Boot, PISCES" 4" (10 cm) Access Pipe to 2" (5 cm) Primary Pipe or 4" (10 cm)FRP to 2" (5 cm) FRP Pipe  Test Boot, PISCES" 4" (10 cm) Access Pipe to 2" (5 cm) Primary Pipe with Air Stem	0.2	0.1	
B-430	Test Boot, PISCES" 4" (10 cm) Access Pipe to 2" (5 cm) Primary Pipe or 4" (10 cm)FRP to 2" (5 cm) FRP Pipe Test Boot, PISCES" 4" (10 cm) Access Pipe to 2" (5 cm) Primary Pipe with Air Stem	0.2	0.1	6/box
3-430A	Test Boot, PISCES" 4" (10 cm) Access Pipe to 3" (8 cm) Access Pipe Test Boot, PISCES" 4" (10 cm) Access Pipe to 3" (8 cm) Access Pipe	0.2	後0.1	6/box
-300	Test Boot, PISCES 4" (10 cm) Access Pipe to 3" (8 cm) Access Pipe Test Jumper Kit for Retractable Pipe (connects TB 400 T	0.2	0.1	6/box
200	Test Jumper Kit for Retractable Pipe (connects TB-420, TB-320, TB-415, and TB-315)  Test Jumper Kit for CP Pipe (connects TB-150 and TB-320)	0.2	0.1	
200A	Test Jumper Kit for CP Pipe (connects TB-150 and TB-320, TB-415, and TB-315)  Test Jumper Kit with Air Standard TB-150 and TB-200)	0.2	0.1	6/box
-36	The state of the will All Stem Connections	0.2	A SECULAR SE	1/bag
	lest Line Termination Kit. 36" (91 cm)		Carrotteran	1/bag
-36A	lest Line Termination Kit for use with At			1/bag
1-15				1/bag
)77	Reducer Insert for CS/BF-100, 77" (19.5 mm) ID (5.0 mm) ID (6.0 mm)	2		1/bag
06	Reducer Insert for CS/BF-100, .77" (19.5 mm) ID. (for Small Dia. Tech Wire)  Reducer Insert for CS/BF-100, .1031" (2.6 mm) ID. (for ¾" / 2 cm Conduit/Large Dia. Tech Wire)			1/box
	(2.0 mm) ID. (for ½" / 2 cm Conduit/Large Dia, Tech Wire)		0.1	1/bag

# **Dispenser Pan Fittings and Accessories**

PISCES" Pan Fittings are installed in the bottom of PISCES™ Dispenser Pans to accommodate Pipe and Flex Connector Entries. The FIJ-3035 is used to isolate and contain Flex Connectors.









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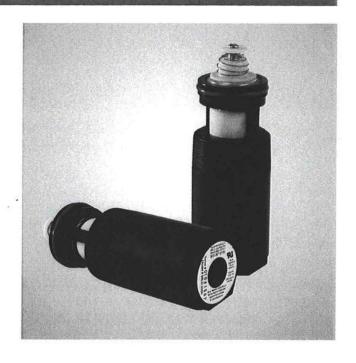
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ring Specifications	PEF-3520R	PEF-3515R	PEF-3515X	DEE	000000000000000000000000000000000000000
			· LI -00 10X	PEF-3515XR	FIJ-3035
					110 0000

PEF-3520R	D. C.		minal ot I.D.	Hole Saw	1A	/eight	
PEF-3515R	Pan Entry Fitting, 1%" (4 cm) FRP Pipe Entry	in. 2%"	cm 6	Required HS-300 (3" / 8 cm)	in. 2.5	kg.	Packaging
PEF-3515X PEF-3515XR	rail Entry Fitting, 1%" (4 cm) Flox Connects (1)	2" 2" (Hex)	5	HS-300 (3" / 8 cm)	2.5	Treas of	3/box 3/box
	Pan Entry Fitting, 1½" (4 cm) Flex Connector (Round Seal)  Add "A" To Above Model Numbers for Air-Test Valve	2 (nex)	6	HS-300 (3" / 8 cm) HS-300 (3" / 8 cm)	2.5	312	3/box
FIJ-3035 JI-20R	Totalio Isolation Jacket 30" (76 am) I am			710-300 (3 7 8 cm)	2.5	线 <b>1</b> 月	3/box
		70	X 16		2	11	6/box
JI-15X	Insert, 2" / 5 cm Flex Connector (2½" / 6 cm Hex Seal) Insert, 1½" / 4 cm Flex Connector (2" / 5 cm Hex Seal)				0.2	0.1	1/bag
© Copyright 200	5, OPW Fueling Components					0.1	1/bag 1/bag

# VMI 99 LD-2000 New Series

Highest Performance, Most Requested Mechanical Line Leak Detector Built Today!!

- · Any Fuel\*
- Any Pump\*
- Any Pipeline System\*
- · Longest Length Pipeline System\*
- Largest Volume Pipeline System\*
- Integrated Check Valve / Pressure relief
  - \*see technical specification



VMI

The 99 LD-2000

The 99 LD-2000 is now the most requested mechanical line leak detector built today. New engineering and the VMI 2-year warranty (after installation) make the 99 LD-2000 more attractive to station operators today than ever before. Not only is the 99 LD-2000 less expensive to own, it is faster and less subject to field and line variables than ever before!

#### Integrated In-Line Check Valve / Pressure Relief

Leaking check valves in the turbine, defective submersible pump pressure relief, or a defective bypass valve will allow the line system to depressurize, resetting the leak detector. Drain-back into the pump or thermal contraction will cause vapor pockets to form. Vapor pockets increase the length of time it takes for a leak detector to open to full flow. Pump problems such as these result in slow flow and technical support calls. The resulting service costs and customer dissatisfaction all take away from the bottom line - making money.

The 99 LD-2000 Is The Only Leak Detector
Capable Of Holding Line Pressure After the Pump Is Off—
Even With Pump Component Wear Or Failure.

In addition to the submersible pump problems encountered without an in-line check valve, the metering portion of the leak detector is hammered by hydraulic shock. This results in many leaks going undetected. Those leak detectors are just not equiped for the job you purchased them for.

The 99 LD-2000 is the answer you have been looking for. VMI leak detectors, with an integrated check valve and pressure relief valve, will save money and reduce customer frustration at the dispenser and reduce service calls.

#### The 99 LD-2000

Has A Higher Level Of Performance Over A broader Range of Burial Depth, Line Length, And Piping System Types Than Any Other Leak Detector

#### **Additional Features**

- · Over 20% increased flow capacity
- Guaranteed for 24 months from date of installation to detect 3 GPH @10 PSI leak
- · One Way Poppet flow path
- Reverse Ratio Piston / Poppet combination
- · Smaller Volume Faster Response piston size
- Shortest profile leak detector available for "tight" installations
- · All fuels (gasoline diesel alcohol)
- · All pipelines (flexible fiberglass steel) up to 400 ml. resiliency
- Exceeds EPA regulations (3 GPH @ 10 PSI)
- · Detects leaks up to 10' above the leak detector
- Installs with 2 1/16" six point socket or pipe wrench

#### **Increased Flow Capacity**

• The 99 LD-2000 has maximized the flow and flow path in existing, older submersible pump heads. This new design allows over 20% more flow than previous LD -2000 models, maximizing pump performance for earlier pump heads.

#### Longest Guarantee

• The 99 LD-2000 shares the longest guarantee available in the industry, along with all other VMI 99 LD-2000 series leak detectors. For 24 months from date of installation, the LD-2000 is guaranteed to see a 3 GPH leak @ 10 PSI

#### One Way Poppet Flow Path

• The One Way Poppet Flow Path isolates pump turbulence from line leak detection at pump startup. The hardened stainless steel poppet does not dimensionally change because of thermal conditions encountered during station operation (precision metering change is insignificant down to -20° F).

#### Reverse Ratio Piston / Poppet Combination

Reverse Ratio means the leak detector has a smaller diameter piston area (smaller than
the poppet it is attached to). This smaller piston area keeps the leak detector in the fast fill
position (2 GPM) to a higher pressure while compressing vapor pockets and stretching flexible lines faster. This means less time to full flow! The leak detector does not have to completely reset (as with competitive leak detectors) for the poppet to be forced into the reset
mode at pump startup.

#### Smaller Volume / Faster Response Piston Size

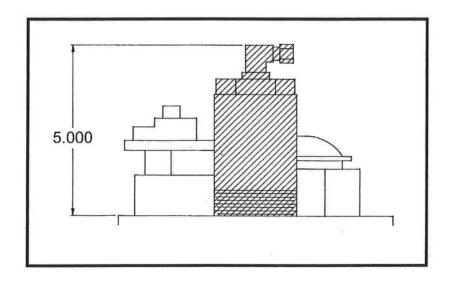
With a reduced piston size there is one fourth the volume to replace when in leak search
and one fourth the volume to return to the line when the pump turns off. This combination
makes for a more responsive and faster leak detector. Less volume to leave the line for the
leak detector to reset and catch leaks. Less volume to fill and provide full flow for dispensing!

#### Superior Flex-Pipe Performance

• The reduced surface area of the piston significantly reduces the surface area exposed to hydraulic line shock. This results in enhanced performance with steel and fiberglass pipe, and especially with today's flexible pipe.

#### Shortest Leak Detector Profile

• The 99 series leak detectors are the lowest profile leak detectors available.





Vaporless Manufacturing Inc. 8700 East Long Mesa Drive

Prescott Valley, Arizona 86314

1-800-367-0185 (928) 775-5191

www.vaporless.com

Fax (928) 775-5309

#### **Technical Specifications 99 LD-2000**

#### All Fuels

- Gasoline, 100% methanol, 100% ethanol, up to 15% MTBE
- Any combination of the above
- #1 or #2 diesel, Kerosene, (Jet A or JP 4 \*consult factory for substitution of bronze parts)

#### Certified to meet EPA 3 GPH @ 10 PSI:

- Maximum Rigid Pipeline size: 400 ft. of 3.25 inch diameter line or up to 172 gallon volume
- Maximum Flexible Pipeline size: 415 ft. of 1.5 inch diameter line or up to 39.5 gallon volume

#### U.L. listed containment housing

- · for pump pressures through 50 PSI
- Schedule 40 cast iron internally plated with zinc phosphate. Externally finished with oven baked powder coat

#### Internal Housing

· Hard Anodized, 6061 T6 Aluminum

#### Check Valve

- Delrin
- · Tygothane® polyurethane seal

#### **Pressure Relief**

- · Stainless Steel
- 29 PSI Pressure relief (holds in addition to pump pressure relief)

#### Seals

- · Piston / Poppet: Teflon, stainless steel spring energized
- O Rings:

Mil Specification; R-83248 Fluorocarbon

#### Metering Pin and Poppet

• 17-4 Stainless Steel

#### Misc. Component Specification

- 660 Bronze
- · 6061 T6 Aluminum
- 1026 cold roll steel chrome plated

#### Reverse Ratio Piston-Poppet

#### One Way Poppet Flow-Path

For Installation with variable or non-variable speed turbines.

Vent line must be unobstructed, leak tight and connected to headspace of tank, not to be subjected to pressure or vacuum.

Can be installed in submersible pump or leak detector adapter Tee.

For chemical applications other than listed above, contact factory.

For installation instructions or further information on the **99 LD-2000** or other line leak detection equipment, contact your local distributor or call:



Vaporless Manufacturing Inc.

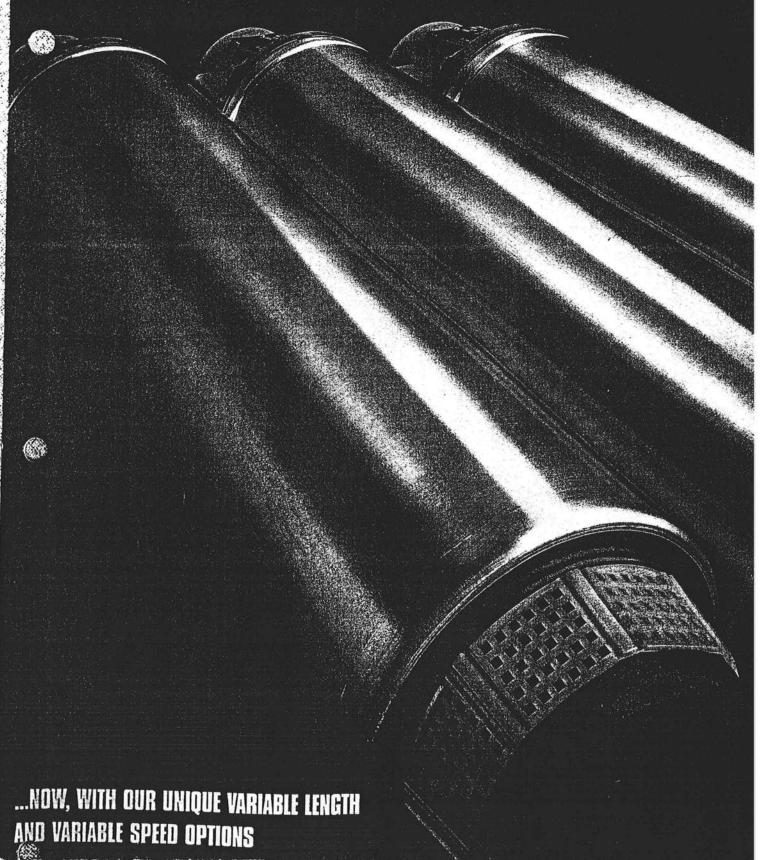
8700 East Long Mesa Drive Prescott Valley, Arizona 86314

1-800-367-0185 (928) 775-5191 www.vaporless.com

Fax (928) 775-5309

# SUBMERGED TURBINE PUMPS





R

FEPETPOS



Manufacturers for the Petroleum Industry

# SUBMERSIBLE TURBINE PUMP SPECIFICATIONS

#### GENERAL

The entire pumping assembly shall have UL listing and shall meet all requirements of UL Standard UL

The pump discharge head and manifold assembly shall be manufactured form ASTM A48 Class 30 grey iron. HORSEPOWER

The pump shall be available in 1/3 3/4, and 1 1/2 nd sepower sizes and shall be manufactured to the proper length as determined by the tank diameter, type of tank, and bury depth.

The pump motor shall have a thermal overcurrent overload protector with automatic reset.

The pump motor assembly shall be clearly marked with pertinent information including Model, Horsepower, Voltage, Phase, and Manufacturer.

The pump motor shall be a permanent split phase capacitor and type, and shall incorporate a 15 mfd capacitor.

The pumping unit shall not incorporate any flexible diaphragms and all sealing shall be accomplished with O-rings or UL recognized fiber gaskets.

The pump shall have a removable intake screen with openings no greater than 3/32 inch.

The pump shall be manufactured by FE Petro, Inc., McFarland, WI.

#### INSTALLATION AND MAINTENANCE

The pump shall have a two-wire field connection and an easy access ground wire terminal, and shall incorporate a wire seal plug which will accommodate three wires.

The pump shall incorporate a port for line pressure testing that shall be sealed with a 1/4 NPT pipe plug.

The pump unit shall have a fully extractable head in order to permit removal of the pump motor assembly without disturbing the discharge piping or the electrical wiring.

The product in the pipelines shall be held in place by a line check valve that shall have a minimum sealing force of 170 lbs when the pump is not running.

The line check valve shall be independent of the removable head and shall be easily accessible.

The removal of the extractable portion of the pump shall not disturb product in the pipelines downstream of the check valve.

During the removal of the extractable portion of the pump, product contained in the discharge manifold of the pump shall drain automatically into the storage tank.

The pump motor shall be interchangeable by horsepower with different manufacturers products.

#### OPERATION

The pump shall have an air/vapor elimination system that returns air or vapors to the underground storage tank through a tube discharging near the top of the pump motor assembly.

The pump unit shall contain a built-in expansion relief valve that relieves pressure above pumping pressure but below 50 psi.

The pump motor shall utilize the product being pumped for lubrication of the motor bearings and for cooling the stator, and this fluid shall discharge into the underground storage tank at the top of the motor.

The pump shall have syphon capability built into the pump as standard.

Rev. 8/94





#### **OPW 634 SERIES TIGHT-FILL TOP-SEAL CAPS**

Tight-Fill Top-Seal Caps are installed on top seal adaptors, when not in use, to prevent gasoline vapors from escaping and to prevent water, dust and debris from entering the tank.

#### **OPW 634TT**

The OPW 634TT is designed to mate with 4" 633T, 633TE, 61SA, 633TC, and 633TCP Top-Seal Adaptors.

Heavy duty and corrosion resistant, the body is made of Duratuff® to help eliminate rust and oxidation for a long, maintenance-free life.

The toggle lever distributes downward pressure to compress its Buna-N gasket evenly, assuring a positive, water and vapor-tight seal. The 634TT can be locked with a padlock or wire seal.

#### **Ordering Specifications**

Product No.	in.	lbs.	kg.	
634TT-7085	4"	1.01	.46	

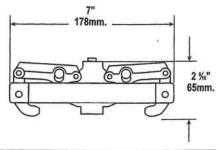
#### **Replacement Parts**

Part No.	Description	
H-05995-M	Buna-N Gasket	



#### **Materials**

Cap & links: Duratuff<sup>®</sup> Pins: stainless steel Gasket: Buna-N Color: grey



#### **OPW 634TTP**

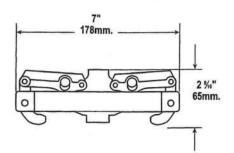
The OPW 634TTP is similar to the 634TT with the added feature of a pressure relief valve incorporated into the stem of the fill cap. A small button protrudes out of the top/center of the toggle lever, and may be manually pushed open prior to removal of the cap. If any pressure buildup occurs in the drop tube, bleed-off is possible before removing the cap.

It is important to note the use of OPW 634TTP will not release any more vapors than would be released by removing the cap normally.

#### **Ordering Specifications**

Product No.	in.	lbs.	kg.	
634TTP-8076	4"	1.01	.46	

Dimensions shown applicable to 634TT, 634TTP, 634TTM, 62TT and 1711T.



OPW 634TTP

#### **OPW 634TE**

The OPW 634TE is a single lever action top seal cap designed to mate with 3" OPW 633T Top Seal Adaptors.

The locking lever seats in the groove in the adaptor, providing a cam-down action on the cap for a positive water and vapor-tight seal. The 634TE can be locked with a padlock or wire seal. Patent #3,118,561.

#### **Ordering Specifications**

Product No.	in.	lbs.	kg.	
634TE-7085	3"	1.11	.50	

#### **Replacement Parts**

Part No.	Description	
C-01094-RB	Lever	
H-10765-M	Gasket	
H-10731-RE	Pivot Pin	



**OPW 634TE** 

# 2%e" 56mm.

#### **Materials**

Cap: Duratuff<sup>®</sup> Lever: brass Gasket: Buna-N

Pivot pin: stainless steel

Color: grey

### OPW TIGHT-FILL TOP-SEAL ADAPTORS

Tight-Fill Top-Seal Adaptors are installed in spill containment manholes on the fill riser pipe from an underground fuel storage tank. They mate with the gravity drop delivery elbow on the transport truck.

#### OPW 633T

OPW 633T Top-Seal Adaptors thread onto the fillpipe of underground storage tanks, and are designed to mate with top seal delivery elbows. Use OPW 634TT, 634TE or 634TTP Top Seal Caps with 633T Adaptors.

- Easy Installation Integral internal wrenching lugs are provided for installing in the confined space of spill containers.
- Manufactured from Durable, Corrosion-Resistant Materials - Bronze, hardcoat aluminum and composite Duratuff®.

#### **OPW 633TE**

The OPW 633TE adaptor is similar to the 633T, except it does not have internal wrenching lugs.

 Accommodate 633LC Lock Clamp – 4" x 4" 633T (E) models incorporate dual notches in the base to accept 633LC Clamps.



#### **Ordering Specifications**

- Annual Control of the Control of t				
Product No. Size		lbs.	kg.	Material
3"	2"	0.54	.25	Hardcoated Al.
3"	3"	0.96	.44	Bronze
3"	4"	0.71	.32	Hardcoated Al.
4"	4"	0.82	.37	Hardcoated Al.
4"	4"	2.70	1.23	Bronze
4"	4"	0.45	.20	Duratuff® II
4"	3"	0.89	.40	Hardcoated Al.
3"	3"	0.94	.43	Bronze
4"	4"	0.79	.36	Hardcoated Al.
4"	4"	0.48	.22	Duratuff® II
	Size 3" 3" 4" 4" 4" 4" 4" 4" 4"	Size         Thread           3"         2"           3"         3"           3"         4"           4"         4"           4"         4"           4"         4"           3"         3"           4"         4"	Size         Thread         lbs.           3"         2"         0.54           3"         3"         0.96           3"         4"         0.71           4"         4"         0.82           4"         4"         2.70           4"         4"         0.45           4"         3"         0.89           3"         3"         0.94           4"         4"         0.79	Size         Thread         lbs.         kg.           3"         2"         0.54         25           3"         3"         0.96         .44           3"         4"         0.71         .32           4"         4"         0.82         .37           4"         4"         2.70         1.23           4"         4"         0.45         .20           4"         3"         0.89         .40           3"         3"         0.94         .43           4"         4"         0.79         .36

#### Replacement Parts

Part No.	Size	Description
H-05289-M	3" x 3"	Gasket
H-04150-M	3" x 4"	Gasket
H-04145-M	4" x 3"	Gasket
H-11199-M	4" x 4"	Gasket

Note: Maximum height of adaptor is 211/16" (68mm).

#### OPW 61SA Swivel Adaptor

Pressure decay testing of underground storage tank systems has identified the joint between the tight-fill adaptor and the nipple or tank riser as a persistent leak point.

Considerable movement takes place along the hose while the fill elbow is connected. Walk-downs and changes from one compartment to another move the hose across the pavement, rotating the elbow along with it. The result can be a loosening of the adaptor. As the adaptor backs off, the seal between it and the nipple is relaxed and a leak path is created allowing vapors to escape to the atmosphere. Vacuum-assist dispensing systems can aggravate this situation due to the slight pressurization of the UST.

The 61SA Swivel Adaptor mates with 4" top-seal delivery elbows and features a top section that rotates with hose movement while the bottom section remains securely in place maintaining seal integrity.

- Dual Seals ensure a vapor and liquid-tight seal.
- Conductive, Self-Lubricating Retaining Rod - ensures maintenance-free, reliable service life.
- Same Internal 633T Adaptors - to minimize pressure drop and maximize flow rates for quick product delivery.

OPW 61SA-1000

#### **Ordering Specifications**

010011113	00011100			
Product No.	Base Material	Adaptor Material	We lbs.	ight kg.
61SA-1000	Aluminum	Bronze	7	3.2
61SA-1010	Aluminum	Aluminum	5	2.3
61SA-1020	Bronze	Bronze	10	4.5

Certifications and Listings	CARB
61SA-1000 Series	Approval Letter #95-1

**Dimension as Standard** 

#### **Materials**

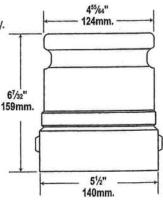
Adaptor: bronze or nickel plated aluminum

Base: bronze or nickel plated aluminum

Retaining ring: conductive nvlon

Set screws: stainless steel

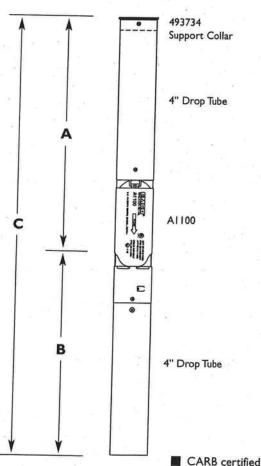
Seals: Buna-N



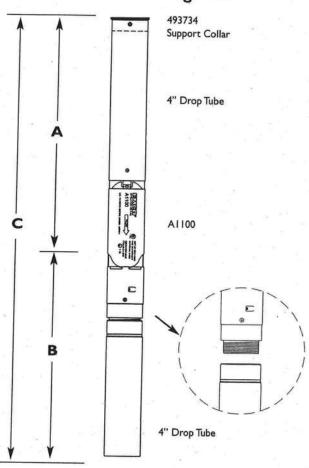


#### A I I 00 Guardian Overfill Prevention Valve Systems Stage I Vapor Recovery

#### **Dual Point Riveted**



#### **Dual Point Screw Together**



Model No.	Description	Upper Length A	Lower Length B	Overall Length C	Maximum Burial Depth	Nominal Tank Dia.	Weight
A1100-010 A1100-055 A1100-056 A1100-057 A1100-058	Valve Only Dual Point Dual Point Dual Point	N/A 77.1" 89.1" 89.1"	N/A 88.6" 100.6" 126.6"	N/A 165.8" 189.8" 215.8"	N/A 72.1" 81.3" 78.7"	N/A 96" 120" 144"	4.3 lbs. 19.2 lbs. 21.4 lbs. 24.8 lbs.
A1100-058 A1100-056S A1100-057S A1100-058S	Dual Point  Dual Pt Screw Together  Dual Pt Screw Together  Dual Pt Screw Together  Dual Pt Screw Together	89.1" 89.1"	126.6" 91.8" 103.8" 129.8" 129.8"	253.8" 168.9" 192.9" 218.9" 256.9"	116.7" 72.1" 81.3" 78.7" 116.7"	144" 96" 120" 144"	28.1 lbs. 21.5 lbs. 23.7 lbs. 27.1 lbs. 30.4 lbs.

All OPV systems listed above can be ordered as a package which includes an A0097-005 Tight Fill Cap and an A0030-014 Tight Fill Adapter. To order, place a P at the end of the variant number. (Example: A1100-055P)

Custom lengths available: Please contact our customer service department.

Lengths A and B are measured from the shut-off point (flapper). Maximum burial depth assumes 95% shut-off and 6" clearance between top of drop tube and inside bottom of containment manhole lid.

# OPW 7111SS-CSDW DOUBLE WALL STAINLESS STEEL SPILL CONTAINER.

#### **FEATURES & BENEFITS**

- Primary and Secondary Spill Buckets are completely field replaceable without needing to break concrete.
- Shallow Bury Applications At only 21-3/4" deep with a 5-gallon capacity, this spill container is great for shallow bury applications.
- Dual Stainless Steel Construction
- Flat-Wall Entry Fitting Allows for numerous installation possibilities. Designed for 3" or 4" entry fittings, field installed to desired depth.
- Spill Bucket Cover Spacious hand-grip pocket provides easy access; new cover seal prevents water and debris from entering the bucket.
- 16" center-to-center spacing 1" per bucket offset from center on 15-1/8" cover allows for nearly 3" of concrete between 16" center of bucket.
- Built-In Flex Joint Constructed with premium Pellethane fitting to allow for ground shift while keeping secondary bucket in place in the ground.
- Monitoring Port Provides quick access to the secondary bucket for monitoring or testing.
- Stainless Steel Secondary Containment Isolates
  the spill bucket and riser from backfill, preventing a
  product spill from entering the soil in the event of a
  damaged primary unit.
- Powder Coated Galvanized Steel Skirt Isolates the spill bucket from backfill, allowing both primary and secondary to be field replaceable.

#### **MATERIALS**

Primary Spill Bucket: Stainless Steel Secondary Spill Bucket: Stainless Steel

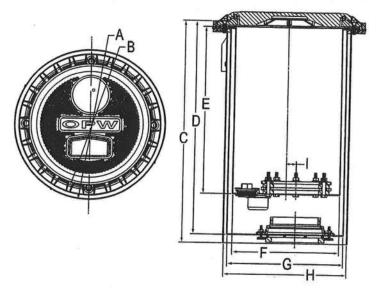
Entry Fitting: Pellethane Compression Seal: Nitrile

Cover and Mounting Ring: Cast Iron, Powder Coated

All Other Seals: Nitrile

All Other Components: Stainless Steel Skirt: Powder Coated Galvanized Steel

#### **DIMENSIONS**



	inches	cm
A	15-1/8"	38.42
В	12-29/32"	32.78
	22-5/8"	57.46
כ	21-3/4"	55.25
•	17"	43.18
•	10-9/16"	26.83
3	11-1/2"	29.21
1	12-1/4"	31.12
	1.0"	2.54

#### **ORDERING SPECIFICATIONS**

Part Number	Description
7111SS-CSDW	5 Gallon Double Wall Stainless Steel
	Spill Container

Note: Consult OPW for continuous interstitial monitoring option.



IMPORTANT: OPW/PISCES™ by OPW Inc. products must be used in compliance with applicable federal, state, provincial, and local laws and regulations. Product selection should be based on physical specifications and limitations, and compatibility with the environment and material to be handled. OPW/PISCES™ by OPW Inc. makes no warranty of fitness for a particular use. All illustrations and specifications in this literature are based on the latest production information available at the time of publication. Prices, materials, and specifications are subject to change at any time, and models may be discontinued at any time, in either case, without notice or obligation. For complete OPW warranty information visit our web site at www.opw-fc.com.



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# **\$**

#### **OPEN ATMOSPHERIC VENTS**

Open Atmospheric Vents are installed on the top of vent pipes from underground or aboveground fuel storage tanks. The vent cap and internal wire screen are designed to protect the tank vent lines against intrusion and blockage from water, debris or insects. These vents are always open to atmosphere and allow any pressure or vacuum in the tank to vent.

#### A 50 11

### OPW 23 Series Open Atmospheric Vent Features

- Reliable Service Vent cap drain spouts extend outward to deter rainwater entry.
- Corrosion-Resistant Construction Aluminum body and cap assure a long service life.
- Easy Installation The 23 is available in 2" and 3" slip-on models that provide for attachment to the vent line with set screws.
- Complies with NFPA 30
   Requirements for venting gasoline vapors upward.
- ◆ High Maximum Flow Rate 7000 SCFH at 2 psi pressure drop.
- 40-Mesh Brass Wire Screen Helps prevent debris and insects from entering the tank vent lines.



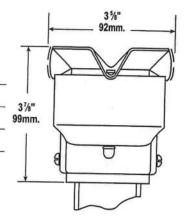
**OPW 23** 

#### **Ordering Specifications**

Product No.	in.	oz.	kg.	Description
23-0044	1½"	3.8	.11	Open Vent
23-0033	2"	4.3	.12	Open Vent
23-0055	3"	5.0	.14	Open Vent

#### **Replacement Parts**

Description	
Screw	
Nut	
Screen	1-11
	Screw Nut





#### Materials

Body: aluminum Screen: 40-mesh brass

Set Screws: brass

#### **OPW 320DV Isolation Float Vent Valves**

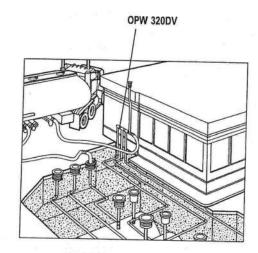
Isolation Float Vent Valves are installed aboveground on manifold vent pipes from underground fuel storage tanks. An internal stainless steel ball isolates each tank vent, should the storage tank overfill sending product into the vent lines, to help prevent intermixing of different grades of fuel.

#### **Features**

- Stainless Steel Ball Float Ensures a clean, tight seal against the valve body.
- Aluminum Valve Body Corrosionresistant for a long service life.



Product No.	in.
320DV-0130	3" x 3" x 2"





**OPW 320 DV** 







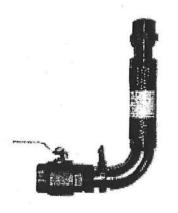


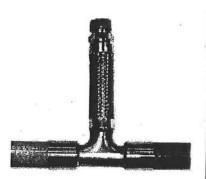
Facilitates Compliance of NFPA 30 & 30A

Flexible Ideas For Flexible Products

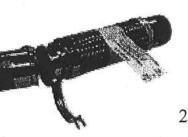
For The Petroleum, Hydraulic and Cryogenic Industries

# FLEX-CONNECTOR SYSTEMS









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LISTED



# EMERGENCY SHUT-OFF AND VAPOR LINE SHEAR VALVES/CONNECTORS/ADAPTO

# EMERGENCY SHUT-OFF VALVES AND VAPOR LINE SHEAR VALVES



# OPW 10 Series Emergency Shut-Off Valves

OPW 10 Series Emergency Shut-Off Valves are installed on fuel supply lines beneath dispensers at grade-level to minimize hazards associated with collision or fire at the dispenser. If the dispenser is pulled over or dislodged by collision, the top of the valve breaks off at the integral shear groove, activating poppets and shutting off the flow of fuel. Single-Poppet models shut off supply flow, while Double-Poppet models shut off supply as well as prevent release of fuel



# **PA15 Offset Adaptor**

The OPW PA15 Offset Adaptor is designed for adjusting misalignment of pipe in dispenser sumps and suction stubs. The PA15 has a low profile feature, and is



# **OPW 60V Series Vapor Line Shear Valves**

OPW 60 Series Vapor Line Shear Valves are installed on vapor return lines beneath dispensers at grade-level to minimize hazards associated with collision or fire at the dispenser. If the dispenser is pulled over or dislodged by collision, the top of the valve breaks free at the integral shear groove to minimize damage to the dispenser piping. Poppeted models afford additional protection by preventing the release of vapors from the dispenser's internal piping and



# **OPW Stainless-Steel Flexible Connectors**

Stainless Steel Flexible Connectors provide flexibility in the installation and operation of fuel piping systems. Flexible Connectors can be used as a convenient means of connecting piping to pumps and dispensers and throughout the piping systems where connections and changes of direction are necessary.



The FireStomper® Automatic Sump Fire Suppression System is designed to quickly and completely extinguish a fire inside a dispenser containment sump. The FireStomper® automatically discharges when the actuator temperature reaches 155° F (68° C), extinguishing a sump fire within seconds of ignition, and protecting the low-melt material piping in accordance with NFPA 30A (2001 Edition) requirements.

## POMECO/OPW CONQUISTADOR™ COMPOSITE COVER MANHOLES

Lightweight and extremely durable, composite cover manholes make sump accessibility safer and easier than ever before. Designed for use in many service station, commercial, and industrial driveway applications, these manholes offer a wide variety of features to ensure the ultimate in user-friendly convenience and long-lasting performance.

The Conquistador Duratuff® helps put an end to the risk of back, foot and hand injuries with a slip-resistant tread pattern and lightweight, low-profile construction for easier and safer access to tank sumps and other underground equipment.

#### **Features**

3.5

3.0

2.5

2.0 1.5

1.0

0.5

0

10K

20K

Loading Force (lbs.)

Deflection (Inches)

- Slip-resistant tread pattern
- Easy removal and replacement
- Two lifting options
- Reduced risk of back, foot and hand injuries
- Unmatched deflection performance
- Outstanding long-term durability in rigorous cycle tests

391/2" Cover - Load/Deflection Tests

Three mounting options

- Unique structural fiberglass reinforcement matrix
- Water-resistant models available

391/2

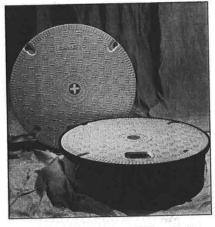
or

11

70K

60K

- Bolt-down models available
- Interchangeable with other manufacturers' covers
- Load rated to over three times H20



**Mounting Options:** 

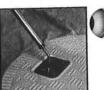
**Lifting Options** 















(90K-KLS Stick Not Included)

#### **Dimensions**

Cover	A	A B			Cover Wt.	Assembly Wt.	
39 ½"	3611/32"	92 cm	385/8"	98 cm	65 lbs.	125 lbs.	
441/4"	411/8"	104 cm	43 13/32"	110 cm	85 lbs.	157 lbs.	

### **Ordering Specifications**

Cover Manho	le Assembly	Y
Product No: 39 1/2"	44 1/4"	Description:
39CD-PL10	44CD-PL10	Cover, Plain with Recessed Handle
39CD-PLKL	44CD-PLKL	Cover, Plain with Key-Lift Provision
39CD-BD10	44CD-BD10	Cover, Bolt-Down with Recessed Handle
39CD-BDKL	44CD-BDKL	Cover, Bolt-Down with Key-Lift Provision
39CD-WT10	44CD-WT10	Cover, Bolt-Down, Gasketed, Recessed Handle
39CD-WTKL	44CD-WTKL	Cover, Bolt-Down, Gasketed with Key-Lift Provision

CONQUISTADOR' COMPETITIVE FRP COVER

FAILURE

40K

COMPETITIVE NYLON COVER

50K

Product No:		Description:
391/2"	44 1/4"	
P39CD-PL10	P44CD-PL10	Cover, Plain with Recessed Handle
P39CD-PLKL	P44CD-PLKL	Cover, Plain with Key-Lift Provision
P39CD-WT10	P44CD-WT10	Cover, Bolt-Down, Recessed Handle
P39CD-WTKL	P44CD-WTKL	Cover, Bolt-Down with Key-Lift Provision
90K-KLS		Key-Lift Provision Stick

## **OPW 104 SERIES CAST IRON MANHOLES**

Heavily ribbed cast iron covers and body rings ensure maximum load bearing capacity on cast iron manholes and fill boxes. These manholes are ideal for connecting underground tank lines directly to the surface without sump enclosures. A variety of features available on cast iron manholes and fill boxes make them the perfect choice for many applications.

#### OPW 104A Cast Iron Manhole

A sturdy steel skirt on the standard 104A extends nearly a foot below grade to ensure trouble-free installation in deep concrete, and optional skirts that extend a full 19 1/4" below grade are available in 12" and 18" diameters for sandy soil locations.

Features:

- Full-size internal diameters for maximum access and working area
- H20 Load Rating
- Rugged cast iron covers and body rings

#### **Dimensions**

Α	В	С
8"	101/8"	111/4"
12"	141/4"	111/4"
12"	141/4"	191/4"
18"	201/8"	111/4"
18"	201/8"	191/4"
	8" 12" 12" 18"	8" 101/8" 12" 141/4" 12" 141/4" 18" 201/8"

## **Ordering Specifications**

Product No.	ID(in.)	ID(mm.)	lbs.	kg.
104A-0800	8"	203	15	6.8
104A-1200	12"	305	28	12.7
104A-1219	12"	305	33	15.0
104FG-1200*	12"	305	28	12.7
104FG-1219*	12"	305	33	15.0
104A-1800	18"	457	50	22.7
104A-1819	18"	457	57	25.9

<sup>\*</sup> Finger Grip Cover Manhole

### **OPW 104FG Cast Iron** Manhole

The 104FG provides a convenient finger grip feature on the cover to facilitate cover removal.

- Cast-in non-skid finish on covers
- Sturdy, extra long steel skirts
- Individually boxed for ease of handling

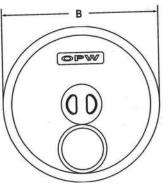
#### **Materials**

Body ring: cast iron Cover: cast iron Skirt: steel

#### Replacement Parts

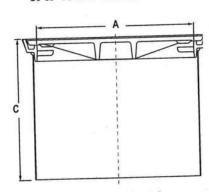
Description
Cover for 8" 104A-0800
Cover for 12" 104A-1200
Cover for 12" 104FG-1200
Cover for 18" 104A-1800
Cover for 20" 104C-2000



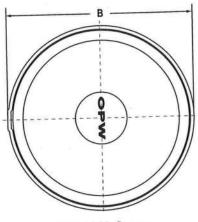




**OPW 104FG Cast Iron Manhole Cover** 



OPW 104A/FG Cast Iron **Cover Manholes** 



**OPW 104A Cover** 

## OPW 233 SERIES EXTRACTOR FITTINGS

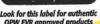


OPW 233 Series Extractor Fittings thread into 4" NPT openings on underground storage tanks. A 4" riser pipe threads into the top of the 233 for use in Stage I Vapor Recovery or to access a ball float. The 233 Extractor Fittings have threaded single-outlet connections for attaching tank vent lines or multiple outlets used to manifold tank vents or accommodate Stage II vapor return lines from dispensers. Internal threads on the 233 are designed to install a ball float or test plug in the extractor.

#### **Features Include**

- Duragard<sup>®</sup> Coated Cast Iron Body Helps prevent rust and corrosion for long service life.
- ZA12 Zinc/Alloy Cage Assembly –
   Eases installation and removal of ball float vent valves and test plugs.
- Precision Machined Threads Help prevent cross threading of the ball float or tank riser pipe.
- Compatible with 85% Ethanol (E85) or Methanol (M85)







(TEE)

#### **OPW 233**

The OPW 233 Extractor Fittings are designed for use with all OPW 30MV and 3" 53VML Ball Float Vent Valves that include an extractor cage (the OPW 233 does not include an extractor cage). The 233 Extractor incorporates either single-outlet or multiple-outlet threads.

#### **OPW 233V**

The OPW 233V Extractor Fittings are designed for use with all OPW 53VML 2" Ball Float Vent Valves (the OPW 233V includes an extractor cage). The 233V is a threaded single-outlet extractor designed to connect vent lines to the underground tank.

#### **OPW 233VM**

The OPW 233VM Extractor Fittings are designed for use with all OPW 53VML 2" Ball Float Vent Valves. (The OPW 233VM includes an extractor cage.) The 233VM is a multiple-outlet extractor used to manifold tank vents or accommodate Stage II vapor return lines from dispensers.

### **OPW 233VP Extractor Test Plug**

The OPW 233VP Extractor Fitting Test Plug is used on all OPW 233, 233V and 233VM Series Extractor Fittings. The 233VP incorporates an O-ring above the threads (on the plug) to isolate the tank from the vent piping systems during a tank test.

#### **Ordering Specifications**

6	Top	Thread	Outle	t Thread	Botto	m Thread	Wei	ght
Product No.	in.	mm.	in.	mm.	in.	mm.	lbs.	kgs.
233-4420 (Tee)*	. 4"	102	2"	51.	4"	102 Ext.	13.89	6.31
233-4430 (Tee)*	4"	102	3"	76	4"	102 Ext.	14.06	6.39
233-4422 (Cross)*	4"	102	2" x 2"	51 x 51	4"	102 Ext.	15.18	6.90
233-4433 (Cross)*	4"	102	3" x 3"	76 x 76	4"	102 Ext.	15.54	7.06
233-4432 (Cross)*	4"	102	3" x 2"	76 x 51	4"	102 Ext.	17.29	7.86
233V-4420 (Tee)	4"	102	2"	- 51	4"	102 Ext.	15.33	6.99
233V-4430 (Tee)	4"	102	3"	76	4"	102 Ext.	12.50	5.68
233VIII-4422 (Cross)		102	2" x 2"	51 x 51	4"	102 Ext.	16.62	7.55
233VM-4433 (Cross)	4"	102	3" x 3"	76 x 76	4"	102 Ext.	16.98	7.72
233VM-6045 (Cross)	4"	102	3" x 2"	76 x 51	4"	102 Ext.	16.62	8.51
233VM-604L (BSPP)	4"	102	3" x 2"	76 x 51	4"	102 Ext.	16.62	8.51

<sup>\*</sup> without cage assembly

Note: Use OPW 89 Extractor Wrenches (See Page 186)





(CAGE)



233 VP Test Plug

#### Replacement Parts

OPW 233V and 233VM

Part No.	Description		
H-08932	Cage SA		
233VP-6046	Test Plug		





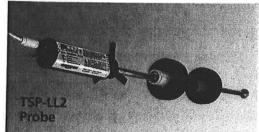


The TS-750 kit is a complete, easy to order and cost effective solution for your environmental compliance needs. It provides inventory control and leak detection for sites with up to 4 underground storage tanks.

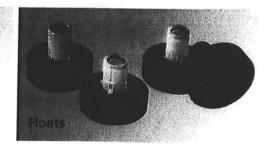
#### **Features**

- Designed specifically to deliver cost-effective environmental compliance
- TS-750 compliance tank gauge includes printer
- Can accommodate up to 8 sensors and 4 probes
- Provides real-time, accurate inventory and delivery information for each tank monitored
- Optional, continuous, 24 hour leak testing (SCALD)
- Capable of multiple alarm modes

- Can control remote visual and audible alarms
- Easily programmed to meet site-specific criteria
- Uses INCON's magnetostrictive technology probes for unparalleled accuracy
- Reports product and water levels in tank
- Temperature compensated
- Will accommodate tanks up to 12 feet in diameter
- Kits provide for easy ordering and great value







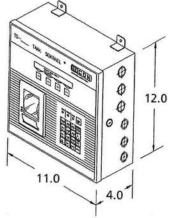
# TANK SENTINEL®— Compliance Kit

# TS-750

#### Specifications **Unit Model** TS-750 TSP-LL2-nnn **Dimensions** 12"H x 11"W x 4"D Varies (nnn+shaft Length) **Operating Temperature** 32 - 122°F (0 - 50°C) 14 - 122°F (-10 - 50°C) Storage Temperature -4 - 140°F (-20 - 60°C) -40 - 158°F (-40 - 70°C) Intinsic Safety Rating Class 1, Div. 1, Group D Form C Relay 2 **Output Channels** Leak Detection 8 Sensor Input Channels The following specifications apply to all models:

## Dimensions

Console



PROPERTY AND PROPERTY OF THE P	
Number of Tanks Monitored	1, 2, 3, or 4
Applicable Liquids	Petroleum
Level Units	Inches or (millimeters)
Volume Units	Gallons or (Liters)
Display Type	Alphanumeric LCD
Display size	2 lines of 40 characters
Printer type	24 column thermal
Power requirements	117 + 10% VAC 50 Watts Maximum

#### **Order Kit Number**

T750P/1 = TS-750/Printer/1 Tank

T750P/1S = TS-750/Printer/1 Tank/SCALD

T750P/2 = TS-750/Printer/2 Tanks

T750P/2S = TS-750/Printer/2 Tanks/SCALD

T750P/3 = TS-750/Printer/3 Tanks

T750P/3S = TS-750/Printer/3 Tanks/SCALD

T750P/4 = TS-750/Printer/4 Tanks

T750P/4S = TS-750/Printer/4 Tanks/SCALD

#### All Kits Include:

• TS-750 Tank Gauge • Installation Kits

Probes
 4 inch Float Sets

#### **Ordering Information**

The TS-750 is available in kit form, designed specifically for underground fuel storage tank sites. When ordering, specify the number of tanks, the diameter of each tank, and the product type for each tank. INCON will provide the appropriate TS-750 tank gauge, probes, floats, and installation kits for each site.





Franklin Fueling Systems

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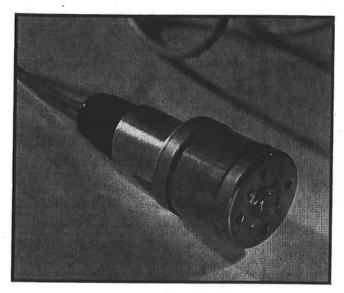


# SENSORS

## TSP-ULS

## TANK SENTINEL®

BriteSensor®, Universal Liquid Sensor



The TSP-ULS Liquid Sensor is a low-cost liquid sensor which may be used with all Tank Sentinel® automatic tank gauge (ATG) consoles. Based on float-switch technology and made of chemically resistant materials, the TSP-ULS may be installed in sumps, dispenser pans, steel double-wall tanks or other locations where the presence of liquid indicates a leak has occurred.

- Highly reliable float technology and closed output circuit ensures that leaks are detected
- Chemically-resistant materials assure compatibility with most liquids

**FUNCTIONALITY** 

Utilizes float switch technology to indicate if a leak has occurred.

#### INSTALLATION

Each TSP-ULS comes with 25-foot cable. NPT thread (1/2") is provided on the compression gland fitting attached to the sensor's cable, allowing it to be suspended from standard electrical boxes and fittings. Sensor may be positioned vertically by adjusting cable length.

For steel interstitial tanks, TSP-ULS is lowered into the opening provided on the tank and is suspended by optional TSP-KI2 installation kit.

Other mounting methods available depending upon application and location.

#### ORDERING INFORMATION

TSP-ULS Universal Liquid Sensor

Optional Accessory:

TSP-KI2 Interstitial Sensor Riser Cap Kit







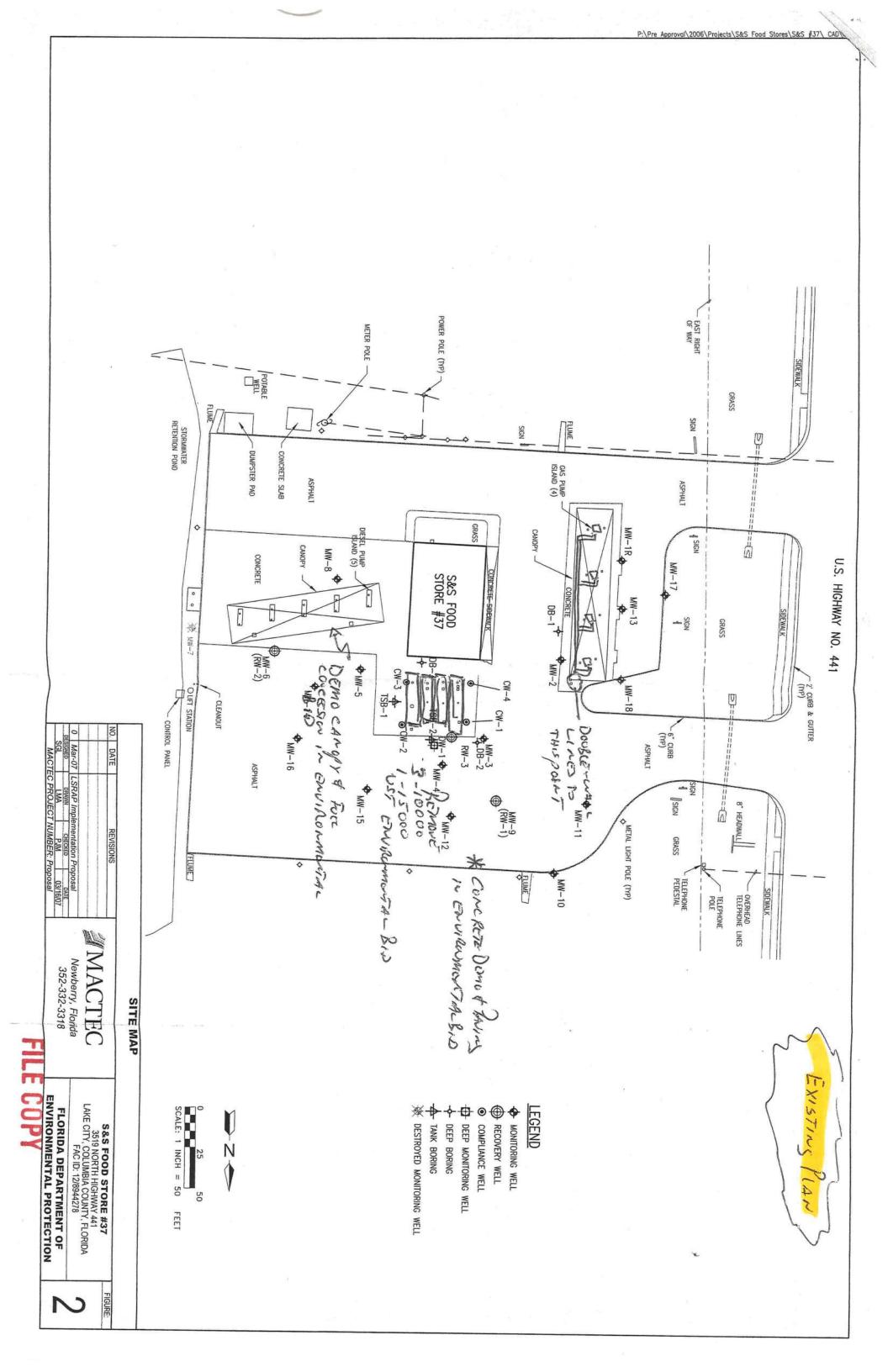


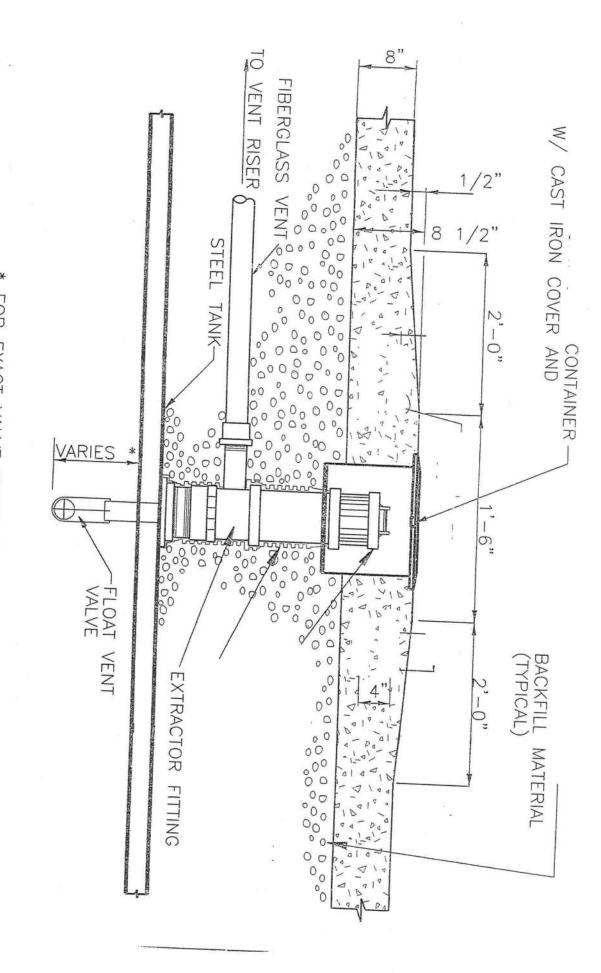
800-872-3455

74 Industrial Park Road, P.O. Box 638, Saco, Maine 04072 Phone: 207-283-0156/Fax: 207-283-0158 www.intelcon.com/e-mail: sales@intelcon.com

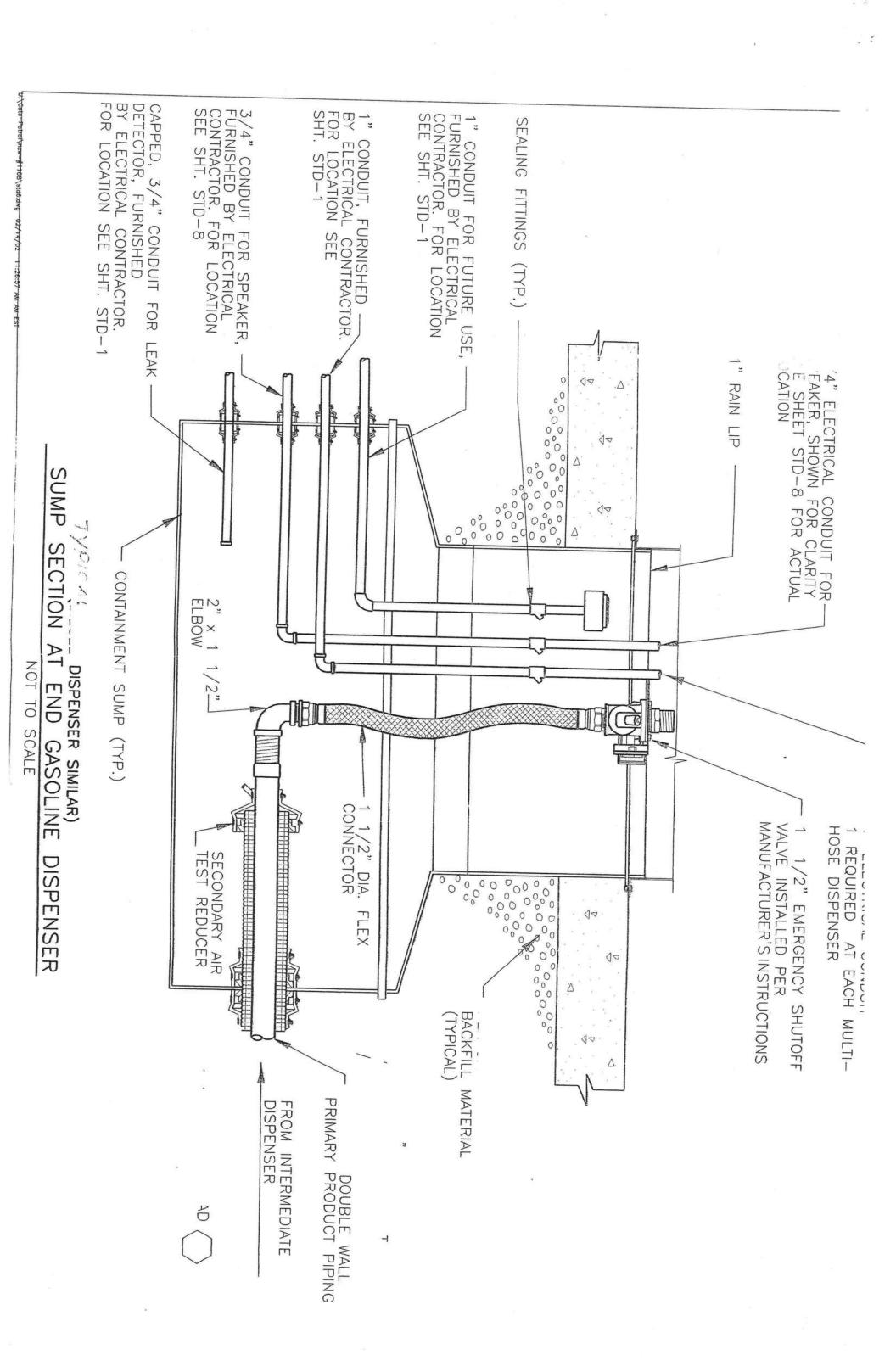


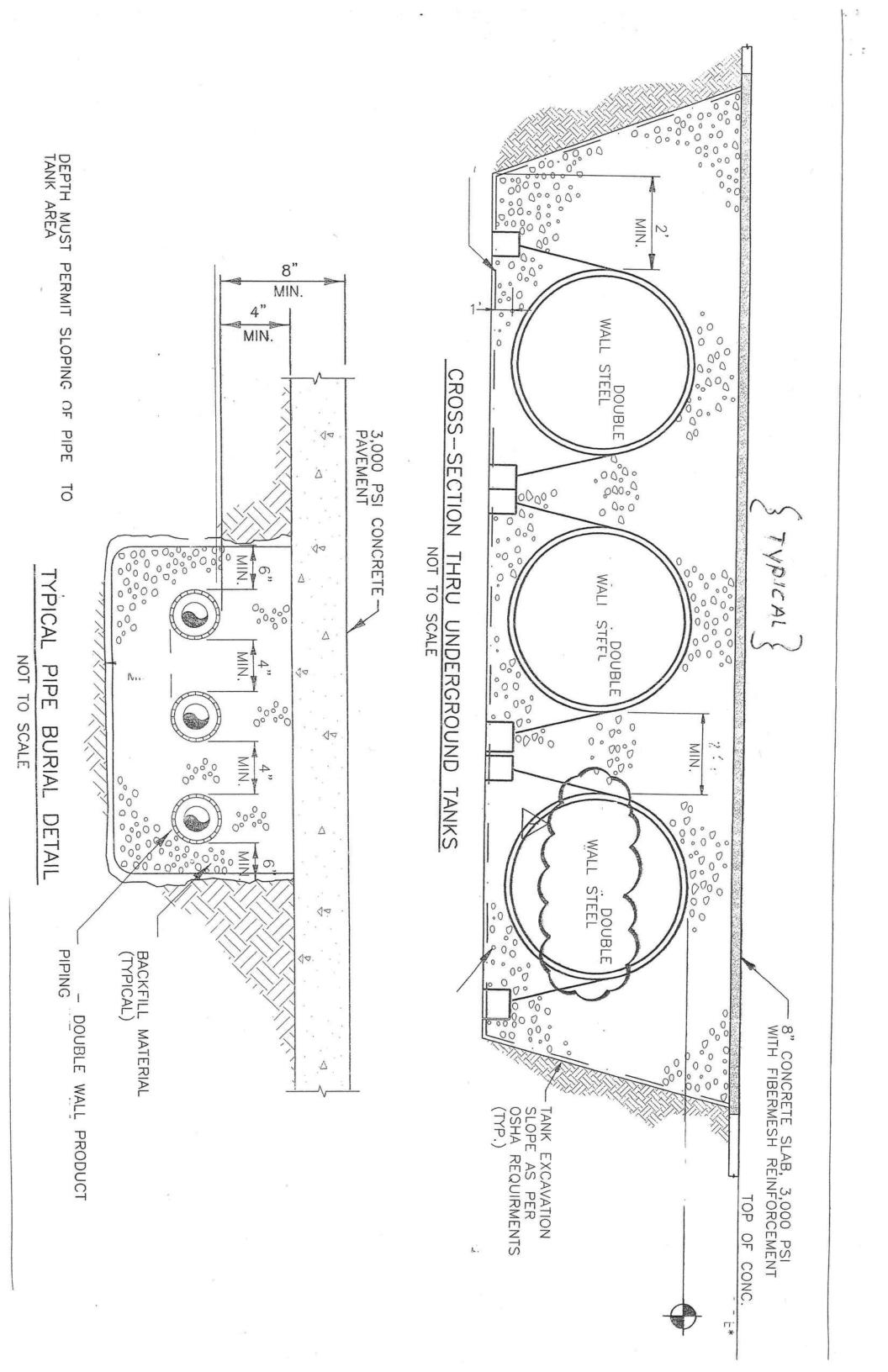
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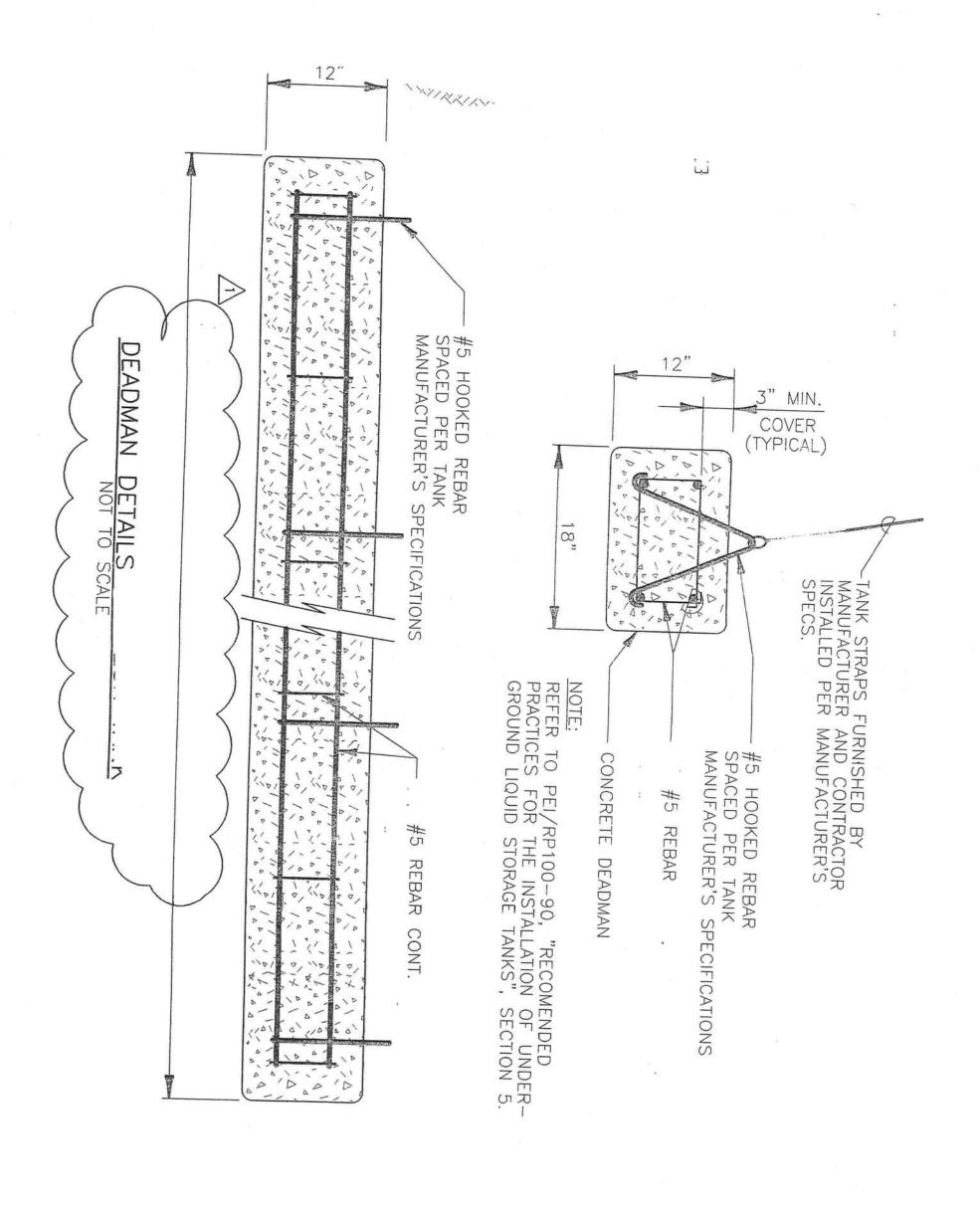


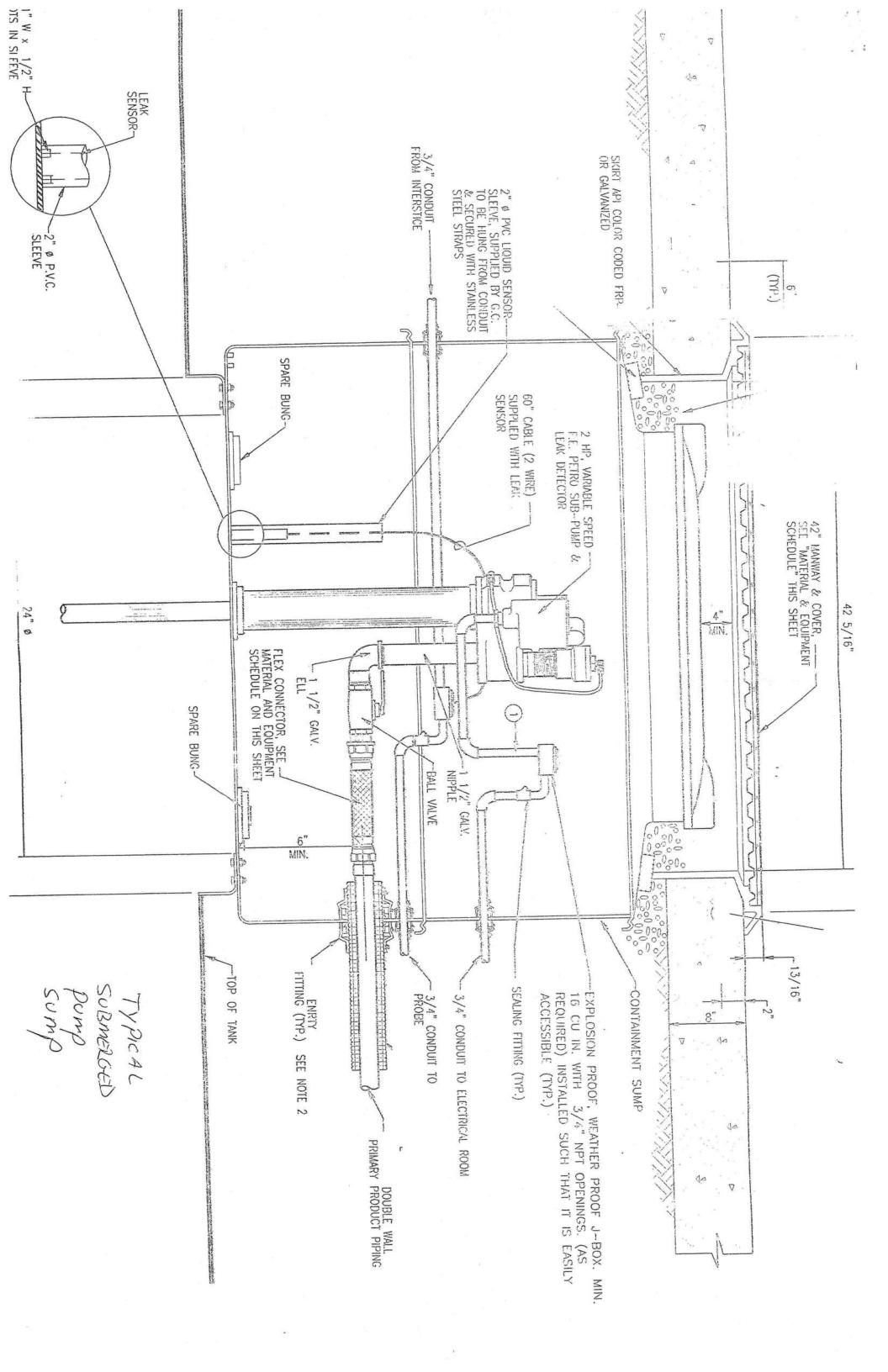


\* FOR EXACT VALVE DEPTH FOR EACH TANK, SEE CHART BELOW.









TANK FILL DETAIL

SOLL