



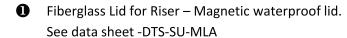
### "Better By Design"

### Octagonal Fiberglass Tank Sump

#### **TECHNICAL DATA SHEET**







2 Sump Riser - 32" inside diameter designed for 4 foot burial. Isophthalic resin rated for fueling applications. (See optional shallow burial riser on reverse page)

Octagonal sump base manufactured from isophthalic resin rated for fueling applications.

The tank base is manufactured for 42" or 48" collar mounting, as well as bung mounting. Cut out bottom section for either 42" or 48" collar mounting.

Large 23" high panels on sides for easy pipe penetrations.

Optional Friction Fit Lid

Optional Tank Sump Adaptor (SU-TSA) for bung mounting applications – see data sheet. DTS-SU-TSA

Optional Sump Riser Extension (SU-TKSF EXT) – see data sheet-DTS-SU-TKSF Ext. The extension is 24" tall allowing for up to 6' burial. Multiple extensions may be installed. Consult factory for less than 4' burial.

Optional sensor mounting kit (SU-SMK) – see data sheet-DTS-SU-SMK.

(See reverse page for sump dimensions)

# SHIELDS HARPER

#### PRODUCTS USED ON THIS PROJECT

 Yes
 No

 □
 Octagonal Fiberglass Tank Sump
 SU-TKSF

 □
 2' Fiberglass Extension
 SU-TKSF EXT

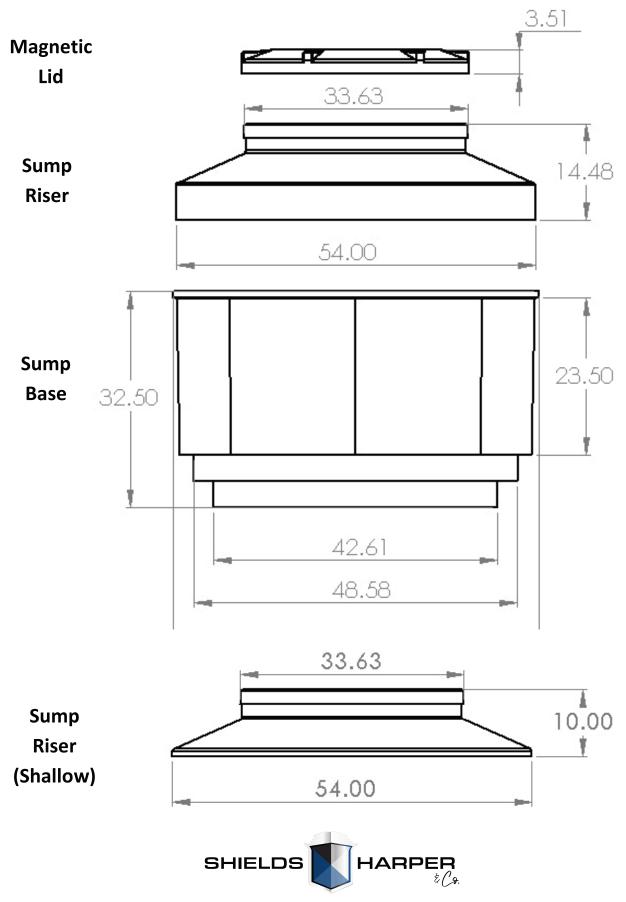
 □
 Tank Sump Adaptor
 SU-TSA

 □
 Tank Sump with Friction Lid
 SU-TKSF-SB-FL





### "Better By Design"







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### Octagonal Fiberglass Tank Sump

**TECHNICAL DATA SHEET** 



- Magnetic Fiberglass Lid for Riser (Optional Friction Lid)
- 2 Sump Riser 32" inside diameter designed for 4 foot burial. Isophthalic resin rated for fueling applications. Height is field adjustable.
- 3 Octagonal sump base manufactured from isophthalic resin rated for fueling applications.

The tank base is manufactured for 42" or 48" collar mounting, as well as bung mounting.

Large 16" high panels on sides for easy pipe penetrations.

Optional Tank Sump Adaptor (SU-TSA) for bung mounting applications – see data sheet (DTS-SU-TSA).

Optional Sump Riser Extension (SU-TSFA-EXT) – see data sheet DTS-SU-TSFA-EXT. The extension is 24" tall, allowing for up to 6' burial. Multiple extensions may be installed. Consult factory for less than 4' burial.

Optional Sensor Mounting Kit (SU-SMK) – see data sheet DTS-SU-SMK.

Dimensional Data on Reverse

#### THIRD PARTY APPROVALS





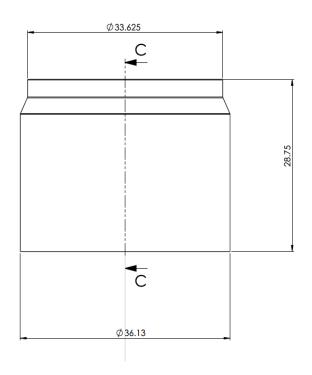


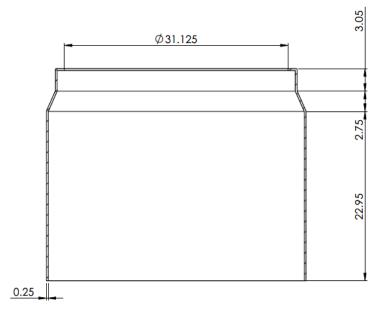
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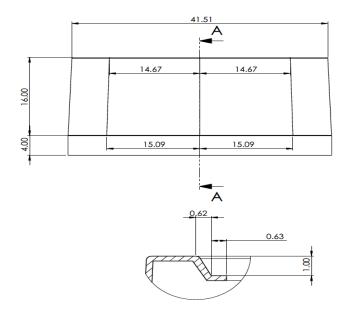


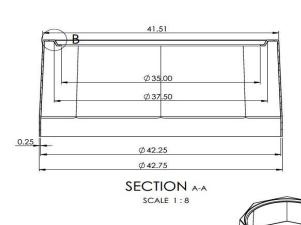


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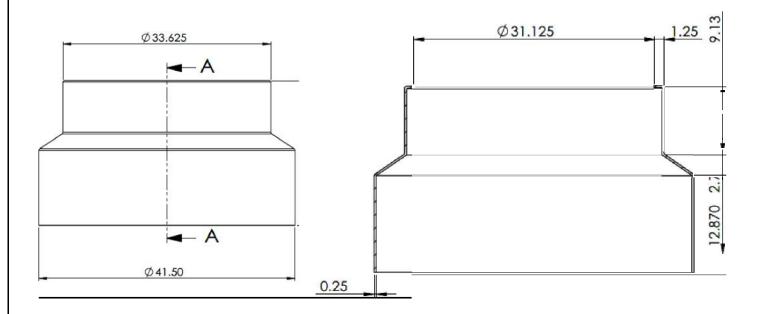


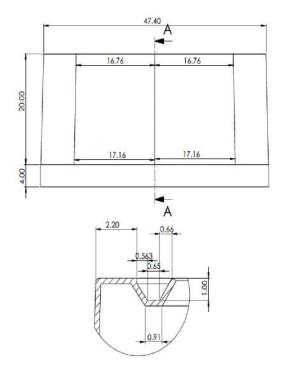


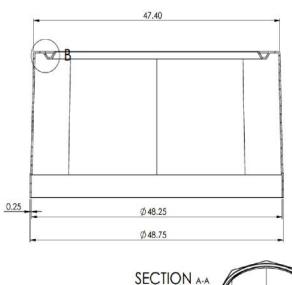




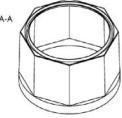
### "Better By Design"







SCALE 1:8







#### **Installation Instructions**

## **SU-TKSF**

#### **Tank Sumps**



**Diversified Products** 

Manufacturing Inc.



Weaver Products

**Prepare all Surfaces:** All surfaces to be bonded should be prepared prior to Completing the installation steps below.

**Warning:** Failure to follow each step will void the warranty and may result in premature failure of the penetration fitting. Adhere to the following general instructions for each step of the installation.

**Bonding to Poly & FRP surfaces:** Clean and sand (rough up) sump surfaces with CH-DBC II. Remove all gel coat on all fiberglass surfaces. Apply CH-DBB V to all surfaces to be bonded both the fitting and sump wall.

**Cleaning:** Spray all surfaces to be bonded with CH-DBC II Cleaner and allow to air dry. Excess cleaner may be wiped off with a clean dry cloth.

Diversified's Tank sumps are two part. This allows the base to be installed and piped prior to the assembly of the riser or entension (deep burial applications). The riser may be field cut in a dish pattern for shallow burial applications approximately 42". the standard riser provideds a sump burial of approximately 48". Each tank sump may be directly mounted to the tank sump bung by using diversifieds Tank sump adaptor. Or the sump base may be factory or field modified for 42" or 48" collar installations.

#### Step 1

**Inspect the riser and base:** At the time the riser and base are received, the products should be immediately unpacked and checked for damage. Should the base or riser be damaged, notify the carrier and contact the factory immediately.

#### Step 2

**Prepare for mounting:** Determine if the sump is to be bung or collar mounted either 42" or 48". If Bung mounted determine the location of the turbine riser and cut a hole for the riser. Follow the installation instructions for the tank sump adaptor provided. If collar mounted, cut the appropriate segment out of the bottome of the sump. The sumps may be ordered with the bottoms removed for either 42" or 48" collar mounting. Sand all surfaces to be bonded removing all gel coat and clean with CH-DBC II.

#### Step 3

**Mount the sump base:** If bung mounted follow the instructions provided with the tank sump adaptor. If Collar mounted, sand all surfaces to be bonded and clean with CH-DBC II.

#### Step 4

**Prepare the Epoxy:** It takes 4.3 lbs of CH-DEB epoxy for a 42" collar mount and 4.9 lbs for a 48" collar mount. Order sepearately as a kit or in bulk. Use the container provided and mix part A & B thouroughly. If desired, the epoxy may be mixed outside the can provided. If so clean the surface where the epoxy will be mixed with CH-DBC II prior to use.



















#### Step 5

**Apply the Epoxy:** Apply an even bead of epoxy around the collar and seat the sump onto the tank. Wipe off any displaced epoxy on the sump exterior where possible. Smooth the epoxy seam on the sump interior. Make sure the seam is thouroughly packed with the epoxy, spread evenly with a spatula and let cure. Let cure for 4 hours prior to entering the sump to perform the piping functions inside the sump.

#### Step 6

**Install extension or riser:** Sand and clean the shelf for the mounting of the extension or the riser. For shallow burial cut down the riser to a dish pattern. For standard burial applications approximately 6" may be cut off the bottom of the riser skirt. Mix the epoxy as described above and seat the riser or extension. Allow 4 hours prior to disturbing sump after bonding is completed.

#### Step 7

**Install magnetic Lid:** Using the SU-ML Tool check riser for Planarity and install magnetic Lid. Follow instructions supplied with the tool.

#### **Tools Needed**

Sanding and cleaning products
Saws for trimming riser and cutting holes for adaptor or collars









#### **Products Needed**

SU-TKSF

CH-DEB-5 lb Epoxy Kit

- .9 lb for a bung mount (Tank Adaptor Kit)
- 3.3 lb for a riser or an extensoin. (Required for every sump)
- 4.3 lb for a 42" collar mount
- 4.9 lb for a 48" collar mount



#### Reference Data



#### **Guideline Specifications Tank Sumps**



#### **Guideline Specifications**

### Sumps & Accessories – Tank Sumps About the Product

Diversified's sump line includes, Fiberglass Tank Sumps, Under Dispenser Containment both HDPE polyethylene and fiberglass. Under Dispenser Containment is available for retail sumps and commercial sumps. Additionally Transition Sumps are available from 24" through 48" cube. Accessories to support these products are also contained in this section. Fiberglass sumps are manufactured using isopthaulic or vinyl ester resins. HDPE sumps are rotary molded.

### Guideline Specifications Tank Sumps (SU-TSF)

Provide Tank Sumps as shown on the drawings or as otherwise specified. Tanks sumps shall be resin transfer molded. Laid up sumps shall not be acceptable. Sumps wall thickness shall be 3/8 consistently throughout the sump. Both sides of the sump shall have a Class A finish allowing the installation of penetration fittings without the need for smoothing the surface. All sumps shall be octagonal where penetrations enter the sump. The sump shall have both a 42" and a 48" collar mount and a solid floor for mounting to a tank when using a tank adaptor kit. Tank sumps shall be two part with a bottom half that is 33" tall. Octagonal panels shall have at least 22" of free vertical area for mounting of fittings. The riser shall transition from the octagonal bottom half to a 33" round riser. Sump risers shall allow for shallow burial (<48"), medium burial (48" nominal) and shall have extensions available in 2 ft increments to allow any burial depth greater than 48". Risers shall be designed to be cut down in the field. Tank sumps shall incorporate a magnetic attractor on the lip of the riser. The Attractor shall be designed to mate with Diversified's magnetic lid. The riser shall be mounted to the base using Diversified's epoxy CH-DEB.

#### Tank Sump Extensions (SU-TKSF Ext)

Provide sump extensions where required for deep burial applications. Tank sump extensions shall mate with the tank sump riser and shall contain a magnetic attractor on one end. Risers shall be able to be cut down in the field to extend the sump any length up to 24" Extensions shall be installed to the riser using Diversified epoxy CH-DEB.

#### Tank Sump Magnetic Lid (SU-ML)

For each Tank Sump, provide a Magnet Lid. Magnetic lids shall be manufactured using isopthaulic or vinyl ester resins and fiberglass mat. Lids shall be resin transfer molded and shall have a smooth finish on both the interior and exterior of the lid. Lids shall mate with the adaptor ring. Lids shall contain a replaceable fuel resistant seal. Lids shall be equipped with a sufficient number of rare earth magnets to assure a minimum of 30 ft lb of thrust to release the lid form the attractor. Lids shall be water tight when installed.

