

NsertAseal Corporation

Environmental and Fire Safety Products
For the Petrochemical Industry

Product Catalog



Leo Kozlowski and James E. Webb, company co-founders

"In 1989 we were oil refinery firefighters. At oil refineries, sandbagging is the customary procedure to temporarily seal potentially explosive process sewer drains during hotwork. But sandbagging can be a messy, drain-fouling, labor-intensive technique. We talked of a better way. Eventually we came up with our Original Inserts. That was the beginning of NsertAseal. NsertAseal incorporated in 1991. Since then, our line of vapor missions control and fire safety products has expanded significantly.

NsertAseal Corporation still sells Original Inserts, but our main focus now involves retrofitting sewer systems with water seals that are semi-permanently caulked into place. These seals allow waste fluid to pass through drains into the sewer system normally, but stop fugitive emissions from leaching back out into the atmosphere.

Our drain seals help the petrochemical industry comply with regulatory mandates and contribute to a safe, odor-free work environment. Our standard inventory Vertical Pipe Trap (VPT) inserts are for sealing standard drain openings, from two to twelve inches in diameter. To solve unique drain problems, we produce custom VPT designs. We also design and fabricate large seals for junction boxes, catch basins, manholes, and vent pipes.

Our primary business goal has always been simple: To satisfy our customers with drain sealing devices that save money, save time, and work better than anything else available."

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Four Factors to Consider

When seeking a solution to process sewer drain emissions problems, the four factors of primary importance are:

SAFETY	Implementing a drain solution must not create a safety problem.
EFFECTIVENESS	A seal to guard against fugitive emissions must work well, and be easily observed and verified.
SIMPLICITY	Product design must be simple and rugged. Installation should be efficient and uncomplicated.
AFFORDABILITY	Product cost must be affordable to the customer and an attractive alternative to more complicated solutions.

Making Process sewer systems conform to the latest environmental and safety regulations can be an expensive, time consuming proposition. NsertAseal offers affordable products that solve emissions problems.

Our inserts are simple to install. No complicated, expensive, or dangerous modification of existing installations is necessary. No shutdowns or hot work is required. They can be installed in minutes with a minimum of training.

NsertAseal products have been successfully used for years across the country in many large refineries. They have withstood the test of time and have proven themselves to be reliable and durable.

Our refinery customers depend upon NsertAseal to solve their emissions problems. And when our refinery customers upgrade and renovate their facilities, NsertAseal depends upon their satisfaction with us for their repeat business.

NsertAseal Helps Manage Process Sewer Drains

Drop-In Technology . . .

Most NsertAseal products are designed to be caulked into existing drain systems without labor intensive installation procedures. For most emissions problems we have off-the-shelf solutions. When unique solutions are required, we create custom products to do the job. When old systems have to be brought into regulatory compliance, our products can save refineries time, money, and space. NsertAseal inserts can also be used in new construction applications at a fraction of the cost and space requirements of conventional fittings when water seal vapor barriers are needed.

Control of Benzene and Other Hazardous Chemicals . . .

The NsertAseal Vertical Pipe Trap (VPT) is one of the most widely used products in the industry for the passive sealing of new or existing process drain openings and bringing them into compliance with government regulations controlling the emission of benzene and other hazardous chemicals. The patented water seal design of the VPT can be adapted to an opening of almost any size and shape. Water seals maintain true drain function, while preventing the escape of vapors.

Elimination of Noxious Odors . . .

Our VPT's, Box Traps, and custom-fabricated seals provide a barrier against the emission of noxious, pungent, and worrisome odors from refinery sewer systems. Use of our ruggedly constructed and economical products demonstrates an oil refinery's desire to maintain a good relationship with employees and neighbors.

Making Hot-Work Safe Without Fouling Drain Systems . . .

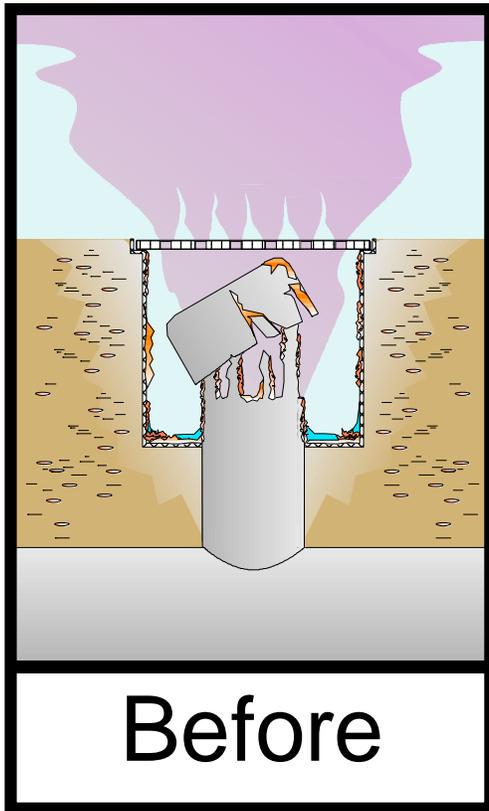
NsertAseal has products to securely seal drains during welding, cutting, and other "hot-work" in potentially explosive environments. Unlike sand bags and other loose drain covers, these drain closure systems are easy to install and provide greater fire protection and less chance of sand and other contaminants from fouling the process drain system.

NsertAseal Sells Directly to Customers

We Work Closely with Our Customers

When you specify NsertAseal Products, you're not only buying reliable, quality equipment, you're buying the expertise of the NsertAseal team. We give all of our customers the same high level of personal attention and service. When helpful, we send our technicians out to our customers' installations. This focused attention eliminates the added expense of rework, while ensuring an effective and appropriate drain management system for the customer.

Our Experience Helps Us Identify Cost-Saving Solutions

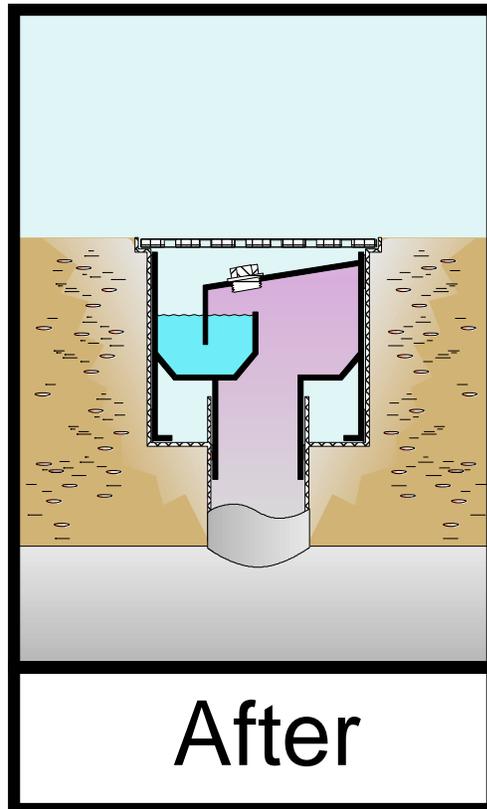


For example, during a recent compliance upgrade project at a large refinery, government mandates threatened to cost a potential customer a great deal of time, planning, and expense. Regulations required that this refinery's drain sumps be fitted with seals to prevent fugitive emissions. These drain openings were large and numerous, and they were extremely corroded, with parts of the original vapor trap system missing.

An idea of the sewer-drain problem this refinery was facing can be gathered from the illustration at left.

This refinery's original plan was to clear the drain areas of any obstructing equipment, isolate and clear the sewer system, and fabricate new drain sumps. This would have involved digging-up and removing the drain sumps and welding in the new. After excavation and refill, the whole area would then have had to be repaved. All this would have required a shutdown and the utilization of a great deal of highly-skilled labor. A lot of time and money was at stake.

When NsertAseal was called and visited the plant, we came up with an innovative solution. We developed a special pneumatic cutting tool to trim and clean the corroded drain openings. Then we designed and cast special water seal inserts that could be installed with sealant into newly prepared drain openings. These inserts renewed the drain sumps instantly with no loss of flow. Even the valuable original gratings were able to be reused.



Since approximately 1000 openings were corrected, savings were massive. Our recommendations and know-how saved this grateful customer literally hundreds of thousands of dollars.

Our Products Are Tested By Time,
Are Used Throughout the Country, and
Are Indorsed By Our Customers . . .

Our products have been used in the biggest oil refining companies in the world for the last fifteen years. Chevron in Philadelphia (now Sun Oil) has used them on a massive scale. So has HOVENSA in St. Croix. We were of great service to Chevron in El Paso (now Western Refining), where VPT's are widely used. NsertAseal seals are also widely used at Chevron in El Segundo, California.

A letter of Recommendation:

HOVENSA

REPLY TO:
HHOVENSA L.L.C.
1 Estate Hop
Christiansted VI 00820-5652

October 27, 2003

Dear Mr. Kozlowski:

In regard to NsertAseal Corporation and its products:

In approximately 1994, regulations required the HOVENSA Refinery in St. Croix, US Virgin Islands, to undertake an extensive retrofit of our sewer system. NsertAseal Corporation was of immense help. This company came up with custom-designed products and innovative techniques that reduced our expected costs dramatically. NsertAseal offers products that are easily installed and maintained. Their on-site consultations and ability to solve problems was invaluable. I am happy to recommend NsertAseal whenever environmental regulations require upgrading existing process sewer drains.

Sincerely,
Luther Edwards
Luther Edwards, P.E.
Manager of Design Engineering
HOVENSA, L.L.C.
Phone: 340-692-3533

Among our other satisfied customers are Chevron in Pascagoula, Mississippi; Chevron in St. James, Louisiana; Sunoco in Toledo, Ohio; TPI/Valero in Ardmore, Oklahoma; Tesoro in Anacortes, Washington; Marathon-Ashland in Robinson, Illinois; Chevron in Salt Lake City; and refineries and chemical plants owned by Arco, Shell, and Mapco. Large general contractors number among our customers, including Bechtel International, Fluor-Daniel, McJunkin, ABB Lummus Global, Raytheon, and JE Merit.

A Memorandum Chevron Shared with NsertAseal During NsertAseal's Participation in the Philadelphia Installation:

MEMORANDUM

Date: February 7, 1992
To: D.S. Silinski
From: R.G. Bullinger
Subject: Sole Source Justification for P-Trap Drain Inserts
Benzene NESHAP Compliance Project

D. Silinski,

It is our recommendation that fabrication of P-Trap inserts for Benzene NESHAPs job should be from a single source:

We have the following reasons for recommending the sole source procurement.

There are only two vendors in the USA with patented designs for these unique P-Trap Inserts.

Bechtel at Philadelphia Refinery and at El Segundo Refinery has conducted extensive performance tests on these inserts and clearly insert fabricated by NsertAseal Corporation has better performance characteristics and price advantage.

Installation of these inserts must be completed before March 7, 1993 to demonstrate Chevron's good faith effort to compliance date.

R.G. Bullinger

SCS/cjj

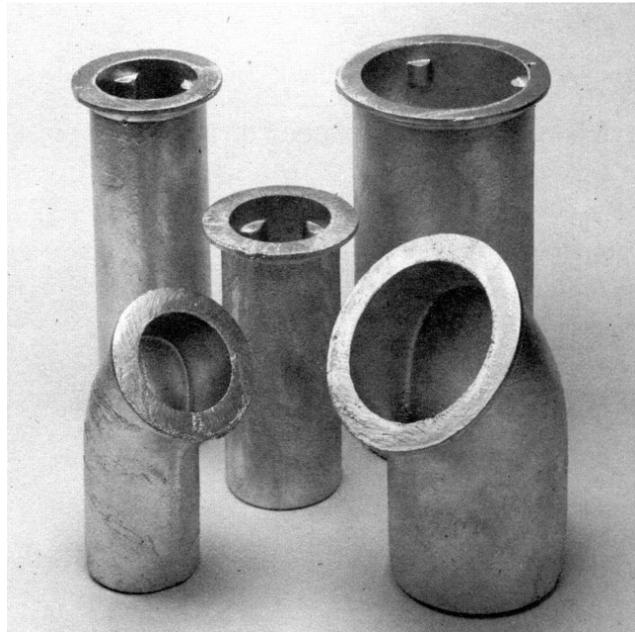
cc: S.S. Vinayagalingam
C.E. Emerick
S.C. Sethi

Our Line of Vertical Pipe Traps (VPT's)

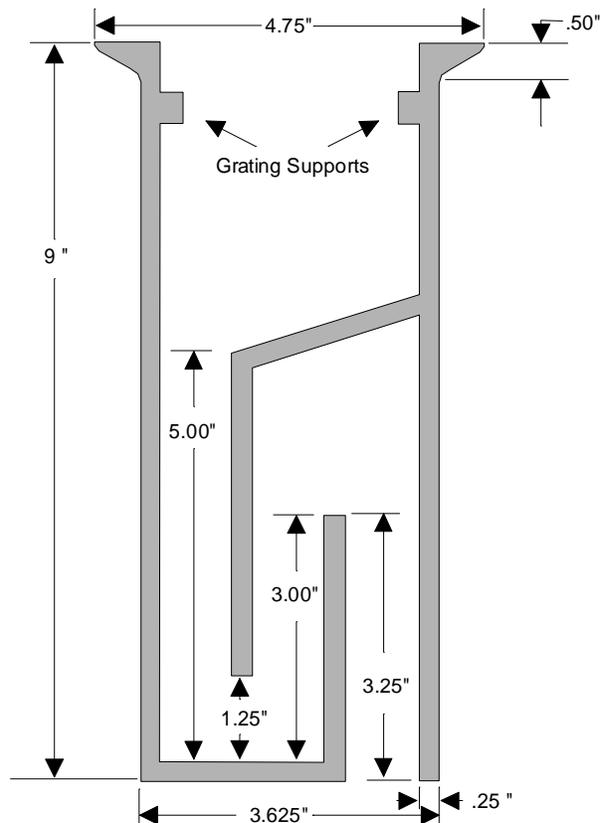
When old sewer drain systems have to be brought into regulatory compliance, our Vertical Pipe Trap products (VPT's) can save refineries time, money, and space. VPT's are easy to install and maintain. Our VPT drain seals help the petrochemical industry comply with regulatory mandates and contribute to a safe, odor-free work environment.

VPT's are simply caulked into existing drain systems without the need for shut-downs or labor intensive installation procedures. VPT's allow normal use of drains, but by establishing a column of water between the sewer system and the outside atmosphere, they prevent the escape of fugitive evaporation emissions. NsertAseal VPT inserts can also be used in new construction.

The innovative, patented VPT was developed to enable industry to meet the latest environmental control standards more conveniently and less expensively than other means available. A column of water held inside the VPT stops vapors from escaping through the process drain. VPT's are designed for easy installation and maintenance. Most drains can be retrofitted in a few minutes.



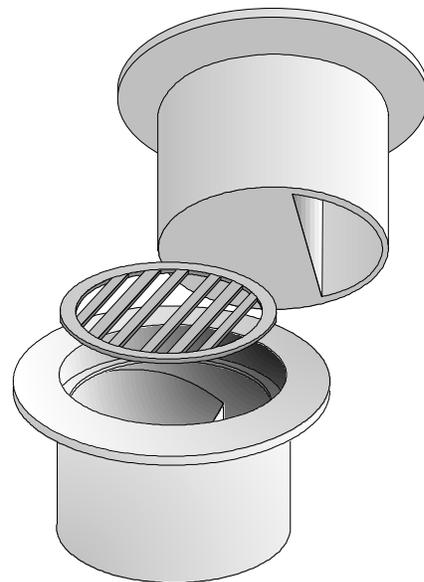
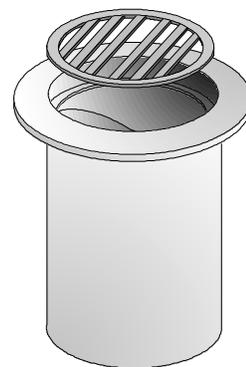
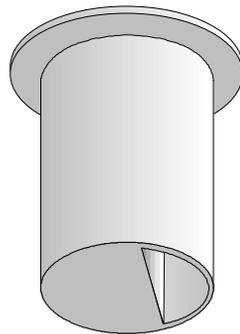
Type-20 Four-Inch Insert



Installation of the VPT is simple and effective. VPT's are simply caulked into the existing drain hub or shaft using silicone or latex-based caulks. This allows for for a semi-permanent installation that will often stay in place for years, yet will allow the periodic removal of the unit should that ever become desirable.

The VPT is available in a number of standard sizes and configurations to fit most standard industrial sewer drain configurations. For many years we made our standard inventory of VPT's from powder-coated cast iron. However, because of increasingly lengthy foundry lead times, rising costs, and other issues, we now fabricate some of our new VPTs models (particularly 4" and 6" short models) from stainless steel.

We still have a large inventory of powder-coated cast iron products in some sizes. We will be offering immediate shipment and lower prices on these models until inventories are depleted. New production in these models will be in stainless steel. Both materials have excellent performance qualities. Stainless steel is a bit more expensive, but when our inventories run out, shorter delivery schedules with newly constructed products will now be under our control. We also design and fabricate custom designed stainless VPTs for unusually configured drain openings and other hard-to-fit applications.



VPT Standard Inventory
Catalog List
prices as of 10/10/2023



NsertAseal Corporation

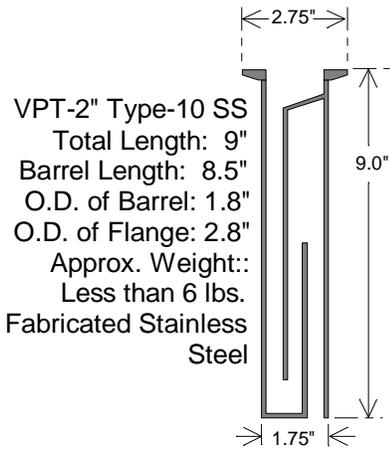
Phone: 707-226-1504 Send Surface Mail To:
Email: nsertaseal@aol.com 560 Hoover Street
Napa, CA 94559

Visit us online at: NsertAseal.Com

MODEL / TYPE	FOR DRAIN PIPE SIZE	DRAIN PIPE SCHEDULES AND SIZES	VPT BARREL O.D.	VPT FLANGE O.D. (outside diameter to opposite side outside diameter)	VPT FLANGE HEIGHT (thickness of flange at thickest point)	VPT TOTAL LENGTH (including flange)	VPT BARREL LENGTH (length extending below flange)	APPROX. SHIP. WEIGHT	PRICE
VPT-2" / Type-10	2"	fits XH (Schedule 80), STD (Schedule 40), and below fabricated stainless steel	1.8"	2.8"	0.5"	9"	8.75"	<6 LBS.	call for price
VPT-3" / Type-9	3"	fits XH (Schedule 80), STD (Schedule 40), and below; cast iron.	2.8"	3.8"	0.6"	9"	8.4"	10 LBS.	call for price
VPT-4" / Type-20	4"	fits XH (Schedule 80), STD (Schedule 40), and below; cast iron	3.7"	4.9"	0.5"	9"	8.5"	12 LBS.	call for price
VPT-4" S (short) / Type-22	4"	fits XH (Schedule 80), STD (Schedule 40), and below; cast iron	3.7"	4.9"	0.5"	6"	5.5"	8 LBS.	call for price
VPT-4" Stainless / Type-20 SS	4"	fits STD (Schedule 40) and XH (Schedule 80) 304 Stainless Steel	3.5"	4.875"	0.125"	7.25"	7.125"	<10 LBS.	call for price
VPT-6" Stainless Type-19 SS	6"	fits STD (Schedule 40) and XH (Schedule 80) 304 Stainless Steel	5.563"	6.75"	0.125"	7.25"	7.125"	<12 LBS.	call for price
VPT-6" / Type-19	6"	fits STD (Schedule 40) and below; will not fit XH (Schedule 80); cast iron	5.8"	6.8"	0.5"	11.1"	10.6"	25 LBS.	call for price
VPT-6" Schd.80 / Type-19B	6"	fits XH (Schedule 80) cast iron	5.5"	6.5"	1.0"	11.1"	10.1"	25 LBS.	call for price
VPT-8" / Type-6 (will fit Schd.80)	8"	fits both STD (Sch. 40) and XH (Sch. 80) Fabricated Steel	7.5"	9.0"	0.75"	10.25"	9.5"	30 LBS.	call for price
VPT-10" / Type-18	10"	fits both STD (Sch. 40) and XH (Sch. 80) Fabricated Steel	9.5"	11.0"	0.75"	12.5"	11.75"	55 LBS.	call for price
VPT-12" / Type-25	12"	fits both STD (Sch. 40) and XH (Sch. 80) Fabricated Steel	11.75"	13.75"	0.375"	12.875"	12.375"	75 LBS.	call for price
CUSTOM VPT UNITS TO FIT SPECIAL 45- AND 90- ELBOWS	FOR ELBOWS AND OTHER UNIQUE APPLICATIONS; ASK FOR PRICE QUOTE. WE WILL MAKE SOMETHING TO FIT.							call for price	

We also design and fabricate custom designed stainless VPTs for unusually configured drain openings and other hard-to-fit applications.

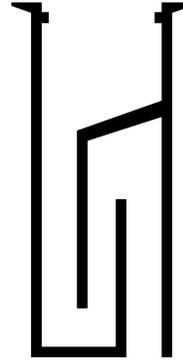
Cross-Sectional Views and Specifications of Standard VPT's



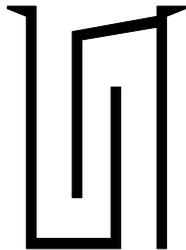
VPT-2" Type-10 SS
 Total Length: 9"
 Barrel Length: 8.5"
 O.D. of Barrel: 1.8"
 O.D. of Flange: 2.8"
 Approx. Weight: Less than 6 lbs.
 Fabricated Stainless Steel



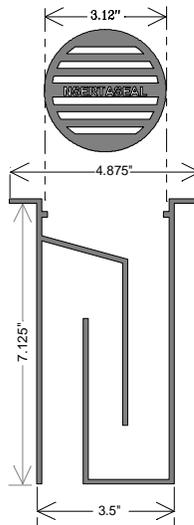
VPT-3" Type-9
 Total Length: 9"
 Barrel Length: 8.5"
 O.D. of Barrel: 2.8"
 O.D. of Flange: 3.8"
 Approx. Weight: 10 lbs.
 Cast Iron
 Includes Grate



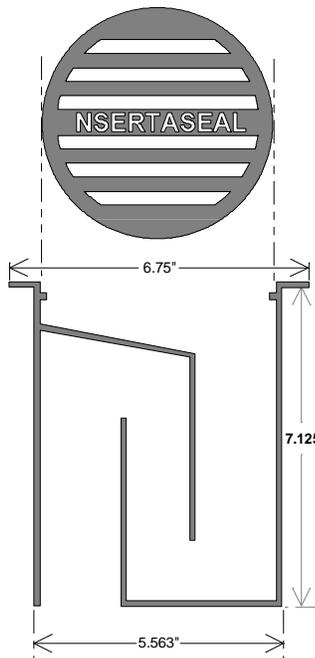
VPT-4" Type-20
 Total Length: 9"
 Barrel Length: 8.5"
 O.D. of Barrel: 3.7"
 O.D. of Flange: 4.9"
 Approx. Weight: 12 lbs.
 Cast Iron
 Includes Grate



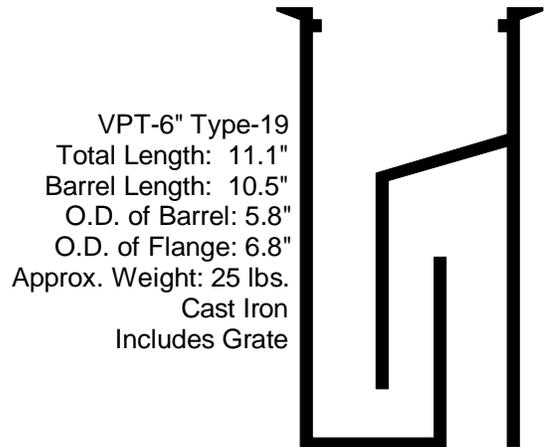
VPT-4" Type-22
 Total Length: 6"
 Barrel Length: 5.5"
 O.D. of Barrel: 3.7"
 O.D. of Flange: 4.9"
 Approx. Weight: 8 lbs.
 Cast Iron; No Grate



VPT-4" Type-20 SS
 Total Length: 7.25"
 Barrel Length: 7.125"
 O.D. of Barrel: 3.5"
 O.D. of Flange: 4.875"
 Approx. Weight: Less than 10 lbs.; Fabricated Stainless Steel; Includes Grate; new replacement for Type-20 and Type-22 Cast Iron units



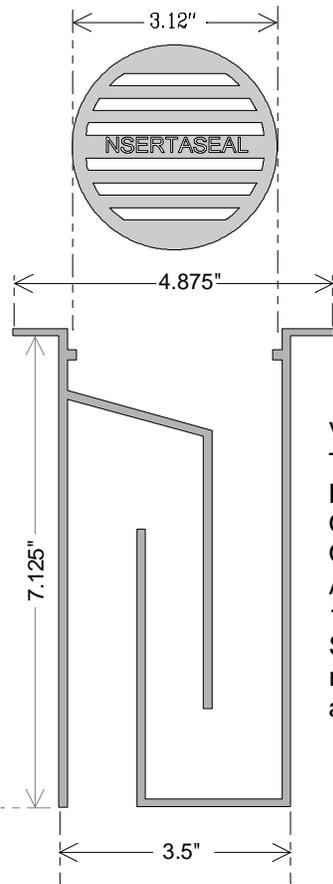
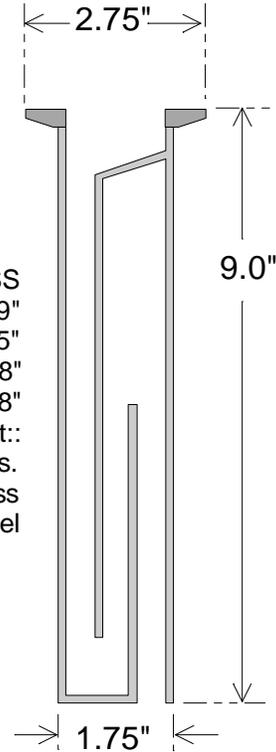
VPT-6" Type-19 SS
 Total Length: 7.25"
 Barrel Length: 7.125"
 O.D. of Barrel: 5.563"
 O.D. of Flange: 6.75"
 Approx. Weight: less than 20 lbs.
 Fabricated Stainless Steel; Includes Grate; new replacement for VPT-6" Type-19, VPT-6" Sch.80; and VPT-6" Short.



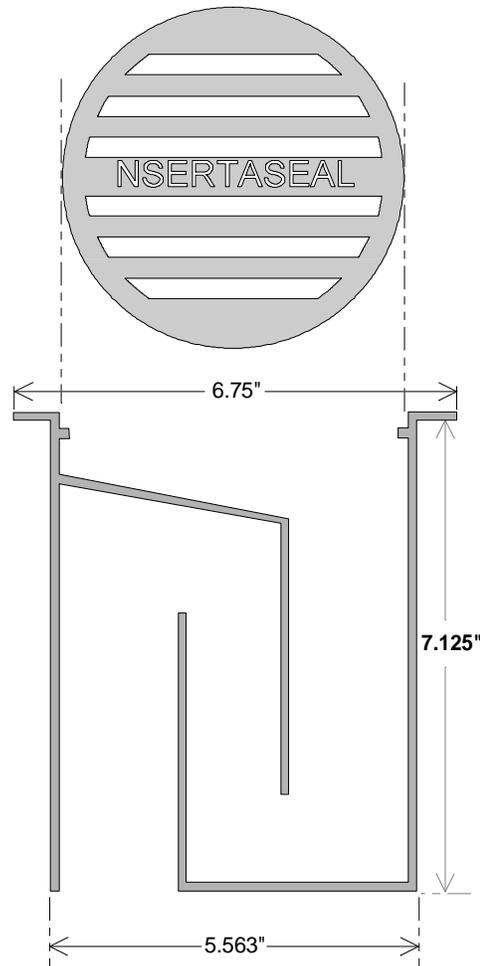
VPT-6" Type-19
 Total Length: 11.1"
 Barrel Length: 10.5"
 O.D. of Barrel: 5.8"
 O.D. of Flange: 6.8"
 Approx. Weight: 25 lbs.
 Cast Iron
 Includes Grate

New Stainless Steel VPTs

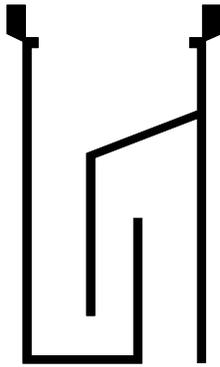
VPT-2" Type-10 SS
 Total Length: 9"
 Barrel Length: 8.5"
 O.D. of Barrel: 1.8"
 O.D. of Flange: 2.8"
 Approx. Weight:
 Less than 6 lbs.
 Fabricated Stainless
 Steel



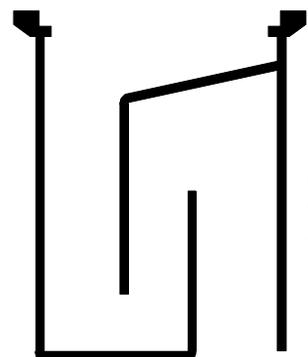
VPT-4" Type-20 SS
 Total Length: 7.25"
 Barrel Length: 7.125"
 O.D. of Barrel: 3.5"
 O.D. of Flange: 4.875"
 Approx. Weight: Less than
 10 lbs.; Fabricated Stainless
 Steel; Includes Grate; new
 replacement for Type-20
 and Type-22 Cast Iron units



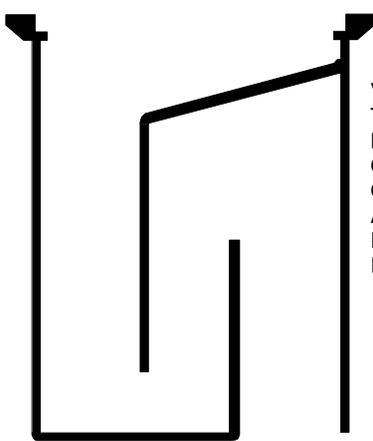
VPT-6" Type-19 SS
 Total Length: 7.25"
 Barrel Length: 7.125"
 O.D. of Barrel: 5.563"
 O.D. of Flange: 6.75"
 Approx. Weight:
 less than 20 lbs.
 Fabricated Stainless Steel;
 Includes Grate;
 new replacement for VPT-6"
 Type-19, VPT-6" Sch.80;
 and VPT-6" Short.



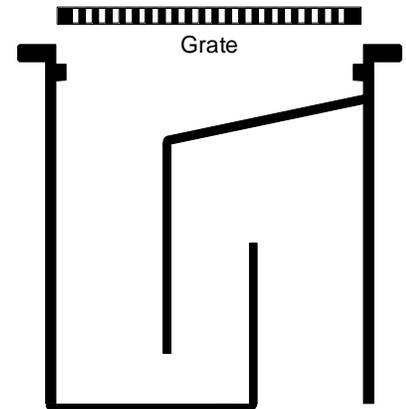
VPT-6" Schd. 80 Type-19B
Total Length: 11.1"
Barrel Length: 10.5"
O.D. of Barrel: 5.5"
O.D. of Flange: 6.5"
Approx. Weight: 25 lbs.
Cast Iron; Includes Grate



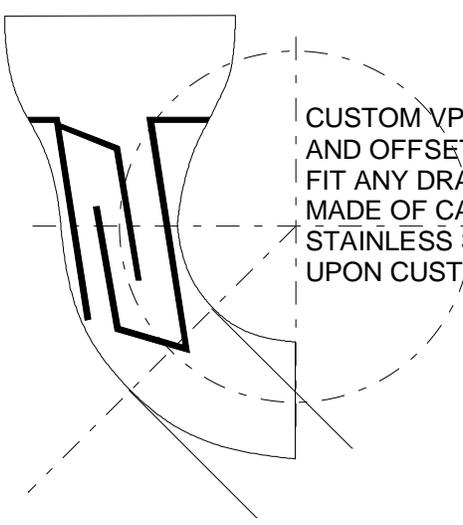
VPT-8" Type-6
(fits Schedule 40 and 80)
Total Length: 10.25"
Barrel Length: 9.5"
O.D. of Barrel: 7.5"
O.D. of Flange: 9.0"
Approx. Weight: 40 lbs.
Fabricated Steel
Includes Grate



VPT-10" Type-18
Total Length: 12.5"
Barrel Length: 11.75"
O.D. of Barrel: 9.5"
O.D. of Flange: 11.0"
Approx. Weight: 52 lbs.
Fabricated Steel;
Includes Grate



VPT-12" Type-25
Total Length: 12.875"; Barrel Length: 12.5"
O.D. of Barrel: 11.75"; O.D. of Flange: 13.75"
Approx. Weight: 70 lbs.;
Fabricated Steel; Includes Grate

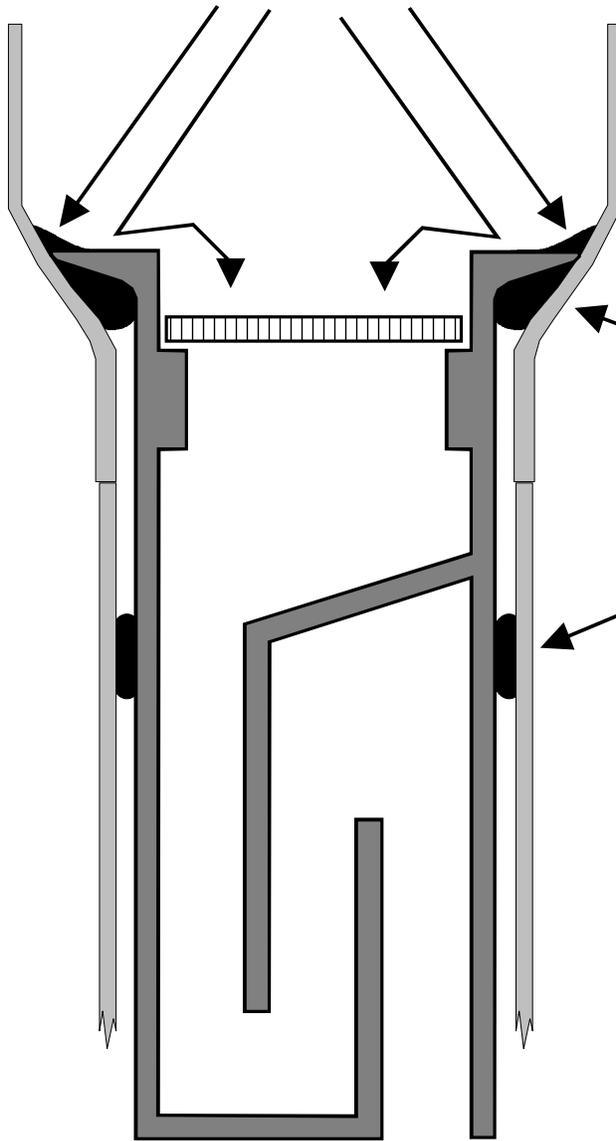


CUSTOM VPT SLANTED
AND OFFSET; MADE TO
FIT ANY DRAIN APPLICATION;
MADE OF CAST IRON OR
STAINLESS STEEL, DEPENDING
UPON CUSTOMER REQUIREMENTS.

**In addition to the
units pictured here,
upon customer
request and
consultation we will
fabricate seals to fit
any drain
opening of any size
and configuration.**

Caulking Procedure

Use BoatLife Caulk (boatlife.com), or Lexel Caulk made by Sashco (Sashco.com), or any other silicone caulk of good quality. Caulk should direct sewage into throat of insert; spread caulk progressively higher as it radiates away from perimeter of flange.

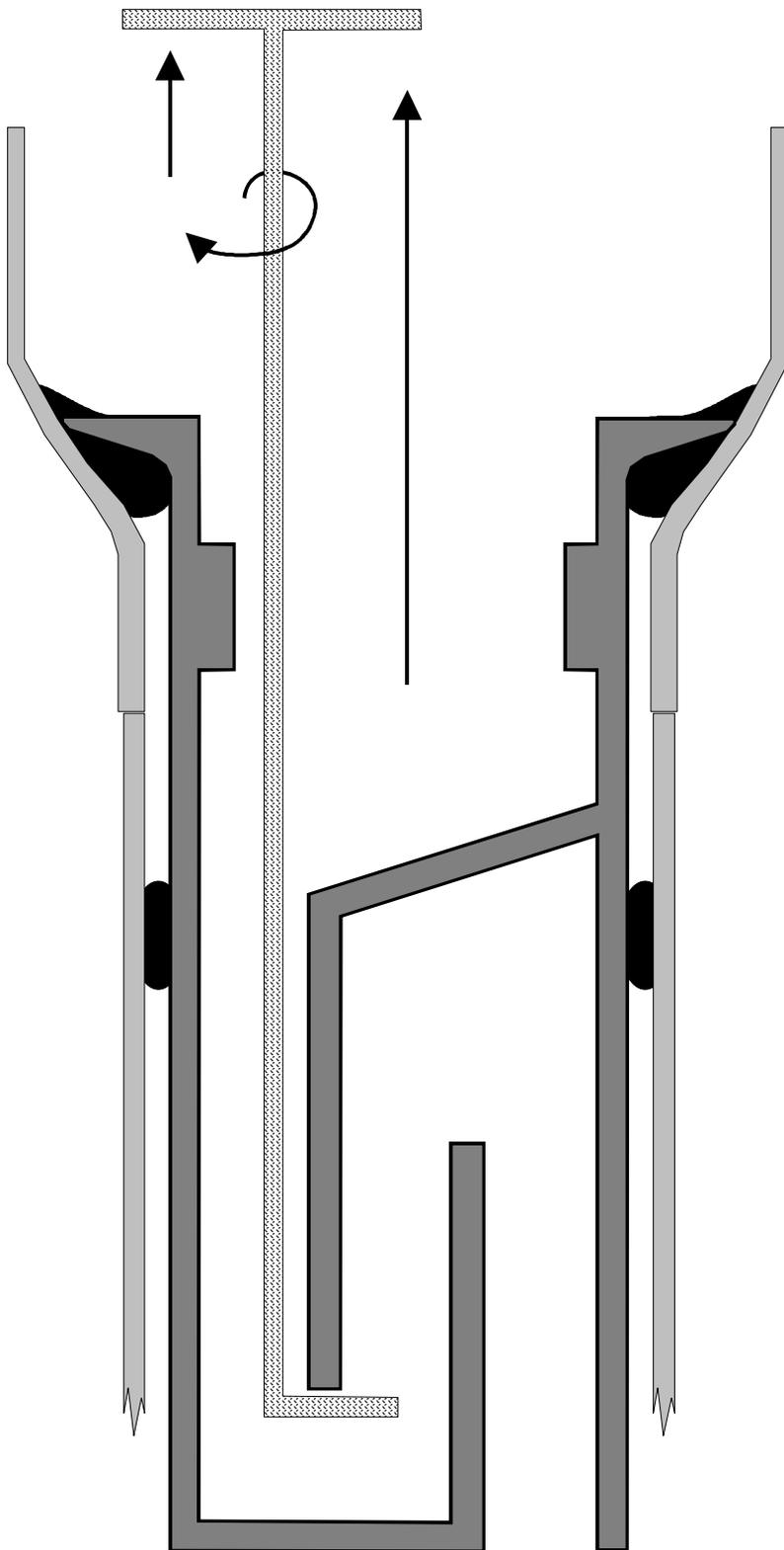


Put a bead of caulk beneath the flange of the insert, creating an airtight seal between underside of flange and the inside diameter of the drain hole. After seating the insert into the drain hole, place another bead atop the circumference of the flange, directing sewage toward center, down into the throat of the insert.

Place a bead of caulk around the insert, midway down the side of the barrel.

Sometimes underside of flange will not seat perfectly against all points of the smallest inside diameter of the concentric reducer, bell housing, or other structure topping the drain opening. That is okay. Just caulk as indicated in diagram. It is the caulk, not the metal against metal, which creates and maintains the seal.



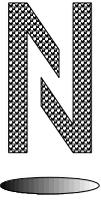


Removal Procedure

Removal can be accomplished easily, should it ever become desirable. Use a tool with an "L" bend at the end. One can be made of iron bar stock. Such tools are available from NsertAseal Corp. Insert tool into throat of insert. Twist 90-degrees, then pull up, rocking insert to break silicone caulk seal.

N NsertAseal Corporation
Phone: 707-226-1504 Send Surface Mail To:
Email: nsertaseal@aol.com 560 Hoover Street
Napa, CA 94559

Visit us online at: NsertAseal.Com



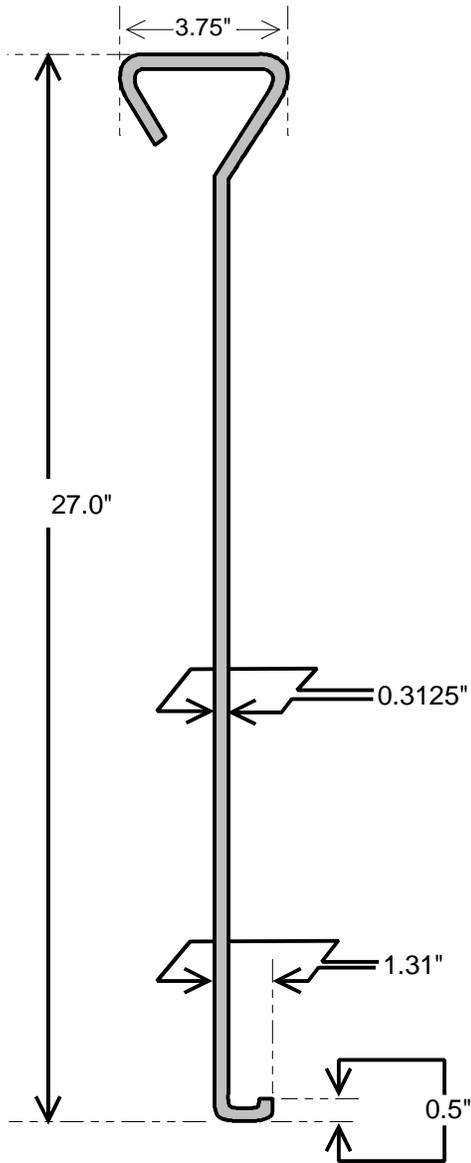
NsertAseal Corporation

Phone: 707-226-1504

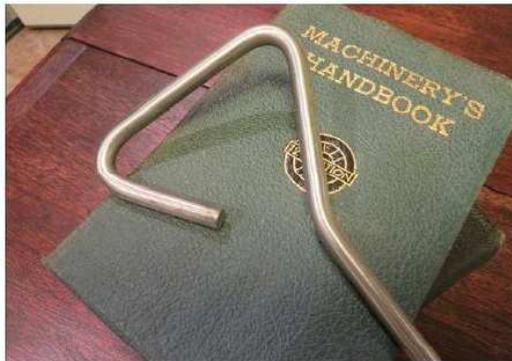
Send Email to: NSERTASEAL@AOL.COM

Send surface mail to 560 Hoover St.; Napa, CA 94559

Web Site: NsertAseal.Com



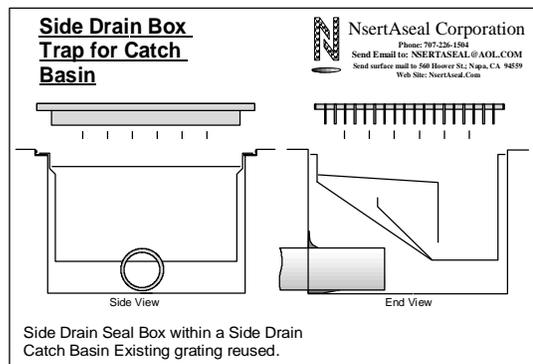
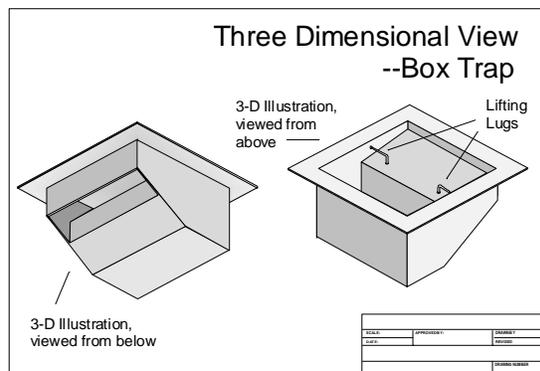
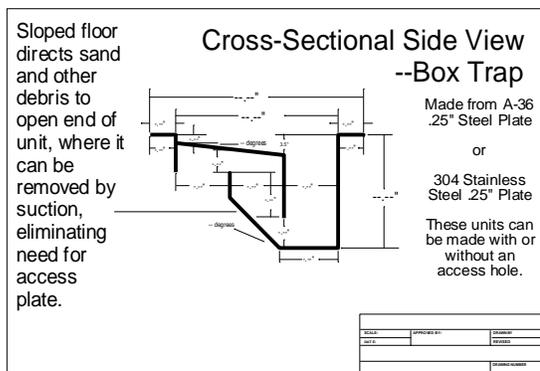
INSTALLATION AND REMOVAL TOOL



Our Custom Made Box Traps

Where catch basins, junction boxes, oddly-shaped sewer drains, and other collection points present vapor emissions problems, the custom-fabricated NsertAeal Box Trap is the answer. Using the Box Trap, catch basins and junction boxes can be retrofitted with a water-trap at a fraction of the cost associated with removal and repiping of the existing assembly.

Our Box Traps contain a wier which creates a vapor-sealing column of water to control emissions. Our unique designs also allow for easy removal of any sediment that may build up within the trap. There are no large-size sewer drain emissions problems for which we cannot find a custom solution.



BOX TRAPS ARE CUSTOM DESIGNED to your specifications. After collecting precise measurements, our fabrication team adapts the water trap concept to each particular installation. In all cases, an NsertAseal representative works with your plant personnel to produce the best solution to your vapor control problems. Box Traps are made of either stainless steel, or carbon steel coated with a corrosion resistant, baked-on epoxy coating.

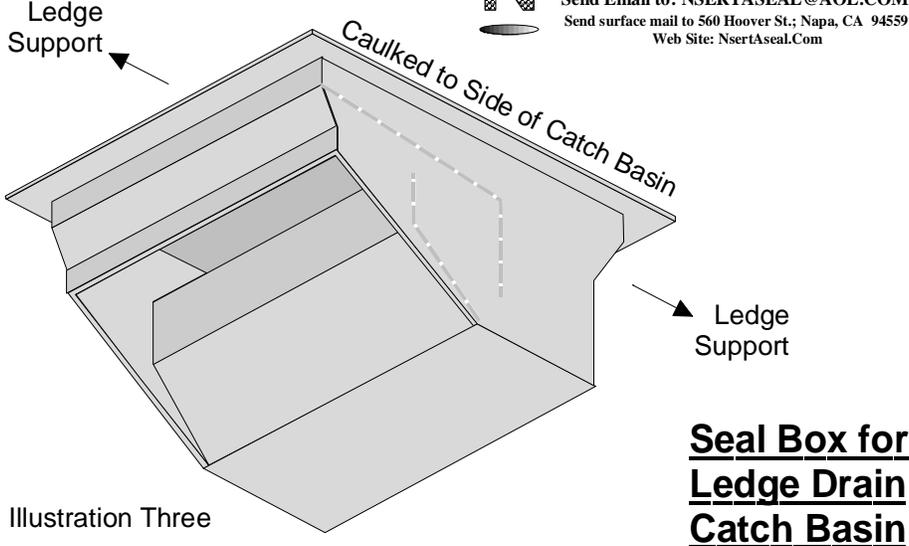


BOX TRAPS CAN BE MADE to permanently replace your existing catch basin covers, or to sit below them. Box Traps can be caulked into place or supplied with soft compressible gaskets which create a vapor-tight seal between the insert and the surrounding structure. Often existing grates can be reused.

Using the NsertAseal Box Trap, your catch basin can be retrofitted with a water trap at a fraction of the cost associated with removal and re-piping of the existing assembly. Box Traps are constructed using designs and employing techniques we have acquired over many years of sealing sewer drains to satisfy environmental regulations. We have experience solving box-trap problems that most problem solvers working for the first time in this area are often not even aware of until production decisions have been made and costly mistakes become apparent.

There are no large-size sewer drain emissions problems for which we cannot find a custom solution.

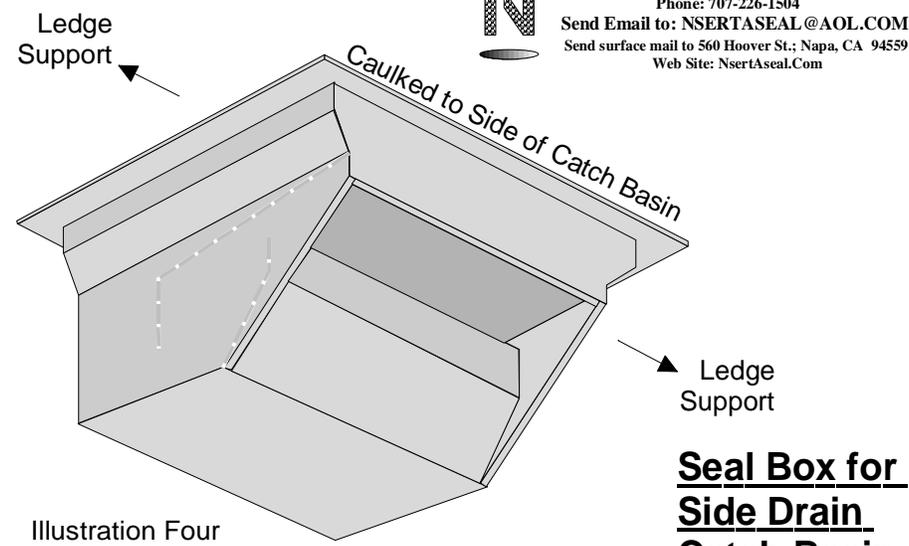

NsertAseal Corporation
 Phone: 707-226-1504
 Send Email to: NSERTASEAL@AOL.COM
 Send surface mail to 560 Hoover St., Napa, CA 94559
 Web Site: NsertAseal.Com



**Seal Box for
Ledge Drain
Catch Basin**

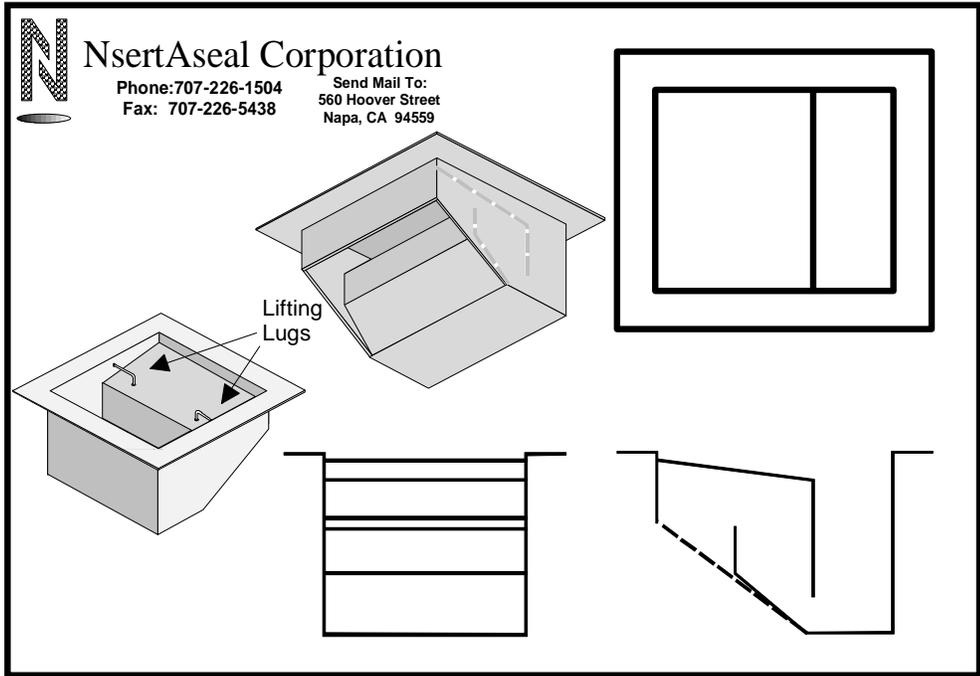
Illustration Three


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**Seal Box for
Side Drain
Catch Basin**

Illustration Four



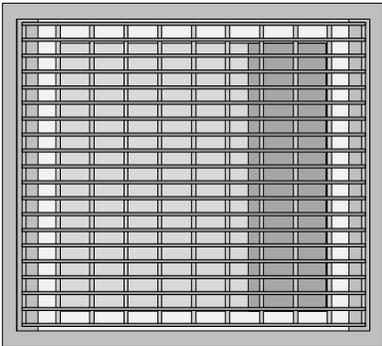
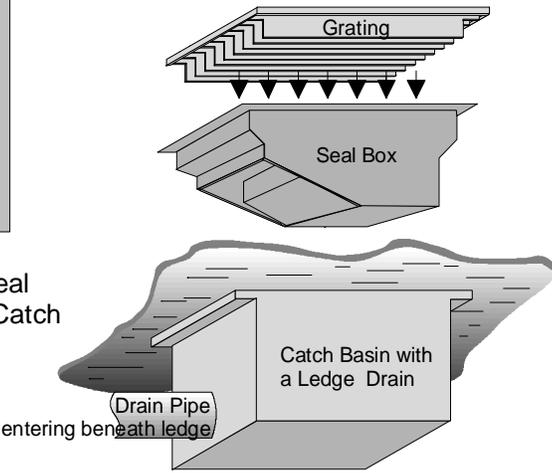


Illustration showing how our Seal Box will fit into a Ledge Drain Catch Basin, with the grating being reused.

Illustration One



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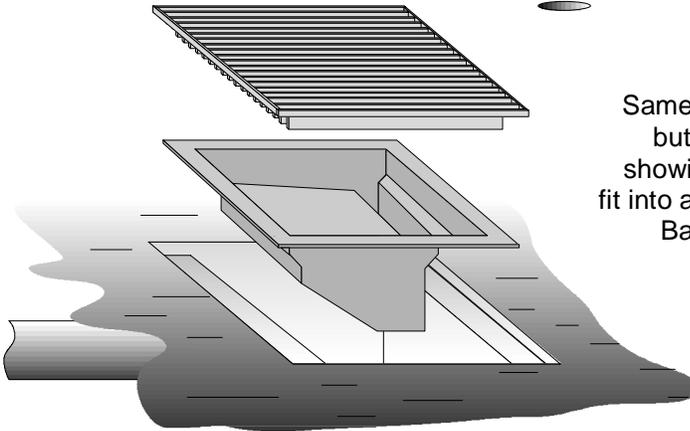
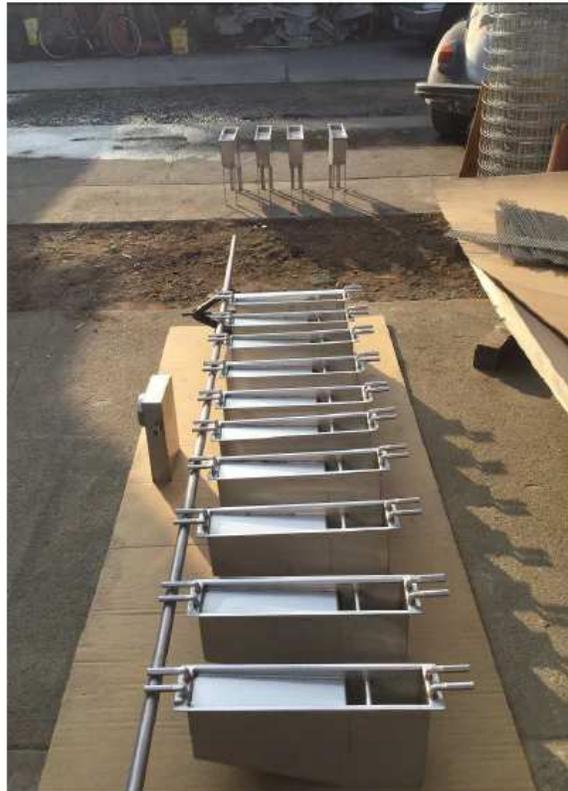


Illustration Two



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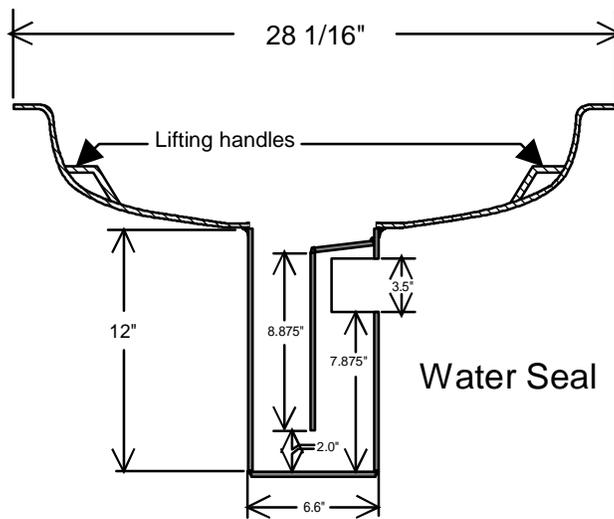
Same as Illustration One, but shown from above, showing how our seal will fit into a Ledge Drain Catch Basin, with the grating being reused.



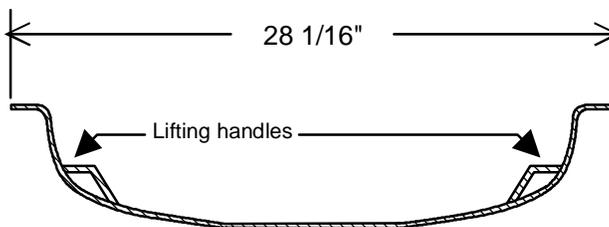
Our Access Hole (Manhole) Seals

The NsertAseal Access Hole seal is designed to seal large (22" to 34") access holes (manholes). Our seals are fitted into place with caulk and gaskets. Access hole lids are replaced after installation. These seals stop the migration of sewer gas to the atmosphere. If required for the application, they can be fitted with a water seal to allow entry of waste water to the sewer system while preventing sewer gas from escaping into the atmosphere.

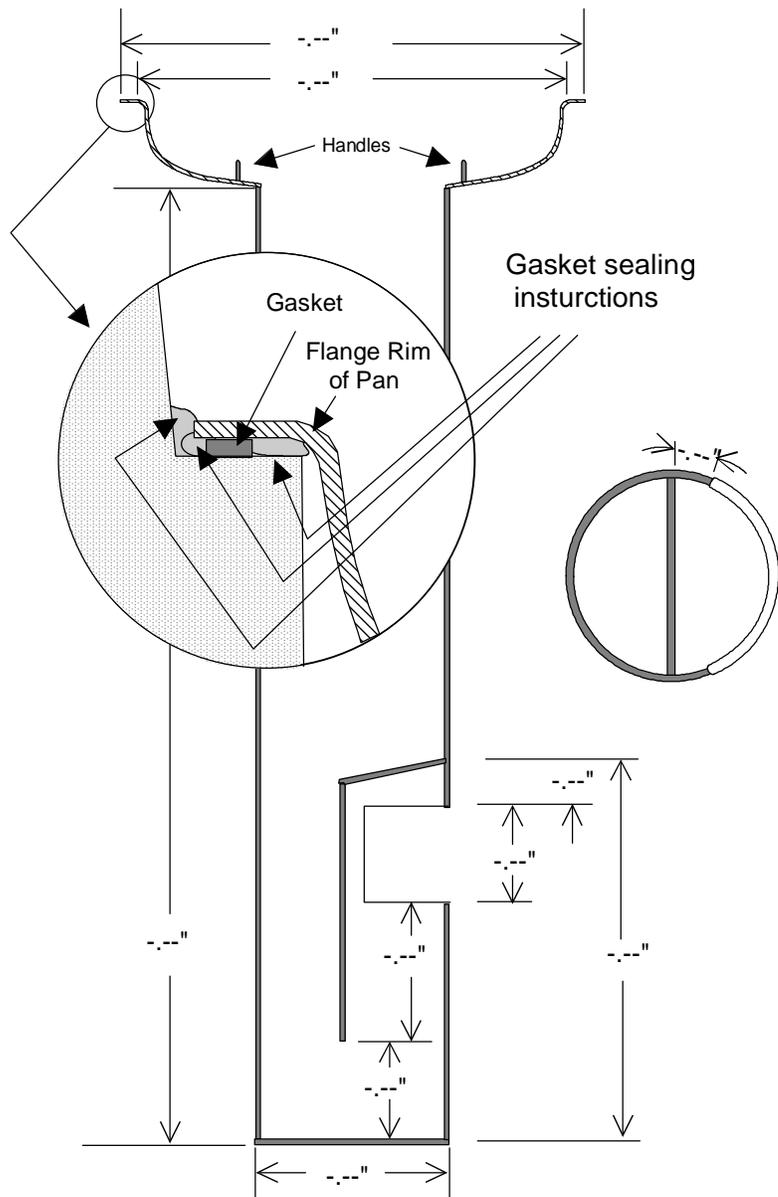
Cross-Sectional Side View--Drawing #1



Cross-Sectional Side View--Drawing #2



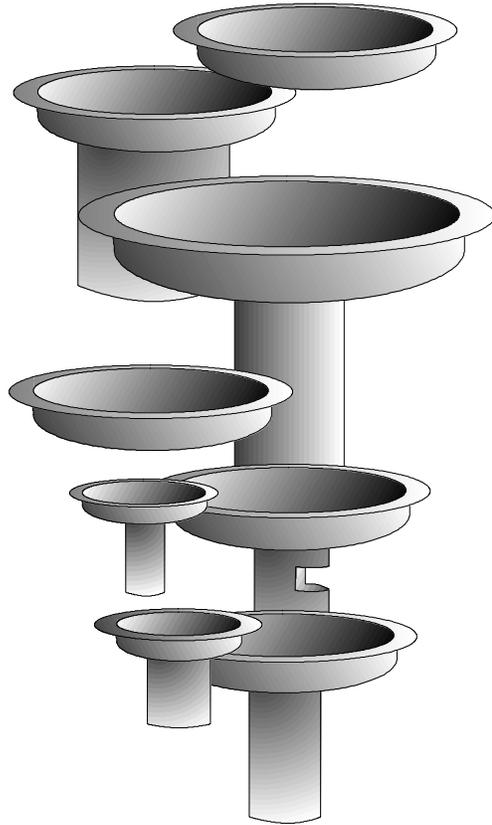
No Water Seal



Our Access Hole Seals come in many sizes and configurations . . .

Manholes which provide access into process sewers exist in many different sizes and configurations. Increasingly, refineries are being required to seal these openings against fugitive emissions due to new environmental regulations. These manholes often have lids or gratings with downward projecting support bracing and other structural elements. These downward projecting elements often make placement of a seal beneath such lids problematic. Complicating this problem is the fact that some of these access holes must allow for the admission of storm water and other runoff liquids into these process sewers while still maintaining a barrier to the the escape of emissions, even in very low concentrations (down to 500 parts per million).

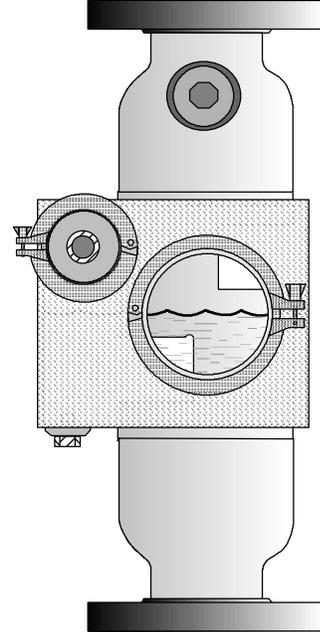
Due to the lack of availability of manhole seals on the commercial market in the myriad of required sizes and possessing the necessary features, such as high-volume water traps, NsertAseal began making its own manhole seals. Our seals are designed for the extreme demands of the refinery environment. We make these seals of 1/8" stainless steel, with heavy duty lifting handles capable of withstanding repeated use as sealing caulk and gaskets are broken free as many times as might be necessary to allow human access into the sewer.



Our Vent Monitor

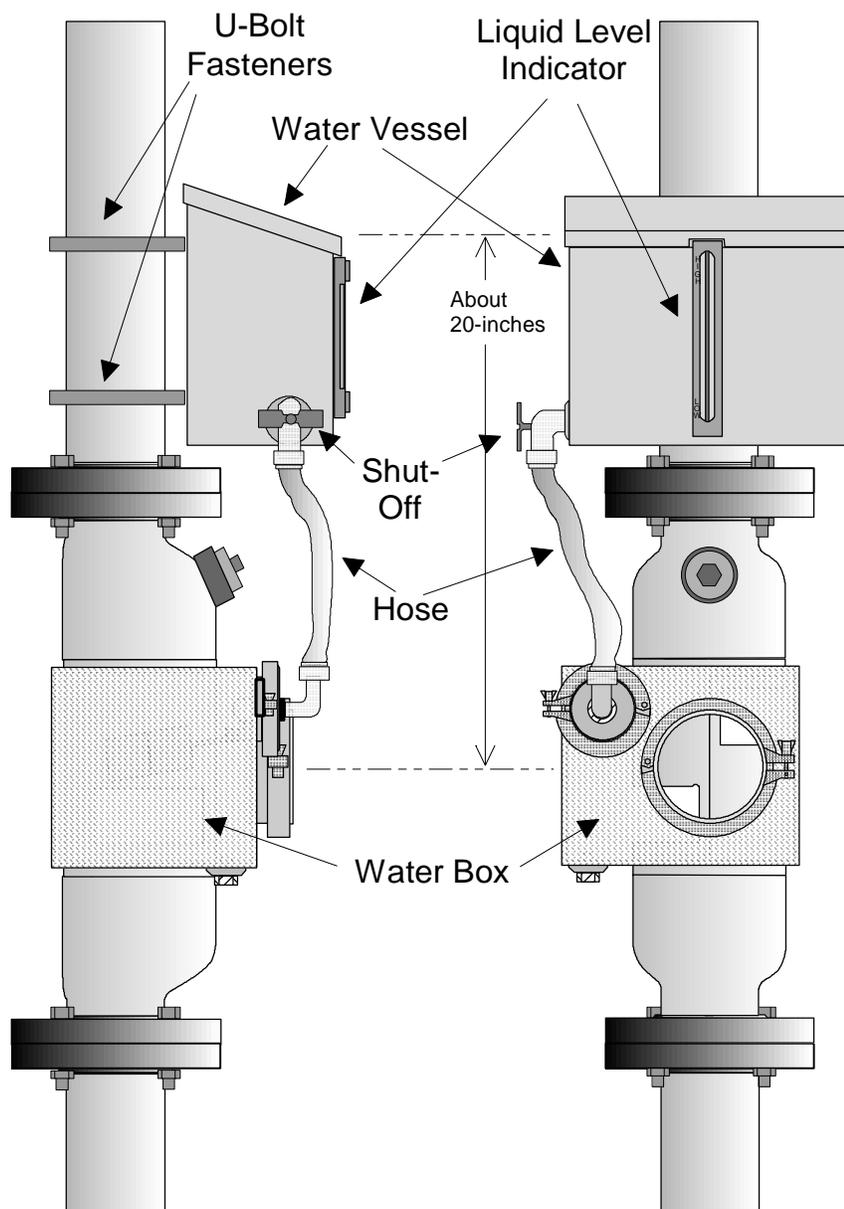
Vent pipes in refinery sewer systems must draw air easily to prevent vacuum lock. Increasingly stringent environmental regulations call for vent pipes to be sealed against evaporative pollution of the outside atmosphere. Sealing vent pipes yet allowing them to draw air easily is where the Vent Monitor (patent pending) comes in.

Sealing is accomplished through a water seal. This water barrier stops sewer gas from migrating unimpeded out the vent pipe. The vent pipe is allowed to draw air easily because the water seal is constituted of less than one column inch of water. That translates into a pressure differential break to allow air into the system of less than .036 psi (actually, closer to .018 psi in most operating conditions).



The low pressure break of the Vent Monitor also protects other water seals in the system from losing excessive water. A strong vacuum condition within the sewer system would suck water out of the water seals in ground drains. The Vent Monitor breaks easily and allows air to easily enter the sewer system, thus preventing a strong suction from robbing other seals in the system of water.

Unlike S-traps, P-traps, and other water seals installed in the sewer system, none of the water creating the water seal in the Vent Monitor is sucked down the drain when the Vent Monitor admits air. Instead, the water continues to reside in the water containment box. Air entering the system merely "bubbles" up through this water. Upon pressure equalization, the water seal immediately reestablishes itself.

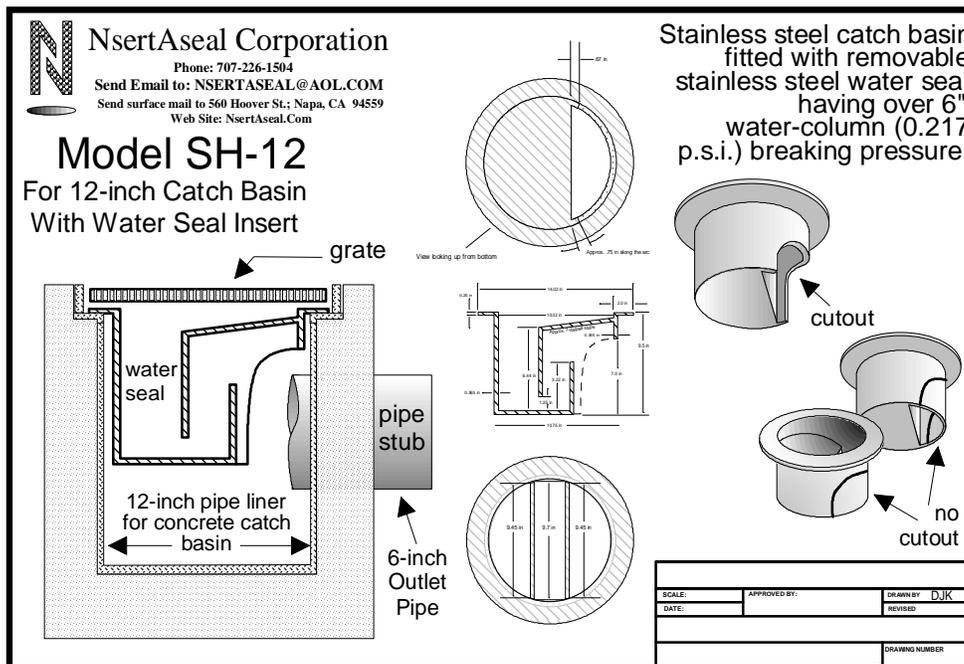


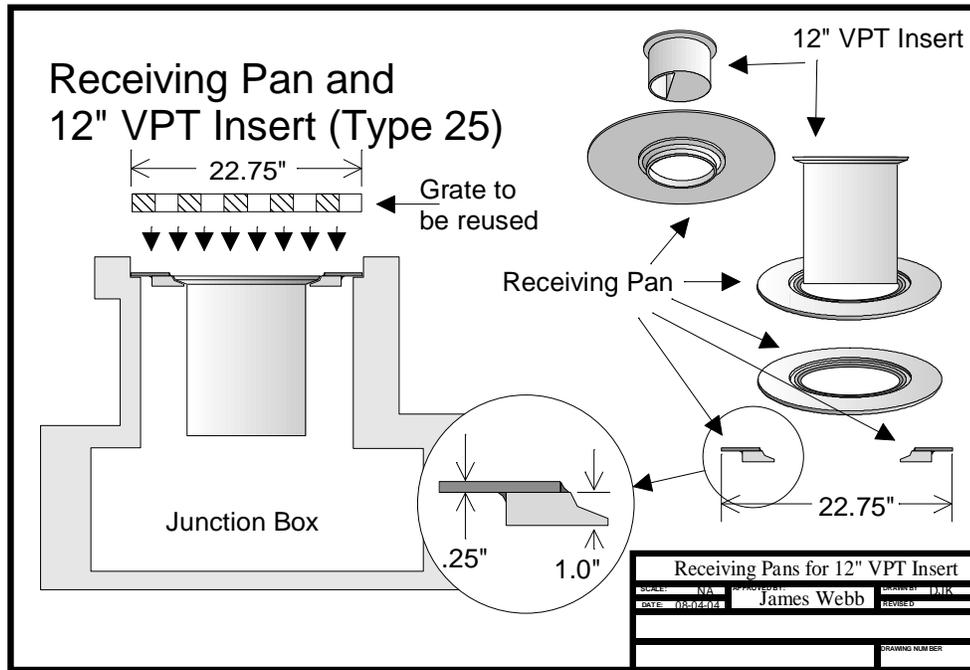
Vent Monitor Shown
With Water Vessel



Some of Our Other Products

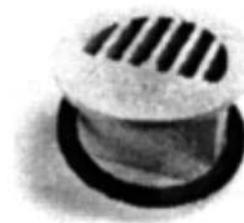
We often implement solutions from conception, to design, to finished product. Below is a plan for a product to satisfy special requirements. A need arose for heavy-duty stainless steel seals and new stainless steel catch basins to be installed in an area where the slope of the existing drain system brought the 6" connecting outlet pipes to less than 5" from surface grade. We constructed the stainless steel catch basins, and fitted them with removable stainless steel seals that had over 6" water-column (0.217 p.s.i.) breaking pressure.





The Original NsertAseal Insert

The original NsertAseal is a custom manufactured insert to temporarily seal drain openings using material weight and water. The Original Insert stops passage of all vapors and provides a verifiable seal for refinery hot work. Made of cast iron. The Original NsertAseal is available with special flags, removal tool and storage pallet.



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A Vent Monitor, which maintains a low breaking pressure water seal within vent pipes, yet allows prevention of vacuum lock within the system.



Custom designed and fabricated spring loaded plug valves.



A custom made VPT for a large drain opening (3 ft. diameter), ready to receive a powder coat.

Below, we ready a rush job of standard inventory VPT's.



When our customers need products fast, we try to comply. Below left, moving a big order to the loading dock. Below right, VPT's--boxed, wrapped, and ready for shipment in a 4' x 4' x 3' tub.



We Design and Make Drain Seals For Any Requirement

Listing all our products in a catalog is impossible, for we constantly design and make new products to suit our customers' special requirements. We have designed and made literally hundreds of custom seals and drain-sealing systems. Custom solutions to special problems often have application only on a unique basis. But we can and often do call upon our experience solving unique drain problems to creatively address new situations as they arise. Such experience at implementing custom drain solutions to drain problems saves our customers time, trouble, and money, and helps them comply with what could be potentially far more costly environmental regulations.



Some of our foundry produced products

Our Products Solve Problems

NsertAseal offers a quick and cost-effective way to comply with environmental regulations. Our products are reliable. They do the job well. Installing our inserts is more economical than other sewer-sealing techniques, both when retrofitting existing systems, and in new-construction applications.

Our main line of products are our "VPT's," or vertical pipe traps. VPT's are used to seal the throats of open drains with a water seal. They install easily using a simple caulking process. They are usually all that is required to make a sewer system safe from fire and bring it into compliance with increasingly stringent clean-air regulations. Installing these inserts will also demonstrate cooperation with nearby residential communities and proactive interest in their concerns about odor abatement.

To complement our standard inventory of VPT's, we also produce custom designs to solve the unique problems which sometimes confront our customers. **With adequate lead time, we can design and cast seals in almost any size and shape.** We have a good deal of experience working on unique sewer drain problems and the solutions they require. We have helped some of the world's largest oil refining and chemical companies with their environmental protection and fire-control problems.

In addition to our line of foundry-produced VPT's, both custom designed and standard pattern, we also offer other products. **Fabrication of very large custom-made box traps for junction boxes and catch basins is a specialty of ours. We also make manhole seals.** We also offer products to completely close off drains during hot work. Other devices, such as our Vent Monitors, are designed for the highly specialized task of allowing internal sewer pressure to equalize with atmospheric pressure without disrupting the integrity of critical water seals in a closed sewer system, and to allow for one-point visual monitoring of the entire system.

If you have a need relating to any aspect of sealing industrial sewer systems, contact us. We can come up with a workable, economical solution.

"We are a small company. But we have often been a big help to big companies by delivering good service and unique, patented products that do the job. We have proved this many times to customers who have given us a chance. If you have a need relating to any aspect of sealing industrial sewer systems, contact us. We can come up with a workable, economical solution. Do not disregard our pledge to be best in our field."

--James Webb, Founder,
NsertAseal Corporation

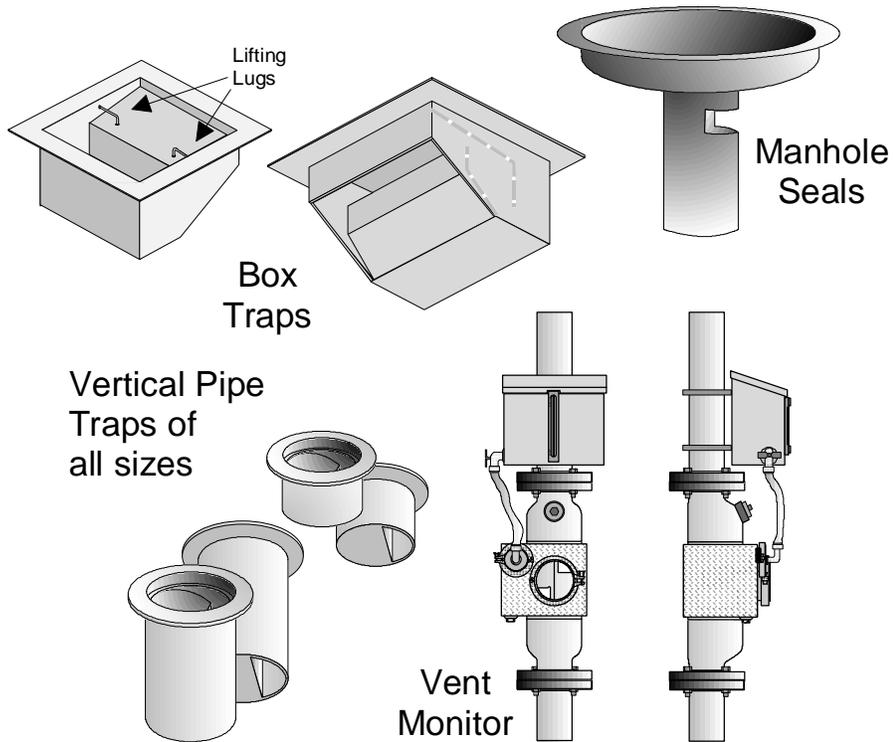
WE SOLVE SEWER SYSTEM EMISSIONS PROBLEMS!



David Kozlowski, General Manager

We continually develop new products to solve our customers' special regulatory problems. Tell us your needs. We will design a solution to fix any sewer drain emission problem. We want to hear from you.

Our products have been used to help solve the emissions and regulatory problems of the biggest oil refining companies in the world for the last thirty-five years.



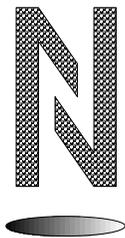
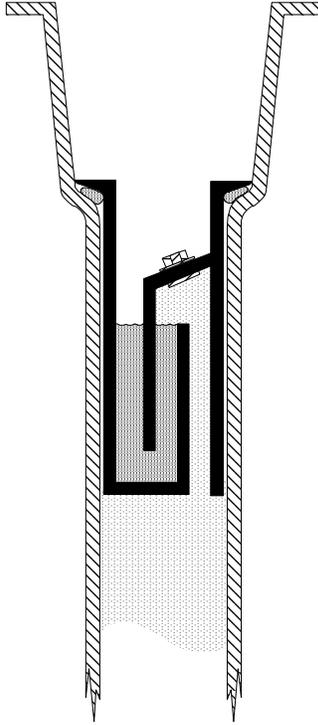
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