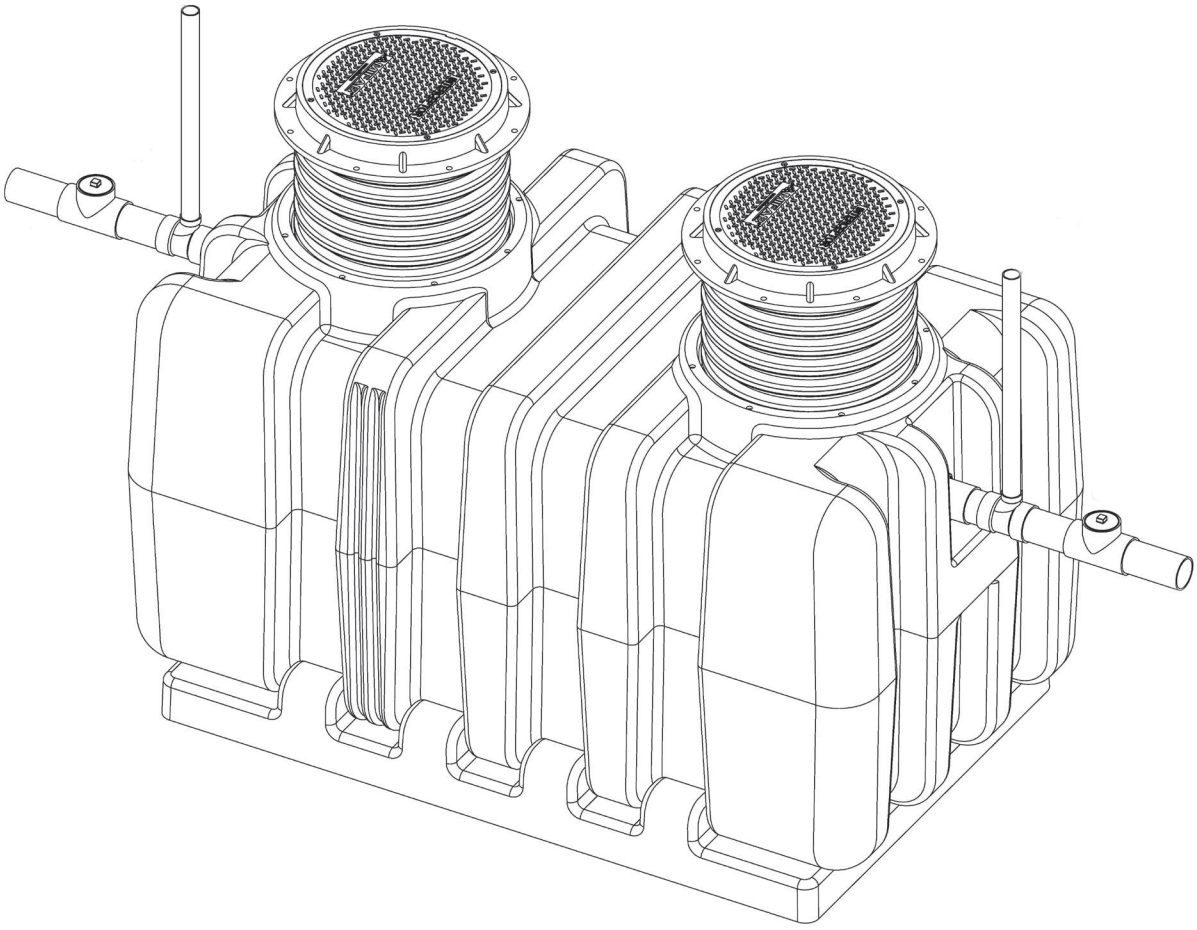
SS LINE

High Density Polyethylene (HDPE)
Gravity Interceptors
Installation & Operation Manual



(for GI-SS-500 and GI-SS-125

Made in the U.S.A.

TOWN & COUNTRY PLASTICS

Customized For Precision

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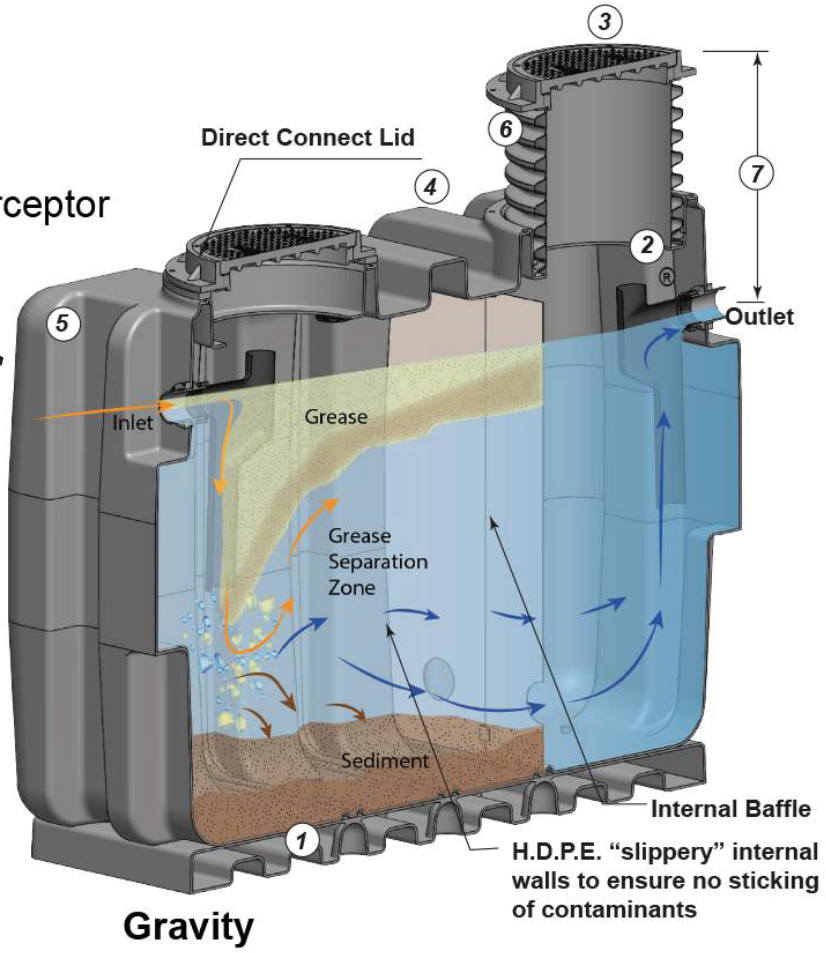
FEATURES

SS LINE

Extra Large H.D.P.E. Interceptor

Every SS Interceptor ships with:

- 6” Base secured to underside of interceptor
- H-20 Load Rated Lid
- (2) direct connect gaskets and two sets of lid hardware



1 Base for Body:
Standard, 6’ base secured to the underside of the interceptor.

2 Sample Port Access:
Sample port access is provided standard. Samples of discharge water taken from top opening of outlet piping.

3 H-20 Load Rated Lid:
20,000 lb. AASHTO H-20 load rated steel encased composite lids and collar are standard to withstand heavy loads.

4 Structural Integrity:
Ribbed body design provides extra structural integrity for in ground installations. Body is rotationally molded High Density Polypropylene with a 3/8” uniform wall thickness providing a strong but lightweight body. This allows installation without need of a backhoe or crane.

5 HDPE Material:
High Density Polypropylene (HDPE), 3/8” rotationally molded material is used with every Interceptor. Grease and Oil interceptor HDPE interceptors have NO environmental impact. Both fiberglass and concrete interceptors have a negative impact on our environment.

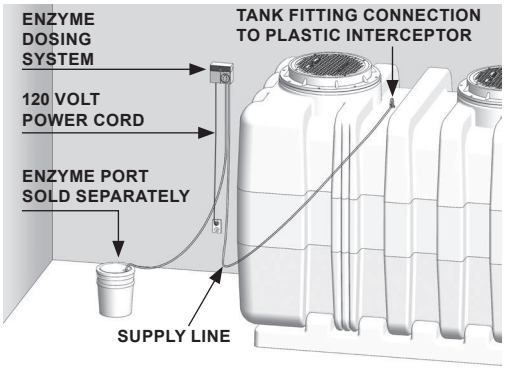
6 Extensions:
With T&C’s patented extension system, uses standard ADS 24N12 pipe. The contractor has to purchase it from T&C or buy a length of ADS pipe from their local waterworks wholesale in order to complete the installation immediately. Flexible extensions make for easier installation where grade may not be level.

7 Extra Rough-in Dimension:
“C” dimension can be field adjusted down to 20.25” resulting in contractors not having:

LIFETIME WARRANTY
NO RUSTING!

MADE IN AMERICA
Note: See appendix for blank warranty registration card

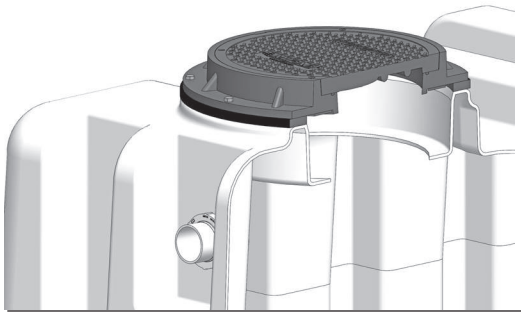
OPTIONS



ENZYME DOSING PUMP SYSTEM – SUFFIX -DS

The purpose of the enzyme dosing pump is to release grease and bacteria eating enzymes into the grease interceptor to consume the accumulated grease. The enzyme dosing pump can be ordered with any T&C grease interceptor. It is ideal for grease interceptors that are located in high volume kitchens.

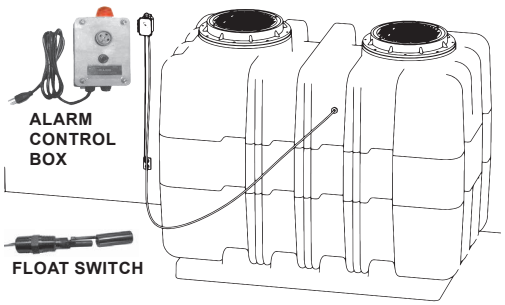
The enzyme dosing pump system includes a 120 volt automatic dosing pump with a programmable 24 hour timer and dosage run time. The system also includes 15' of poly tubing.



DIRECT CONNECT LID - SUFFIX -DCL

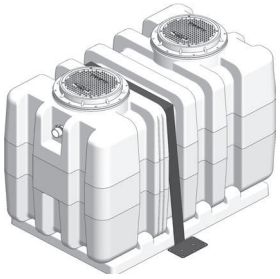
For above ground installations, the standard lid design is often not needed. With the -DCL option, the lid can be bolted to the top of the SS interceptor. A gasket is supplied to install between the top of the interceptor and the underside of the lid.

The direct connect gasket and hardware are shipped standard with every SS interceptor (two of each).



HIGH LEVEL ALARM The purpose of the High Level Alarm is to monitor and send an audible and visual alarm when the interceptor's grease or oil capacity is approximately 75% full. (Specify suffix -HLA) High level alarm systems can be installed on any T&C grease or oil interceptors to allow the owner to monitor grease and oil levels. This permits the interceptor to be maintained when required.

The -HLA option includes an alarm control box that is weatherproof rated NEMA 4/4X, 6' 120VAC Power Cord, 360° viewable alarm light, 85 dB @ 10' solid tone alarm and a silence and test button that is to be mounted to the nearest structure. It also includes a float switch that is mounted inside the interceptor for oil or grease level detection and is connected to the alarm control box. Note that the the alarm control box and float switch are not installed at the T&C factory. They need to be installed on site.



ANCHOR KIT

The Anchor Kit is used to secure the interceptor to a slab or to prevent buoyancy in a high water table. (Suffix -AK)

Cleaning a full grease interceptor is a dirty and smelly job. T&C offers an efficient alternative to do this – the T&C Remote Pump Out Options – RPO and -POK. This ensures that a dirty, greasy hose is not dragged through the inside of the restaurant to connect to the grease interceptor in order to pump it out. Instead, the pump out hose remains outside of the restaurant connected to the grooved threaded coupling on the outside wall.

INTERCEPTOR - ABOVE GRADE

The SS gravity interceptor may be installed as a stand alone unit, or in any number of different combinations to properly service the application.

1) PLACEMENT - All interceptors can be installed above grade. The HDPE ribbed construction allows these interceptors to be placed on an engineered approved, load compliant and level surface. Under normal use, interceptors will require no additional support to maintain full functionality. Seismic ratings and needs should be determined by a design engineer and based on established codes. The interceptor should be placed in a visible and easily accessible area for maintenance, cleaning, and inspection. Allowing space for the service provider to properly clean the vessel is a key consideration.

2) SET IN PLACE - T&C Interceptors should be set in place by the installer. The installer should ensure the pad/site is level and load rate compliant. The interceptor should be plumbed as instructed below in accordance with all required codes.

3) FLOW CONTROLS - Each T&C interceptor is supplied with a factory sized internal flow control for each size unit available. The flow control is an important component to ensure the proper operation and efficiency of the unit. Installation is accomplished using properly sized "flexible" couplings for above ground indoor installation (or Extra Heavy Duty No Hub shielded couplings for any outdoor installation.)

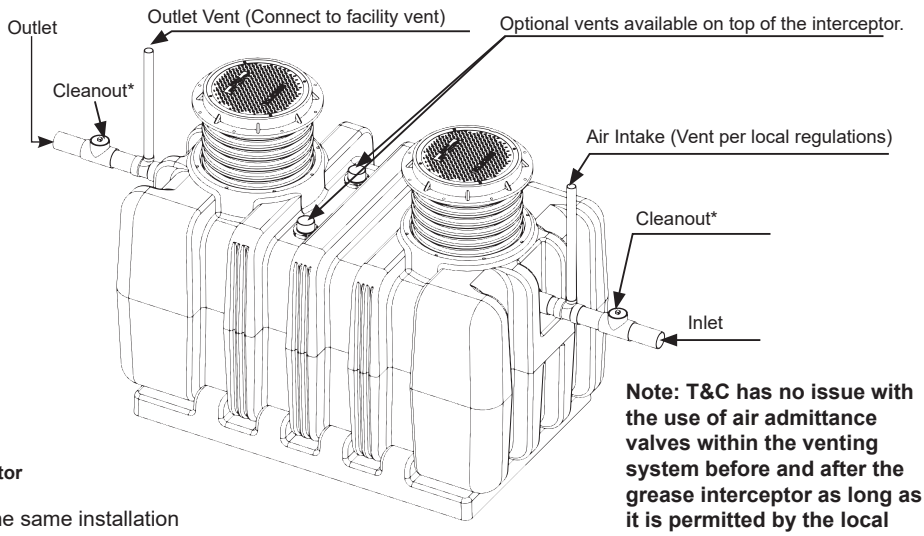
4) INLET/OUTLET PIPING - The inlet and outlet piping connections require no hub pipe couplings. Keep outlet piping as straight as possible. T&C recommends installation of Interceptors and Solids interceptors in accordance with all applicable laws, regulations and codes. Use only "sweep" connections.

Do not install a "P " trap on the outlet connection of system as the system already has an internal gas trap.

5) MULTIPLE UNITS - When combining more than one grease interceptor or solids interceptor in series or parallel, always provide a 1 inch fall or change in grade between units.

6) PIPE SUPPORTS - Pipe supports should be located every 16 inches on all vertical and horizontal piping. Allow for expansion as per local and national code.

7) VENTING - Venting of the SS gravity interceptor is recommended by T&C and required for indoor installations. Vent the grease interceptor on the inlet side. It is also recommended to vent the outlet side of the grease interceptor right after the outlet. An outlet vent or approved air admittance valve of at least 1/2 the diameter of the interceptor's outlet connection must be installed as close as possible to the outlet to prevent possible siphonage problems. The vent on the outlet piping is to be installed in accordance with all applicable laws, regulations and codes. Failure to provide a vent for the interceptor voids T&C's warranty for the system.



Typical piping layout for SS interceptor

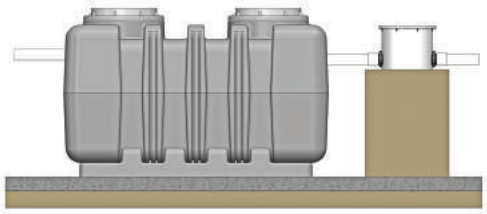
Note: GI-SS-1000 is illustrated. The same installation detail applies to the other SS interceptors.

Note: T&C has no issue with the use of air admittance valves within the venting system before and after the grease interceptor as long as it is permitted by the local authority having jurisdiction.

INTERCEPTOR - ABOVE GRADE

8) SAMPLE PORT - Above ground installation. Typical installation details.

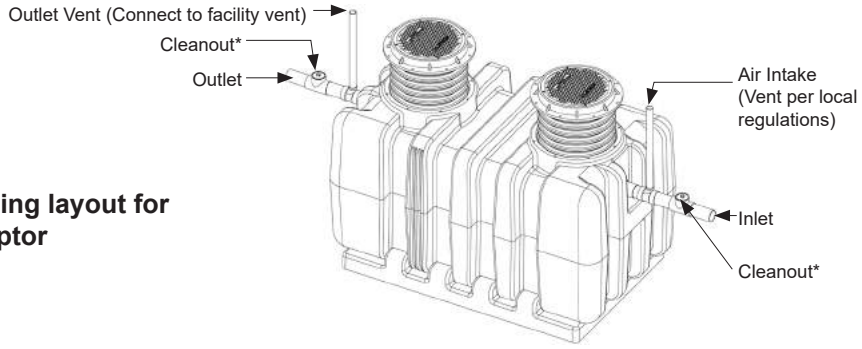
NOTE: Specialty above ground parking garage installation details may be found in Appendix 8, Page 24 of this manual.



9) SS CONFIGURATIONS/TOOLS/CONNECTIONS

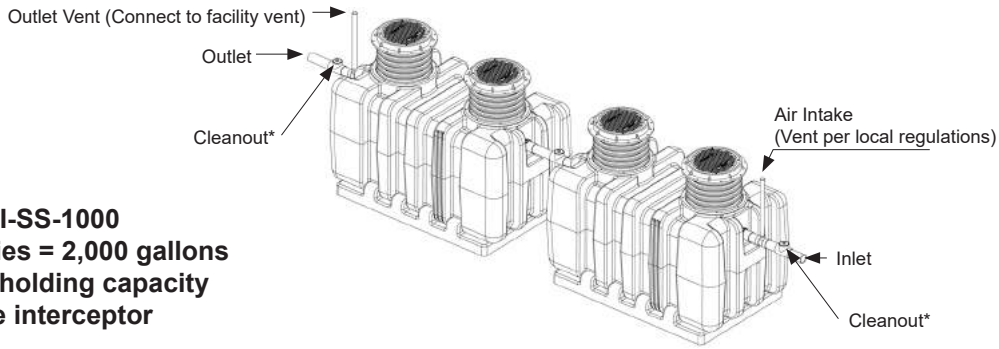
Following are two typical SS typical interceptor layouts, with materials and recommended tools required for installation.

Typical piping layout for SS interceptor



Needed Connections		Recommended Tools	
Dual Cleanouts 4”	2	Screw Driver	Pliers
Union 4” w/ 2” outlet	1	Torque Wrench	Tape Measure
Extra Heavy No Hub Couplings 4”	4	Hand Saw	Leveling Device
Extra Heavy No Hub Couplings 2”	1	PVC Cutter	Marker
4” PVC Pipe	Per Design	PVC Cement	Shovel
2” PVC Pipe	Per Design	PVC Primer	

Two GI-SS-1000 in Series = 2,000 gallons liquid holding capacity grease interceptor



Needed Connections		Recommended Tools	
Dual Cleanouts 4”	3	Screw Driver	Pliers
Union 4” w/ 2” outlet	1	Torque Wrench	Tape Measure
Extra Heavy No Hub Couplings 4”	6	Hand Saw	Leveling Device
Extra Heavy No Hub Couplings 2”	1	PVC Cutter	Marker
4” PVC Pipe	Per Design	PVC Cement	Shovel
2” PVC Pipe	Per Design	PVC Primer	

Note: Drawings for general installation reference only and not for a specially identified project. SS should be installed in Compliance with all applicable laws, regulations, and codes. Installation by a qualified Plumber or Contractor is highly recommended.

10) LOCAL CODES - All local codes should be followed and at no time does T&C require or recommend any installation which does not meet local, state or industry code requirements or standards.

INTERCEPTOR - BELOW GRADE

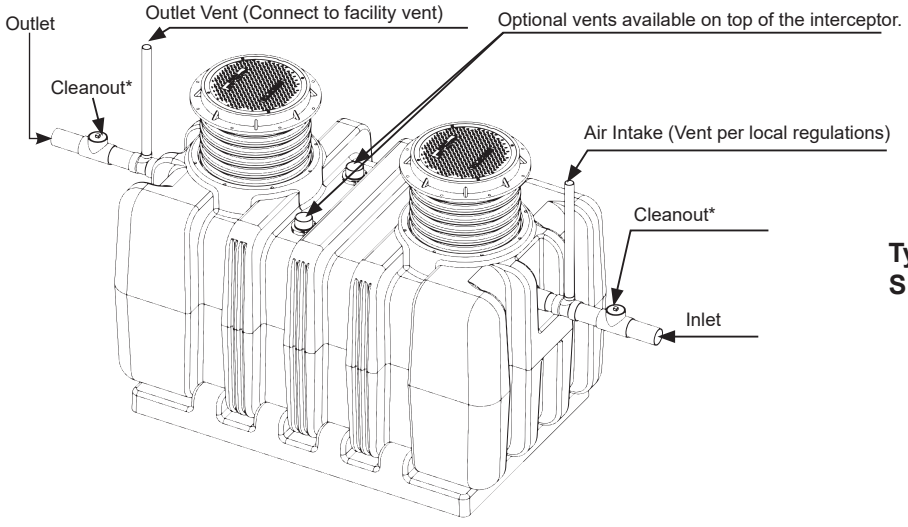
The SS gravity interceptor may be installed as a stand alone unit, or in any number of different combinations to properly service the application.

1) **FLOW CONTROLS -** Each T&C interceptor is supplied with a factory sized internal flow control for each size unit. available. The flow control is an important component to ensure the proper operation and efficiency of the unit. Installation is accomplished using properly sized Extra Heavy Duty No Hub shielded couplings for any outdoor installation.
2) **INLET/OUTLET PIPING -** The inlet and outlet piping connections require no hub pipe couplings. Keep outlet piping as straight as possible. T&C recommends installation of SS interceptors and solids interceptors in accordance with all applicable laws, regulations and codes. Use only "sweep" connections. Do not install a "P" trap on the outlet connection of system as the system already has an internal gas trap.
3) **MULTIPLE UNITS -** When combining more than one grease interceptor or solids interceptor in series or parallel, always provide a 1 inch fall or change in grade between units.
4) **VENTING -** Venting of the SS gravity interceptor is recommended by T&C and required for indoor installations. Vent the SS grease interceptor on the inlet side. It is also recommended to vent the outlet side of the SS grease interceptor right after the outlet. An outlet vent or approved air admittance valve of at least 1/2 the diameter of the interceptor's outlet connection must be installed as close as possible to the outlet to prevent possible siphonage problems. The vent on the outlet piping is to be installed in accordance with all applicable laws, regulations and codes. Failure to provide venting for the interceptor voids T&C's warranty for the system.

Venting of the SS gravity interceptor is recommended by T&C and required for indoor installations.

Vent the SS grease interceptor on the inlet side. It is also recommended to vent the outlet side of the SS grease interceptor right after the outlet.

Note: T&C has no issue with the use of air admittance valves within the venting system before and after the grease interceptor as long as it is permitted by the local authority having jurisdiction.



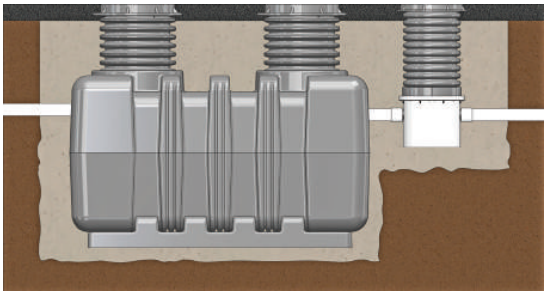
Typical piping layout for SS interceptor

INTERCEPTOR - BELOW GRADE

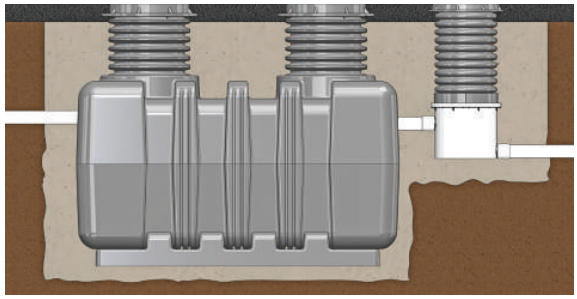
5) SAMPLE PORT INSTALLATION -

T&C's patented extension system uses standard ADS 18N12 pipe. If less than 24 inches is needed, cut to the desired height. Measure and mark the required height on the extension collar then cut to the needed height with a Saws All (see page 12 of this manual). If more than 24 inches is required, additional collar length can be acquired from a local supply house. Simply purchase the required amount of 18 inch diameter ADS pipe and insert into the interceptor. The maximum recommended depth of the collars should be no more than 72".

NOTE: Sample Port must be placed on a suitable base of compacted soil or undisturbed earth in traffic condition.



Sample Port - SP



Sample Port - SP-OF

6) RECOMMENDED EXCAVATION, BACKFILLING, AND FINISHING

a) Install the interceptor(s) as close as practical to the fixtures being served.

b) The excavation must be a minimum of 18" greater on all sides of the tank.

c) The depth of the excavation must be greater than 12" on the bottom of the interceptor.

d) Fill the interceptor with water prior to backfilling in water to prevent the interceptor from floating.

e) Fully install the double wall corrugated pipe and lid prior to backfilling.

f) Concrete or finishing material requirements are to be determined by the specifying engineer.

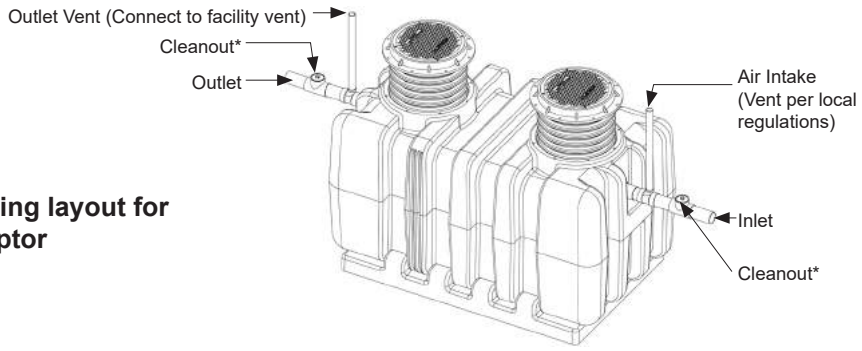
g) Encase the interceptor in well-packed 34" rock, or sand. Do not compact backfill around interceptor.

h) To prevent fload out, the Anchor Kit is recommended for installations in high water table conditions. This is to be determined by the specifying engineer.

7) SS LINE CONFIGURATIONS/TOOLS/CONNECTIONS

Following are two typical SS typical interceptor layouts, with materials and recommended tools required for installation.

Typical piping layout for SS interceptor



Needed Connections		Recommended Tools	
Dual Cleanouts 4"	2	Screw Driver	Pliers
Union 4" w/ 2" outlet	1	Torque Wrench	Tape Measure
Extra Heavy No Hub Couplings 4"	4	Hand Saw	Leveling Device
Extra Heavy No Hub Couplings 2"	1	PVC Cutter	Marker
4" PVC Pipe	Per Design	PVC Cement	Shovel
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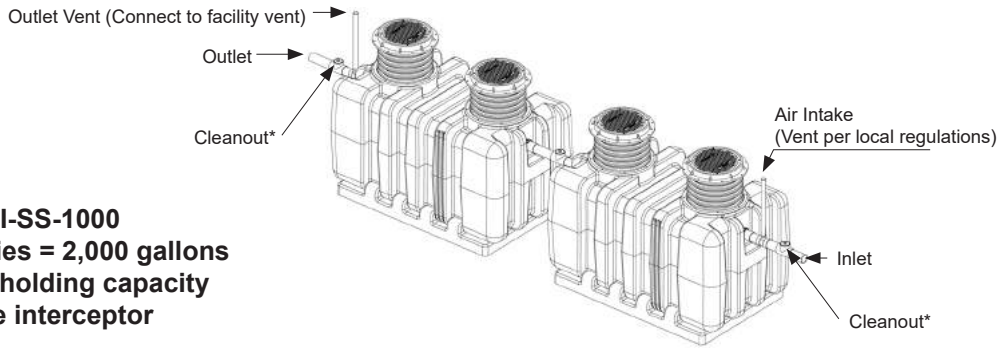
INTERCEPTOR - BELOW GRADE



Two GI-SS-1000 in Series = 2,000 gallons liquid holding capacity grease interceptor

Needed Connections		Recommended Tools	
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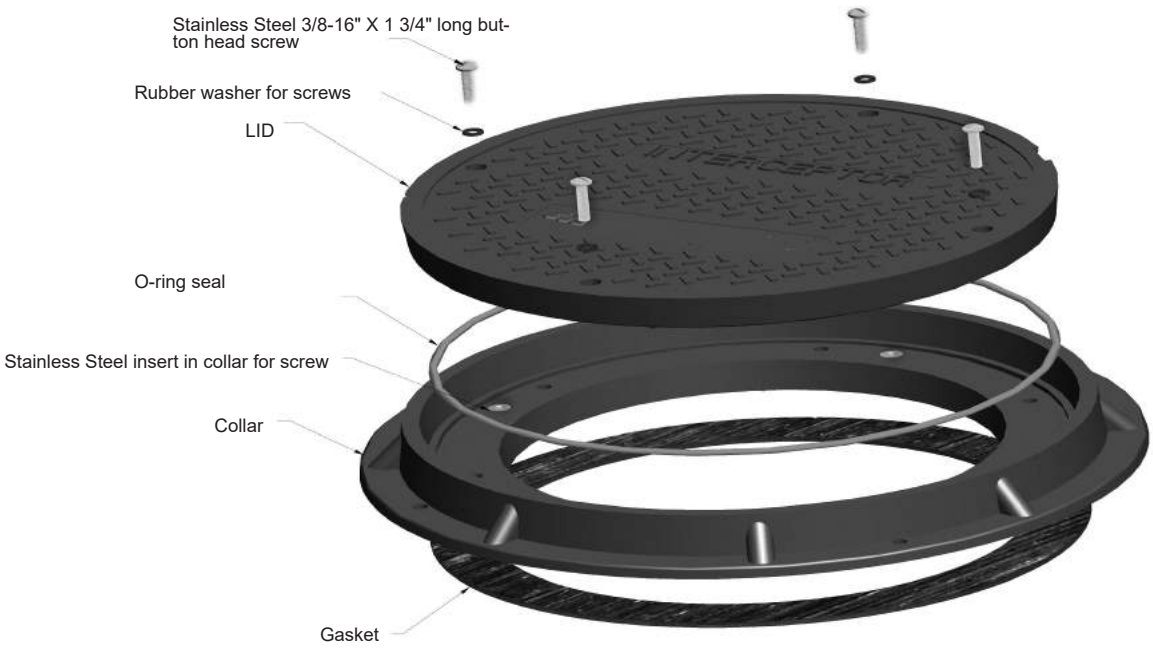
Union 4” w/ 2” outlet	1	Torque Wrench	Tape Measure
Extra Heavy No Hub Couplings 4”	6	Hand Saw	Leveling Device
Extra Heavy No Hub Couplings 2”	1	PVC Cutter	Marker
4” PVC Pipe	Per Design	PVC Cement	Shovel
2” PVC Pipe	Per Design	PVC Primer	

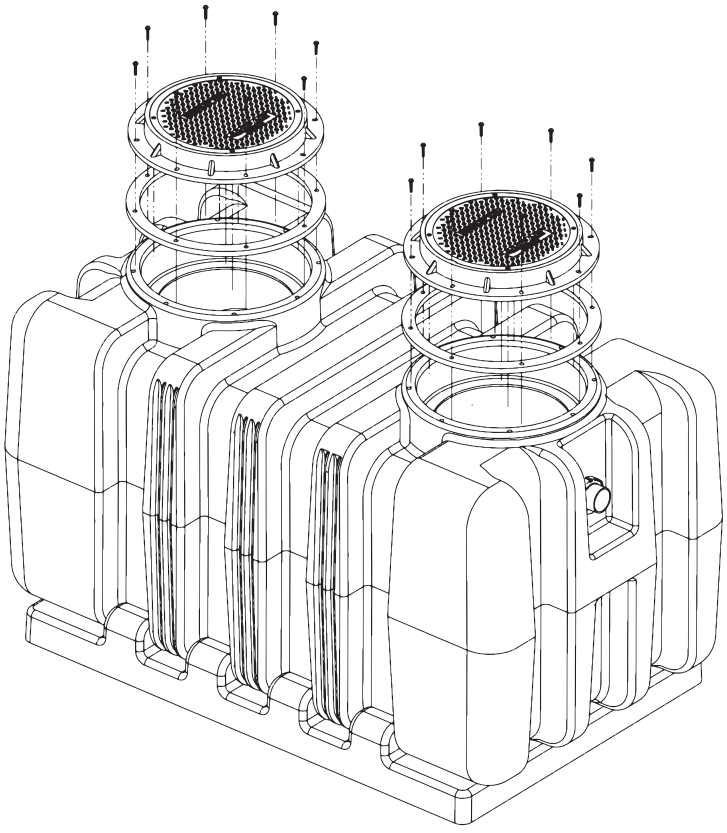
Note: Drawings for general installation reference only and not for a specially identified project. Interceptor should be installed in Compliance with all applicable laws, regulations, and codes. Installation by a qualified Plumber or Contractor is highly recommended.

8) **LOCAL CODES -** All local codes should be followed and at no time does T&C require or recommend any installation which does not meeting local, state or industry code requirements or standards.

DIRECT CONNECT LID



SS LINE



EXTENSION COLLAR

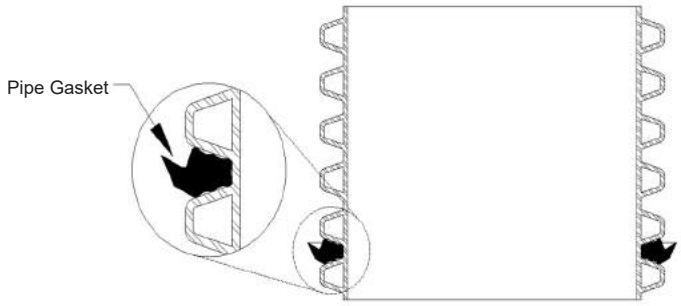
1) T&C's patent extension system uses standard ADS 24N12 pipe. The contractor has to purchase it from T&C or buy a length of ADS pipe from their local waterworks wholesaler in order to complete the installation. The maximum recommended depth of the collars should be no more than 72".

2) Install the Pipe Gasket onto the bottom of the pipe as shown. Then firmly press the 24” diameter pipe into the top opening(s) of the interceptor. It will bottom out at the pipe stop. The Gasket is designed to fit tightly around the extension collar. Prying the gasket into place with a pry tool can save time and make this process easier.

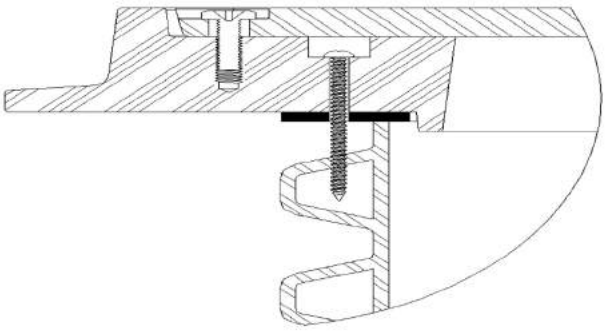
3) Insert the extension collar and pipe gasket onto the opening of the interceptor. Press firmly until the extension is seated inside provided recessed channel. Both the extensions are designed to fit tightly, and installation can be made easier by wetting the receiving area with mild soapy water. This will reduce the friction and allow the extension to side more easily into place.

4) Remove the cover from the lid assembly and this will expose predrilled screw holes. Affix the lid gasket with the self adhesive onto the underside of the collar. Place lid assembly onto the top of the corrugated pipe. Connect the lid assembly collar to the pipe with the 6 self tapping screws into the countersunk holes. Replace lid back onto the lid assembly collar.

To view an ADA extension preparation and installation video, go to:



Extension Collar and Gasket Assembly



Lid and Extension Collar Installation

MAINTENANCE

1) A well maintained interceptor is important to keeping efficiency high. If the interceptor is not kept to a strict cleaning schedule, it will build up with grease and eventually allow the grease to pass directly into the municipal water system. A cleaning schedule is directly affected by the volume of FOG present and introduced into the interceptor, as well as the type of menu. For example a Fried Chicken type restaurant may have higher FOG generation than a sandwich shop.
2) The grease interceptor should be checked after the first few days of operation. Note the buildup of grease within it. Based on the amount of grease collected, a regular cleaning schedule should be implemented to ensure that the grease buildup does not get to the point of allowing the grease laden water to pass directly through the interceptor.
3) Routine service including pumping is a requirement for to operate properly. To determine when to pump and clean the interceptor may be done by simple measurement.
4) Measuring collected solids in any interception system is a more difficult task than with the FOG measurement. Because most solids are organic in nature there is a tendency for these solids to absorb water becoming more bulky but having very little actual mass. A simple solution is to have the Solids Interceptor pumped when the Grease Interceptor is pumped. The likelihood that they will both require service at the same time is very high. Servicing the Solids Interceptor is an integral part of maintaining system efficacy.

Following the simple steps below will help make cleaning easier:

1) Remove the bolt(s) from the interceptor lid(s) taking care to carefully locate the bolts together and out of the way.
2) Remove the lid(s) (Take caution, the lid(s) can be heavy and slippery)
3) SS Interceptors require cleaning by a pumping service.
4) Check to make sure that the gasket material is still in good condition. No rips or missing pieces and that it is still in the proper position.
5) Reinstall the lid(s) and bolt(s) by reversing step #1.