KRUEGER SENTRY GAUGE
1873 SIESTA LANE GREEN BAY, WI 54313 | 920-434-8860 | www.ksentry.com

Leak Gauge – Type K – FDEP EQ 675

Top mounted liquid leak gauge that can measure from 6 inches to 170 inches in depth. Bushing size can be 2" or 1.5". Gauges are custom made in house to fit your tank. This gauge is designed to monitor either the interstitial space of a double wall containment system, or it can mount into an external monitoring pipe.



Calibration: Consists of 3 pieces –
Outer plastic piece, inner plastic piece, and a piece of paper in between.
Upgrades: Inner glass or Solid Glass

Lock Nut: HDPE Plastic
Also available in aluminum or PVC.

Bushing: Aluminum
Can be 2", 1.5".
Stainless steel options also available

Internal Rods: Standard construction is Aluminum

Union: Compression union

Float: HDPE

Part Number—
K-(size opening)-(tank depth)-(list options)
Example: K-2-48

Instructions for Operation:

This gauge is a simple visual tool. If the red indicator rises into the viewing window, it is indicating that there is a leak occurring in your double wall containment system. Once installed, you simply view the calibration to monitor your interstitial space. The indicator is not calibrated. It simply indicates leak or no leak.

Material Options:

Internal Rods are limited to standard construction

.75'' Busing available up to 76'' tank depth

Accessories & Add-ons:

- Gauge Guard: A cover that protects the exposed plastic components on top of the gauge.

- Audible Alarm: Can turn your mechanical gauge into an audible Leak alarm.

KRUEGER SENTRY GAUGE
1873 SIESTA LANE GREEN BAY, WI 54313 | 920-434-8860 | www.ksentry.com

Accessories and Replacement Parts

Accessories

Direct Mount Alarms- Audible alarm that mounts directly to the gauge and provides audible Leak warning.
(part # add -DAlarm)

Remote Mount Alarms- Audible alarm that can be remotely wired and provides audible Leak warning.
(part # add -RAlarm)



Remote Alarm



Direct Mount Alarm



Gauge Guard



Aluminum Lock Nut



Inner Glass Calibration

Solid Glass Calibration



Upgrades / Add-ons

Aluminum Lock Nut- Replace the red lock nut for added durability.
(part # add -ALN)
Gauge Guard- Protective cover that replaces the red locking nut providing protection from physical damage, weathering damage, and helps with passing fire inspections.
(part # add -ALG)
Inner Glass Calibration- The internal piece of the calibration becomes glass. Provides protection from heat, fumes, weathering, and helps with passing fire inspections. (part # add -GLC)
Solid Glass Calibration- Calibration is a solid glass. Increases resistance to a variety of environmental factors including sun damage, heat damage, and weathering. (Requires aluminum lock nut)

Replacement Parts

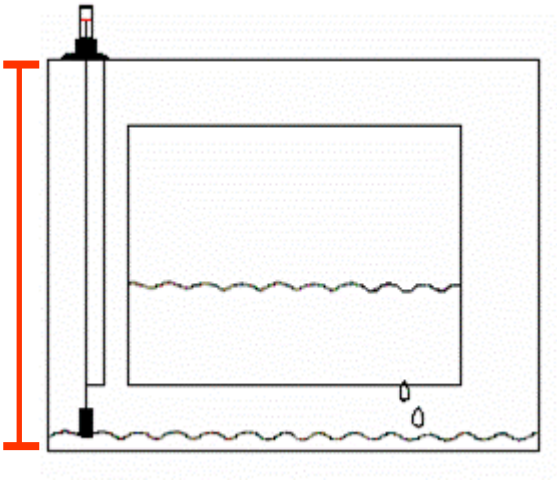
K-Kit- Replaces all the top components with standard materials.
KG-Kit- Replaces all the top components with standard materials and a glass calibration.
KALN-Kit- Replaces all the top components with standard materials and an aluminum lock nut.
KGALN-Kit- Replaces the top components with a glass calibration and aluminum lock nut.
KSG-KIT- Replaces the top components with a solid glass calibration and aluminum lock nut.



KSG-KIT

KRUEGER SENTRY GAUGE
1873 SIESTA LANE GREEN BAY, WI 54313 | 920-434-8860 | www.ksentry.com

Ordering, Installation, Maintenance and Operation



Installation Instructions:

Assemble for single rod gauge- 6 to 42 inches:
1. Lower gauge into monitoring space, and thread in the bushing.

Assembly for dual rod gauge- 43 to 76 inches:
1. Connect rods together with connector.
2. To disassemble press on top of connector.
3. Be sure connection is secure, lower into monitoring space, and thread in the bushing.

Assembly for multiple rod gauge- 77 inches and up:
1. Remove cotton ball from top of calibration.
2. Connect rods together with brass connectors, use 3/8" and 7/16" wrench to tighten or loosen connectors.
3. Be sure connection is secure, lower into monitoring space, and thread in the bushing.

Instructions for Operation:

This gauge is a simple visual tool. If the red indicator rises into the viewing window, it is indicating that there is a leak occurring in your double wall containment system. Once installed, you simply view the calibration to monitor your interstitial space. The indicator is not calibrated. It simply indicates leak or no leak.

Ordering Instructions:

Part Number Layout:
K-(Opening Size)-(interstitial depth)-(options)

1. State the gauge type (Type K)
2. State the opening size you are using. (1.5"---2")
3. State the interstitial tank depth (pictured left).
4. List other material options and accessories that you prefer. These options and accessories can be located on page 2 of this document. *Skip this if you want standard materials.*

Example Part numbers
- K-2-48
- K-2-24-GLC

Maintenance:

The Leak Gauge can fail in one of three ways

- The calibration assembly on the outside of the tank can become weathered, unreadable, or broken.
- The connecting rods that extend into the tank can come apart or become damaged.
- The float that sits at the bottom of the gauge can come off or become saturated with product.

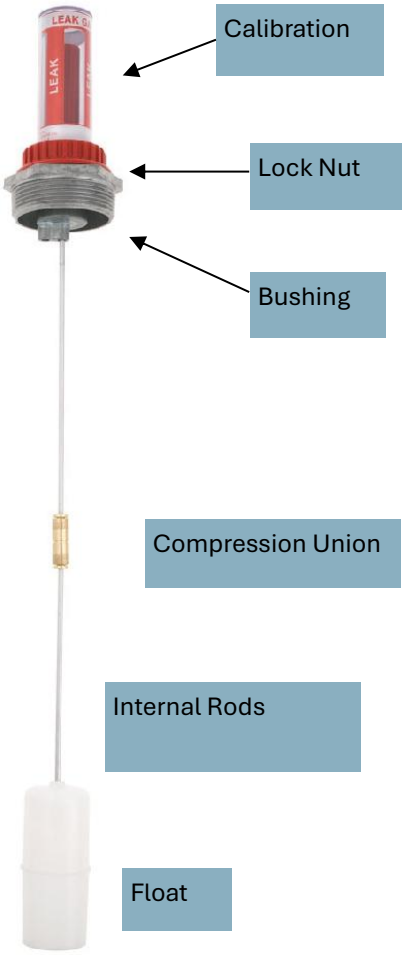
Recommended Maintenance Procedures:

- Once per month: Inspect the top of the unit once per month to ensure that the calibration is visible, readable, and unbroken. (these top pieces can be easily replaced without having to replace the whole gauge)

- Once every 6 months: Unthread the unit and carefully remove it from the tank. Be sure all rods are connected as one piece from the red indicator all the way down to the float. Also inspect the float for damage or leakage. To ensure proper working order, manually raise the float arm from empty to full to be sure that the red indicator freely moves up and down with the motion of the float rod.

KRUEGER SENTRY GAUGE
1873 SIESTA LANE GREEN BAY, WI 54313 | 920-434-8860 | www.ksentry.com

FAQ's and Troubleshooting



Helpful Information:

- Restocking Fee is typically 25% but may vary depending on the individual situation and the type of gauge.
- 1 year warranty after date of purchase
- PSI rating for gauges is 70 PSI



Solid Glass



Inner Glass


Gauge Guard

Frequently Asked Questions:

Q: The top plastic portion of my gauge has become damaged or weathered, what can I do?
A: The top of the gauge is easily replaced, just order a K-Repair Kit which replaces all of the top components of the gauge.

Q: How can I prevent the top of my gauge from becoming weathered or warped in the future?
A: Several upgrades exist that improve the life and performance of the gauge. The glass calibration, which makes the internal part of the calibration into glass, increases the gauges resistance to heat, fumes, and sun.

Q: My gauge top keeps getting broken by hoses/weather/people, do you have a more durable option?
A: We offer something called a Gauge Guard. This is an aluminum cage that replaces the red lock nut and protects the top of your gauge from physical damage and weathering.

Q: The fire inspector says my gauge is not up to code? How can I satisfy
their requirements.
A: If you get the glass calibration and the gauge guard, you are creating a glass and metal barrier between the inside of the tank and the external environment. Explain this to your inspector and see if it satisfies their requirements.

Q: I am experiencing corrosion around the spot where my internal rods enter into the bushing. What causes this, and are there any solutions?
A: This problem occurs on tanks located in certain environmental conditions. Most commonly seen near salt water. You can replace the thermal well (the cup that sits inside the bushing) with a machined PVC part. This will solve any corrosion issues.

Q: My leak gauge is not the correct length for my tank. Can it be adjusted.
A: The leak gauge is the only gauge we make that can be field adjusted, provided it is at least 43 inches long.

Generally, we make the gauge to fit your application, but if the gauge is too long you can trim it at the spot where the Leak Union is. If the gauge is too short, or if it is a one piece gauge with no leak union (under 43") then the gauge cannot be adjusted.

KRUEGER SENTRY GAUGE
1873 SIESTA LANE GREEN BAY, WI 54313 | 920-434-8860 | www.ksentry.com

FDEP Letter

Mr. Lee Geurts

Krueger Sentry Gauge Co. Inc.

1873 Siesta Lane

Green Bay, WI 54313-8021

RE: DEP Approval of the AT-A-GLANCE Leak Gauge, File No. EQ-675

Dear Mr. Geurts:

The Bureau of Petroleum Storage Systems has concluded its review of the Equipment Approval request dated May 9, 2007, that was submitted for the above referenced equipment pursuant to Rule 62-762.851, Florida Administrative Code (F.A.C.).

Based on the information provided by Krueger Sentry Gauge Co. Inc., the Department finds that the applicant's AT-A-GLANCE Leak Gauge will provide environmental protection substantially equivalent to that provided by compliance with the requirements established in Rule 62-762.641(3)(a)1.b., F.A.C.

Pursuant to Rule 62-762.851, F.A.C., the request for the use of the AT-A-GLANCE Leak Gauge is approved for interstitial monitoring of shop-fabricated aboveground storage tanks in the State of Florida.

Please be advised that the above referenced Department rules are subject to change. If the above rule standards are modified in the future, this order may be modified or rescinded for future upgrades and installations. Additionally, if it is later determined that the above referenced product(s) do not meet the appropriate performance standards or show a consistent pattern of failure(s), and therefore does not provide substantially equivalent environmental protection, the Department may rescind this Order.

The Department's Order shall become final unless a timely petition for an administrative hearing is filed under sections 120.569 and 120.57, Florida Statutes ("F.S."), within 21 days of receipt of this Order.

Persons who have filed such a petition may seek to mediate the dispute, and choosing mediation will not adversely affect the right to a hearing if mediation does not result in a settlement. The procedures for petitioning for a hearing and pursuing mediation are set forth below.

Persons affected by this Order have the following options.

A. If you choose to accept the above decision by the Department about the equipment approval, you do not have to do anything. This Order is final and effective as of the date on the top of the first page of this Order.

B. If you choose to challenge the decision, you may do one of the following:

1. File a petition for administrative hearing with the Department's Agency Clerk in the Office of General Counsel within 21 days of receipt of this Order; or

2. File a request for an extension of time to file a petition for hearing with the Department's Office of General Counsel within 21 days of receipt of this Order; such a request should be made if you wish to meet with the Department in an attempt to resolve any disputes without first filing a petition for hearing or negotiate an agreement to mediate.

FDEP cont.

3. In addition to requesting an administrative hearing, any petitioner may elect to pursue mediation under section 120.573, F.S., and must negotiate an agreement to mediate within 10 days after the deadline for filing a petition.

How to Request an Extension of Time to File a Petition for Hearing

For good cause shown, pursuant to Rule 62-110.106(4), Florida Administrative Code ("F.A.C."), the Department may grant a request for an extension of time to file a petition for hearing. Such a request must be filed (received) by the Agency Clerk in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000, within 21 days of receipt of this Order. Petitioner, if different from the applicant, shall mail a copy of the request to the applicant at the time of filing. Timely filing a request for an extension of time tolls the time period within which a petition for administrative hearing must be made.

How to File a Petition for Administrative Hearing

A person whose substantial interests are affected by this Order may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, MS 35, Tallahassee, Florida, 32399-3000, within 21 days of receipt of this Order. Petitioner, if different from the applicant, shall mail a copy of the petition to the applicant, at the time of filing. Failure to file a petition within this time period shall waive the right of anyone who may request an administrative hearing under sections 120.569 and 120.57, F.S.

Pursuant to subsection 120.569(2), F.S. and Rule 28-106.201, F.A.C., a petition for administrative hearing shall contain the following information.

a) The name, address, and telephone number of each petitioner, the name, address, and telephone number of the petitioner's representative, if any, the name, address of the applicant if different from petitioner;

b) A statement of how and when each petitioner received notice of the Department's action or proposed action;

c) An explanation of how each petitioner's substantial interests are or will be affected by the Department's action or proposed action;

d) A statement of the disputed issues of material fact, or a statement that there are no disputed facts;

e) A concise statement of the ultimate facts alleged, including a statement of the specific facts the petitioner contends warrant reversal or modification of the Department's action or proposed action;

f) A statement of the specific rules or statutes the petitioner contends requires reversal or modification of the Department's action or proposed action; and

g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the Department to take with respect to the Department's action or proposed action.

FDEP cont.

How to Pursue Mediation

In addition to requesting an administrative hearing, any petitioner may elect to pursue mediation. The election may be accomplished by filing with the Department a mediation agreement with all parties to the proceeding (i.e., the applicant, the Department, and any person who has filed a timely and sufficient petition for hearing). The agreement must contain all the information required by rule 28-106.404, F.A.C. The agreement, signed by all parties, must be received by the Agency Clerk in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000 within 10 days after the deadline for filing a petition, as set forth above. Choosing mediation will not adversely affect the right to a hearing if mediation does not result in a settlement.

Pursuant to Rule 28-106.404, F.A.C., an agreement to mediate must include the following:

(i) The name, address, and telephone number of the persons who may attend the mediation (also the DEP file number, and the name and address of the applicant);

(ii) The name, address, and telephone number of the mediator agreed to by the parties;

(iii) How the costs and fees associated with the mediation will be allocated (the Bureau of Petroleum Storage Systems will not pay any of the costs of mediation)

(iv) The agreement of the parties regarding the confidentiality of discussions and documents introduced during mediation to the extent authorized by law;

(v) The date, time, and place of the first mediation session;

(vi) The name of the party's representative who shall have authority to settle or recommend settlement; and

(vii) The signature of the parties.

As provided in section 120.573, F.S., the timely agreement of all parties to mediate will toll the time limitations imposed by sections 120.569 and 120.57, F.S., for holding an administrative hearing and issuing a final order. Unless otherwise agreed by the parties, the mediation must be concluded within sixty days of the execution of the agreement. If mediation results in settlement of the administrative dispute, the Department must enter a final order incorporating the agreement of the parties. Persons seeking to protect their substantial interests that would be affected by such a modified final decision must file their petitions within 21 days of receipt of this notice, or they shall be deemed to have waived their right to a proceeding under sections 120.569 and 120.57, F.S. If mediation terminates without settlement of the dispute, the Department shall notify all parties in writing that the administrative hearing processes under sections 120.569 and 120.57, F.S., are resumed.

FDEP cont.

This Order is final and effective as of the date on the top of the first page of this Order. Timely filing a petition for administrative hearing postpones the date this Order takes effect until the Department issues either a final order pursuant to an administrative hearing or mediation settlement.

Judicial Review

Any party to this Order has the right to seek judicial review of it under section 120.68, F.S., by filing a notice of appeal under rule 9.110 of the Florida Rules of Appellate Procedure with the Agency Clerk of the Department in the Office of General Counsel, Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within thirty days after this order is filed with the clerk of the Department (see below).

Questions

Any questions regarding the Department's review of your equipment approval should be directed to Farid Moghadam at (850)245-8848. Questions regarding legal issues should be referred to the Department's Office of General Counsel at (850)245-2242. Contact with any of the above does not constitute a petition for administrative hearing (or time extension) or agreement to mediate.

Sincerely,

Michael E. Ashey, Chief

Bureau of Petroleum Storage Systems

MEA/fm

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to §120.52

Florida Statutes, with the designated

Department Clerk, receipt of which is

hereby acknowledged.

_____ _____