GENERAL CATALOG

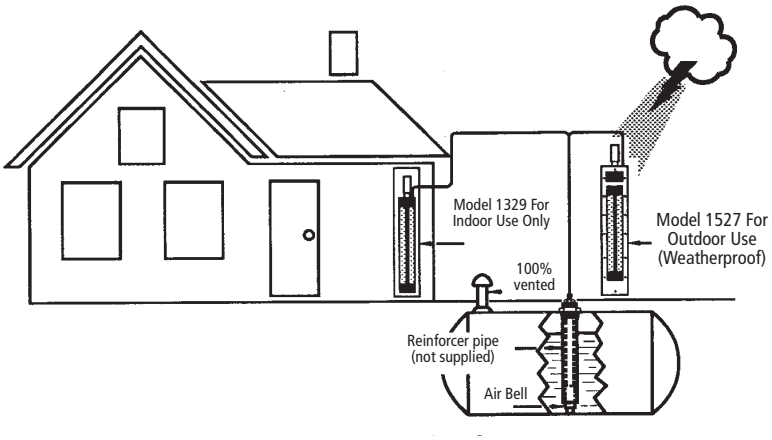
RESIDENTIAL AND COMMERCIAL HEATING OIL INDUSTRY • OIL AND PETROLEUM STORAGE AND TANK FACILITIES

CHEMICAL AND SOLVENT BULK STORAGE FACILITIES • SERVICE STATION AND QUICK LUBE FACILITIES

WASTE WATER TREATMENT PLANTS AND MUNICIPALITIES • MARINE AND LUXURY YACHT INDUSTRY

Petro-Meter Fuel Oil Gauging Systems for Domestic and Commercial Use

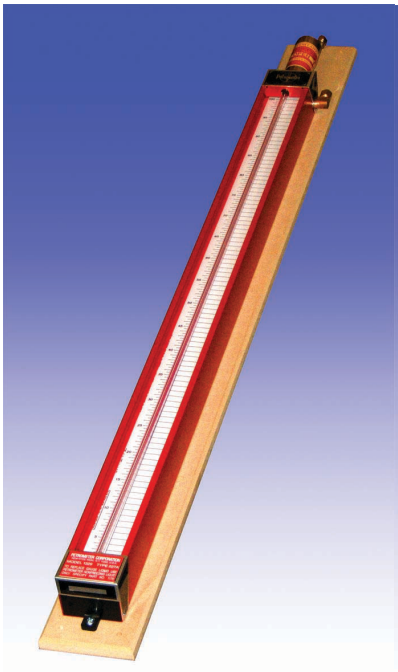
Our Gauges operate on the principle of *hydrostatic measurement* to provide a true reading of product level and/or volume. Air to purge (blowdown) the Tank Assembly Unit is introduced by a built-in handpump. During tank withdrawals, the system is self purging and gauge readings will follow the tank liquid level. During filling the gauge will read slightly lower than the actual tank level. A few strokes of the handpump will correct this small error.



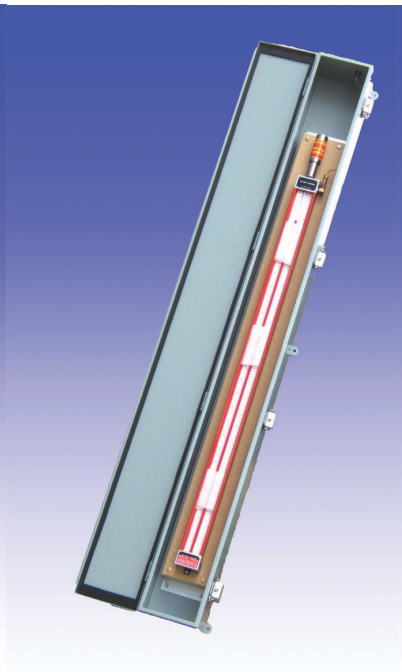
SCALES

The Standard Inch Scale: included with Model 1329 gauges, is calibrated on the left side in inch and half inch increments of tank depth. Blank lines are provided on the right side corresponding to each inch that will permit the user to fill in their own gallon figures. Two Scales are provided with each 1329 Gauge: One for No. 2 Oil and one for No. 6 Oil.

The Volume Accurate Gallon Scale (Pt. No. 1329-I/G): These Special Order scales are inserted in the Petro-Meter Gauge, are custom printed on heavy duty stock and double laminated (for long life and protection from spills and atmosphere). They are calibrated for each individual tank (there are thousands of different sizes and shapes of tanks on the market). They can be adjusted or replaced to correct for any change of product in the tank, or if you change to a different tank size. Propietary software and printing process is used to calculate these scales, they are guaranteed to be accurate for the Customer Supplied Tank Specifications (ie: diameter/height, length, dish size, type/specific gravity of liquid in tank. Also, we must know which Petro-Meter Gauge you are using (standard, non-freezing, 1329, 1700, mercury gauge, etc.).



Model 1329 Residential



Model 1527 Commercial

Model 1700 Industrial(shown in Weatherproof Cabinet)

PETRO-METER GAUGING SYSTEMS

These Gauges are designed for tanks holding fuel, chemical, or other liquids in small to medium 100% vented tanks (up to approximately 10 feet tall (depending upon type of liquid product in the tank) and distances from tank to gauge of up to approximately 150 feet (using the Petro-Meter [Pt.No.1372] Tank Assembly unit). They are available for both indoor and outdoor installations, and non-freezing types. *For unvented tanks, longer distances, deeper tanks or viscous liquids refer to Series 1700 Gauges.*

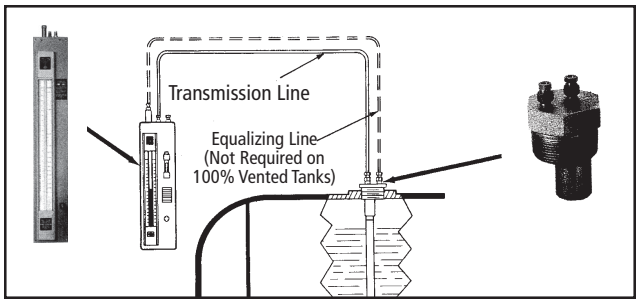
A Complete System May Consists of the Following:

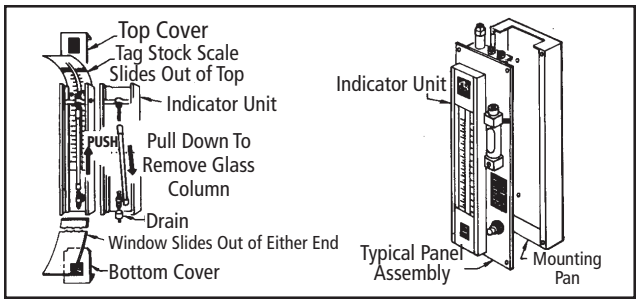
1. The Model 1329 or 1527 (weatherproof) Tank Gauge (well type manometers) in which a column of Red-X indicating liquid is read against a scale calibrated in units of depth and/or volume.
2. The Tank Assembly Unit, Model 1372 or other (refer to page 9).
3. Cleaning Kits, indicating liquid, replacement pumps are available.
4. Call us for volume accurate custom scales (Pt.No.1329-I/G)

Used extensively for industrial, yacht, and marine applications, the 1700 series indicators are recommended for use with both vented and non-vented tanks. The 1700 series are available with Red-X indicating liquid for the majority of installations or mercury for measuring deeper tanks. The wide variety of models and accessories permit the selection of a system designed to meet your requirements. *May be purchased with or without Weatherproof cabinet*

A Complete System May Consists of the Following:

1. The Model 1700 Liquid Level Indicator, a well type manometer with purge devices, in which a column of Red-X indicating liquid or mercury (for tall tanks) is read against a scale calibrated in units of depth and/or volume.
2. The Tank Assembly Unit, a downpipe or air bell within the tank, connected to the indicator with ¼" O.D. tubing (refer to page 15).
3. Call us for optional accessories.





Petro-Meter Series 1700 Industrial Liquid Level Indicating System

THE 1700 SYSTEM

The 1700 gauging system operates on the principles of hydrostatic measurement to provide a true reading of product level and/or volume. Air or inert gas is introduced into the system by the purge devices to purge (blowdown) the tank assembly unit, filling it with air and thus converting the tank liquid pressure to air pressure. This air pressure is transmitted to the manometer indicating unit, forcing the indicating liquid up the glass column, to be read against the calibrated scale.

1700 indicators are equipped with a well type manometer indicator unit and a liquid vent check valve – a float type valve to prevent the loss of indicating liquid should the capacity of the manometer be exceeded. The difference between models is the choice of purge devices through which compressed air or inert gas is introduced into the system to purge (blowdown) the tank assembly unit. The following check list will help in selecting the proper model.

1. Is compressed air or inert gas supply available?
   If yes, any model can be selected.
   If no, only manual hand pump operated models apply.
2. Do you want automatic hands-off readings?
   If yes, select a model equipped with a Flow Indicator or Bubbler.
   If no, select a model with Purge Valve or Hand Pump.
3. If Flow Indicator or Bubbler is used, should operator be able to check reading manually?
   If yes, also use Purge Valve in addition to Flow Indicator or Bubbler.
4. Will indicator be used to activate a high level pressure switch (to sound alarm, stop pump, etc.)?
   If yes, a Flow Indicator or Bubbler must be used (also recommended for low level).

Generally, if compressed air is available, use it. It makes the system simpler for the operator to use, has fewer moving parts and requires less periodic maintenance. Compressed air should be clean, dry and oil-free.

Design and Construction:

1. The indicator unit consists of a well type manometer housed in an aluminum extrusion with built-in channels for scale and window. The indicator is assembled with purge devices on one aluminum panel.
2. The top and bottom covers, plastic window, scale and the glass indicating column are readily accessible and can be removed and replaced without the use of tools.
3. Petro-Meter's O-ring quick coupler tube jumpers are used to connect all integral indicator parts.

PURGE DEVICES

Purge Valve: Performs three functions. Provides high pressure purge for rapid blowdowns of the tank assembly unit. Provides a means to check the indicator reading. Affords a means to blow lines clear of condensate or foreign material. In operating position, the valve connects the tank assembly unit to the manometer indicating unit. In the "purge" position (button depressed) it connects the compressed air supply to the tank assembly unit.

Flow Indicator: Dispenses a flow (approx. 0.1-0.2 SCFH) of air into the tank assembly unit to keep it fully purged, automatically maintaining correct readings. A needle valve permits adjustment of flow rate. A sight tube with float provides visible evidence of flow.

Bubbler: Dispenses a flow (approx. 0.1-0.2 SCFH) of air into the tank assembly unit to keep it fully purged, automatically maintaining correct readings. A needle valve permits adjustment of flow rate. Bubbles passing through the liquid filled glass bowl provides visible evidence of flow rate.

Hand Pump: A long stroke air pump for manual purging of the tank assembly unit.

Manual Compressor System: To produce and store a supply of compressed air for purging, it consists of a storage tank, pressure gauge and hand pump. Provides air for several purges at higher pressure than the hand pump alone and is more suitable for heavy oil, deep tanks and clogging conditions. An inlet is provided to connect storage tank to a compressed air supply, thus leaving the hand pump as a stand-by.

Standard Models

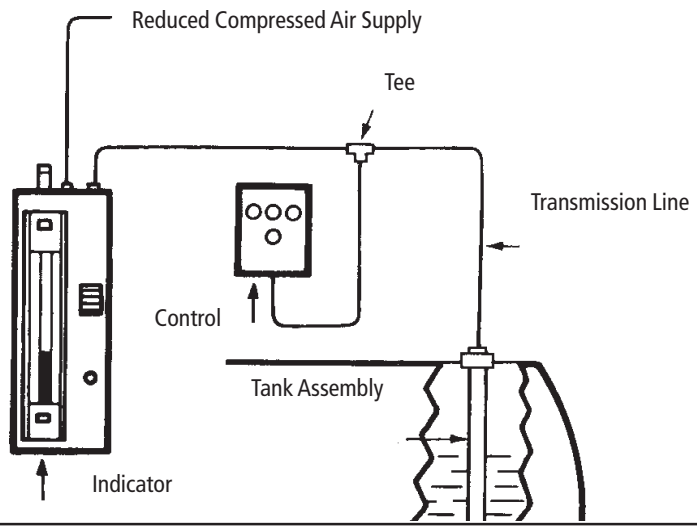
No Air Required

Model	Equipped With	Compressed Air Required
1700-5	Manual Compressor System & Purge Valve	NO
1700-6	Hand Pump	NO

Air Required

Model	Equipped With	Compressed Air Required (30-40 PSI)
1700-2	Purge Valve	YES
1700-3	Purge Valve & Bubbler	YES
1700-4	Purge Valve & Flow Indicator	YES
1700-18	Flow Indicator	YES
1700-19	Bubbler	YES

Series 1800



Petro-Meter Liquid Level Alarm and Control Systems

Liquid Level Control, High and/or Low Alarm

Control of liquid level in tanks is the primary application for the series 1800 control system. A number of control activities may be achieved when a pressure switch setting is tripped at a predetermined tank-content level. These activities may include start or stopping of pumps, opening or closing of valves, etc., to automate production processes; or just to provide visual and audible alarm of a tank level(s).

Series 1800 Electric Controls The series 1800 controls consist of various electrical and pneumatic components designed to provide the required functions for alarm, control and status lamp indications as may be required by a process.

All controls have three basic system components. These are:

1. A control unit with electric relays, indicators, associated pressure switch, etc.
2. A tank-assembly unit, a downpipe or an airbell within the tank, connected to the control unit via tubing.
3. A purge device for introducing air or an inert gas for displacement of the product from the downpipe or airbell. Where high-level control is needed, a constant purge device is required.

Components 2 and 3 are usually part of a liquid-level indicating system.

Petro-Meter Overfill Alarm System

40 Type O and 40 Type W

Application The Model 40 Overfill Alarm is designed to warn of tank level overfills in any type of tank or vessel. The tank may be installed above or below ground in the vertical or horizontal position. Due to the versatility of this alarm the Model 40 may be used for various applications ranging from small waste oil tanks to large bulk facilities. These alarms are available in two types: Model 40 Type O for indoor mounting of control box and Model 40 Type W for outdoor mounting of control box (weatherproof type).

The System Consists of the Following:

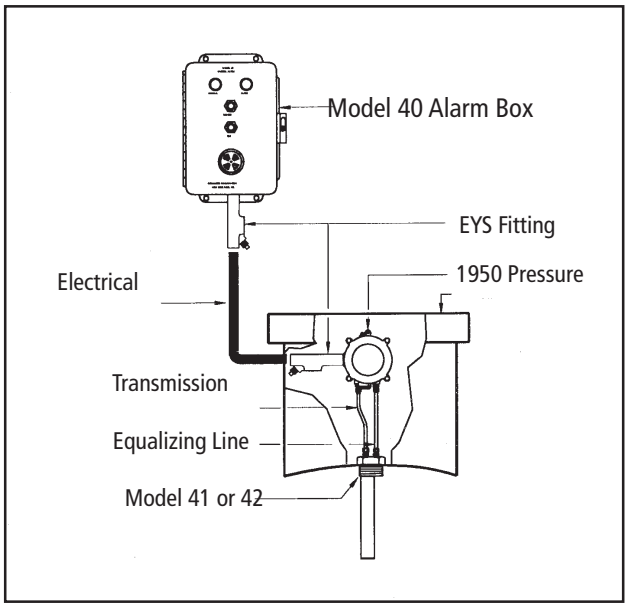
1. The Alarm Unit: Consists of a control box complete with 2 status lights (Green/Normal-Power on; Red/Alarm), audible horn, relay, silencer and test pushbutton switches and printed circuit board.
2. Pressure Switch: Explosion-proof and weather-proof switch intended to be mounted at the tank top. Connected electrically to the alarm box by 3 wires and pneumatically to the tank by transmission and equalizing lines.
3. Model 41 or 42 Tank Assembly Unit:

A) Model 41 Tank Assembly Unit includes a 9" downpipe.

B) Model 42 Tank Assembly Unit includes a 1" NPT coupling for a length of pipe to be added to whatever length necessary to meet user's desired actuation level. This downpipe is not provided by Petro-Meter.

Operation

The tank overfill system is fully automatic, has no moving parts or electricity within the tank and operates on the principles of hydrostatics. The sensing device for the alarm system is an open ended air bell and equalizing line that is installed at the top of the tank. This device (Tank Assembly Unit) is connected to a pressure switch via ¼" and 3/16" O.D. tubing. As a rising liquid level covers about ¾" of the air bell, the increase in pressure of the trapped air activates the pressure switch which in turn activates an audible and visible alarm. The audible alarm is silenced by a pushbutton silencing circuit and the visible alarm automatically resets when the liquid level drops below the air bell. An alarm test pushbutton permits verification that the alarm circuits function correctly.



20 T / 20TX

Petro-Meter Double Containment Tank Leak Alarm Systems

Applications The Model 20 Type T is recommended for tanks containing diesel fuel, fuel oils, kerosenes, anti-freeze and any other liquids that are not flammables. The 20 Type TX is required for applications where flammable liquids such as alcohols and gasolines are being stored.
Operation These Tank Leak Alarm Systems are fully automatic and need only to be connected to a power source. They operate on the principles of hydrostatics using the Tank Assembly probe as the sensing devices. A leak in the storage tank will start flooding the double containment tank with the stored liquid, immersing the probe in tank liquid. This causes an increase in pressure of the trapped air within the probe and interconnecting copper tubing that activates the pressure switch to sound an alarm. In factory tests using 50' of tubing and water, a 3/8" immersion above the air bell opening sounded the alarm. The audible alarm is silenced by a pushbutton silencing circuit and automatically resets when the double containment tank is pumped out. An alarm test pushbutton permits verification that the alarm circuits are functioning correctly.

Petro-Meter Tank Assemblies

The Tank Assembly Unit is the sensing device for the tank gauging system. When installed in the tank and filled with air, it converts the hydrostatic pressure of the tank liquid to air pressure which is transmitted to the manometer gauge. Tubing that connects the tank assembly unit to the manometer contains only air and may be cut to length on the job. Runs should be one piece, if joints are unavoidable, insure they are made up absolutely air tight. Always make sure that material of tank assembly unit selected is compatible with the liquid being measured.

Model 1372 (For 100% vented tanks only)

Consists of ¼" O.D. one piece coil copper tubing and factory soldered brass air bell with steel extension and 2"x 1½" double tapped tank top bushing with brass locking fitting. Units are available in lengths of 25, 50, 75 and 100 feet and in multiples of 10 feet thereafter. *Note: A schedule 40, 1½" NPT reinforcer pipe supplied by installer is required to hold the air bill rigidly in place at the bottom of the tank.*

Model 1606

Consists of a 2" tank top bushing with coupling for a ¾" IPS downpipe (not supplied), fittings for ¼" O.D. tubing to gauge (one fitting for 100% vented tanks, two for non-vented tanks) and is available in the following materials: Carbon Steel, PVC, 316 Stainless Steel, Brass or Aluminum.

Model 1603 Sectional

Sectional tank assemblies are used for tanks in installations where head room is limited (such as a low ceiling).
The 1603 tank assembly consists of a 5/8" O.D. hard copper tube downpipe with a factory soldered 1½" brass air bell, a 2" black iron tank top bushing with brass locking fitting and brass fitting for ¼ O.D. tubing that connects tank assembly unit with the gauge. The 1603 is available in one or multiple (1, 2, 3, etc.) sections. Call us for price on an individual basis.

Cabinets & Panels

Model 1527 Outdoor Cabinet

The Petro-Meter Outdoor Cabinet, for the protection of gauges installed outdoors, are available for single units in three stock sizes. Made from 1/16" steel welded construction, with aluminum hinge, stainless steel hasp, cover gasket and durable organic finish.

Model 1752 Multiple Indicator Plywood Panel

Recommended for installations of 2 or more indicators at the same location. Petro-Meter mounts the indicators to a common plywood panel thus eliminating the need to install a separate set of mounting provisions for each indicator. Especially advantageous on hard to drill and uneven walls. For indicators that require compressed air supply, Petro-Meter manifolds the air inlet terminal of each indicator for a single point air supply connection.

Leak-Guardian® System

It's not a question of IF it will happen, but When!

The Radio-Controlled Leak-Guardian System provides protection for the prevention of uncontrolled flooding from every possible leak. The Leak-Guardian System is activated upon sensing any leak where a sensor/transmitter is located. Water coming from the main water supply will be cut off automatically. Kit consists of: Receiver Module, Valve & Actuator Assembly, Sensor/Transmitter, batteries, and instruction manual.

2500-075i . . . . . .3/4" IPS (Thread)
2500-100i . . . . . 1" IPS (Thread)
Other Pipe configurations can be accommodated through the use of pipe adapters.

2500-015
Leak-Guardian Sensor/Transmitter

Use one in each location where you need flood control!

When a leak is detected by the sensing pads of the Leak-Guardian Sensor/Transmitter power is sent through the unit which then transmits a radio signal to the Leak-Guardian Receiver Module, shutting off the incoming water supply, thereby eliminating a potential flood. Multiple sensors can be placed throughout the building to prevent flooding from several locations. Effective distance is approx. 160 feet fromthe receiver module.

Petro-Meter Valves

2000 Series Ball Valves

High quality brass ball valves.
Provide tight shut off and leak free systems. Suitable for a wide range of temperature applications and pressure. With NPT ends.

2000-001 . . . . . 2" Sweat Ball Valve 400 WOG
2000-002 . . . . . 1 ½" Sweat Ball Valve 400 WOG
2000-003 . . . . . 1 ¼" Sweat Ball Valve 400 WOG
2000-004 . . . . . 1" Sweat Ball Valve 400 WOG
2000-005 . . . . . ¾" Sweat Ball Valve 400 WOG
2000-006 . . . . . ½" Sweat Ball Valve 400 WOG
2000-007 . . . . . 2" NPT Ball Valve 400 WOG
2000-008 . . . . . 1 ½" NPT Ball Valve 400 WOG
2000-009 . . . . . 1 ¼" NPT Ball Valve 400 WOG
2000-010 . . . . . 1" NPT Ball Valve 400 WOG
2000-011 . . . . . ¾" NPT Ball Valve 400 WOG
2000-012 . . . . . ½" NPT Ball Valve 400 WOG
2000-013 . . . . . 3/8" NPT Ball Valve 400 WOG
2000-014 . . . . . ¼" NPT Ball Valve 400 WOG
2000-015 ¼" NPT Ball Valve 400 WOG(For Pressure Gauge)
2000-016 . . . . . ¼" M-F NPT Ball Valve 400 WOG

2100
Anti-Siphon Valves

Use to reduce hazards and spills by shutting off the flow of liquid from a broken or open suction line. Petro-Meter Anti-Siphon Valves are made of brass with XX" IPS (NPT?) downpipe (threading?).
Available in ½" and ¾" sizes.

2100-001 . . . . . ½" Anti-Siphon Valve
2100-002 . . . . . ¾" Anti-Siphon Valve

Pressure Gauges

Petro-Meter Vermont pressure gauges are available dry or glycerine filled for low vibration. Dry gauges come with black case and square wrench hold, glycerine pressure have a chrome case with hex wrench hold.
Available in 2 ½" and 3 ½" for a wide range of PSI's.

1200-001 . . . . . 0-15 PSI Pressure Gauge 2½" Black
1200-002 . . . . . 0-30 PSI Pressure Gauge 2½" Black
1200-003 . . . . . 0-60 PSI Pressure Gauge 2½" Black
1200-004 . . . . . 0-100 PSI Pressure Gauge 2½" Black
1200-005 . . . . . 0-160 PSI Pressure Gauge 2½" Black
1200-006 . . . . . 0-200 PSI Pressure Gauge 2½" Black
1200-007 . . . . . 0-300 PSI Pressure Gauge 2½" Black
1200-008 . . . . . 0-15 PSI Pressure Gauge 3½" Black
1200-009 . . . . . 0-30 PSI Pressure Gauge 3½" Black
1200-010 . . . . . 0-60 PSI Pressure Gauge 3½" Black
1200-011 . . . . . 0-100 PSI Pressure Gauge 3½" Black
1200-012 . . . . . 0-160 PSI Pressure Gauge 3½" Black
1200-013 . . . . . 0-200 PSI Pressure Gauge 3½" Black
1200-014 . . . . . 0-300 PSI Pressure Gauge 3½" Black
1200-015 . . . . . 0-30 PSI Vacuum Gauge 2½" Black
1200-016 . . . . . 0-30 PSI Glycerine Pressure Gauge Chrome
1200-017 . . . . . 0-60 PSI Glycerine Pressure Gauge Chrome
1200-018 . . . . . 0-100 PSI Glycerine Pressure Gauge Chrome
1200-019 . . . . . 0-160 PSI Glycerine Pressure Gauge Chrome
1200-020 . . . . . 0-200 PSI Glycerine Pressure Gauge Chrome
1200-021 . . . . . 0-300 PSI Glycerine Pressure Gauge Chrome

Immersion Wells

Petro-Meter immersion wells allow changing out of thermometers without disrupting a constant flow system. Made of copper and brass with MORE INFO.
Available in 3/4", 1" and 1" extended sizes.

2200-001 . . . . . ½" Short Immersion Well
2200-002 . . . . . ¼" Short Immersion Well
2200-003 . . . . . ¼" Long Immersion Well

2300 Tridicator

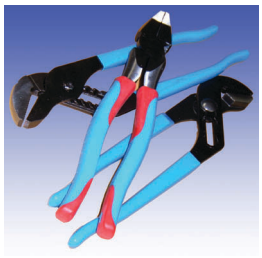
Designed for use in all types of hot water heating systems. Petro-Meter tridicators read out the water pressure, water temperature, and system head in feet of water. All internal components are of industrial quality. Case of XX with brass NPT threading and XX" copper stem (??). 0-75 PSI, 20-160° C. Calibrated in Fahrenheit and Centigrade.

2300-001 . . . . . 0-75 PSI 2½" ¼ NPT Tridicator
2300-002 . . . . . 0-75 PSI 2½" ½ NPT Tridicator

4" NPT Thermometer

0-120° C Vermont Gauge industrial-grade thermometer. Stainless steel(?) with 4" dial, male(?) ½" NPT threaded mounting base, XX" MATERIAL stem. Calibrated in Fahrenheit and Centigrade.

2300-003 . . . . . 4" Thermometer ½" NPT



ChannelLock Pliers

High leverage, heavy-duty construction pliers from ChannelLock are heat treated, with right angle teeth grip in all directions for maximum bite and minimum wear. Made from precision made high carbon steel with PermaLock fasteners and blue comfort grips.

317 ..... 7 ½" Long Nose Plier
318CB ..... 8 ½" Long Nose Plier
338CB ..... 8" Cutting Plier Lap Joint
369CB ..... 9" Linemen's Plier
430CB ..... 10" Tongue and Groove Plier, 2" capacity
212 ..... 12" Oil filter/PVC Plier, up to 4 ½" capacity
430 ..... 10" Tongue and Groove Plier
440 ..... 12" Tongue and Groove Plier

CB = *"Code Blue" Comfort Grip w/Red Trim*

B&G and TACO Gasket / Bolt Kits

B&G and TACO gaskets for quality sealing.
Red rubber flange, 2" diameter. Each kit includes 2 gaskets with nuts and bolts for installation.

2400-001 ..... TACO Gasket/Bolt Kit
2400-002 ..... B&G Gasket/Bolt Kit

Self tapping Screws

For fixing applications into hard woods, soft woods, plywoods, composite boards, soft plastics and sheet metals. Self tapping screws save tapping and drilling and give a vibration resistant assembly. 100 pcs. per box, available from ½" to 1" in Nos. 8 and 10.

2400-620 ..... .#8 x 1" Screws Q100
2400-622 ..... #8 x ¾" Screws Q100
2400-624 ..... #8 x ½" Screws Q100
2400-630 ..... #10 x ½" Screws Q100
2400-632 ..... #10 x ¾" Screws Q100
2400-634 ..... .#10 x 1" Screws Q100

5/8" Gauge Glass Washers

XX" I.D., XX" O.D., thickness, pressure.
For 5/8" gauges. 100 pcs.

2400-700 ..... 5/8" Gauge Glass Washers Q100

Wall Anchors / Bantam Plugs

Use with a sheet metal or wood screw on lightweight fixtures. Not to be used overhead. Anchors interface longframe [310] jacks to bantam jacks. Suitable for most base material. Available in No. 6-8 screw x ¾" length to No. 14-16 screw x 1 ½" length. 100 pcs., screw anchors and bit are provided.

2400-635 ..... .Bantam Plug Assortment