

Western Gauge
Mercer Valve
Superlok
GPM Pump



Proud member of the Unified Valve Group



# A Trusted Advisor and Supplier for the Oil, Energy, Mining and Industrial Sectors







# PRODUCTS TO TRUST The Latest Technology & Measurement Solutions

# **Quality and Service**

We pride ourselves on being innovators in the industry by continually offering the latest technology and measurement solutions, providing some of the best customer support in the marketplace. Our stock is ready for same-day shipping. Talk to our staff at WGI to take advantage of their wealth of knowledge in the instrumentation field. We are a great resource to answer your questions for your applications. Our staff can ship your order same day from our huge inventory or locate and promptly fill your order using trusted backup vendors we have put into place.

Look for the WGI "CACTUS" Logo that identifies our manufactured product as adhering to exacting WGI STANDARDS. These products are manufactured by ISO certified factories and majority of our products have CRN (CANADIAN REGISTRATION NUMBERS). This number guarantees top quality and extremely reliable workmanship.

Our EDMONTON and SASKATOON locations offer full calibration and dead-weight certification for your pressure indicators. Ask us about a custom ID printed face for your larger OEM requirements!

- Pressure Gauge's
- Temperature Indicators
- Needle & Ball Valves
- Regulators
- Electronics
- Support Accessories

# Fort St. John Grande Prairie Edmonton Red Deer Calgary Brooks

# **Calibration Services**

WESTERN GAUGE AND INSTRUMENTS can offer the following services at our repair centers located in EDMONTON and SASKATOON, please contact us to find out which location serve your needs.

# **General Repairs**

WGI repairs all makes and models of Gauges, and is the Western Canadian repair center for 3D Instruments, and Direct Drive Pressure Gauges. Deadweight Certificate of Calibration available upon request. WGI calibrations on your Pressure Devices and Temperature Instruments, are traceable to NIST (National Insitute of Standards and Technology). WGI uses Silicone, Glycerin and other Specialty fluids for Pressure Gauges and BiMetal Thermometers. Ask us about Stainless Steel or Aluminum tags installed for your custom requirements. WGI can also mount various instruments to your Diaphragm or Chemical Seals, as well as fill with either Silicone Oil, Glycerin or High Temperature Products to meet your needs.

# Custom

CUSTOM DIAL FACES: Custom Dials are available in many different scales including Psi, kPA, kg/cm2, cm of H2O, feet of water, inches of Hg, inches of H2O, ounces per square inch, bar, mBar, MPa, and many more. Customer "name on dial" service also available.

#### • Western Gauge • Mercer Valve • Superlok • GPM Pump

#### **PHONE:**

Calgary:	. 403.236.4888	Fully Stocked Location
Grande Prairie:	. 780.539.7800	Stocking Soon!
Edmonton:	. 780.463.3800	Fully Stocked Location
Red Deer:	. 403.340.3922	Stocking Soon!
Saskatoon:	. 306.986.0099	Fully Stocked Location
Brooks:	. 403.362.4272	Stocking Soon!
Fort St John:	. 250.787.0080	Fully Stocked Location

### CONTACT US TODAY

EMAIL: sales@wgiltd.com



# **Pressure Gauges**

# Classic 150/200/250/350

Classic series gauges are for general service applications where cost savings are needed. Suited for use with water, oil, air, gas and other non-corrosive media. Not for use with oxygen. **Sizes** 

1.5" through 3.5" Dial – Bottom and back connection



Steel

Accuracy ± 3%-2%-3% ASME B40.1 Grade B



# Elite 150 Stainless

Elite 150 series stainless internal gauges have a 304 stainless steel case and 316 stainless steel internals, Silicone fill for use in harsh environments. Suited for use with water, oil, air, gas and other corrosive media.

**Sizes** 1.5" Dial – Bottom and back connection Case 304 Stainless Steel

Accuracy ± 2%-1%-2% ASME B40.1 Grade A



# **HVAC Gauge**

The WGI Contractor gauge was designed to service the mechanical industry. The HVAC gauge offers high reliability at an economical price and features a corrosion resistant, stainless steel case and acrylic window.

**Sizes** 4.5" Dial - Bottom connection Case Stainless steel Accuracy ± 1% ASME B40.1 Grade B

Elite 250 Brass

media.

Sizes

Case

304 Stainless Steel

Elite 250 series brass gauges have a 304

stainless steel case , silicone fill for use in

harsh environments. Suited for use with

# Elite 200 Stainless

Elite 200 series gauges have a 304 stainles steel case, 316 stainless steel internals, silicone fill for use in harsh environments. Suited for use with water, oil, air, gas and other corrosive media.

Sizes 2" Dial – Back and Bottom Connection Case 304 Stainless Steel Accuracy ± 2%-1%-2% ASME B40.1 Grade A



# Elite 250 Stainless

Elite 250 series gauges have a 304 stainless steel case and 316 stainless steel internals, silicone filled for use in harsh environments. Suited for use with water, oil, air, gas and other corrosive media.

Sizes 2.5" Dial – Bottom and back connection Case 304 Stainless Steel Accuracy ± 2%-1%-2% ASME B40.1 Grade A







Accuracy ± 2%-1%-2% ASME B40.1 Grade A



# **Pressure Gauges**

# Elite 400 Stainless - NACE

WGI Elite 400 series pressure gauges have a 304 stainless steel case for use in harsh or corrosive environments, and silicone filled for pulsation dampening. Suited for oil and gas equipment, refineries, hydraulic equipment, process systems etc.

#### Size

4" Dial – Bottom and back connection Case 304 Stainless steel Accuracy

± 1% Full Scale ASME B40.1 Grade A



## Elite 450 Process Gauge – Solid Front

WGI's Elite 450 NACE process gauge was engineered for the oil and industrial process industries designed with operator safety in mind. Features a solid front blow-out back

Sizes 4.5" Dial – Bottom connection Case Phonelic Accuracy ± 0.5% ASME B40.1 Grade B



# Elite 600 Stainless - NACE

WGI Elite 600 series pressure gauges have a 304 stainless steel case for use in harsh or corrosive environments and is silicone filled for pulsation dampening. Ideally suited for oil and gas equipment, refineries, hydraulic equipment, process systems etc. **Sizes** 

6" Dial – Bottom connection **Case** 304 Stainless steel **Accuracy** ± 0.5% ASME B40.1 Grade A

# Diaphragm Gauge (Low Pressure)

**Sizes** 

Case

Accuracy

WGI Diaphragm gauges are sensitive instruments used in low pressure applications not exceeding 10 PSI. Typical applications include air flow indicators, liquid level, leak testers, natural gas and any other low pressure applications.

2.5" Dial – Bottom and Back Connections



Brass or 316SS Internals

## Elite 450SS Process Gauge – Solid Front

WGI's Elite 450 NACE process gauge was engineered for the oil and industrial process industries designed with operator safety in mind. Features a solid front blow-out back

Sizes 4.5" – Bottom connection Case 304 Stainless steel Accuracy ± 0.5% ASME B40.1 Grade B



# Ammonia Gauges

Steel & 304 Stainless steel

± 0.5% ASME B40.1 Grade B

WGI ammonia gauges are designed for rugged performance in the measurement of vacuum and pressure for any system or piece of equipment that is charged with ammonia.

Sizes 2.5" & 4" Dial – Bottom & Back connection Case 304 Stainless Steel Accuracy ± 2-1-2% ASME B40.1 Grade B



Commercial or Agricultural Models Available





# **Temperature Gauges**

## **Bi-Metal Thermometers**

Features a 304 stainless steel hermetically sealed case providing weather tight protection. External recalibration screw on rear of case for ease of calibration. Silicone fill available. Ranges from -40°C to 1000°C.

Sizes 2", 3" & 5" Dial Case 304 stainless steel Accuracy ± 1% ASME B40.3 Grade A



# **Pocket Thermometers**

General purpose pocket thermometer used mainly for field or lab testing. Ranges from -40°C to 500°C. External recalibration screw on rear of case. Also available in digital or alcohol reading.

#### Size

1 3/8" Dial (PT1835) 5" Scale (GT-120) **Case/Stem** 304 Stainless Steel (PT1835) Glass stem (GT-120) **Accuracy** 

± 2% full scale



# **Industrial Thermometers**

WGI Industrial thermometers are mainly used by the boiler industry in HVAC applications. The adjustable angle case can be moved to any viewing position for enhanced readability.

Scale sizes 7" & 9" Case Die-cast Aluminum Accuracy ± 1% ASME B40.1 Grade B



# **Magnetic Thermometers**

WGI bimetal magnetic surface thermomete are ideal for use on engines, bearings, pipes, tanks, ovens or any flat metallic surface. Rear recalibration adjustment standard. Ranges from -100°F to 500°F

#### Size

2" Dial Case Aluminum Accuracy ± 2% full scale



# Hot Water Thermometers

WGI hot water thermometers are typically used in hot water heating systems, boilers and hydronic heating systems. Complete with removable NPT or solder brass thermowell for maintaining a sealed system.

Size 2" Dial Case Aluminum Accuracy ± 5° F / 2°C full scale



# **Tridicators**

WGI tridicators indicate pressure, temperature and altitude in one compact instrument. Intended for use on all types of hot water heating systems Sizes

2.5" & 3.5" Dial Case Drawn steel Accuracy ± 1% ASME B40.1 Grade A







## **Brass Ball Valves**

601 Series ball valves are an economical full port NPT brass ball valve featuring a cast brass body for durability and superior corrosion resistance

Sizes 1/4" to 4" NPT Body Cast brass – 600 WOG Porting Full port



## Brass Ball Valves - Gas / Sprinkler Service

2-Piece, full port, brass ball valves are used in commercial and industrial applications for a full range of liquids and gases. They feature a bottom-loaded blow-out proof stem, virgin PTFE seats, double o-rings, chrome plated brass ball, brass adapter, and steel handle.





# High Flow Needle Valves

Rated at 10,000 psi working pressure to cover most applications. Features adjustable PTFE packing, and non-rotating stems for high throttling applications.

#### **Sizes**

1/8" through 1" NPT Body material A105 carbon steel & 316 Stainless steel **Seat** Hard seat **Pressure Rating** 10,000 PSI @ 100°F



# Standard Flow Needle Valves

Rated at 6,000 psi working pressure to cover most applications. Features adjustable PTFE packing, and non-rotating stems for standard throttling applications.

Sizes 1/8" through 1" NPT Body A105 carbon steel & 316 stainless steel Pressure rating 6,000 PSI at 100°F Seat Hard seat



**Conforms to NACE** 

# Miniature Soft Seat Needle Valves

1/4" through 2" NPT or Soldered

Cast brass – 600 WOG

WGI miniature needle valves feature soft seats for use with any medium that requires a bubble tight shut off. Available in straight or angle pattern.

#### Size

Sizes

Body

Porting

Full port

1/4" NPT **Body Material** A105 carbon steel (zinc plated) Or 316 stainless steel **Pressure rating** 3000 psi @ 100°F **Seat** Soft seat (Delrin)



# Soft Seat Needle Valves

Soft seat needle valves are designed for use with various instrumentation equipment and can be installed to control, isolate, measure, calibrate, equalize, drain or vent the pressure of gases and liquids.. Features bubble tight shutoff.

Sizes 1/4" through 1" NPT Body material A105 carbon steel, 316 stainless steel Pressure rating 6000 PSI @ 100°F Seat Soft Seat (Delrin)





# Valves

## **Angle Pattern Needle Valves**

Angle pattern needle valves are available in carbon and stainless steel. Angle pattern valves will allow the installer / design engineer to optimize space and components in a system. Mainly used by the propane and agricultural industries.

#### **Sizes**

1/8" Through 1" NPT Body A105 carbon steel, 316 stainless steel Seat Hard seat Pressure rating

# **Gauge Valves** (Block and Bleed)

WGI multi-port gauge valves allow for easy positioning of gauges or pressure switches without requiring additional penetration of the main piping system. Metal to metal seats for high-pressure applications.

#### Sizes

1/2" x 1/2" NPT & 3/4" x 1/2" NPT, 1/2" x 1" NPT Body A105 carbon steel, 316 stainless steel Seat Hard seat **Pressure rating** 10,000 PSI @ 100°F

# **High Pressure** (15,000psi)

Metal to metal seats for high-pressure applications. High flow port.

Sizes 1/2" NPT Only Body 316 stainless steel Pressure rating 15,000 psi @ 100°F



# 2,3&5 Valve Manifolds

WGI manifolds are designed for remote or separate mounting. Connecting system impulse lines, transmitters & chart recorders. NACE models are available.

### Configurations

NPT x NPT, NPT x Flange **Body Materials** A105 carbon steel, 316 stainless steel Seat Soft seat (Delrin) Hard seat available **Pressure rating** 6000 psi @ 200°F



**Pipe mounting Bracket** (optional)

# **Check Valves**

VU series in-line check valves are designed to allow free flow of oil in a hydraulic system in one direction and block flow in the reverse direction. Can also be used in natural gas or air service.

Sizes

1/4" Through 2" NPT **Body Materials** A105 carbon steel & 316 stainless steel **Cracking Pressure** 7 PSI **Pressure rating** 3675 Through 10,000 PSI

# **Needle Valve Accessories**

**Bleed Valves / Plugs** Replacement bleed valves and plugs for multiport gauge valves. Rated at 10,000 psi









# Thermowells

Thermowells are used to provide isolation between a temperature sensor and the environment, either liquid, gas or slurry. A thermowell allows the temperature sensor to be removed and replaced without compromising either the ambient region or the process.

#### **Styles**

Threaded and flanged **Shank styles** Straight, stepped & tapered **Bore Sizes** .260, .385 & .702



### Siphons / Cooling Towers

Gauge siphons are used to protect the pressure gauge from the effect of hot pressure media such as steam and also to reduce the effect of rapid pressure surges. The siphon allows condensate to form and be collected inside the siphon, preventing the hot media from coming in direct contact with the pressure instrument.

**Types** Pigtail, barrel & finned **Body** Pigtail – Carbon or stainless steel Barrell & Finned – stainless steel



# **Diaphragm Seals**

Diaphragm seals use a flexible barrier or diaphragm seal to isolate a pressure sensor such as a gauge or transmitter from the process fluid. Diaphragm seals are available in many configurations.

Sizes

1/4" NPT & 1/2" NPT **Body material** 316 Stainless steel (other materials available) **Pressure Rating** 30" Vac to 2,500 PSI @ 100°F



# Snubbers

Snubbers are used to reduce the effects of pulsation on gauges, transmitters and pressure switches in most water, light oil or air services.

Sizes 1/4" & 1/2" NPT Body Brass & 316 stainless steel Pressure rating 10,000 PSI at 100°F









# **Calibration Services**

Western Gauge and Instruments can offer the following services at our repair centre located in Edmonton, Alberta and Saskatoon Saskatchewan.

**Deadweight Certificates:** WGI will certify the accuracy of your pressure devices, temperature instruments traceable to the National Institute of Standards and Technology (NIST).

**Fluid Filling:** Silicone or Glycerin can be applied inside of a Pressure Gauge or Bi-metal Dial Thermometer.

**Instrument Tagging:** Stainless Steel or Aluminum tags are available for marking an instruments field location or use.

# Mounting Diaphragm/Chemical

**Seals:** WGI can mount and fill your Diaphragm seals with either Silicone Oil, Glycerin, or high temperature fill.

**Custom Dial Faces:** Custom Dials are available in many different scales including Psi, kPA, kg/cm2, cm of H20, feet of water, inches of Hg, inches of H20, ounces per square inch, bar, mBar, MPa, and many more. Customer "name on dial" service also available.

# Apollo Valves



**FasTest Fittings** 







# **Midwest DPI**

A low cost differential pressure gauge for use in measuring the pressure drop across filters, strainers, separators, valves, pumps, chillers, in addition to local flow indication and control.

#### **Sizes**

2.5", 3.5" & 4.5" Dial Body Materials Aluminum & 316 stainless steel Ranges 0-5 PSID through 0-110 PSID



# Thermocouple and RTD

JMS designs and manufactures a complete line of high quality standard and customized temperature sensors including Thermocouples, RTD's and Thermowells as well as a wide selection of temperature accessories.

- Miniature and Industrial Thermocouples
- Plastics Industry Temperature Sensors
- Resistance Temperature Devices (RTDs & PRTs)
- Sanitary and 3-A Certified Temperature Sensors



- Specialty Sensors
- Thermowells, Protection Tubes,
- and Coatings Accessories Thermocouple and RTD Wire
- Transmitters
- Thermistors
- Miscellaneous Temperature Instruments

# **Gauge Minder**

The Model 200 "Gauge Minder" features a pressure limiting valve that blocks off excess pressure to the instrument thus preventing calibration failure, internal damage, and "blowout" from over-ranging, a principal cause of instrument failure.

#### **Sizes**

1/4" NPT & 1/2" NPT **Body material** 316 Stainless steel (other materials available) **Pressure Rating** 10,000 PSI @ 100°F

# High Pressure Valves, Fittings & Tubing

Eight pressure classes from 10,000 psi to 150,000 psi. Tubing connections from 1/16" to 1" and pipe connections from 1/8" to 1" NPT. Complete line of specialty valves, air operated valves, accessories and tooling

Taper Seal – 10 & 15,000 psi Medium Pressure – 20,000 psi High Pressure – 30, 40 & 60,000 psi Ultra High Pressure – 100,000 & 150,000 psi Specialty Valves Air operated Valves Accessories Tooling





## High Pressure Ball Valves

BKH high pressure ball valves are made of nickel plated carbon steel and are primarily used in the hydraulic industry where pressures operate at 3000 psi and greater. BKH series ball valves are field repairable, have blowout proof stems and delrin ball seats.

#### Sizes

1/4" through 1-1/2" NPT Connection NPT and ORB Threads Configurations Two way and three way Porting Full port



# Pressure Transducers / Transmitters

Transducers are commonly used in applications for industrial OEMs, fluid power, hydraulic systems, fuel cells, medical gases, HVAC/R, water management, oil and gas exploration, aerospace, scientific research, aircraft ground support and military. Many Sensor products offer UL/cUL, CSA approvals for hazardous environments (ATEX and CRN pending).



#### **Models Include**

- General Purpose
- High Accuracy
- Industrial
- Differential Pressure
- Submersible
   OFM
  - Hazardous Area UL/CSA Approved



# Instrument Air / Gas Regulators

The Marsh Bellofram Type 50 & Type 50 NACE are reliable, precision filter air set pressure regulators, designed for instrumentation and general purpose use in both standard (Type 50) and corrosive environments (Type 50 NACE).

Port Size 1/4" NPT Body Die-cast aluminum Inlet Pressure 250 PSI Pressure Ranges 0-10, psi, 0-30 psi, 0-60 psi & 0-120 psi

## P627 High Flow Gas Regulator

A105 carbon steel, 316 stainless steel

The P627 is a spring loaded, direct-operated regulator for both low and high pressure applications in the oil and gas industries. These regulators are also available in an external pressure registration model (P627M), and NACE construction.



# High Pressure Regulators

The Type P39 is the industries largest and most easily configurable gas pressure regulator. Units are offered with a choice of three different seat materials, allowing the designer to custom fit for individual applications.

Configurations NPT × NPT, NPT × Flange Body Materials Brass, stainless steel, nickel plated Seat Soft seat (Delrin) Hard seat available Inlet Pressure 5500 psig

# Magnehelic Differential Pressure Gauge

The Magnehelic® gauge is the industry standard to measure fan and blower pressures, filter resistance, air velocity, furnace draft, pressure drop across orifice plates, liquid levels with bubbler systems and pressures in fluid amplifier or fluidic systems.



**Size** 4″ Dial

#### Housing

Die cast aluminum case and bezel, with acrylic **cover** Pressure Limits -20" Hg. to 15 psig.† (-0.677 bar to 1.034 bar) **Temperature Limits** 20 to 140°F.\* (-6.67 to 60°C)



Rugged, accurate and easy to use. The Difference is the greater accuracy possible with a digital display and, through an advanced design.

#### Accuracy

Body

Seat

Hard seat

Pressure rating

10,000 PSI @ 100°F

specified to be 0.05% full scale over the temperature range of 0 °C (32 °F) to 50 °C (122 °F).

# **Digital Gauges**





# **Direct Drive Gauges**

The advantage of Perma-Cal® direct drive over conventional C- tube gauges is simple, there is only one moving part No gears, linkages, or springs to wear or break. Perma-Cal® gauges have a unique helicalwound elastic element that is attached directly to the pointer shaft. This eliminates the need for any movement-amplifying gears or linkages (the parts of a C-tube that fail most frequently).

- Accuracy, Grade 3A, 0.25% of FS
- Overpressure without calibration shift, 150% of FS pressure
- Burst pressure +500% of FS.
- Wetted parts, Inconel X-750 element, 316SS stem, 304SS capillary, silver solder

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# and bezel, with acrylic



# Additional Product Lines (distributed Products)

Mid-West <sup>®</sup>	<ul> <li>Differential P</li> <li>Gauge Mind</li> <li>Backflow Tes</li> </ul>		ENTRY INCOMP	<ul> <li>Thermocouples</li> <li>RTD's</li> <li>Explosion Proof Heads</li> <li>Wire</li> <li>Accessories</li> </ul>	
Dwyer.	<ul> <li>Magnehelic (</li> <li>Flow Meters</li> <li>Level Gauges</li> <li>Pressure Swi</li> <li>Pressure Trans</li> </ul>	s / Switches itches		<ul> <li>High Pressure Valves</li> <li>High Pressure Fittings</li> <li>Pumps &amp; Intensifiers</li> <li>Vessels</li> </ul>	
NOSHOK	<ul> <li>Pressure &amp; Load Cells</li> <li>Pressure Trans</li> </ul>	evel Instruments nsducer		<ul> <li>High Pressure Ball Valves</li> <li>High Pressure Check Valves</li> </ul>	
Group of Companies	<ul> <li>Air / Gas Re</li> <li>Pressure Gau</li> <li>I/P &amp; E/P Tra</li> <li>FRL's</li> <li>Diaphragm (</li> </ul>	uges ansducers	Apollo Valves	<ul> <li>Ball Valves</li> <li>Actuator</li> <li>Safety Relief Valves</li> </ul>	
PERMA-CAL® INDUSTRIES, INC.	* Direct Drive	Pressure Gauges	FasTest	<ul> <li>Calibration Fittings</li> <li>High Pressure Swivels</li> <li>TwistMate Connectors</li> </ul>	
TAYLOR. Peters Peterson 3 nor 101	<ul> <li>Digital Thern</li> <li>Pocket Thern</li> <li>Min/Max Th</li> <li>Food Service</li> </ul>	nometers	SUPERLOK	<ul> <li>Tube Fittings</li> <li>Manifolds</li> <li>Valves</li> <li>Accessories</li> </ul>	
Belgas.	<ul><li>High pressur</li><li>Natural Gas</li></ul>	re regulators & Propane Regulators	Calibration Services	<ul> <li>Pressure Gauges</li> <li>Thermometers</li> <li>Back-flow Test Kits</li> </ul>	
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