

Budenberg Auto Rower of





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Pressure Gauges | Digital Pressure Indicators Digital Tank Gauges | Chemical Seals Thermometers | Pressure Gauges Transmitters | Switches and Contacts | Accessories Calibration Services | Training Courses

> A global supplier of quality instrumentation with a clear customer focus through production efficiency for total customer satisfaction





### **High Quality Instrumentation**

With 150 years experience, Budenberg Gauge can readily design and manufacture high quality instruments for a wide range of applications and processes. Whether you need a one-off special or a custom OEM product, we have the product range and expertise to provide the perfect instrument to suit your individual requirements.





## Test/Calibration Gauges

- 0.15%, 0.2%, or 0.25% accuracy class
- Dial sizes from 100mm to 250mm as defined in EN837-1
- Ranges from vacuum to 2500 bar
- Safety pattern construction
- Temperature compensation option
- Brass/Bronze or AISI 316L (1,4404) or Monel wetted parts
- Individual calibration certificate

## B100 Range Budenberg Digital Test Gauge

- Available with selectable pressure units & include mbar, mPa, kg/cm<sup>2</sup> and PSi
- Auto power off function to improve battery life
- Accuracy 0.1%, 0.25%





#### Low Pressure Gauges

- Capsule or Schaffer Diaphragm sensing element
- Ranges from 2.5mbar up to 25 bar
- High overload capability
- Dial sizes from 63 to 200mm as defined in EN837-3
- Screwed, flanged or hygienic connections

### **Differential Pressure Gauges**

- 100mm and 150mm dial sizes as defined in EN 837-1
- Differential ranges from 25mbar to 60 bar
- Maximum static pressure 700 bar
- AISI 316L (1.4404), Inconel 625 or Hastelloy wetted parts
- Bellows, Diaphragm or Bourdon Tube sensing element
- Direct, surface or flush mounting or direct onto a 3 valve manifold





#### **Pressure Gauges**

Budenberg Gauge Co Ltd is a premier manufacturer of instrumentation for industrial process and offshore petrochemical markets. Quality and reliability have become the trademark of all Budenberg products and all our instruments are supplied with a minimum 2 year guarantee and carry a unique serial number for traceability purposes.

## Industrial Pressure Gauges

- Dial sizes from 63mm to 250mm as defined in EN 837-1
- Ranges from vacuum to 4000 bar
- 0.5% or 1.0% accuracy class
- AISI 316L (1.4404), Monel or Brass / Bronze / BeCu wetted parts
- Direct, Surface or Flush mounting
- Full range of connection types and sizes





#### **Process Gauges**

- All safety pattern construction
- AISI 304 (1.4301), AISI 316L (1.4404)
  DMC or Die Cast Aluminium case materials
- Dial sizes from 63mm to 160mm as defined in EN 837-1
- Ranges from vacuum up to 4000 bar
- 0.5% or 1.0% accuracy class
- AISI 316L (1.4404) or Monel wetted parts

## Harsh Environment Gauges

- Complies with UK Ministry of Defence Standard 66-2
- Complies with ANZAC Defence Standards.
- Withstands continuous vibration from 4 to 100hz with 0.1 to 1.5mm displacement
- Low magnetic permeability <1.05
- Withstands severe shock
- Lifetime tested over 1 million pulsations





## Low Cost Utility Gauges

- Dial sizes from 40mm up to 100mm as defined in EN 837-1
- Ranges from vacuum to 1000 bar
- Brass / Bronze or AISI 316L (1.4404) parts
- 1.6% or 2.5% accuracy class
- Customised Dials





### Chemical Seals

Budenberg Gauge Co Ltd is considered a market leader in the design and manufacture of chemical seals for a multitude of industries. We specialise in seals for the most arduous of applications and we have always guaranteed continuous, long term repeatability in the harshest environments



## Low Cost Chemical Seal

- All welded construction
- Pressure range from vacuum to 600 bar
- Connections up to 1" NPT, BSP or metric
- Over range capability to 800 bar
- Elevated temperature operation up to 400°C
- Optional purge/flushing connection
- Full range of materials and filling fluids



### Field Serviceable Chemical Seal

- Field replaceable diaphragms
- Clean out/flushing facility for slurry or viscous fluid applications
- Pressure ranges between Vacuum and 350 bar
- Connections up to 1 "NPT, BSP or flanged connections
- Elevated temperature operation up to 400°C
- NACE MR-01-75 compatibility

## Flanged Chemical Seal Units

- Models with flush, clamped or welded diaphragms
- 'Extended nose' type Chemical Seals
- Custom designed Seals for specialist applications
- Flanged to DIN, ANSI, BS and ISO standards
- Flange class ratings up to 2500 RJT
- Flushing ring options





## Hygienic Chemical Seal for Food and Pharmaceutical Industries

- Crevice-free sanitary design
- DIN 11851 connections
- Triclamp/Triclover connections to BS4825/ISO 2825/NF E 29 521
- ISS, IDF, APV/RJT connections to BS4825
- Homegeniser Button Diaphragm Seals
- High temperature operation for Autoclave applications
- Electro polished finish
- FDA approved filling fluids



### **Special Applications**

Budenberg provide highly specialised machined - to complete products for niche industries globally. Our resources allow for bespoke solutions from finished product to machined components

- Oxygen and Nuclear clean gauges
- Electrical control and alarm gauges
- Gas density, flow and cable monitoring gauges
- Load cell and load indicators
- Tank contents and level indicators
- Air and Oil filled transmitter systems
- Food Industry Research Association (FIRA) can vacuum gauge
- Watertight gauges/high voltage cable alarm gauges



Budenberg operates a machine shop equipped to produce bespoke products in a full range of materials including exotics for the most arduous process applications.

### Thermowells

- Threaded, flanged weld-in or hygienic proceed connections
- British DIN & ASME Standards
- Fabricated or solid barstock
- Specific materials of construction or coatings
- Bespoke custom designs available
- Full material designs & test certification available





## Orifice Plates

- Square edge concentric
- Quandrant edged
- Conical entrance
- Eccentric
- Segmental
- Full range of materials to include exotics
- Conforms to ISA RP 3.2, DIN 1952, BS1042, ISO - 5167





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#### Temperature

Fast response, exceptional repeatability and accuracy are just some of the standard features of our range of Bimetallic or Filled System Temperature Indicators. We have an extensive range of systems, options and configurations and can provide a cost effective solution to all your temperature measurement needs.



## High Quality Bi-Metallic Thermometers

- Direct, Coaxial or 'Any Angle' models
- Dial sizes from 63mm to 160mm
- Temperature ranges from -80 to +700°C
- 1% accuracy with external zero adjustment
- All stainless steel construction
- Environmental protection upto IP67
- Electrical contacts for alarm / control applications
- Ideal for Hygienic, Food and Dairy applications



## Filled System Thermometers

- Gas, Vapour or Mercury filled systems
- Ranges between -80 and 700°C
- Dial sizes 63mm to 250mm
- Remote reading versions with up to 45 metres of temperature compensated capillary
- Direct, surface or flush mounting
- 1% accuracy with external calibration and zero adjustment
- Electrical contacts for alarm / control applications

#### Thermocouples & RTDS

- Mineral insulated thermocouples
- M1 tube skin thermocouple assemblies
- Multi point thermocouple assemblies
- Nickel wire and mineral insulated RTDs
- Thermocouple RTDs with local indication
- Both RTDs and thermocouples available with transmitters



#### Budenberg - Extended Product Portfolio

## Chart Recorders

A line of chart recorders for accurate reliable measurement and recording of pressure and temperature in a wide variety of applications.

The robust construction and choice of either 304 or 316 Stainless Steel, make these an ideal unit for the arduous offshore oil and gas industry.

The chart recorders are available in 240mm Dia charts in a variety of sensors and mounting configurations to suit customer applications.



## **Electronic Pressure Transmitters**

- Thin film sensor technology
  - Ranges from -1 to 1400 bar gauge, -1 to 25 bar absolute
  - High Pressure versions up to 7000 bar
  - 0.1%, 0.5% and 1.0% Accuracy class
  - 4-20 mA or 5/10 VDC Output
  - High shock and vibration stability
- High temperature operation up to 200°C
- Explosion proof version for Zone 1 and 2 applications
- Flush Diaphragm and Sanitary versions available
- IP65 environmental protection

## Differential Pressure Transmitters

- Flexible server inputs; differential pressure
- 4 20mA (Analog) output & digital signal
- Various parameter settings
- Self diagnostics (continuous)
- HART protocol communications
- Various test & burst pressure ranges
- Various materials of construction & wetted parts





## History Of Budenberg

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Here are some milestones in our history

No one can deny the tradition of quality and innovation that engineers associate with Budenberg. The rich history of our company helps to enforce the significant brand strength that makes us the first name that comes to mind when quality pressure & temperature instruments are needed.





Germany 1850: Arnold Budenberg laid down the foundations of the company when he took out, with Ernst Schaffer, a patent on a diaphragm gauge.

1852: Arnold Budenberg came to sell Pressure Gauges in England and set up operations in Manchester in 1854. (Schaffer & Budenberg then had 48 employees)

1856: Schaffer & Budenberg decided to carry stocks of Pressure Gauges in England located in Manchester.

1896: Schaffer & Budenberg moved to a new building in Whitworth Street, Manchester with 100 employees, where as well as selling German products they began manufacturing.

1914: Schaffer & Budenberg relocated to a new purpose built factory in Broadheath, Manchester. At the start of the First World War Schaffer & Budenberg were nationalised and remained so until, at a public auction following the War, the business was acquired by the Budenberg family; thus becoming Budenberg Gauge Co Ltd.

The company remained under Budenberg family ownership (culminating into a workforce of 7000 in 1944) until 1991 when Burnfield PLC acquired it.

In 1997 there was a management buy out of the Budenberg Gauge Pressure & Temperature divisions from Burnfield PLC.

Since the management buy-out in 1997 Budenberg moved to Irlam, Manchester and has continued to develop and cater for the global instrumentation market.





We are:-Budenberg Gauge Budenberg VAC Budenberg Technical Services

Budenberg is a customer focused organisation dedicated to providing total customer satisfaction. For full details please view our website www.budenberg.co.uk



#### **Budenberg Technical Services**

We offer repair and calibration services to our customers onsite or from our service centre in Irlam, Manchester. We also offer calibration kits and bespoke panels to our customer specifications.



Our panel configurations are produced to meet our customers specific designs. We produce and build complete panel sets to include a range of instruments & accessories. We also offer a design service if required.

### **Budenberg Training Services**

Budenberg Technical Services also provides individually tailored training courses for our customers covering, but not limited to the following areas: -

- Gauge Calibration Training / Certification to meet the requirements of ISO 9001 and EN 837-1
- Gauge Repairs/Maintenance (for approved distributors)
- Applications Training Temperature and Pressure Instrumentation
- Applications Training Instrumentation Valves and Double Block and Bleed Assemblies

All our courses are conducted by fully trained personnel to CIPD standards and certificates of attendance/competence will be issued (valid for one year) for all attendees.

Budenberg offers in-house training on our customers site for convenience (for course delegates numbers of five or more). Alternatively, open courses are run on Budenberg's premises for groups of delegates from a selection of companies.

For course dates and further details please contact our sales office.





# **Budenberg**

Budenberg VAC Ltd are a sister company specialising in complex double block & bleed & mono flange assemblies. We offer modular designs for critical applications as well as standard instrumentation valves and manifolds. Contact **+44 (0) 161 777 7300** 

Distributor Details



#### **Budenberg Gauge Company Ltd**

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Made in Britain

