

BOISWOOD

GAS AND LIQUID CONTROL TECHNOLOGIES

Pressure & Vacuum

Flow

Level & Temperature

Tube & Fittings

HVAC/R

Custom Services

Universities
Products and Services Catalogue





WE'RE KNOWN FOR SELLING SOLUTIONS

Our journey started in 1989, when Boiswood was founded. As our knowledge and expertise grew, so did our vast range of products and services, and today, we are one of the country's most well respected and trusted suppliers of gas and liquid control technologies.

We are partnered with several high-quality, globally reputable manufacturers with a distinct range of products and services that offer unique features and benefits to EPC's, System Integrators, OEM's and End Users....our customers.

Our whole business culture centres around our genuine commitment to hands-on service and support, whenever and wherever this is required. We offer unparalleled advice and support, and our 'one stop shop' approach removes all the headache and hassle from our customers, ensuring you always get what you need on-time, on-budget and the perfect fit for your application.

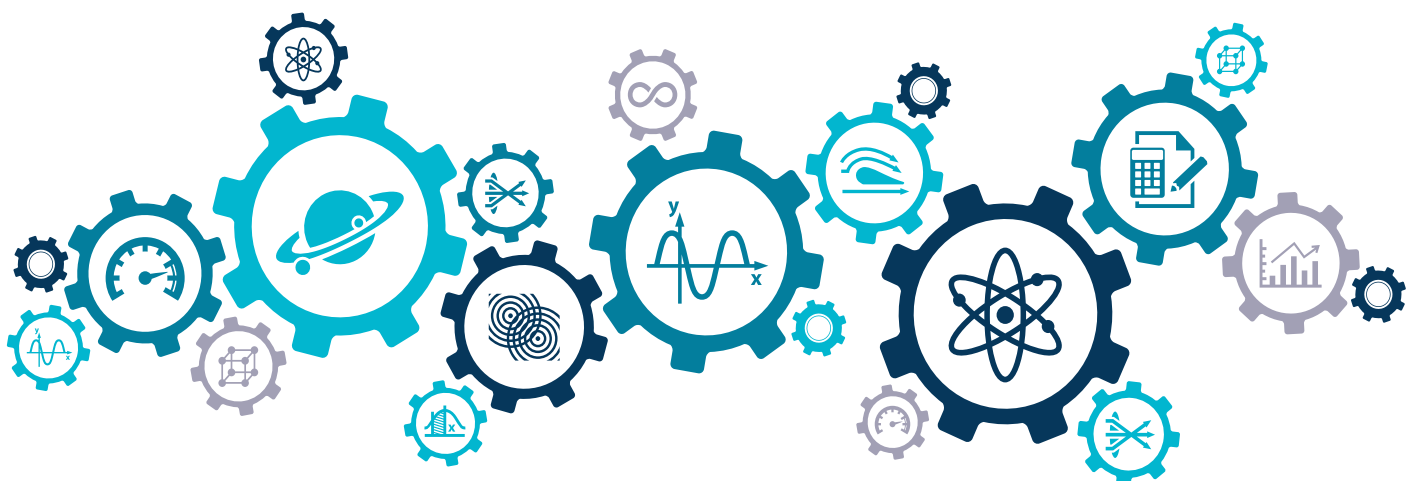
We have over 30 years of successful experience in an extensive range of applications and processes within the markets we serve. Our visionary, technically astute and customer focused approach ensures we consistently add value. Working closely with our customers and supply partners ensures we stay up to date with the latest technologies, using our insight to facilitate the niche and specialist markets we serve.

You can rely on us to specify, supply and support all your gas and liquid control needs.

QUALITY EDUCATION DESERVES QUALITY SERVICES

We support a vast array of university departments, including students, post doctorates, technicians and lecturers with their applications. Whether it be a chemical plant pilot rig, a small benchtop biology experiment or a mechanical engineering powertrain test bed, we have got you covered. We support university facilities as well as startup companies.

WE'RE TRUSTED BY...



Product Solutions

RX2400 SERIES

High Purity Single Stage Regulators



The RX2400 Series is a diaphragm controlled pressure regulator, designed for medium flow rates in high purity applications.

TECHNICAL DATA:

100% Functional & Helium Leak Test Performed • Hastelloy Diaphragm • Low Internal Volume • Fluid Specific Seat Materials Available • Up to 240 BAR Inlet Pressure • -20°C to +65°C Temperature Range • CV values up to 0.20

FEATURES & BENEFITS:

No Spring in Gas Flow (True UHP) • Suitable for Aggressive Media • Individual serial number for full traceability • Assembled in Class ISO 4 Cleanroom • Electropolished as per SEMI F19 UHP Grade

M4SI SERIES

High Purity Diaphragm Valves



The M4SI Series is a manual or pneumatically actuated diaphragm valve, designed for medium flow rates in high purity applications.

TECHNICAL DATA:

100% Functional & Helium Leak Test Performed • Reverse Seat Design for High Life Cycle • Constant Bleed Option Available • Up to 240 BAR Pressure • -40°C to +150°C Temperature Range • CV of 0.20

FEATURES & BENEFITS:

Fast Delivery • LOTO Available • Individual serial number for full traceability • Assembled in Class ISO 4 Cleanroom • Electropolished as per SEMI F19 UHP Grade

EB SERIES

One-Piece Encapsulated Ball Valves



The EB Series one-piece encapsulated ball valves offer important improvements for the most popular valve design used in analytical instrumentation and other medium pressure applications.

TECHNICAL DATA:

Stainless Steel, Brass, Alloy 400 and Alloy C-276 Materials • Up to 206 BAR Pressure • -53°C to +148°C Temperature • Up to 12.0 Cv • 1/16" to 3/4" End Connections • 2-Way, 3-Way and Angle Pattern Designs • Tube OD, NPT, and BSPP Fittings

FEATURES & BENEFITS:

Extremely low dead space • Industries first blowout proof stem design • Forged 316 Stainless Steel increases structural integrity • End-to-end dimensions match Swagelok® 40 series valve dimensions

PR1 SERIES

Instrumentation Pressure Regulators



GO REGULATOR

In Stock

The PR1 series is a versatile pressure reducing regulator designed to fulfil a wide range of needs in instrumentation sample systems and other applications.

TECHNICAL DATA:

Gas or Liquid Service • Inlet Pressures up to 6,000 PSIG • Outlet Pressures from 10 to 750 PSIG • -40°C to +260°C Temperature Ranges • Five Seat Material Options • 20 Micron Inlet Filter • Range of CV values up to 0.50

FEATURES & BENEFITS:

Range of standard configurations in stock • Easily field maintainable • Long-life span • Training Services available

CYL-20 SERIES

Dual Stage Pressure Regulators



GO REGULATOR

In Stock

The CYL-20 Series offers precision pressure control with less than 0.01% outlet pressure change with varying inlet pressures, and is designed for use in gas calibration systems and cylinder applications.

TECHNICAL DATA:

Gas or Liquid Service • Inlet Pressures up to 6,000 PSIG • Outlet Pressures from 10 to 500 PSIG • -40°C to +260°C Temperature Ranges • Five Seat Material Options • 20 Micron Inlet Filter • Range of CV values up to 0.50

FEATURES & BENEFITS:

Range of standard configurations in stock • Easily field maintainable • Long-life span • Training Services available

3100 SERIES

Thin Film Pressure Transducers



Gems
Sensors & Controls

In Stock

The 3100 Series is ideal for OEMs that require consistent high levels of performance, reliability and stability utilising the sputtered thin film technology.

TECHNICAL DATA:

Pressure Ranges from 0 – 7 BAR up to 2,200 BAR • High Proof Pressures • Broad Choice of Outputs and Pressure Ports • Pressure and Temperature Measurement Combination • RoHS Compliant • From -40 to +125°C Temperature Ranges

FEATURES & BENEFITS:

Unbeatable Price/Performance Ratio • Compact Design • OEM Discount Available

Product Solutions

S15 SERIES

Line Pressure Regulators



★ ROTAREX
★

The S15 series is used as a line pressure reducing regulator for high-flow industrial or lab applications.

TECHNICAL DATA:

Up to 25 BAR Inlet Pressure • Up to 10 BAR Outlet Pressure • Purity up to Grade 6.0 • G3/8 or 1/4" NPT Connections • FPM or EPDM Seal Materials • -20°C to +60°C Temperature • 50 m³/h Nominal Flow • Brass or Stainless Steel

FEATURES & BENEFITS:

Wall or Panel Mounting • Best-in-class pressure stability with Balanced-Valve technology • Long operational life span • Low cost of ownership • Fast delivery

S2+ SERIES

Dual Stage Cylinder Regulators



GCE

The S2 series is a heavy duty multi-stage cylinder regulator designed to provide accurate, fluctuation-free delivery for precision applications such as machine cutting or laboratory use.

TECHNICAL DATA:

Forged Brass bodies • Up to 300 BAR Inlet Pressure • Up to 10 BAR Outlet Pressure • Flow rates up to 191 m³/h • Set pressures and connection forms for a wide range of gas bottle media

FEATURES & BENEFITS:

Top-safe and accurate 50mm bulkhead pressure gauges • Cost-effective non-serviceable units • Fast delivery times • Technical data permanently marked on bodies • Non-adjustable safety valves fitted

239 SERIES

Differential Pressure Sensors



setra

The 239 is the "standard" for measuring low differential pressure in the Test & Measurement industry, with decades worth of installation helping build a reputation as the first-choice for critical applications.

TECHNICAL DATA:

High Accuracy down to $\pm 0.073\%$ • Fast Response Times down to $< 10\text{ms}$ • From 125 up to 7,500 Pa Pressure Ranges • Available in "WC and PSID" • Variation of Outputs, Terminations and Special Options

FEATURES & BENEFITS:

Captures Dynamic Pressure Changes • Small Footprint • Low Thermal Error • CE & RoHS Compliant • Fast Warm Up and Response Times

S75 SERIES Constant Flow Regulators



★ ROTAREX
★

The S75 series constant flow regulator was designed for calibration applications where predetermined pressure and adjustable flow are required, and for portable cylinder use.

TECHNICAL DATA:

Inlet Pressure up to 200 BAR • Outlet Pressure up to 3.5 BAR • 0.3 – 15 LPM Flow Selector (3 different max. outlets) • Rear inlet connection • FPM or EPDM O-Rings • Nickel Plated Brass or Stainless Steel Materials

FEATURES & BENEFITS:

Piston technology allows having a very stable flow outlet pressure • Equipped with a flow selector (10 positions) • Compact, lightweight design

LPH SERIES Non-Adjustable Flow Monitors



ChemTec

The LPH series non-adjustable flow monitor provides a cost-effective solution for all applications.

TECHNICAL DATA:

Available from 50 up to 45,300 SCC/M (Air) or 1 to 2,200 ML/M (Water) • 1/8" – 1/4" FNPT Ports (as Standard) • Stainless Steel, Brass, Acrylic or Teflon® Construction • Electrical Conduit Optional • Range of Switch Options

FEATURES & BENEFITS:

Compact Design • Economical Pricing (OEM) • Close On/Off Differential • No Seals Required • Visual Indication (with Acrylic model) • In-line vertical plumbing

225 SERIES High Purity Pressure Transducers



setra

The 225 series is designed for high purity gas delivery systems in semiconductor processes and critical applications that require ultra-clean operating, high performance and long term stability.

TECHNICAL DATA:

Vacuum to 200 BAR Pressure Range • Gauge, Compound and Absolute Pressure Types • NPT or FaceSeal™ Connections • Current and Voltage Outputs • ±0.25% Accuracy • -9°C to +65°C Temperature

FEATURES & BENEFITS:

Superior Stability Avoids Downtime • CE & RoHS Compliant • Optional ATEX Approval • EMI/RFI Immunity Prevents False Shutdown • Sturdy Design Allows Trouble-Free Installations

Product Solutions

UNIFLUX SERIES Variable Area Flowmeters



INFLUX

The Uniflux direct-reading variable area flowmeters combine versatility, practicality and accuracy for the measurement of gas and liquid flow rates.

TECHNICAL DATA:

5 cc/min up to 100 L/min (Air) • Scaled for many different media options
• Up to 20 BARG Pressure • Class 2.5 VDI/VDE Accuracy • -15°C to +120°C Temperature • Optional 4 – 20 mA Transmitter • Optional Integral Needle Valve • Brass or Stainless Steel

FEATURES & BENEFITS:

Panel mounting as standard • In-line or rear facing connections • Standard scales available for fast delivery • Cost-effective solution

267 SERIES Differential Pressure Sensors



setra

The 267 is the most rugged high accuracy, low differential pressure transducer available on the HVAC market – offering a vast range of customisable options fit for your application.

TECHNICAL DATA:

0.1" W.C. up to 100" W.C. Pressure Ranges • Optional LCD Display • NEMA 4 Rated Housing • Integral Static Pressure Probe • 24 VAC or 24 VDC Excitation • Up to ±0.25% FS Accuracy

FEATURES & BENEFITS:

Fast Delivery • Huge Global Install Base • Very Competitive on pricing • Most reliable differential pressure sensor on the market • Suitable for harsh environments

BP3 SERIES Instrumentation Pressure Regulators



GO REGULATOR

 In Stock

The BP3 Series is a versatile back pressure regulator designed to fulfil a wide range of needs in instrumentation sample systems and other applications.

TECHNICAL DATA:

Gas or Liquid Service • Control Pressures up to 1,000 PSIG • -40°C to +260°C Temperature Ranges • Six Seat Material Options • Range of CV values up to 0.50

FEATURES & BENEFITS:

Range of standard configurations in stock • Easily field maintainable • Long-life span • Training Services available

Tube, Pipe, Weld and FaceSeal™ Fittings



We have a complete catalogue of tube, pipe, weld and UHP FaceSeal™ fittings designed to fulfil any application requirements.



TUBE FITTINGS

A full range of Duolok® twin ferrule compression fittings that ensure leak-tight performance in analytical and process instrumentation applications. Designed and manufactured to interchange and intermix with Swagelok® tube fittings.

PIPE FITTINGS

Our range of TruFit® pipe fittings are designed to provide reliable connections in instrumentation and process piping applications. Functionally interchangeable with Swagelok®, Cajon®, Parker® and Hoke®



WELD FITTINGS

A selection of TruFit® socket and butt weld pipe fittings designed to provide permanent, reliable connections for high pressure and hazardous applications where welded connections are required.



INDUSTRIAL FITTINGS

We can provide a range of industrial SAE, JIC and O-Ring Face Seal fittings in both flared and flareless designs for industrial, maritime and naval applications where easy installation and high vibration resistant are crucial requirements.



METAL GASKET FACESEAL™ FITTINGS

Our Gazel® components offer the high purity of a metal to metal seal, providing leak-tight conditions from critical vacuum up to high pressure. Our fittings ensure high quality and reduced dead volume measurements.



MICROWELD & SPACE SAVER FITTINGS

We can provide type types of configuration for the weld section – with shoulder or without shoulder. Without shoulder is the optimal choice for butt welding using an automatic TIG, whereas with shoulder is better for tight spaces.

Product Solutions

2200/2600 SERIES

Industrial Pressure Transducers



The 2200 and 2600 Series features stability and accuracy in a variety of enclosure options with an all welded stainless steel back end for demanding submersible and industrial applications.

TECHNICAL DATA:

From 1 to 400 BAR Pressure Ranges • Gauge, Absolute, Vacuum and Compound Pressure Types • Millivolt, Voltage and Current Output Models
• ATEX and CSA models available • -40 to +125°C Temperature Ranges

FEATURES & BENEFITS:

Unbeatable Price/Performance Ratio • OEM Discount Available • High Stability achieved through CVD Sensing Element • Submersible, General Purpose and Wash Down Enclosures

EFV SERIES

Automatic Excess Flow Valves



The EFV adjustable excess flow valve is perfect for preventing uncontrolled flows of liquids and gases. Using a controlled bleed it can reset automatically and can restrict or shut off flow completely.

TECHNICAL DATA:

Available from 0.5 up to 3681 SLPM (Air) or 0.015 to 75.7 LPM (Water)
• 1/8" – 3/4" FNPT Ports (as Standard) • Stainless Steel or Brass Construction • Positive Shut Off Available • Fully custom models can be quoted on request

FEATURES & BENEFITS:

Unobtrusive right angle flow path to prevent blockage in the line • Operates via magnetic piston rather than spring design • Very low pressure drop • Adjustable flow range (not fixed)

TB SERIES

Trunnion Ball Valves



The TB Series trunnion ball valve family provides positive shut-off and directional flow control for systems with high working pressures and temperatures.

TECHNICAL DATA:

Pressures up to 10,000 PSIG (689 BAR) • Temperatures from -40 to +232°C
• Available in 316SS and Alloy 400 • 2-Way, 3-Way and Actuated Versions Available • Range of Seat and Packing Materials • From 1/8 to 1/2" Sizes

FEATURES & BENEFITS:

Spring-Loaded Seats provide Leak-Tight Seal • Springs Compensate for Seat Wear • Bottom-Loaded Blowout-Proof Ball and Stem for Safety, Reliability and Easy Maintenance

XLS-1 SERIES Ultrasonic Level Sensors



The XLS-1 ultrasonic level sensors are compatible with water and hydrocarbon based liquids, and are perfect for applications where condensation may affect other sensing technologies.

TECHNICAL DATA:

Pre-set based on required actuation condition (Wet/Dry Sink/Source)

- 316L Stainless Steel Housing
- Range of Port Threads and Electrical Connections
- -40°C to +125°C Temperature
- Up to 250 PSIG Operating Pressure
- Range of Seal Materials

FEATURES & BENEFITS:

- Ignores Condensation on Sensor
- Zero Maintenance
- Solid-State with No-Moving-Parts
- Will Not Sense Foam as Liquid
- Microcontroller-Based Electronics

CAP-300 SERIES Capacitive Level Sensors



The CAP-300 capacitive level sensor is one of our most durable and reliable point level sensors, designed as a versatile OEM solution for specialty and off-highway vehicles.

TECHNICAL DATA:

Pre-set based on required actuation condition (Wet/Dry Sink/Source)

- Brass or 316L Stainless Steel
- Range of Port Threads and Electrical Connections
- -40°C to +125°C Temperature
- Up to 100 PSIG Operating Pressure
- IP67 Rated Seal Design

FEATURES & BENEFITS:

- Cost-Effective Solution
- Tolerates Coolant Coating
- Developed for rugged aqueous applications
- Zero Maintenance
- Mount in Any Position
- Non-Contact Versions Available

B SERIES Modular Solenoid Valves



The B Series is a direct acting solenoid valve, available in 2 or 3-way functionality, with a bubble tight plunger construction designed to last for millions of cycles in general purpose gas & liquid applications.

TECHNICAL DATA:

- MOPD of 400 PSI (28 BAR)
- Cv Range of 0.018 to 0.430
- 7 Watts Power Consumption
- Stainless Steel or Brass Construction
- Wide Range of Seal and O-Ring Materials
- Choice of Port Configurations and Special Options

FEATURES & BENEFITS:

- OEM Pricing Available
- Very High Cycle Life
- Suitable for a vast range of applications

Product Solutions

730 SERIES

Vacuum Capacitance Manometers



setra

The 730 series high accuracy capacitance manometer is for measuring low vacuum pressure ranges that are critical to the control of processes in photovoltaic and semiconductor markets.

TECHNICAL DATA:

From 10 Torr to 20 mBAR Pressure Ranges • Voltage Output • ISO NW, FaceSeal™, Tube or NPT Connections • Down to $\pm 0.5\%$ Accuracy Available • 0°C to $+80^{\circ}\text{C}$ Temperature • Compatible with LD330 Display

FEATURES & BENEFITS:

Chemical Resistive Inconel® Design • Tensioned Diaphragm Provides Superior Performance • Fast Response Time with Low Circuit Noise • Insensitive to Environmental Changes

MIM SERIES

Magnetic Inductive Flowmeters



KOBOLD

The MIM series was developed for measuring and monitoring small to medium sized flow of conductive liquids in pipelines.

TECHNICAL DATA:

0.03 to 3 up to 1.5 to 350 L/min (Liquids) • 16 BAR Nominal Pressure • Up to $+140^{\circ}\text{C}$ Temperature • $1/2''$ to $2''$ Connections (NPT or BSPP) • Stainless Steel Construction • 2 x Analogue, Pulse, Frequency, Alarm or IO-Link • 1 x Control Input

FEATURES & BENEFITS:

Rotatable IFT Display (Non-misting/condensation) • Compact design • Integrated PT1000 optional • Bidirectional measurement • Dosing function and grand totaliser options available

5000 SERIES

Low Pressure Transducers



Gems
Sensors & Controls

The 5000 series features a sturdy diaphragm that detects minute pressure variations, while withstanding large pressure spikes. The unit is designed to operate in the most demanding applications.

TECHNICAL DATA:

318 Duplex Stainless Steel Case Construction • Ranges from 25 to 1,000 mBAR • Current and Voltage Outputs • Broad Range of Pressure Connections and Electrical Terminations • ATEX Zenier or Galvanic Barriers • -40 to $+100^{\circ}\text{C}$ Temperature Ranges

FEATURES & BENEFITS:

Submersible and General Purpose models available • Designed to withstand Sea Water • High Accuracy • High Proof Pressures • Detects Minute Pressure Changes



PRESSURE GAUGES

Including Mechanical and Digital Pressure Gauges and Indicators



INSTRUMENTATION VALVES

Including Ball, Needle, Plug, Check, Toggle, Relief and Quick Connects



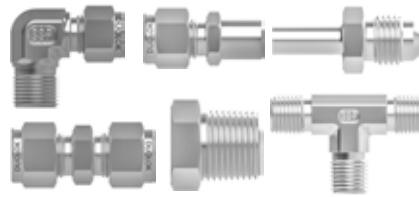
MANIFOLD VALVES

Including Block, Bleed, Vent and Gauge Manifolds



CONTROL VALVES

A range of pneumatic and electric Globe, Bellows and Control Valves



INSTRUMENTATION FITTINGS

Including Twin Ferrule Compression Tube, Pipe and Weld Fittings



HIGH PURITY FITTINGS

Including FaceSeal™, Microweld and PFA/PTFE Fittings



FILTERS, STRAINERS & SEPARATORS

A range of filters, strainers and separators for process and vacuum



BURSTING DISKS

Including forward and reverse acting bursting disks and holders



TUBING, PIPING AND HOSES

A selection of metal tubing, hoses and PTFE/PFA piping.



PRESSURE SWITCHES

Including Mechanical and Digital Pressure Switches and Sensors



SOLENOID VALVES

Including miniature, latching and cryogenic versions.



WIRES & SEALS

Including feedthroughs, sealing glands and packing glands.



CUSTOM SOLUTIONS

Boiswood have been involved in several custom build projects to meet our customers' specific requirements, please visit our website to read our application successes or feel free to ask for more details.

Many of our customers call upon us for subassembly, service, repair and testing solutions from within our manufacturer-certified headquarters.

Value Added Services

Value Added Services



In-House Service Centre

We can offer manufacturer certified in-house evaluation, repair, testing, servicing and assembly of our products from within our Boiswood HQ.



Local Technical Support

We offer a technical helpline from our HQ as well as having a “man on the ground” for on-site support whenever and wherever this is required.



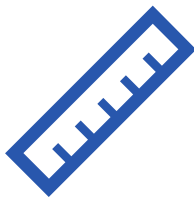
Fast Turnaround

Our local stocks allow us to quickly respond to requirements. We hold a vast range of products in stock so that they're always readily available.



Training Services

We provide a range of educational classes and training seminars that can be delivered from Boiswood HQ or on-site.



Design Services

Over the years we have been involved in many bespoke product designs and system build solutions for our customer base.



Response Times

We endeavour to provide all our customers with unrivalled service with quick responses to both technical and commercial queries.





Assembly & Testing

Our stocks allow us to assemble and test a variety of pressure regulators on a next-day delivery services.



Service & Repair

We can offer manufacturer certified service, repair and certification for our range of pressure regulators.



Subassembly

We can take special requests for component subassembly and control panel design solutions according to your requirements.



Pressure Regulators and Valve Selection Seminar

Selecting the correct pressure regulators and instrumentation valves to suit your needs can be a complex exercise with several factors to consider. Our seminar has been developed to help you understand more about our products and during this you will learn more about:

- The basic functions of pressure regulators and valves
- Analysis of different models and types
- How to correctly size and specify units
- Identifying problems and ways to rectify performance issues
- Build and repair training exercises



Tube Fittings Safe Installation Course

This challenging course will explore the many benefits of our tube fittings range and focuses on each aspect needed to achieve right-first-time installations. You will typically learn more about:

- How the Tube Fitting works
- Hands-on Tube Fitting Installation Exercises
- Typical Health & Safety Considerations
- How to Avoid Installation Problems
- Selection and Correct Handling of Tubing
- Tube Burst and Bending Exercises (Practical and Theoretical Examinations)





Pressure Regulators, Self Acting Control Valves,
Pressure Sensors & Switches, Safety Relief Valves,
Gauges & Manometers

Flow Meters, Switches & Control Valves, Solenoid
Valves, UHP & Cryogenic Valves, Excess Flow
Valves, Filters, Strainers, Pumps & Mixers

Level Sensors, Indicators & Switches, Submersible
Transducers, Float Valves, Bleeding & Venting
Valves, Steam & Condensate Traps, Thermocouples

Tube, Pipe, Weld and UHP Fittings, Quick Connects,
Instrumentation Valves, Bottle Connectors,
Tubing, Piping & Flexible Hoses

Differential Pressure Sensors, Room Condition
Monitors, Power Meters, Particle Counters,
Humidity Sensors & Calibrators

Installation Training, Subassemblies, Valve Sizing,
Servicing & Repairs, Site Surveys

BOISWOOD

GAS AND LIQUID CONTROL TECHNOLOGIES

Spinnaker House, Hempsted Lane, Gloucester, GL2 5FD
Tel: 01452 330011 Fax: 01452 330088 info@boiswood.co.uk
www.boiswood.co.uk

