

BOISWOOD

GAS AND LIQUID CONTROL TECHNOLOGIES

Pressure & Vacuum

Flow

Level & Temperature

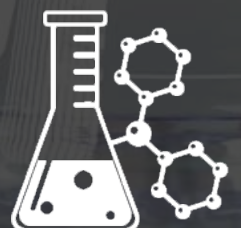
Tube & Fittings

HVAC/R

Custom Services

Chemical & Petrochemical

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.

RELIABLE, AFFORDABLE, EFFECTIVE

Here at Boiswood, we offer an extensive range of pressure, flow, level and temperature products for companies involved in the chemical and petrochemical industries. Whatever manufacturing or process challenges you face, our helpful engineers will be able to provide you with a durable and effective solution.

HIGH PERFORMANCE PRODUCTS, JUST FOR YOU

We supply high-performing products, so whether it is designed for specific applications or an “off-the-shelf” solution, we can offer standard and high purity finish pressure regulators, valves, fittings, flow/pressure sensors and pumps. Our experienced technical team can suggest affordable solutions to even the most complex challenges, adapting our product offering to suit your individual needs. So, if you have an unusual problem you want to solve, don't hesitate to get in touch. Call us on 01452 330011 for a no obligation chat.

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

UNIVERS 1200 SERIES

Cryogenic Globe Valves



The Univers 1200 is a high quality stainless steel valve designed for gaseous and liquid media. Straight or angle configuration is available with a wide range of end connections suited for your application.

TECHNICAL DATA:

Available in Manual, Pneumatic and Electric versions • -269°C to +50°C Operating Temperature Range • Up to 40 BAR Nominal Pressure • Available in DN10 – DN300 • Variety of service fluids • Position Indicators, IP Regulators and Limit Switches Optional

FEATURES & BENEFITS:

Stainless Steel bellows allows for a long life span • High leak-tightness to atmosphere • Valve body machined from one piece of stainless steel • Fully Customisable • Check Valve and Filter Versions Available

125 SERIES Adjustable Flow Monitors



ChemTec

The 125 Series standard unobtrusive adjustable flow monitor for use on both corrosive and non-corrosive liquids and gases.

TECHNICAL DATA:

Gas or Liquid Service • Available in 316SS, Brass or Teflon • Broad Range of Adjustability • From 30 to 16,000 SCC/M (Air) or 1 to 500 ML/M (Water) • -17 to +104°C Temperature Ranges • From 80 to 3,000 PSIG Max. Operating Pressures

FEATURES & BENEFITS:

Unobtrusive right angle flow path • Operates via magnetic piston • Very low pressure drop • Compact Size and High Resolution • Special Designs available on request

DON SERIES Oval Wheel Flow Meters



KOBOLD

The DON Series oval wheel flowmeter is suitable for low and high viscous liquids and designed as a compact product to fit in tight spaces.

TECHNICAL DATA:

Measuring ranges from 0.5 – 36 L/hr up to 150 – 2,500 L/min • Up to 1000 cP Viscosity Range • G1/2 to G4" Connections (DN25 to DN100 or ASME 1 to 4") • Up to 400 BAR Pressure • Up to +120°C Temperature • Accuracy of ±0.2%

FEATURES & BENEFITS:

Compact Design • Available with Pulse Output, LCD Display and Alarms

DM152 SERIES High Purity Pressure Reducing Valves



MANKENBERG

The DM152 self-acting pressure reducing valves were designed specifically with CIP/SIP hygienic applications and ultra-pure media in mind.

TECHNICAL DATA:

DN15 to DN50 Connections • Up to 8 BAR Inlet Pressure • 0.3 to 5 BAR Outlet Ranges • 2 to 7 m³/h KVS Values • Up to +180°C Temperature • For Liquids, Gases and Steam • Internal surface quality up to 0.25 µm available

FEATURES & BENEFITS:

Low thermal losses during CIP/SIP applications • Easy to clean and maintain • Long operational lifespan • FDA, BGV and USP approved

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)

RFO & RFS SERIES

Flow Rate Monitors



The RFO and RFS flow rate monitors utilise paddlewheel design combining high visibility rotors with solid-state electronics compact into a neat panel mount housing.

TECHNICAL DATA:

4.5 to 24 VDC Pulsed Output • Polypropylene, Brass and Stainless Steel Materials • 1/4" – 1" Port Sizes • NPT and BSP threaded connections • Low and High flow ranges available

FEATURES & BENEFITS:

Unbeatable Price/Performance Ratio • OEM Discount Available • Low flow adapter supplied as standard

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:

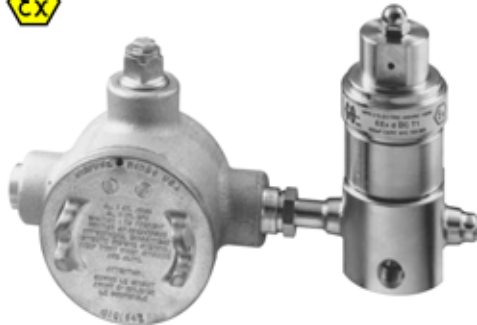
Gas or Liquid Service • Inlet Pressures up to 6,000 PSIG • Outlet Pressures from 10 to 750 PSIG • -40°C to +260°C Temperature Ranges • Five Seat Material Options • 20 Micron Inlet Filter • Range of CV values up to 0.50

FEATURES & BENEFITS:

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

HPR2 SERIES

Heated Pressure Regulators



GO REGULATOR

The HPR2 series electrically or steam heated pressure regulator is designed to supply heat to samples entering instrumentation systems.

TECHNICAL DATA:

Gas or Liquid Service • Inlet Pressures up to 6,000 PSIG • Outlet Pressures from 10 to 500 PSIG • Five seat material options • Range of CV values up to 0.20 • Available in 120 or 240 VAC • CSA and ATEX Approved

FEATURES & BENEFITS:

Unique spiral wrapped heat exchange element provides up to 100 square inches of transfer area • Modular pressure control and heat exchanger assemblies for easy maintenance

S-110 SERIES

Gas Microturbine Flow Sensors



McMillan
FLOW PRODUCTS

The S-110 series gas flow sensors is an excellent and affordable choice for any OEM or laboratory application. Its time-proven turbine design will keep measuring accurately for years.

TECHNICAL DATA:

20 to 100 mL/min up to 500 L/min Flow Ranges • 0 – 5 VDC Output • Optional Integrated Display • Range of Seal Materials • Ryton or Brass Connections • 1/8" to 3/8" Fittings • Up to 25 VDC Power

FEATURES & BENEFITS:

Works well with mixed gases • Advanced turbine design maintains excellent accuracy and repeatability

PAD SERIES

Differential Pressure Transmitters



HART
COMMUNICATION PROTOCOL



The PAD series is a micro-processor based high performance transmitter, with flexible calibration and output configurations.

TECHNICAL DATA:

Up to 413.7 BAR Measuring Range • 310 BAR Max. Static Pressure • Up to +120°C Temperature • Various Output and Connection options • Differential, Gauge or Absolute pressure types • $\pm 0.075\%$ High Accuracy

FEATURES & BENEFITS:

Digital communication with HART® Protocol • ATEX Version Available

MIM SERIES

Magnetic Inductive Flowmeters



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°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

DM555 SERIES

Universal Pressure Reducing Valves



The DM555 series is a self-acting pressure reducing valve, with a modular spring-loaded design for a universal range of applications where small to medium flow rates are required.

TECHNICAL DATA:

DN15 to DN50 Connections • Up to 40 BAR Inlet Pressure • 0.5 to 16 BAR Outlet Ranges • 1.3 to 7.5 m³/h KVS Values • Up to +130°C Temperature • For Liquids and Gases • Available in BSPP or Flanged Connections

FEATURES & BENEFITS:

Modular construction to EN or ASME Compliance • Long Operational Lifespan • Easy to Adapt Connections • Fast Delivery • Non-rising adjusting screw • Corrosion resistant materials



PRESSURE GAUGES

Including Mechanical and Digital Pressure Gauges and Indicators



INSTRUMENTATION VALVES

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



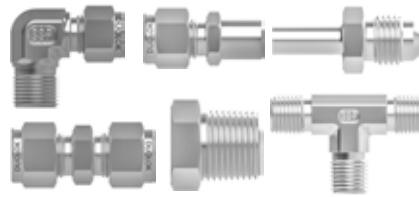
MANIFOLD VALVES

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.

Product Solutions

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.



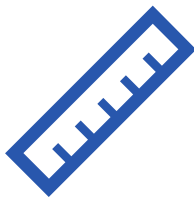
Fast Turnaround

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 fast service with quick responses to both technical and commercial queries.



Selecting a UHP Regulator

There is no compromising when it comes to ultra-high purity (UHP) gases – you need a regulator that will suffice reducing the pressure on a UHP line safely and effectively.

UHP gases are used in the production of lots of equipment, from LEDs and photovoltaics to semiconductors, and pressure regulators must meet different specifications. Choosing the correct regulator that performs right for your application can provide challenging. Read through this guide to help you select the correct regulator:

1. Safety

What gas will your regulator be suited for? UHP gases are known to be toxic, corrosive and flammable. The Rotarex pressure regulator goes through stringent helium leak tests, you can be assured that no harmful gas will leak through to atmosphere.

2. Purity

It is important to keep your gases uncontaminated. UHP gases that are deployed in cleanrooms, even the smallest imperfection can have a bad affect

on the whole system. The Rotarex equipment is assembled, tested and packaged in ISO 4 cleanrooms and electropolished to improve corrosion resistance.

Rotarex offers pressure regulators with no moving parts coming into contact with no gas at all. They avoid even the smallest sized particles produced by thread and spring-based mechanisms. The regulator can also receive additional surface treatment for especially pure gases.

3. Precision

You need to consider where on the line your UHP pressure regulator will be used. The supply pressure and maximum gas flow need to be considered for high-precision applications.

If the pressure regulator is installed just after the gas cylinder, it will need to be able to deal with extremely high inlet pressure, and effectively reduce it as it enters the much lower pressure pipes. When a pressure regulator is at the end of the line, where the inlet pressure will be low, the outlet pressure and flow will need to be considered and the flow coefficient (Cv) sized accordingly.



Products in Focus



Our partner, Saint Gobain, is one of the world's leading manufacturers of engineered, high-performance polymer products, and serves virtually every major industry across the globe. All Saint Gobain businesses support these key industries with advanced technology polymer products for the

most demanding applications. Backed by a product heritage of product innovation, technological expertise and market leadership, we are dedicated to working with our customers to solve today's applications and challenges.



Furon® standards for flexible operations, technical service and valve, pump and manifold design.

Furon® products include premium pumps, valves, fittings and manifolds.



Dependable, fluoropolymer-based pumps designed specifically for delivery of high-purity and or/ aggressive fluids. Distribution and dosing pumps available.



High-purity, injection molded fluoropolymer valves, including manual, pneumatic and regulating versions for ultra-pure and/or aggressive media.



High-purity fluoropolymer fittings including FlareGrip II®, FuseBond™, GrabSeal™, Dual Containment and No O-Ring Union types available.



The integrated manifold product line features multiple function components in a single, fully customized and pre-tested package that is easily installed.

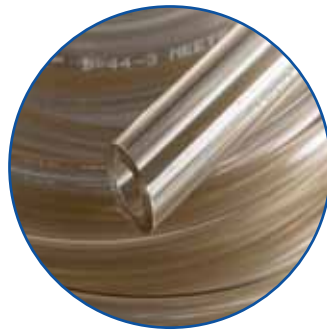
TYGON®

Tygon® stands for flexible operations, technical service, formulating and regulatory expertise. The Tygon® range offers precision-designed tubing

and piping for peak performance and regulatory compliance, across a range of specialised fluid transfer applications.



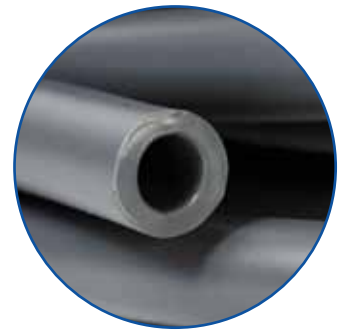
**Chemical Resistant
Tubing**



**Food and Beverage
Dispensing Tubing**



**Fuel and Lubricant
Transfer Tubing**

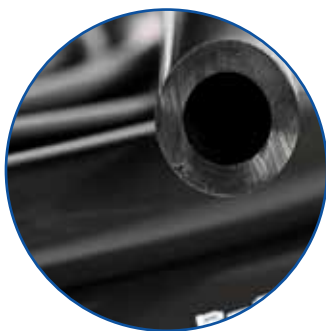


**Marine Certified
Tubing**

VERSILON™

Versilon™ stands for flexible operations, technical service, formulating and multi-material expertise. Versilon™ products provide premium quality

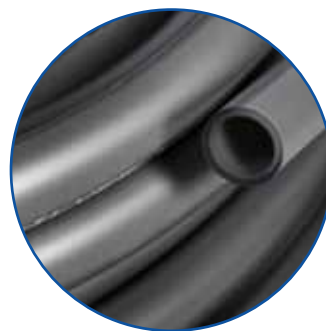
tubing, hoses and fittings, fulfilling a wide range of demanding certification, performance and safety standards.



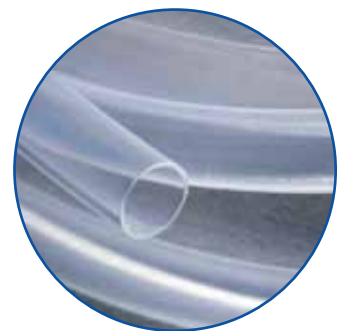
**Chemical Resistant
Tubing**



**Food and Beverage
Dispensing Tubing**



**Fuel and Lubricant
Transfer Tubing**



**Marine Certified
Tubing**



**TOP-QUALITY
MATERIALS 1**

Tubing manufactured from only the highest quality raw materials.



**FULLY
CERTIFIED 2**

In accordance with a range of industry specific certification standards.



**OEM
SOLUTIONS 3**

OEM pricing, "call-off" orders and underwritten stock available.

How to Specify a Pressure Regulator

1	Pressure Regulated	<input type="checkbox"/> Pressure Reducing <input type="checkbox"/> Back Pressure/Overflow			
2	Type of Regulation	<input type="checkbox"/> Line <input type="checkbox"/> Bottle			
3	Preferred Material	<input type="checkbox"/> 316L SS <input type="checkbox"/> Brass <input type="checkbox"/> Monel® <input type="checkbox"/> Hastelloy® <input type="checkbox"/> Other			
		MIN	NORM	MAX	UNITS
3	Upstream Pressure (P1)				PSIG/BARG
4	Downstream Pressure (P2)				PSIG/BARG
5	Flow Rate (Q)				SCFM/LPM
6	Temperature (T)				°C/°F
7	Media (M)				
8	Pipework Size	_____ in / DN _____			
9	Pipework Material	<input type="checkbox"/> 316L SS <input type="checkbox"/> Brass <input type="checkbox"/> Monel® <input type="checkbox"/> Hastelloy® <input type="checkbox"/> Other			
10	Flow Direction	<input type="checkbox"/> Left to Right <input type="checkbox"/> Right to Left <input type="checkbox"/> Top to Bottom			
10	Preferred Connection Size	_____ in / DN _____			
11	Preferred Connection Type	<input type="checkbox"/> NPT <input type="checkbox"/> BSPP <input type="checkbox"/> BSPT <input type="checkbox"/> Tube OD Compression <input type="checkbox"/> VCR <input type="checkbox"/> DN Flanged <input type="checkbox"/> ANSI Flanged <input type="checkbox"/> Socket Weld <input type="checkbox"/> Butt Weld <input type="checkbox"/> Other (Please Specify)			
12	Pressure Gauges	<input type="checkbox"/> Inlet Only <input type="checkbox"/> Outlet Only <input type="checkbox"/> Inlet & Outlet <input type="checkbox"/> No Gauges			
13	Adapter Fittings	<input type="checkbox"/> Yes, I need _____ <input type="checkbox"/> Not Required			
14	Cylinder Connectors	<input type="checkbox"/> Yes (For Media Listed) <input type="checkbox"/> Not Required			
15	Flexible Hose	<input type="checkbox"/> Yes, I need _____ <input type="checkbox"/> Not Required			
16	Relief Valve	<input type="checkbox"/> Yes, I need _____ <input type="checkbox"/> Not Required			
17	Upstream Filter	<input type="checkbox"/> Yes, I need _____ <input type="checkbox"/> Not Required			
18	Mounting	<input type="checkbox"/> Base Mounting <input type="checkbox"/> Panel Mounting <input type="checkbox"/> Not Applicable			
19	Application Details				
20	Special Notes/Requirements				

Calculation Tools

Our calculation tools allow you to correctly select the required flow coefficient (Cv) value for your pressure reducing or back pressure regulator. These software tools will utilise your process data to calculate the Cv so that you can achieve your required flow rate. Basic operating parameters you will need to have on hand are as follows:

- ✓ Inlet/Supply Pressure
- ✓ Outlet/Control Pressure
- ✓ Flow Rate (Maximum in SCFM)
- ✓ Media
- ✓ Temperature

GO Regulator Calculation Tool

From entering the above required information, this calculation tool will produce a recommend Cv value (that must be doubled as a safety factor) for your pressure.

The calculation software can also do the reverse of this – allowing you to use a pre-selected Cv value to calculate your maximum possible flow rate.



ValvePilot by Mankenberg

This calculation and design software calculates KV/ KVS values, as well as indicating noise pressure level, nominal diameter, reduction ratio and velocity limits.

The software can also provide warnings about potential hazards such as cavitation, flashing or excess noise pressure levels. You will also receive recommends surrounding pipe size extensions.






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

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