



# Intelligent Flow Management













# **Quality Assurance**

We hold the highest quality approval, ISO 9001: 2015 audited and approved by Lloyds Register of Quality Assurance. We also hold PED approval for the manufacture, modification and assembly of valves, and PMI capability.

# Manufacturing

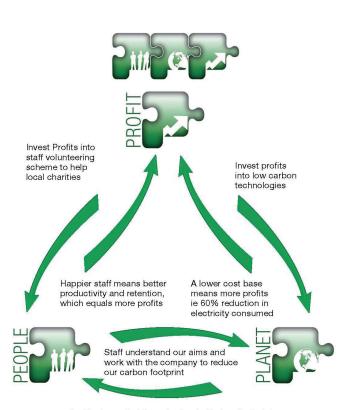
Heap & Partners manufacturer our own range of products under the Phase brand name. Phase Trunnion mounted ball valves for the nuclear, oil & gas and subsea markets. Phase Hygienic Diaphragm Valves for the aseptic markets, Phase Sprung Disc Check Valves, Phase Control Panels and Phase Distribution Manifolds. All these are in addition to mounting kits, switch boxes, actuators and spindle extension kits.

# **Export**

Our Export department has been shipping goods all over the world for more than 150 years. In the last 5 years alone, we have supplied equipment to over 80 different countries.

### **Associations**

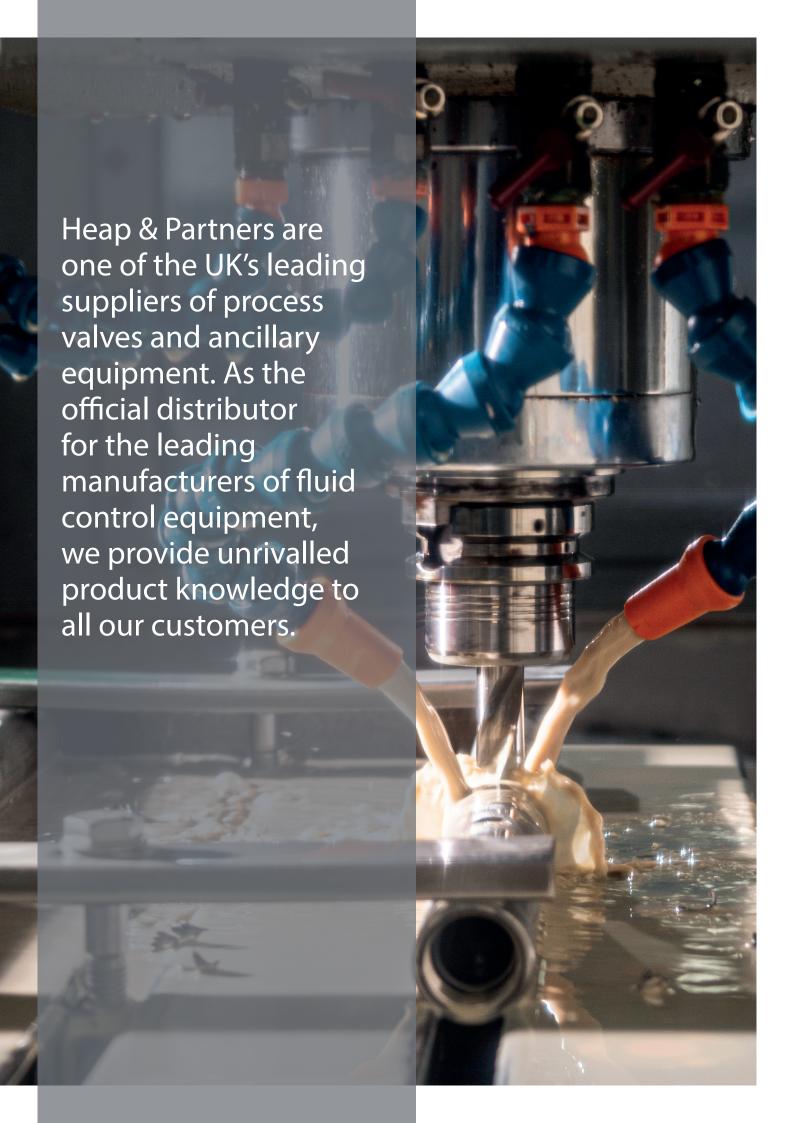
In addition to our LRQA approval, we are also members of the British Valve & Actuator Association (BVAA) and are registered with FPAL and Achillies UVDB.



Positive impact of the reduction in Carbon footprint influences staff to consider improvements at home and other companies to join the initiative

Our award winning 3Ps program has seen the company halve its carbon footprint and double offset its remaining carbon output through planting over 15,000 trees. Making Heap & Partners surpass carbon neutral and actually become Climate Positive. In addition every member of staff gets 6 days paid volunteering time to help local charities. If they use their time to fundraise, Heaps will match the amount raised.





# **Engineering Services**



# **Experience & Expertise**

From our establishment in 1866, we have continually evolved and improved our service to our clients, achieving a high degree of trust and reliability that forms the basis of the long-term relationships we are proud to maintain.

We have built up an enviable track record within the industry, with our current staff having between them a staggering 737 years experience in the fluid handling industry. This unrivalled experience and expertise in supply and ongoing support ensures that we can specify the correct equipment for your process, saving you time and money.



# Bespoke solutions when you need them

In addition to being a major distributor, we provide design and consultancy services on flow related issues all over the world. Our Research & Development department provides bespoke solutions, backed up by our extensive in-house manufacturing and testing capabilities.



# **Set Up & Testing**

Set-up and testing services are provided to ensure that when it comes to on-site installation, you are safe in the knowledge that the equipment we have supplied will work in your environment.

Our test facilities can accommodate valve sizes 1/2" up to 24" with pressures from vacuum and low pressure to high pressures of 15,000 psi in our custom-made explosion proof bays with remote monitoring from anywhere in the world. Clients are provided with login credentials giving them remote control of four CCTV cameras that deliver real-time video as well as information from the Data Logger displaying Hydrostatic Pressure, Low Air Test Pressure, Temperature, and Seat Leakage rate.



#### **Documentation**

Heap & Partners provide comprehensive documentation to ensure that you get the best performance from your installed equipment. In our experience, clear and detailed instructions minimise the risk of any issues occurring with the installed equipment and saves time should any breakdown occur.



# **After Sales Service**

Heap & Partners rapid response service provides prompt resolution when you need it, keeping plant downtime to an absolute minimum.



### **Delivery**

You can be confident that delivery will be on time to the correct location. With over £2 million of stock encompassing over 500,000 items, we pride ourselves on our ability to deliver on time to any location around the world.

# **Products and Industry Sectors**

	Actuators, Switchboxes & Positioners	Ball valves Trunnion & Floating	Butterfly Valves	Check Valves	Control Panels	Control Valves, Intelligent Positioners & Regulators	Diaphragm Valves	Filters/ Strainers	Instrument Valves, Manifolds & Fittings	Mounting kits & Spindle Extensions	Plug Valves	Relief Valves	Solenoid Valves
Process	_												
Acid	<b>/</b>	~	~		~	~	~	~	<b>✓</b>	~	<b>V</b>	~	~
Automatic fire protection	<b>/</b>	~	~	~	~		~		<b>✓</b>	~		~	
Chemical	<b>V</b>	~	<b>V</b>		~	<b>V</b>	~	<b>V</b>	<b>✓</b>	~		<b>/</b>	~
Chlorine	<b>V</b>	~	~		~	<b>V</b>	~		<b>✓</b>	~		<b>/</b>	~
Desalination	~	~	~	~	<b>V</b>	<b>V</b>	V		<b>/</b>	~		<b>/</b>	
Distilling crude tar	<b>V</b>	~	<b>/</b>		<b>/</b>	<b>V</b>	<b>V</b>		<b>V</b>	<b>/</b>		<b>/</b>	
Fertiliser	<b>V</b>	~	<b>/</b>		<b>/</b>	<b>V</b>	<b>V</b>		<b>V</b>	<b>V</b>		<b>/</b>	~
High volume assembly plant	<b>V</b>	<b>V</b>	<b>/</b>	~	<b>/</b>		~		<b>V</b>	<b>V</b>		<b>/</b>	
Hot Oil	<b>V</b>		<b>V</b>	~	~		~	<b>V</b>	<b>V</b>	<b>/</b>		<b>/</b>	
Metal manufacturing	<b>V</b>	<b>V</b>	<b>V</b>	~	~		~		<b>V</b>	<b>/</b>		<b>/</b>	
Mineral mining & processing	<b>V</b>	<b>/</b>	~	~	<b>V</b>		~		<b>/</b>	<b>V</b>		<b>/</b>	
Pulp & Paper	<b>V</b>	<b>/</b>	~	~	<b>V</b>	<b>V</b>	V	~	<b>✓</b>	<b>V</b>		<b>/</b>	~
Road tankers	<b>V</b>	<b>/</b>	~		<b>V</b>	<b>~</b>	~		<b>/</b>	<b>V</b>		<b>/</b>	
Water treatment	V	~	~	~	<b>V</b>	<b>V</b>	~	~	<b>✓</b>	V	<b>V</b>	~	~
Energy			,										
Hydro Power	<b>V</b>		<b>V</b>	~	~		~		<b>V</b>	<b>V</b>		<b>~</b>	~
Nuclear Power	<b>/</b>	<b>/</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	~	<b>V</b>	<b>✓</b>	<b>V</b>	<b>V</b>	<b>~</b>	~
Thermal Power	<b>V</b>	<b>/</b>	~		~	<b>~</b>	~	~	<b>/</b>	<b>V</b>	<b>V</b>	~	~
Hydrogen	<b>V</b>	<b>/</b>	~	~	~	<b>~</b>	~	~	<b>/</b>	<b>V</b>	<b>V</b>	~	~
Production Power	<b>V</b>	<b>/</b>	~	~	~	<b>~</b>	~	~	<b>/</b>	<b>V</b>		~	~
Oil Refining	<b>V</b>	<b>/</b>	~	~	~	<b>V</b>	~	~	>	<b>V</b>		<b>/</b>	~
Petrochemical	V	<b>/</b>	~	~	~	<b>V</b>	~	~	>	<b>V</b>		<b>/</b>	~
Life Sciences													
Pharmaceutical	V	~	<b>V</b>	<b>V</b>	<b>V</b>	~	~	<b>V</b>	<b>V</b>	~		<b>V</b>	<b>'</b>
Food & Beverage	V	~	~	<b>V</b>	~		~	~	<b>V</b>	~		<b>V</b>	
Biotechnology	V	~	~	<b>V</b>	~		~		<b>V</b>	~		<b>V</b>	
Sugar production	~	~	<b>V</b>	~	~	~	~	<b>V</b>	~	~		<b>V</b>	



# **Support Services**









# **Stock Management**

We provide an on-site stock management service tailored to meet individual customer requirements. Utilising some of the best forecasting software available and analysing a customer's annual usage, we can provide recommendations and streamline stock profiles to ensure their stock levels are effectively and correctly managed. By reducing dead stock and ensuring the correct levels of healthy stock, a client can significantly improve the efficiency of their plant while reducing costs.

# Clean Build/Special Preparation

Our clean build and test facilities enable us to offer a range of 'clean built' valves suitable for specialist processes including Hydrogen Peroxide, Chlorine, Fluorine and Oxygen service.

The valves are produced in accordance with customers' and legislative requirements of PED.

# **Project Management**

We can co-ordinate all valve purchases for the entire project and hold the equipment in a dedicated quarantined area, for call-off to site.

# **Training**

Conference room facilities are available at our headquarters in Birkenhead, London office or Teesside facility. We offer training from handson valve maintenance, assembly and retesting training through to advanced valve sizing and selection.





# Refurbishment

Valve overhaul and upgrade facilities are available either on site or at our workshops. Services include fault finding and diagnosis, instrumentation upgrading, valve strip-down cleaning, re-machining, assembly, retesting, calibration and painting.

# **Valve Actuation Packages**

We can fit a wide range of pneumatic, electric, electro-hydraulic or hydraulic actuators and intelligent positioners (4-20ma, Hart, fieldbus etc.) to any make of valve. H&P can handle sourcing of valves, actuators and instrumentation to our customers' specifications and assemble, fully test and calibrate in our workshops.

# **Valve Customisation**

Our valve customisation service enables us to offer a range of actuated and manual customised valves. We can fit a variety of pneumatic, electric and hydraulic actuators to any make of valve for either on/off or modulating controls duties and can provide customer specific ESD valves. Applications include: Valve safety interlocking, Extended spindles to clear lagging or low temperature applications, Clean build for special processes, Special paint finishes, Special engineering modifications.



# **Our Own Range**



#### Phase Ball Valves

Product Range: Full or reduced bore side entry, soft & metal seated ball valves

Size Range: 50mm - 600mm

Body: Carbon steel, stainless steel, special alloys

Temperature: - 100 Deg C to + 250 Deg C, other applications on request

Ends: Flanged, hubbed, butt weld end Operation: Lever, gearbox, actuated



#### **Phase Check Valves**

Product Range: Sprung Disc Wafer Check valves

Size range: 15mm - 100mm

Material: Stainless Steel, Duplex, Super Duplex, Hastelloy, Inconel, Special Alloys



#### Phase Distribution Manifolds / Air Headers

Supply Connections: 1"threaded BSPP, BSPT, NPT, Welded Flange and Captive Flange

Branch Connections: ¼", & ½" threaded BSPT, NPT or Twin Ferrule options.

Branches: 4, 6, 8, 10, 12, 14 and 16 way distribution

Materials: Stainless Steel



#### Phase Hygienic Diaphragm Valves

Product Range: Hygienic weir pattern bodies

Size Range: 8mm to 50mm

Body: Stainless Steel, Hastelloy, Titanium, PVDF and others available upon request.

Diaphragms: Various elastomers and advanced PTFE faced

Surface finish: Range of mechanically polished or electro polished finishes available.

Ends: Tri-clamp, flanged and screwed.
Operation: Handwheel and actuated.

Custom Designs: Bespoke multiport designs available.



# Phase / Topworx / Avid Switchboxes

Product Range: ¼ turn and linear limit switchbox

Enclosure: PPS other materials available subject to manufacturer

Rating: IP66

Features: Multiple switch options, 1,000 hour salt spray tested,

internal solenoid, field network cards subject to manufacturer



# **Phase Linear Actuator**

Operation modes: Double Acting, Spring Open, Spring Closed.
Operating air supply: Rated to maximum 8 BarG (116 psi).

Normal operating pressure: 6 BarG (87 psi).

Available in sizes: DN8 – DN50.

Temperature range: -10° C to + 80° C.

Materials of construction: Acetal enclosure with Stainless steel 316 componentry

(316 enclosure option available).

Connections: Namur mount for direct solenoid connection to minimise assembly

envelope, 1/8" BSPP ports for direct piping as standard

(NPT option available on request).



#### **Phase Control Panels**

Product Range: Design and manufacturing service or control panels

Type: Pneumatic, electrical, hydraulic, electropneumatic,

valve control boxes, ESD systems

Design: In-house, customer specific



#### Saunders Industrial Diaphragm Valves

**Product Range:** 'A' type weir pattern and 'KB' straight

through pattern

Size Range:

Cast iron, SG iron, cast steel, stainless steel, copper alloys Body: Linings: Natural, butyl, hard ebonite & polychloroprene rubber, glass,

polypropylene, ETFE, PFA , PTFE

Various elastomers and advanced PTFE faced Diaphragm:

Ends: Flanged, screwed Operation: Handwheel, actuated



# Saunders HC4 Diaphragm Valves & Bio Blocks

Product Range: 'HC4' type hygienic standard and customised designs

Size Range: 8mm - 150mm

Stainless steel 316L, special alloys (on request) Body:

Various elastomers and advanced PTFE faced (FDA complaint and fully traceable) Diaphragm:

Surface Finish: Range of mechanical polished and electropolished Surface

> Weld, triclamp, mechanical End:



#### **Farris Safety Relief Valves**

Product Range: Spring-loaded and Pilot-operated safety relief valves

Size Range: 25mm - 500mm

> Body: Carbon steel, stainless steel, special alloys

Flanged, screwed, socket weld, butt weld, triclamp Ends:

Chemical, petrochemical, oil & gas, pharmaceutical, food & beverage **Applications:** 



#### Fisher Globe & Rotary Control Valves

Two and three way control valves Product Range:

Size Range: 15mm - 300mm

> Body: Carbon steel, stainless steel, low carbon steel, special alloys (on request)

Trim: Contoured, anti-cavitation, low noise

Ends: Flanged, screwed

Pneumatic & electric actuated Instrumentation: Intelligent positioners, Operation:

regulators, solenoid valves



# **Fisher Regulators**

67C Series: **Instrument Supply Regulators** 

MR95 Series: **Pressure Regulators** 

MR98 Series: Backpressure Regulators, Relief, and Differential Relief Valves

T205 & T208 Series: Tank Blanketing Regulators

Type ACE95: Vapor Saver Tank Blanketing Valves



## Fisher Digital Valve Controllers / Positioners

DVC2000 Area Class:

Intrinsically Safe, Non-incendive for CSA and FM Explosion Proof, Intrinsically Safe, FISCO, Type N, Flame Proof, DVC6200 Area Class:

Non-incendive for FM Comms Protocol: 4-20 mA HART

Diagnostics: Yes

Position Control: Throttling Control, On/Off **Process Control:** Flow, Pressure, Temperature, Level Supply Media: Air, Natural Gas, Nitrogen



### **KTM/Hindle Ball Valves**

Operation:

Full and reduced bore antistatic, firesafe design Product Range:

Size Range: 15mm - 400mm

Carbon steel, stainless steel, special alloys (on request) Body: Virgin, glass filled and carbon filled PTFE, Peek Seats:

Ends: Flanged

Operation: Lever, gearbox, actuated



#### **Keystone / Hobbs / Crane Butterfly Valves**

Product Range: Resilient seated, high performance and triple offset designs

Size Range:

Cast iron, SG iron, carbon steel, stainless steel, aluminium bronze Body: Disc: Stainless steel, carbon steel, nylon coated, PTFE, Hastelloy

EPDM, nitrile, viton, PTFE, metal Seats: Wafer, fully lugged, double flanged Ends: Lever, gearbox, actuated



#### **Keystone / Hytork Actuators**

Product Range: Rack and pinion type pneumatic actuator
Material: Aluminium alloy, two pack epoxy finish

Operation: Double acting, spring return

Ancillaries: Switchbox, positioner, solenoid, gearbox override



#### **Kinetrol Actuators**

Product Range: Vane type pneumatic actuator Material: Zinc alloy, stove enamel finish

Operation: Double acting, spring return, electrohydraulic Ancillaries: Switchbox, positioner, solenoid, gearbox override



#### Parker/Lucifer Solenoids

Product Range: 2, 3 and 4 way, direct pipe mount and namur Material: Stainless steel, brass, aluminium, synthetic

Classification: Cenelec and Atex hazardous areas Eex ia, Eex d, Eex m



#### **Parker Instrumentation Valves**

Product Range: Ball, needle, check, relief, in-line filters
Size range: 1/8" - 2" (imperial), 3mm - 25mm (metric)
Material: Stainless steel, special alloys (on request)



# **Parker Instrumentation Fittings**

Product Range: Imperial and metric A-Lok and CPI fittings
Size range: 1/16" - 2" (imperial), 3mm - 25mm (metric)
Material: Stainless steel, special alloys (on request)



### Instrumentation Tube

Product Range: Imperial and metric tube

Size range: 1/16" - 2" (imperial), 3mm - 25mm (metric) Material: Copper, nylon, stainless steel, special

alloys (on request)



#### **Parker Manifolds**

Product Range: 2, 3 and 5 way manifolds

Size range: 1/8" - 2" (imperial), 3mm - 25mm (metric)
Material: Stainless steel, special alloys (on request)



# **Parker Flanged Product**

Product Range: Double Block & Bleed

Size range: 1/2" - 2" (imperial), 15mm - 50mm (metric) Material: 5 tainless steel, special alloys (on request)



#### Parker/Balston Filtration

Product Range: Filter housings and elements Size range: 1/8" - 2" (imperial only)

Material: Stainless steel, various plastics, teflon



#### Parker/Balston Nitrogen Generators

Principal: Production of nitrogen at very high concentrations from existing compressed air supply using membrane technology.

Applications: Purpose built machines for tyre inflation (truck & car). Units for bulk production of nitrogen for applications requiring large volumes ie. Tank

blanketing and modified air packaging.



#### **Plenty Filters / Stainers**

Product Range: Simplex, duplex, self cleaning, back flushing

Size Range: 25mm - 900mm

Body: Cast iron, carbon steel, stainless steel

Ends: Flanged, screwed Filtration: 1 - 3000 micron



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