nonstop

IT'S ABOUT KEEPING YOUR PROCESSES RUNNING





About AxFlow

Part of Axel Johnson AB with sales of over 7 billion euro and 20,000 employees worldwide, the AxFlow Group is one of Europe's largest suppliers of process pumps with offices a presence in 26 European countries and employing nearly 500 people in total.



fluidity.nonstop a concept through which we provide products and services that encompass all aspects connected with the smooth running of process pumps.

In the UK AxFlow has over 50 years history operating from 5 locations across the country from which it supplies a large range of process pumps and a comprehensive pump service and repair package.

- Food and beverage
- Chemical process
- Off shore and petrochemical
- Pharmaceutical
- Water treatment
- Municipal authorities
- Power generation
- Building services
- Marine and dockside.

AxFlow has had a pump centre in Aberdeen for over 40 years giving us an intimate knowledge of the North Sea offshore industry and the ability to react quickly when required.

fluidity. nonstop

IT'S ABOUT KEEPING YOUR PROCESSES RUNNING

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The most comprehensive portfolio of process pumps in the UK

Our process pump range covers AOD pumps, centrifugal pumps and numerous positive displacement pumps making it one of the largest ranges available to the UK offshore and petrochemical sector.

WILDEN

Wilden is one of the world's largest manufacturers of air operated double diaphragm pumps. Within Europe, Wilden has a history with AxFlow that goes back more than 40 years, making us the pre-eminent European experts in their products.

Gruppo Aturia

The oldest pump manufacturer in Italy tracing it's routes back to 1889, Gruppo Aturia manufactures pumps for the utilities, process and oil/gas sectors and has recently absorbed the entire workforce of Caster Pumps.



Established in 1875 Hermetic have been manufacturing canned motors since 1951 and remain the leading European canned pump manufacturer having supplied over 180,000 units around the world.

Waukesha Cherry-Burrell

Now part of SPX, Waukesha Cherry-Burrell has established themselves as world leaders in specialized stainless steel pumps able to handle solids.



Recently acquired by Gruppo Aturia Finder is one of the leading pump suppliers to the Oil and Gas sector with an impressive range of API 610 pumps.



Established in 1975, OBL has one of the largest metering pump portfolios including plunger, mechanical diaphragm and hydraulic diaphragm types.



Blackmer is the world's leading manufacturer of rotaryvane pumps. Blackmer's unique sliding-vane design is now recognised world-wide for handling industrial process fluids, volatile or organic compounds and viscous liquids.

ALMATEC

First established in 1984, Almatec has become the respected world leader in the field of pneumatic diaphragm pumps due to a combination of consistent innovation and German product quality.

* PULSAFEEDER

Pulsafeeder has been a leader in fluid handling technology since the early 1940's, when they pioneered the hydraulically actuated diaphragm metering pump principle. Following this they have also become experts in magnetically driven gear.

-FMC

Since their introduction in 1884 FMC Technologies' piston and plunger pumps have remained at the forefront of high pressure reciprocation pump technology.



APV invented the plate heat exchanger in 1923 and have remained a dominant force in process plate heat exchangers ever since. AxFlow have recently become the exclusive UK distributor for their products in the Chemical Process and Offshore markets.



Since 1972, Hydra-Cell's seal-less, diaphragm pumps have proven reliability in lowering the total cost of ownership in low and high pressure applications handling liquids of all types from thin non-lubricants to abrasive slurries, chemicals and contaminated mixes. Metering & dosing, transfer, pressure injection.

Experts in pumps associated with the offshore and petrochemical industries

AxFlow has been supplying pumps to the offshore and petrochemical sectors for over 50 years so we understand that it's about safe liquid handling reducing down time and lowering life cycle costs. With the largest pump range in the UK, we believe that we can always offer the most suitable solution for every application.

Produced Water Pumps

There are many different types and approaches to the separation of the well fluid components and because of this, a myriad of pump types are used. At AxFlow we understand the challenges of separation processes and the transfer of produced water such as the high temperatures, high pressures, gritty solids, low NPSH and the need in many instances for low shear solutions. This understanding is supported by our extremely wide product range that allows us to offer API 610 centrifugal pumps, vertical pumps and many types of API 675 positive displacement pumps boasting low shear characteristics.

Seawater Lift Pumps

Having teamed up with Gruppo Aturia, AxFlow is able to offer many types of vertical seawater lift pumps including semi submersible multi-stage mixed flow and fully submersible multi-stage radial and mixed flow pumps. They are available in stainless steel, Duplex and Super Duplex materials, can be constructed to lengths well in excess of 50 metres and are both Factory Mutual and NFPA approved. Lastly, we provide comprehensive and experienced support for the installation of the pumps in offshore applications.

Separated Oil Pumps

Slops Tanks are often located in the lower sections of the rig and because of this Recovered Oil Pumps may need to cope with high heads, higher than normal viscosities and offer low shear pumping actions. AxFlow are in an almost unique position to offer both centrifugal and positive displacement pump solutions.

Closed Drain Pumps

Closed drain pumps can see a wide range of liquids containing hydrocarbons, corrosive chemicals and solids. AxFlow have numerous pumps that can be fitted on closed drain tanks from air driven AOD pumps and vertical pumps through to large API 610 units and rotary lobe models capable of handling liquid sludge.

Chemical Injection Pumps

The definition of chemical injection varies greatly across the offshore and petrochemical sectors as different applications require different levels of accuracy, reliability and pressure. Consequently, we offer a range of pumps capable of dosing to different levels of flow and accuracy. These range from AOD and precise metering pumps through to high pressure piston and plunger pumps.

Heating and Cooling

Heating and cooling systems come in many guises from heat transfer used in well fluid separation processes to HVAC systems used in accommodation blocks. Axflow have pumps suitable for all of these different systems including cast iron water pumps, API 610/API 685 pumps along with turbine and rotary lobe pumps for low flow high head duties.

General Purpose Transfer Pumps

In addition to our very wide range of centrifugal and PD transfer pumps, AxFlow are the UK offshore sector's leader in the supply and hire of air driven AOD pumps and specialize in the supply of ATEX complaint vane pumps for fuel transfer.





Range Summary

		API ISO/DIN	Material			Seal Type	ATEX	Solids	Max <u>m m³/h</u> r		Max bar	Max °C	lax Page ° <u>C</u> Nos	
AOD			_				_	_						
Metal High Pressure	Wilden		SS			Seal-less	8	0	200	22	20	176	6	
AH	Almatec		PE	PTFE		Seal-less	3	0	160	22	16	176	6	
Original/Advanced	Wilden		PP	PVDF		Seal-less	-	0	80	45	8	107	7	
Original/Advanced	Wilden		SS	AL DI		Seal-less	8	0	80	70	8	176	7	
E series	Almatec		PE	PTFE		Seal-less	2	0	70	35	7	176	8	
Chemicor	Almatec		SS			Seal-less	B	8	70	26	7	176	8	
Centrifugal	A		00				1	-	202	4500	50	450	40	
SMKM	Aturia	610 0H2	55	HSI DX			100 C	0	380	1500	50	450	10	
ND	Aturia	610 BB2	55				S.		400	2000	50	450	10	
	Aturia	150 5199	55				8		140	470	25	200	11	
SMKM - M	Aturia	685 042	55 66			-	Š		380	1500	25	300	12	
	Hermetic	685 042	55 CS	сс ЦС1			Š	0	220	1000	20 50	425	12	
CNF	Hermetic	150 2858	CS CS	SS 1151			ě.		180	1600	1200	420	13	
CAM		130 2030	CS	SS 115		2	ě.		1000	300	500	360	13	
VAR - PAG	Aturia	610 VS1, VS6	C	SS DX			100	0	200	6000	16	60	14	
FLV	Aturia	610 VS3, VS7		SS DX			5	-	15	30000	16	60	14	
Submersible	Aturia	010 100, 101	SS	HST DX	ті		õ	ä	700	900	70	60	15	
NA and NE	Aturia	DIN 24255	CI	BR SS			ŝ	-	130	1000	10	60	16	
AquaRange	Aturia	DIN 24255	CI	BR SS			-		100	250	10	60	16	
TK - VTK	Aturia		CI	ss C Ste	el		Ð		640	800	65	60	17	
PD - VPD	Aturia	610 BB1	CI	SS C Ste	el		S		170	3500	17	60	17	
Turbine														
STM	Aturia	685	SS	HST DX	TI	-	Ð		90	10	300	300	12	
SDTM	Aturia	685	SS	HST DX	П		0		180	12	300	300	12	
Metering														
Plunger	OBL		SS	PVC PVD	F	Seal-less	Ð		4000	5.5	400	280	18	
Hydraulic Diaphragm	OBL	675	SS	PVC PVD	F PTFE	Seal-less	Ð		1400	3.7	140	100	18	
PULSA pro 900	Pulsafeeder	675	Π	PVC Vito	n PTFE	Seal-less	Ð		3010	62	1000	370	19	
PULSAR	Pulsafeeder		SS C	SM PFA	PTFE	Seal-less	Ð		2200	0.4	260	110	19	
Hydra-Cell	Wanner	675							3500	350	350	150	20-21	
Rotary Lobe						_								
Universal	Waukesha		SS		_	֥	Ð	6	350	133	35	148	22	
Borger	Borger		CI	CS SS		֥	Ð	6	350	133	12	100	22	
Vane						_								
NP-SNP-HXL	Blackmer	676	SS	CI		֥	0		140	250	14	260	23	
SVM	Aturia	676	SS	HST DX	TI		8		130	2	300	300	23	
Piston/Plunger														
FMC	FMC	674	CI	SS DX		֥	Ð	6	6900	340	690	150	21	
SS Stainless DX Duplex S HST Hastelloy CI Cast Iron CS Carbon S	Steel ainless Steel teel	HC Hi Cl TI Titar DI Duct	nrome Steel nium ile Iron	PP PVDF PTFE	Polypropyl Polyvinylic Polytetrafl	iene Iene Fluoride uoroethylene	S TY SQ NI	G Tyg L Sol	cone ion va		HYP NOR NBR NR	Hypalon Norpren Nitile Natural	e rubber	
Mechanic	al seal	Mag	netically Drive	n 🔝	Canned p	ump	©.	ATE	EX complian	t [6	Solids h	andling	

Please note all technical information is approximate, please consult AxFlow GB before specifying any product.





- High discharge pressures.
- Reliable and very robust.
- Improved product containment. •
- ٠ Dry priming and dry running.
- Single-point exhaust option. •
- Can be dead headed without damage. •
- Will deliver variable flow and pressure. •
- Sizes 1/2" to 4". •



AH Series

High Pressure

Almatec's high-pressure plastic diaphragm pumps made of PE UHMW, which is seven times more resistant to abrasion than PP, and is more resistant to wear than aluminium, iron or steel.











- Reliable and robust. •
- Dry priming and dry running. ٠
- High levels of liquid containment. ٠
- Extremely resistant to abrasive chemicals.
- Will deliver variable flow and pressure.
- Sizes 1/2" to 3". ٠
- NPT, DIN or ANSI flange connections.





Wilden's Original Series AODD pumps are designed for utilitarian applications that require a robust construction. The Advanced Series AODD pumps are constructed with bolts to give a better diaphragm seal to cope with varying discharge pressures. They both utilise ProFlo Shift which automatically optimizes air consumption and eliminates overcharging of the air chamber.



AODD 20 15 홂 10 Pressure 8 5 2 Clamped 1 Bolted 0 0 10 20 30 50 60 40 m³/hour

- Reliable and robust.
- Dry priming and dry running.
- Single-point exhaust option.
- Can be dead headed without damage.
- Will deliver variable flow and pressure.
- Sizes 1/4" to 3".

Original/Advanced Metal

Wilden's Original Series AODD pumps are designed for utilitarian applications that require a robust construction. The Advanced Series AODD pumps are constructed with bolts to give a better diaphragm seal to cope with varying discharge pressures. They both utilise ProFlo which automatically optimizes air consumption and eliminates overcharging of the air chamber.





- High discharge pressures.
- Reliable and very robust.
- Improved product containment.
- Dry priming and dry running.
- Single-point exhaust option.
- Can be dead headed without damage.
- Will deliver variable flow and pressure.
- Sizes 1/2" to 4".





Almatec's E-Series represents the latest generation of plastic air-operated AOD pumps. They are machined from solid blocks of plastic and all housing bolts are tightened against a diaphragm ring allowing for a extremely secure unit. They are ATEX rated and their bodies can be made from PE or PTFE.





- Reliable and robust.
- Dry priming and dry running.
- High levels of liquid containment.
- Extremely resistant to aggressive chemicals.
- Will deliver variable flow and pressure.
- Sizes 1/2" to 3".
- NPT, DIN or ANSI flange connections.





Chemicor

Almatec's metal pneumatic diaphragm pumps feature soft contours, smooth flow channels and no dead spaces. CHEMICOR pumps contain a central block made of PA or conductive PE.





- Reliable and robust.
- Dry priming and dry running.
- Can be dead headed without damage.
- Will deliver variable flow and pressure.
- NPT or BSP connections.
- Sizes 3/4" to 2".





AOD

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Why hire a pump?

delivery times.

occasionally.

Try before you buy.

No capital cost of purchase.

No concerns regarding maintenance.

Hire pumps can satisfy urgent requirements with shorter

A practical solution for equipment that may only be used

Hire Pumps

AxFlow offers the largest fleet of AOD hire pumps in Aberdeen. This includes chemically resistant plastic, high pressure and ATEX compliant models.

All of our hire pumps are fully serviced using only approved manufacturers' parts. Our core hire products consist of Wilden's air operated double diaphragm (AODD) pumps and Wanner's Hydra-Cell pumps.

Wilden AODD Pumps

- Flows to 60 m3/hr
- Pressures to 17 bar
- Ideal for general transfer duties, hydrocarbon condensate and waste water removal.













HydraCell Pumps

- Pressure greater than 17 bar
- Where no compressed air is available.











Centrifugal



SMKM

A range of API 610 and OH2 process pumps. SMKM pumps



- Statically and dynamically balanced impellers.
- Compartmentalized approach to axial thrust.
- Double angular contact ball bearings.
- Single, double and balanced seals.



KSMKM

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A range of split case between bearing process pumps to API 610 (BB2). KSMKM pumps can be constructed as two stage units. Also available as mag drive API 685.





- Statically and dynamically balanced impellers. •
- Compartmentalized approach to axial thrust. •
- Double angular contact ball bearings.
- Single, double and balanced seals. •







High quality ISO 2858 - ISO 5199 process pumps refined over many years service life to offer an efficient and balanced pump design. Most components are stocked resulting in short lead times. ND pumps can be fitted with seals to API 682.





Corrosive Liquids



Centrifugal



NDM

High quality magnetically driven ISO 2858 pumps. NDM pumps have hydraulically and hydro-statically balance pump chambers

and Hastelloy rear housings, Samarium Cobalt magnets and Silicon Carbide bears as standard. They are available as either a

long or close coupled construction.

St Steel

Hastelloy Dup St St

 \checkmark

Corrosive Liquids

50 hz 140 100 Head mether 50 30 10 5 ō 100 500 1000 2000 ō 10 50 m¹/hour

- Dynamically balanced impellers.
- Oil lubricated ball bearings.
- Back pull out design.
- Labyrinth seals on bearing supports to negate external contamination.
- Single, double and flushed seals.
- Optional Refrigerated seal chamber.
- SS with DX or Hastelloy options.



50 hz 140 100 metres 50 Head 30 10 5 Ö 100 200 300 500 ē. m'/hou

- No mechanical seals to leak or service.
- Oil lubricated ball bearings.
- Incoloy or Hastelloy constructions available.
- Back pull out design with screw-on impeller.
- Available with self cleaning filters.







SMKM-M

A range of API 685 OH2 process pumps. SMKM-M pumps can be made from a wide range of materials and have seen many years successful service. The SMKM-M is centre line mounted making it more stable and capable of withstanding higher temperatures.







- Statically and dynamically balanced impellers.
- Compartmentalized approach to axial thrust.
- Double angular contact ball bearings.

Corrosive Liquids

Refrigerants







STM – SDTM

High specification regenerative turbine pumps for high heads/ low flow applications. Because STM and STDM pumps are machined from solid metal, they are offer an extremely wide range of design options and construction materials. Comply to API 685.







- No mechanical seals to leak or service.
- High system pressure capability up to 200 bar.
- Will pump up to 20% entrained gasses.
- Can be vertically mounted.
- Polished internal surfaces available.





CNP - CN

The CNP range of canned pumps utilise API 610 hydraulics, combined with canned pump technology to provide a fully compliant API685 seal-less pump. The CN range conforms to ISO 2858. Both provide high levels of containment and a integral pump/motor construction, they offer a trouble free solution without the complex seal systems and system pressures up to 1200 bar (CN).





- Double containment of liquid.
- Extremely long service life.
- Reduced footprint.
- Simplified installation.
- ATEX certified up to T6.
- Reduced instrumentation.





CAM – CAM Tandem

The CAM range of canned pumps utilise are multi-stage, canned pumps that provide a high containment solution to low flow high head applications.





- Double containment of liquid.
- No mechanical seals to leak or service.
- 180 month mean time before failure.
- Reduced footprint.
- Easy installation.
- ATEX certified up to T6.





Axial Flow Centrifugal

Gruppo Aturia Semi-Submersible Pumps

Gruppo Aturia have been making vertical pumps since the 1890's and remain at the forefront of the industry. The Aturia range of vertical pumps includes semi-submersible cantilever pumps and submersible pumps and utilises centrifugal, mixed flow (turbine pumps) and axial flow pump technologies.

Applications for our Aturia vertical pumps include: Seawater lift pumps, borehole pumps, fire fighting pumps and drainage pumps.





TKV

The TKV range are multi-stage radial flow (centrifugal) pumps to

API 610 VS1 and also VS6 when barrel pumps.

VAB - VABX

The VAB and VABX ranges are multi-stage mixed flow (turbine) pumps to API 610 VS1 and VS6 when barrel pumps.





PAG

PAG pumps are high flow mixed flow (turbine) pumps to API 610 VS1, VS2 and VS6 when barrel pumps.

ELV

ELV are single or two stage axial flow pumps to API 610 VS3 and VS6 barrel pumps.



Cast Iron Carb Stee St Stee Bronze Duplex S Duple: 25 bar ATEX Certified Viscous 50 cP + 90 °C 0 °C



Centrifugal

Mixed Flow

700

500

400

ž 300

200

100

0

Radial Flow

100

200

Gruppo Aturia Submersible Pumps

An extremely comprehensive range of fully submersible pumps including both mixed and radial flow models. They are available in sizes from 6 to 14".

- Designed with the minimum number of wearing components.
- Impellers are dynamically balanced and splined to the shaft.
- The shafts are driven by coaxial bearing bushes and protected by sleeves.
- All the pumps are provided with NRVs.



Mixed Flow

Mixed flow submersible pumps can be fitted with standard Aturia 400v and 690v motors or purpose made MV and HV motors.





Fire Fighting Systems

Audoli & Bertola" is a division of Gruppo Aturia and operates exclusively in the fire fighting field as supplier of water fire fighting packages in compliance with the European Standards (EN 12845 e EN 12259-12) and the American Standards (NFPA 20).

Audoli & Bertola is the only Italian pumps manufacturer to have obtained from "Factory Mutual" the approval for its vertical turbine pumps and split case pumps for a range of capacities from 500 USGPM to 3500 USGPM, at 50 ÷ 60 Hz and Diesel Driven. ATEX: Packages and Pumps for Atex Classified area are available for Electrical Pump and Diesel Engine Driven Pump Fire-Fighting services.





Radial Flow

400

m²/hou

300

Mixed Flow

600

ATEX

800

1000

50 hz

Radial flow (centrifugal) models are available in sizes from 6" to 12" for low flow high head applications.

low



NA and NE

The NA and NE ranges are long coupled pumps to DIN24255-EN733-UNI 7467. They have oversized shafts with oil lubricated ball bearings along with balanced impellers. The NE range offers ATEX approval.





- Many sizes ex-stock.
- High efficiency & low NPSHr.
- CI with optional SS and Bronze impellers.
- Available with a range of seals.





AquaRange

The AquaRange of mono block pumps is made up of :

- AquaFit single stage end-suction pumps to DIN 24255.
- **AquaLine** inline vertical pumps available as either a single or double construction.

All pumps meet the required efficiencies of the ErP Directive.





- Dynamically balanced impellers.
- Cast iron, bronze or stainless steel impellers.
- Low NPSH requirements.
- High quality castings.
- Compact construction.
- Designed and manufactured to ISO 9001.
- Short delivery times.
- A choice of connection types.





PD

Robust split case, double suction pumps available in either horizontal or vertical configurations. The position of inlet and outlet nozzles (in the lower half case of PD horizontal pumps or in the rear half case of PDV vertical pumps) allows inspection and repair without removing the pump from it's position.





- Replaceable shaft sleeves.
- Pump body in CI optional steel or ductile iron.
- Impellers CI optional DI and SS.
- Grease or oil lubricated roller bearings.
- Gland packing or a range of mechanical seals.
- Many models available to API 610.



TK-VTK

A comprehensive range of horizontal and vertical multi-stage boiler feed pumps designed to ISO 9908 and ISO 9906 deg 2. All models can conform to the latest ErP directive requirements.





- Oversized shaft.
- Double, oil lubricated ball bearings.
- · Dynamically balanced impellers.
- High efficiency & low NPSHr.
- CI with optional SS and Bronze impellers.
- Available with a range of seals.





OBL Plunger

A comprehensive range of plunger metering pumps with ceramic plungers that comply with API 675 for high pressure applications. They can be used singularly or in multiple head units and feature a simple linear adjustment dial.







- Simple and robust plunger metering pump.
- Low maintenance costs due to small number of components.
- Available with a stroke length actuator.
- Single and multiple head arrangements possible.



OBL Hydraulic diaphragm



- · Longer diaphragm life.
- Suited to aggressive fluids.
- Single and multiple head arrangements possible.
- Available with a range of actuators.
- Comply with API 675.
- Available with a double diaphragm construction.





Hydraulically actuated diaphragm pumps which offer the product containment of mechanical diaphragm units and the high pressure capabilities of plunger type pumps. They feature builtin relief valves, air purge valves and mechanically actuated replenishing diaphragms that guarantee a constant hydraulic balance.







PulsaPro 900

The PulsaPro 900 is a more rugged and large scale range for high flows and pressures. One of the most innovative features of the PulsaPro 900 is the unique gearbox design which allows for up to four heads.









- Vertical or horizontally mounted motors.
- Hydraulically balanced diaphragms no wear point.
- 1 yr warranty on wear parts, 5 on gear train
- Manual adjustment mechanism to ±0.5% accuracy.
- A wide range of control signal options.
- Dual scale % and flow units.
- API 675.



Pulsar

Pulsar Pumps are high specification API 675 metering pumps available with three different designs: **Pulsar** for flows up to 450 l/min and 250 bar. **Hypopump** for Sodium Hypchloride 420 l/min and 10.4 bar.

Shadow for flows up to 640 l/min and 21 bar.







- Balanced diaphragm to give prolonged life.
- 4 bolt tie bar provides rigidity to the 3 component check valves and eases their quick removal.
- Diagnostics give hydraulic operation, system over-pressure, diaphragm integrity and hydraulic oil fill level.
- 1 yr warranty on wear parts, 5 on gear train.





Pulse-less metering with Hydra-Cell®

Hydra-Cell Metering Solutions product range incorporates multiple diaphragms which are not conventional and enable you to exceed API 675 performance standards, and meet ATEX compliance, with virtually pulse-less, linear flow. Hydra-Cell Metering Pumps offer the advantages of conventional metering pumps with additional benefits.





- No need for pulsation dampeners saving installation and maintenance costs.
- Higher efficiencies.
- No pipe strain no leakage.
- Smaller footprint, lower acquisition and maintenance costs.
- Superior valves for abrasives, viscous and solids containing fluids.
- More control over the accuracy and consistency of flow rate.
- Non-lost motion design.



Wobble Plate Design

Wobble plate pumps can have up to five diaphragms, and each diaphragm has its own pumping chamber the diaphragms operate sequentially to provide consistent, low-pulse flow.



Crank-Shaft Design

Each piston contains a patented hydraulic cell (4) that is moved sequentially by the crank-shaft. The Hydra-Cell maintains the precise balance of oil behind the diaphragm (5) regardless of the operating conditions of the pump.

Diaphragm Position Control (DPC)

Hydra-Cell's DPC is a patented system which is designed to stabilize the diaphragms and virtually eliminates the possibility of an incidental diaphragm failure caused by adverse system conditions.





Hydra-Cell Transfer Pumps

Hydra-Cell Industrial Process pumps feature a seal-less, packing-free API674 design that eliminates leaks, hazards and the expense associated with seals and packing maintenance, lowering the cost of ownership and giving an extensively longer service life. These Hydra-Cell pumps can operate with a closed or blocked suction line and run dry indefinitely without damage.





- Seal-less design eliminates leaks.
- Unique diaphragm design handles more abrasives with less wear reducing maintenance, eliminating unplanned downtime and costs.
- Smaller footprint, lower acquisition and maintenance costs.



Piston/Plunger

FMC

FMC manufacture both piston and plunger pumps and by doing so can offer a cost effective solution for almost any application. Piston Pumps provide unsurpassed value for many low to medium pressure applications pumping undemanding fluids. Whereas FMC's plunger pumps cover higher pressure, flows and corrosive liquids.











- API 674.
- Vapour-less stuffing boxes.
- Controllable flows.
- Glycol, Methanol, MEG and IEG injection.





Universal

Waukesha circumferential piston pumps use arc shaped rotor wings resulting in a long sealing path. They have the ability to pump liquids with both high and low viscosities and at much higher heads than centrifugal pumps and with less shear. Their transfer rate varies less than centrifugal pumps when viscosities change.





- Bi-directional flow.
- Low shear pumping action.
- Free draining pump housing.
- Dry running with flushed seal.
- · Can pump large solids.
- Can pump a wide range of viscosities.



Börger

Simple and robust rotary lobe pumps that can handle large solids, are self priming and easy to maintain due to the low number of components. They are available in three different construc-

tions Classic, Select and Protect which offer different types of

mechanical seal.

Cast Iron Cast Steel

St Steel

 $\mathbf{\nabla}$

 \checkmark

 \checkmark

Solids

Self Priming

Low Shear



- Bi-directional flow.
- Self priming.
- · Free draining pump housing.
- Maintenance in place.
- Can pump large solids.
- Can pump a wide range of viscosities.







P Series

The Mouvex P Series vane pump cover a large range of industrial applications, from thin fluids to very viscous products, whether they are non-lubricating, abrasive or corrosive. Blackmer vane pumps have proved particularly useful in fuel transfer duties.





- CIP and SIP compatible.
- Performance remains constant over time.
- Dry-run capability.
- Can be supplied with built-in heating or cooling jackets.





SVM-SVP

Robust, high specification mag drive rotary vane pumps designed with a flow path which produces no pulsation. SVM pumps can be configured to a range of different applications and will pump fluids up to $300 \, {}^{\circ}$ C.





- High heads low flows.
- · Viscous or thin liquids.
- Available with metallized graphite.
- Dry running capability.
- Threaded, PN, Tri-Clamp or ANSI flanges.
- SS plus options of Duplex and Hastelloy.







Methanol injection skid.

Offshore Skid Systems

AxFlow pump skid packages are used for many different process requirements, including chemical injection, sea water filtration, fluid separation and treatment, effluent and sewage processing, cooling duties, product and chemical transfer, mud mixing, general sludge transfer and drain duties.



Design Flexibility

AxFlow's skid packages can be configured for specific site specifications, space constraints, and power supplies and can also be fully ATEX compliant, meeting or exceeding client requirements.



Magnetic drive centrifugal pump Sulphuric Acid Transfer skid.













Typical offshore pump skid with an ISO 5199 pump and 53B support system for produced water.

Options

AxFlow's skid packages include various drive options such as pneumatic, electric, hydraulic motors or diesel engines. Axflow specialise in complete skid design, including pump selection, on skid pipework, manifold design, instrumentation, valves and process control.





Filtration Skid with Duty and Standby Coarse Water Filters.

Traceability

All skids packages are available with full component traceability and a complete scope of Non-Destructive Examinations and Non-Destructive Tests to suit client requirements. Standard documentation and testing packages can be tailored to meet exact requirements.



Hydracell Air Driven Pump skid for Hydrocarbon Service.



PCAN SERVER INSTALLATION, COMMISSIONING OPERATION AND TELEVISION OPERATION



It's not just about the products

At AxFlow we understand the importance of tests and documentation to the petrochemical and offshore sectors. We take this aspect of every project seriously from the start to ensure we can fulfil our commitments correctly and on time.

Consequently we only use manufacturers who are capable of meeting the required QA standards and who can provide the requisite documentation.



AXHOW	TYPICAL PUMP PRODUCTION	SCHEDULE																
							10	Ax	GLOW		PERFORMANCE TEST PROCEDU							
					l		LINET 3, HARL DICC, AABRD THL 00234 27 Purchase Or Cuidanner Description: Selval Nox Sales Order: Date:	LAN CENTRE, 5 DEIN ARTE ODS 20087, FAX. DE rder Number: :	MOWINGUS CRESCENT, KIRON N 1330 72868	LI PREGITINAL ESTATE			員					
-				AXHOW	TYPICA	L SDRL	No Load Ro	un Temperat	iture Record			Transmitta	Barrard TC					
-			SDDR Code	DESCRIPTION OF DOCUMENTS	Final Re Handover Cla Manual	view Fi	le	1	2 3	4	5 6	7	8	9 10	11	12	13 1	
and a second sec			A01 A02	Supplier Document Register (SDR) Fabrication Production Schedule	KD1	R												
			A04 A05	Sub-order Schedule Concession Request	J01 KD1	R R												
- and a			801 802 803	General Arrangement Drawing Acceptable Nozzle Load Interface and Connection Schedule	KD1 / J01 J01 J01	R R R												
d'Armonian .			804 C01	Foundation Loading Diagram & Support D Piping & Instrument Diagram (P&ID)	J01	R	Axflow Lin	mited (UK)					Customer					
and a grant of the second s			C05 C07	Bill of Materials Utilities Schedule Weight Data Sheet	301 301 KD1	R R R	Date:						Date:					
			C08 C09	Equipment Data Sheet Noise Level Data Sheet	.301 .301	R												
			D02 D04	Lites-sectors brawing a Exposed we Mechanical Seal Drawing Name Plate Format Drawing	201 201	R R R	3											
to look			D05	Sub-Assembly Drawing Installation & Dismantling Drawing	J01 J01	R	2 2	N	PO + 5 weeks PO + 5 weeks	Y	Y	_			_	_	_	
			E02 E04	Panel & Cabinet Layout Terminal Block Diagram	J01 J01	R	2 1	N	PO + 8 weeks PO + 12 weeks	Y	N		_		_			
			000	Instrument Index	301	R	2)	N	PO + 4 weeks	Y	N							
			P01	Pressure Vessel & Tank Mechanical Calo	Joh Johns	×	2 7	N	PO + 12 weeks	N	N							
			F04 F05	Foundation Support Calculations Lateral Ontical Speed Calculations	.301 KD1	-	2 2	N	PO + 12 weeks PO + 12 weeks	N	N							
			F07	Torsional Critical Speed Calculations Motor Performance Curves	KD1	÷Ŧ	2 2	N	PO + 12 weeks PO + 6 weeks	N	N							
			F30	Certifugal Pump Performance Curves	.01		2	Y	PO + 4 weeks	Y	N							
			601	speez a sorque starting Curves Erection and Installation Procedures	J01 J01	R	2 1	N	PO + 5 weeks PO + 12 weeks	N	Y							



Our Repair and Maintenance Capabilities

At some point during their life all pumps require maintaining or repairing.

At AxFlow we have Service Centres spread across the country equipped with an impressive array of engineering equipment and test facilities.









WHAT WE OFFER

All of our repair and maintenance work is fully documented as would be expected of a company such as AxFlow.

- Machining in-house
- Belzona coating
- Dynamic balancing
- Mechanical seal overhaul
- Metal spraying and fusion welded coatings
- Laser alignment
- Hydrostatic pressure testing
- Motor rewinding
- Hygienic pump repair
- The ability to re-engineer a wide range of pump components
- On site training of maintenance operatives







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