



KelairPumps

PumpAction..... Issue 53 Sep 08

Case Study

Sandpiper smooths the way for solvents

Sales Engineer Hem Prakash

One of the major manufacturing companies on the south side of Brisbane recently participated in a Kelair swap-out programme.

The client originally had four old 1" pumps with brass air valves. The pumps were of Aluminium construction with Teflon elastomers pumping various solvents and chemicals.

The old design brass air valves used in these pumps needed lubrication and were susceptible to freezing. The pumps had to be pulled apart completely to service the air valves. If the lubrication was insufficient or over-lubricated this created problems with the correct shuttling of the air valve. Additional problems can be that the pump fails to operate or restart after shutdown. This is mainly due to the

"centring" of the main air valve or the pilot valve.

In using this old design the client had to spend money getting lubricators and correct lubrication to keep the pumps in action.

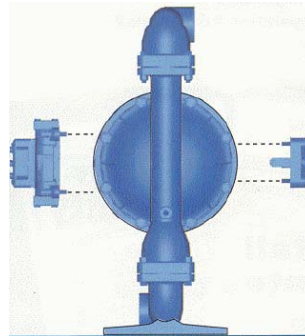


Kelair offered the swap-out option with the latest Sandpiper SIFB1AGTABS000, with ESADS+ air valve design.

ESADS+ is known as Externally Serviceable Air Distribution System which has patented cross-drilled pressure ports and pilot valve.

ESADS+ is lubrication-free i.e.

no lubrication is required with guaranteed ON-OFF-ON reliability.



In addition the diaphragm connecting rod is made of durable corrosion-resistant 416 (Martensitic) and/or 316 (Austenitic) Stainless Steel which give the client the following guarantee.

The diaphragm rod will not yield:

- Tension
- Compression
- Bending
- Pump Operation

Another notable feature of ESADS+ is that the pump will

Products

Pumps

Steam Turbines

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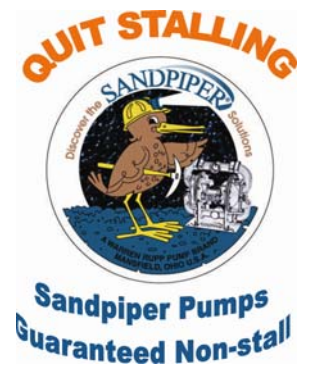
Spare Parts

Sewage-Treatment

Call direct 1300 789 466

not fail to operate or restart after shutdown due to the "centring" of the main air valve or pilot Valve.

The client was so pleased with the swap-out programme that he has changed all his old pumps on site with Sandpiper.



Servicing your air-operated diaphragm pumps

All air-operated diaphragm pumps are reciprocating pumps and will need servicing from time to time.

Considering one can spend precious workshop hours stripping pumps, finding manuals, identifying part numbers then sourcing prices and availability of parts before anyone can make a decision as to repair or replacement, when the decision is made, a qualified tradesperson needs to spend

time completing the repair, time possibly better spent elsewhere.

A business may do this type of work on site for a number of reasons but saving money would not be one of them.

The pump can simply be delivered to any Kelair branch and from that point we will perform a "strip and inspect" on the pump. We will then report back the condition of the pump, the extent of the

repairs required and the time needed to complete them. If the repairs are extensive we will offer a new pump. You can even "trade in" the old pump.

When you choose Kelair to repair your diaphragm pumps you get the parts at the best price because we import them and as this type of pump repair rarely takes more than 4 hours (2-3 is quite common) the labour

component is very reasonable.

Kelair uses only genuine OEM parts.

Perhaps this is worth thinking about next time a diaphragm pump needs repair.

Case Study

Viking pumps key to road tanker application

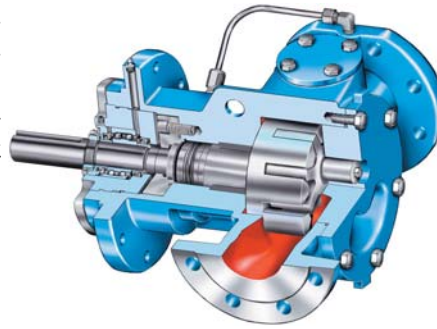
Sales Engineer Alex Calodoukas

Recently Kelair was asked to assist with fabricating pump-sets for use on a road tanker. It's the type of job Kelair has provided pumps for many times in the past but this time it was a little different. There were so many pumps with motors to be installed we were asked to minimise the space that each of these units would require. Electric motors were too large, so much smaller-sized hydraulic motors were opted for.

Working closely with the customer, Kelair enlisted the assistance of a Hydraulics company. Openly discussing what was required, we are each fabricating our respective components to make this a turn-key project right down to turning the ignition key on the truck. When we've all done our share, the truck and the system must be tried and tested, ready for service. It will be time to turn the key and go.

Kelair is providing Viking

4176 motor speed pumps. They are an internal gear pump, the casing in ductile iron construction with steel



shaft and mechanical seal. We will also be fabricating a special bell-housing in our workshop which will be flange-mounted to the pump

and support the weight of the hydraulic motor. This close-coupled design is preferred to maintain the alignment of the pump / motor coupling which will eliminate the need for re-alignment caused by knocks from bumps in the road surface whilst travelling.

It's a different, but a welcome project for Kelair.

Case Study

Chemical dosing stations

Sales Engineer Alex Calodoukas

Over recent months Kelair has been building and laying out chemical dosing station designs for our customers. Kelair is very experienced in chemical dosing station fabrication and as such our customers come to us to build dosing station skid-mounted designs. We are requested to lay out the design on a general arrangement drawing according to the P&ID (component layout) the customer has prepared.

is assembled in our factory. Framework can be galvanized or painted as required.

Kelair sources the Polyethylene or Stainless Steel chemical dosing tanks according to the specification



Kelair understands the flows, pressures and fluid properties, and provides equipment accordingly. We source the pumps, pulsation dampeners, pressure gauges, valves, calibrations columns, in-line filters and the control panel containing multiple variable-speed drives, pipe, and fittings. It

with level gauges, level switches, ultrasonics, or whatever is requested. Filler and breather ports are fabricated on the tank, as are drain and overflow ports. Framework on the skid may be single level or double level as required as the cus-

tomers may have a preference to fill the dosing tanks from IBC (bulki-bin containers) that are lifted onto the top level with gravity feed to the chemical dosing tanks situated below.

On another project, the customer just requested the supply of pumps, valves, strainers etc from Kelair to build the dosing plant at site. In such instances, Kelair is able to lay out the position for the dosing station components on a general arrangement drawing so the contractors can build following our guidelines.

Whatever your dosing requirements Kelair will be able to assist.

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Sandpiper Features and Benefits

- Non-stalling guarantee
- Cross-drilled technology, to eliminate stalling
- ESADS (Externally Serviceable Air Distribution System), allowing repair of pump without removing from pipeline
- Fully-bolted design, minimising repair time and reducing maintenance cost
- Lubrication-free, eliminates requirement for lubricators, reducing initial cost and maintenance cost