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NEWS

Sandpiper heavy duty flap valve pumps keep food lines flowing

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If you have an application in the food industry that requires an air-operated double diaphragm pump (AODDP) and that doesn't use an automated CIP system, then what pump should you use?

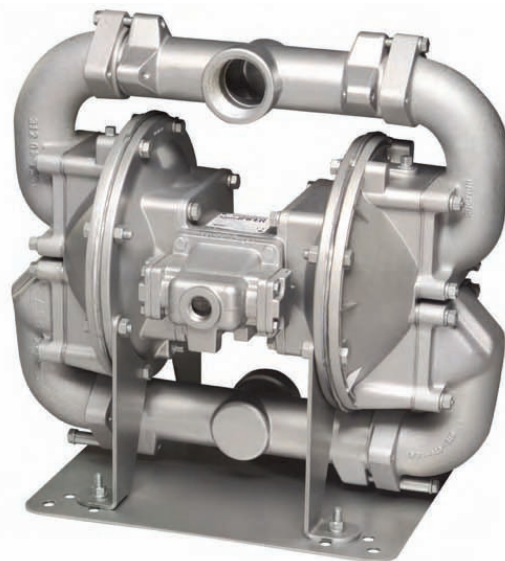
Companies regularly approach Kelair for pumps that meet food grade materials requirements and are easily stripped for manual cleaning. Frequently the applications discussed involve either a continuous process line or batch work from multiple tanks, usually with very thick liquids such as pie fillings or pasta sauces. In some cases, the customer could not justify the expense of a USDA or FDA-approved AODD pump.

To assist in selecting the right pump and to ensure there will be no problems with pump operation for these applications, a Kelair sales engineer visits the customer and works through the system design with them. As always, with thick liquids, the system layout can be critical. In particular, the suction piping and fittings must be large enough to help the pump prime with the thickest of the fillings or sauces it needs to pump.

Based on the results of these site visits, customers have purchased Sandpiper SA series AODD pumps for many of the applications.

The SA2A model DR5S and DD5S flap valve pumps form part of Sandpiper's comprehensive Heavy Duty Flap (HDF) Valve range and are built solely with food grade materials. To comply with customers' cleaning requirements, the pumps are supplied with 316-grade stainless steel wetted parts, food grade Santoprene (to allow caustic to be used when cleaning) or food grade EPDM flap check valves and diaphragms, a fully bolted design for easy disassembly and Sandpiper's lube free non-stall ESADS air system.

The pumps are fitted with food grade fittings of the customers' choice.



Kelair's engineers offer a flap valve pump because closer analysis of the customers' liquids generally finds the liquids contain fragile items such as vegetable pieces, which need to be kept intact to meet the customers' desired quality requirements.

A flap valve can pass a large soft solid - almost 2" diameter in the case of the SA2A - without damaging the ingredient. Indeed, some customers had already experimented with ball valve pumps and lived with the poor results, not realising that a more solids-friendly pump was available.

As an additional advantage, flap valves provide much less resistance than ball valves to the flow of thick liquids, meaning less force is needed to pump the liquid and thicker liquids can be pumped. This design feature means that, in some instances, a flap valve pump selected for an application would be smaller than the correctly sized ball valve pump alternative.