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# PumpAction.....

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## CASE STUDY

### Pioneer's vac-assist pumps are prime for paper mill

*Sales Engineer Michael Underhill (TAS)*

Kelair's Tasmanian branch was recently awarded the order from Norske Skog Paper Mills to supply an emergency diesel-driven effluent pumpset for their multi-million dollar wastewater treatment plant upgrade.

The senior project engineer at Norske Skog, Chris Beanlands, specified a dependable self-priming pump unit capable of delivering a minimum 290 litres a second at a maximum of 7 metres TDH. The pump had to be simple and easy to operate with minimal operator input required. The NPSHR of the pump was also an important factor when looking at the selection due to the suction conditions of the system.

The Pioneer range of vacuum assisted self-priming pumps was the standout choice for the application, due to their extremely robust design and proven reliability in demanding and arduous applications.

Kelair offered the 12" Pioneer vacuum assisted pump unit direct coupled to a Caterpillar, 54KW at 1400rpm continuous-rated, non-overloading, in-line 4 cylinder, four stroke, diesel engine with radiator cooling, 12 volt electrics and complete with Murphy shutdown protection panel. The unit was to be mounted on a heavy duty skid base, complete with 24 hour in-built fuel tank and painted in two pack epoxy paint to minimise corrosion and maximise the service life of the unit on-site.

The Pioneer mechanical vacuum diaphragm, self-priming system utilises a single actuating diaphragm pump run off the main shaft of the pump. The diaphragm has only 5/8" stroke movement and has far less moving parts than competitors' units. As the pump operates it evacuates air from the pump casing and suction line for fast, positive and continuous priming, even under snore conditions. The Pioneer pumps lend themselves to a multitude of applications. With their high head, high flow and solids-handling capabili-



ties, there is sure to be a pump model well matched to your applications.

Some of Pioneer pumps' other features and benefits are:

- Built and assembled in Australia
- Dry prime vac-assist units run dry without damage.
- Hardened mechanical seals running in an oil bath.
- 2 Year manufacturer's warranty
- Spare parts available off the shelf
- Extended pump life with replaceable wear plates
- Heavy duty shaft & bearings
- Advanced Impeller designs, high efficiencies
- Large choice of materials of construction, CI, DI, 316, CD4MCU
- Heavy duty castings
- Patented priming equipment, less moving parts and highly efficient

• For further product information visit [www.kelairpumps.com.au](http://www.kelairpumps.com.au)