

CASE STUDY

Pulsafeeder's 'Eclipse' solves sealing problem

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SRL Plasma is a speciality process plant located in Tottenham (Melbourne's western suburbs) whose process destroys ozone-depleting gases such as freon.

The company uses pyrolysis technology, developed in conjunction with the CSIRO, to convert halogen gases such as freon to acids such as Hydrogen Chloride, Hydrogen Fluoride and Hydrogen Bromide. These acids are then neutralised to salt and water using caustic soda.

For the pumping of 46% commercial grade caustic, SRL previously used a single mechanical seal centrifugal pump. As the plant regularly shuts down and restarts, the caustic dries and then crystallises between the faces, so the seal typically had to be replaced every 3 months.

SRL did consider a flushed seal. However this was too complex as a requirement would have been to top-run a water flush to the pump and this flush system would have to be maintained.

To solve the problem, SRL subsequently elected to use a Pulsafeeder Eclipse plastic magnetic-drive gear pump. As the pump is totally sealed, the caustic that settles in it after the plant is turned off cannot dry out and crystallise.

Also the pump is a magnetic-drive so there is no need to run a flush. It also comes in an IEC frame-mount where a standard motor can be easily fitted. This, combined with the fact that the pump is of plastic construction, makes for a simple, economical and effective solution.



- For further Pulsafeeder product information visit our website www.kelairpumps.com.au