

Case Study Minerals Industry

Ash Resources

The TWA rotary valve has dramatically reduced costs and downtime throughout the Ash Resources group.

Were using standard rotary valves but with the abrasive nature of the product, the maintenance of these valves was a continual headache. The shaft seals had to be adjusted almost continuously (every hour) and changed every other day. The valves themselves were only lasting a matter of six weeks- even for tungsten carbide coated valves- before a complete replacement was needed.

The first TWA was installed and after 16 weeks the valve was still working without any maintenance at all. At 24 weeks, the valve was removed from the line, send back to MID for refurbishment then put back into service. The refurbishment was less than 50% of the cost of a new, old-style 'standard' valve.

We are always striving to improve the performance of our products so we looked for an even better wearing product than ni-hard. We developed a tiling technique where the rotor and liner are tiled with alumina ceramic tiles- extremely hard and abrasion resistant.

The increase in wear life with ceramic lined valves is exceptional- we expect a ni-hard valve to last 4-5 times longer than a standard valve and a ceramic valve to last 12 times longer than a ni-hard valve- that's nearly 50 times longer than a standard rotary valve.

Ash Resources have now started to change all of their ni-hard valves for ceramic lined versions- the increase in production pays for the valves in a very short time and when the reduction in maintenance costs is taken into consideration, the ceramic units are a very economical choice.

A knock-on effect of the ceramic rotary valve is being able to use the

valve where rotary valves could not normally be used as the product is too abrasive.

Ceramic valves have been successfully used on products such as slate, mica and alumina ceramic powders. All of these can be handled using the TWA valve and a lean phase blowing system which makes much more economic sense than using other, more expensive conveying techniques.

British Gypsum

MID have had a very long and successful association with British Gypsum. We supply all types of valves to them including diverter, slide and rotary valves.

All of the valves are designed for longevity and minimum maintenance which make them very popular with the end users.

TWA extreme duty valves are used in critical applications where minimum downtime is critical or a particularly abrasive product is handled. We have also taken the very effective mechanical seal technology from the TWA valve and used it on our standard range of rotary valves at an extremely reasonably cost.

We also develop special, one-off units for use where they need to fit a particular need and a standard valve is the incorrect size.

We have also taken the mechanical seal and put it into a cartridge so it can be retro-fitted to other manufacturer's equipment such as screw conveyors.



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