

Sundyne HMD Kontro Sealless Pumps

Sealless Pumps Provide Long Term Protection

Cristal Pigment Australia, Bunbury, Western Australia

HMD Kontro

Case Study



In 1988, Sundyne HMD Kontro was specified to supply five sealless magnetic drive centrifugal pumps to Cristal Pigment Australia (formerly Millennium Inorganic Chemicals) in Bunbury, Western Australia. Testament to Sundyne HMD Kontro's high quality engineering, two of the pumps are still operating over 25 years later.

Cristal Pigment Australia (CPA) is the world's second-largest producer of titanium dioxide and a leading producer of titanium chemicals. Titanium dioxide pigment (TiO_2) is a white powder with high opacity, brilliant whiteness, excellent covering power and resistance to colour change. These properties have made it a valuable pigment and opacifier for a broad range of applications in paints, plastics, paper, rubber, printing inks, cosmetics and pharmaceuticals.

CPA required robust, high pressure pumps for processing titanium tetrachloride (TiCl_4), an important component in the production of titanium dioxide. Highly volatile, upon contact with humid air TiCl_4 forms spectacular opaque clouds of titanium oxychloride (TiOCl_2) and hydrogen chloride (HCl). Hazards posed by titanium tetrachloride production generally arise from the accidental release of the hydrogen chloride. It was therefore essential that the pumps selected would guarantee total product containment.

The pumps Sundyne HMD Kontro supplied are from our Chemical Services (CS) range of horizontal end suction metallic centrifugal sealless pumps, designed specifically for chemical applications.

Having no seals means there is no opportunity for leaks or emissions, making sealless pumps extremely reliable for high temperature, high viscosity, high pressure and hazardous chemical process applications. Three Sundyne HMD Kontro CS pumps were implemented by CPA operating at $28\text{m}^3/\text{hr}$, 85m head, with the remaining two operating at $22\text{m}^3/\text{hr}$, 20m head. The two smaller pumps were replaced with a newer model as part of a plant upgrade in 2000.

Whilst originally specified over mechanically sealed pumps because of their safety benefits, the longevity of Sundyne HMD Kontro pumps has provided another strong argument in favour of sealless pumps.

For further information on Sundyne HMD Kontro sealless pumps, please contact us on +44 1323 452000 or by email to info@hmdpumps.com. Alternatively, please see our website at www.hmdkontro.com

