

Summit Matsu Chillers:

Proven in industry... Perfect for HVAC

What gives the Honda motor company the ability to power the entire 33 starting cars in the USA Indy 500 in both 2006 and 2007 – and then put this experience into its production cars? Research and development.

Summit Matsu Chilling Systems has invested significantly in its Australian R&D, testing, and manufacturing facilities to produce chillers for industrial customers. The Company is now putting these resources into building quality chillers for the HVAC sector.

“Industrial experience is relevant to the HVAC sector because of quality and reliability” said Rollston.

“With industrial customers it is very easy to put a dollar value on chiller performance. It’s not the cost of the chiller that is important, but the \$10,000 per day or \$100,000 per day of lost production if the chiller fails. Industrial customers tend to be very quality focused and have put us through the wringer for quality again and again. We have passed with flying colours every time.”

Summit Matsu Chilling Systems already supplies to many high profile customers in most industrial sectors.

In food manufacturing the Company counts customers such as Darrell Lea and Sanitarium.

In pharmaceutical and biotech the Company has Schering Plough and Glaxo Smith Kline, Europe’s largest pharmaceutical manufacturer as customers. In 2007 the Company also supplied to Australian biotech company CSL Ltd, who in 2006 were Australia’s single largest spender on R&D.

In mining and infrastructure the company has current orders from BHP Billiton, and has supplied recently to the Gold Coast Desalination Plant (GCDP) in Queensland and the Boddington Gold Mine (BGM) in Western Australia.

The GCDP required a 245kW air cooled chiller to cool water that was pumped to the heads of the tunnel boring machines used on the water inlet and discharge tunnels. By using a chiller in addition to the cooling tower the GCDP was able to reduce cooling water temperature by enough to change the 2km of galvanized cooling water piping from 300mm diameter to 200mm diameter. “The dollar savings to the customer were huge.” said Rollston.

The BGM expansion saw Summit Matsu Chilling Systems win a contract for 2 x 240kW air cooled chillers for the primary crushers on site. The BGM expansion is a two and a half year, \$2bn project located southeast of Perth requiring a purpose built accommodation village for 1500 and a permanent workforce of 650.

The extensive project documentation saw Summit Matsu Chilling Systems work with BGM engineers from Boddington (WA), Colorado (USA), and Santiago (Chile). “We are always open to ways to improve our procedure and business – even when that means reworking or improving drawings. But the inclusions and improvements demanded by large scale engineering customers like BGM, Worley Parsons, and Linde Gas have now become standard features on all models” said Rollston.

In other manufacturing the company has had recent success with customers like Bostic, Alcatel, and optical lens companies Hoya and Essilor which demanded very close temperature control at +/- 0.5 deg C. “Close temperature control has always been requested by industrial customers” said Rollston “and now this is available to HVAC customers.” Also available to HVAC customers is the ability to customise things like exterior panels and condensers for highly corrosive environments.

Sydney’s Coast Golf Club at Little Bay is located 100M from breaking surf so salt spray had reduced the life of many chillers at this site. Summit Matsu Chilling Systems was able to incorporate stainless steel panels, stainless steel drains, a hot dipped galvanised frame, copper finned condensers, and aeronautical-grade anti corrosive paste on all stainless steel fasteners to produce a purpose built durable chiller suitable for the harshest environment. “We have now made all of these additions available to HVAC customers” said Rollston.



**MWC-8-38kW chiller for
Glaxo Smith Kline**



SDA-7-240kW chiller

The new release Summit Door Access (SDA) chiller has also come from a customer requirement. A large commercial and engineering company approached Summit Matsu Chilling Systems looking

for a chiller that could fit through standard doorways and into standard lifts. After 24 months of R&D the SDA series of chillers was produced. The machines can be factory fitted with casters or can be fork lifted into place. The SDA series of chillers are now part of the HVAC offering and use Refcomp semi hermetic or screw compressors and Thermokey shell and tube heat exchangers designed in conjunction with Summit Matsu engineers.



MCW-8-5.8kW chiller

“Everything about the company is geared for expansion into the HVAC sector” said Rollston. “Our name Summit comes from our past – manufacturing compressors, shell and tubes evaporators and condensers, refrigeration racks and chillers, while the name Matsu comes from R&D we did with Hitachi on new types of refrigeration compressors. We continue our own R&D now for both industrial and HVAC chillers.”



**MCW-7-220kW chiller for
corrosive environments**

“Our Honda strategy is working beautifully for us” said Rollston. “And the great thing is it is helping us win against the Toyota’s of the chiller world.”

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