



**HANWEST PTY LTD**

SPECIALISED COMPONENTS FOR AIR CONDITIONING & REFRIGERATION

ABN 49 003 452 551



## **BENEFITS OF USING AQUA SYSTEMS CONDENSERS IN WATER COOLED AIR CONDITIONERS. MODELS 6kW to 200kW.**

**AQUA SYSTEMS** refrigerant to water heat exchangers incorporate the latest in refrigerant heat exchanger technology. The compact size and the high level of heat exchange efficiency are achieved by the Aqua Systems unique heat exchange tube geometry.

The enhanced surface of the copper or cupro nickel tube provides surface extension of 3.7 times that of smooth tubing. The conical, co-axial design of the water coils and the internal rifling ensures that water turbulence is maintained even at low water flow rates.

On the refrigerant side, the close tolerances between the water coils and the condenser shell, result in the extraordinary heat exchange performance during condenser duty on the cooling cycle. As they are designed to also suit reverse cycle applications, the unique design provides a high level of performance when the heat exchanger is as a liquid chiller.

Some of the features which make the Aqua Systems the best condenser choice are as follows:

- 1) Close approach temperature between the Refrigerant Condensing Temperature and the Leaving Water Temperature, reduces the volume of condenser water to be circulated. Reduces size of condenser water pipes and circulating pumps.
- 2) Efficient Liquid Refrigerant Sub Cooling as the leaving liquid is sub cooled by the entering water due to the counterflow design enhancing system efficiency.
- 3) Drainable water tubes due to the spiral design, allows easy draining of the water tubes for freeze cleaning.
- 4) Freeze cleaning of the water tubes after draining, allows rapid condenser cleaning with minimum down time and no mess. Eliminates the use of chemicals.
- 5) **NO** oil trapping as a result of the close tolerances in the refrigerant path.
- 6) Improves heat pump performance with high kW output at low water temperatures.
- 7) Low water side pressure drops reduces pump size and operating costs.
- 8) Continuous water coils with no internal joins has less chance of leaks.
- 9) Compact size convenient cylindrical shape is easy to insulate.
- 10) Reliable operation, as all AQUA SYSTEMS heat exchangers are tested to 3200 kPa after manufacture.
- 11) Comply with Australian Standard 2971-1987 Serially Produced Pressure Vessels. UL® Approval for international or marine applications.
- 12) HANWEST PTY LTD stock all models to meet those urgent orders or repairs.