Case study 305 Nuclear Site Process Cooling

A nuclear site in Cumbria required emergency cooling after a compressor in their primary plant failed. An uninterrupted provision of chilled water is a crucial element for process cooling, and a lack thereof is detrimental to the process. The issue therefore needed to be resolved quickly as the client could have incurred major financial losses. In order to maintain production, it was essential for a temporary chiller unit to be installed on site within a 12 hour period.

A solution to the problem was devised following a previous contingency visit from Andrews Sykes technicians. The set-up at the nuclear site required a specific unit along with a recirculating pump, which distributes the cooling water through a closed circuit loop. The temporary chiller unit bypassed the fixed chillers and pumps which required our engineers to modify, adapt, deliver and install the 30kW Fluid Chiller within strict time constraints. The temporary units high efficiency and capacity to circumvent permanently installed chillers was the reason for the product's recommendation and use.

Andrews Chiller Hire has been the UK's leading specialist supplier of cooling products and guarantees to provide support 24 hours a day. In this instance, the client was very satisfied with the service as it prevented high profile consequences. The whole project was overseen well within the 12-hour window afforded to complete the job.

The result was highly successful and ultimately led to a long-term hire. Additionally, there was also an opportunity to quote a price for the supply of new unit for purchase. The chiller system worked perfectly and ensured the nuclear site did not lose any productivity; the unit is still installed to date and continues to support the client's process.







Nominal cooling duty 30 kW 102,360 btu
Plug type BS4343 32 A 5 pin
Power supply 415 V 3 ph N+E 50 Hz Run 19 A/hr
Average power consumption 10 kW/hr
Noise level (max) 73 dBA @ 10 metres
Generator size 30 kVA
Weight 350 kg
Nominal heating duty (HP version) 30 kW 102,360 btu
Dimension1,600 x 860 x 1,700 mm
Water connection 1.25 Camlock
Control Automatic programmer



