

# Dehumidifier hire assists ship refurbishment in Scotland

With corrosion protection essential to any project undertaken in a marine setting, it is fundamentally important that relative humidity is closely controlled to ensure the optimum conditions are constantly maintained. Most modern ships are constructed from highly corrosive steel which can be vulnerable to damage even if preventative coatings have been applied to surfaces.

The heavy financial and safety implications of rusting often lead to merchants sourcing specialist equipment to help regulate the environment, with cargo tanks, ballast tanks and underwater areas most at risk.

These were the concerns that prompted a historic shipbuilder in Glasgow to contact us prior to a major refurbishment, with some temporary dehumidifier hire units specifically requested to assist the job.

As part of the overhaul, a new fire protection system had to be installed in addition to virtually all interior and exterior surfaces being repainted. Without proper maintenance, saltwater from the sea can cause many of the ship's key components to corrode – including the engine, the hull and electrical wiring.

In order to provide our client with the necessary protection, we delivered and installed three KT2200 desiccant dehumidifiers which were deployed around various parts of the ship to maintain the correct environmental parameters. Our units were used to keep huge areas dry while work was carried out on board the docked vessel, with the entire process taking a total of five months.

During that time, Andrews' market-leading drying hire solution ensured the air's moisture content was sustained at a desirable level and the ship's shell was kept dry enough to apply multiple coats of zinc primer and paint.



Extraction rate (max)	480 litres/24hr
Nominal extraction duty at 60% RH @ 20°C	310 litres/24hr
Air flow (max)	2,200 m <sup>3</sup> /h
Keep dry area (typical)	7,000 m <sup>3</sup>
Dry out area (typical)	3,500 m <sup>3</sup>
Power supply	415 V 3 ph N+E 50 Hz Run 24A
Plug type	BS4343 5 pin 32 A
Generator size	22 kVA
Duct length (max)	40 metres
Noise level (max)	70 dBA / 79 lWA @ 1 metre
Weight	315 kg
Dimensions (L x W x H)	1,326 x 1,210 x 1,510 mm
Control	Manual or Auto (humidistat mounted)
Power consumption	10 kW/h
Duct diameters	Process in 300 mm, Dry out 300 mm, Wet out 150mm, Regeneration air in 150 mm

