

# Case study 524

## Andrews save steel producer thousands

High moisture content in the winter air has become an annual and longstanding problem for steel manufacturers during colder periods. An increase in relative humidity is directly responsible for the formation of condensation and this has costly implications for companies involved in metal production when corrosion occurs. So when one of the world's most diversified steel companies was faced with a crippling revenue loss, Andrews Dehumidification were contacted to ensure this did not occur.

The customer in question had previously hired equipment from a competitor but cancelled the contract prematurely because of the extortionate fuel costs involved. It was therefore our primary intention to propose an alternative hire package that could operate economically whilst performing at the desired level.

One of our dehumidification experts visited the site and conducted a thorough survey of the application which helped flag a number of potential challenges. Our client was dependant on constant overhead access for lifting apparatus and walkways also had to be kept clear at all times because of strict safety regulations. It was therefore left to us to devise a plan that would enable our units and ducting to be appropriately positioned whilst maximising their effectiveness.

Six KT2000 desiccant dehumidifiers were selected for this particular project, and these were accompanied by two DH600 refrigerant dehumidifiers – ensuring conditions were suitable for storing precious materials. Not only did our specialised equipment protect a massive steel stock from rusting and depreciation, but it also provided an international supplier with a tailored drying package far cheaper than the one they had previously. Our bespoke dehumidification hire arrangement saved the customer an average of £800 per day in fuel – equating to around £120,000 across the five months our units were on site.



Extraction rate (max) 450 litres/24hr  
Nominal extraction duty at 75%  
RH @ 20°C 300 litres/24hr  
Air flow (max) 2,000 m<sup>3</sup>/h  
Keep dry area (typical) 5,500 m<sup>3</sup>  
Dry out area (typical) 3,300 m<sup>3</sup>  
Power supply 415V 3ph 50Hz  
Plug type BS4343 230V 5 pin 32 A  
Weight 225 kg  
Dimensions (LxWxH) mm 1,290 x 890  
x 1,050  
Control humidistat option  
Average power consumption 20 kW/h

