Airblast B.V.
P.O. Box 1075
1700 BB Heerhugowaard
The Netherlands
Tel. : +31 72-5718002
Fax : +31-72-5714340
E-mail : info@airblast.com

Commercial Information
The Art of Powerful Cleaning...

Version / Date: 01 / 1103

Title: DH 5000 ME Enhanced Version

Introducing the DH 5000 ME Enhanced Version Airblast B.V's air-cooled dehumidification system designed especially for use in Middle – and Far East climate conditions. In these climates, the rate of atmospheric corrosion of steel is determined by three factors: the steel temperatures, the presence of pollutants, and relative humidity.

1. Steel temperatures influence the rate of corrosion reactions in the same way as in most chemical reactions. That is, the higher the temperatures, the higher the rates of corrosion reactions.

2. Pollutants (present in the air or on the surface) render condensed water more conductive and thereby causing faster corrosion rates.

3. Rate of corrosion is determined by relative humidity, with rates of corrosion reactions found to increase exponentially with relative humidity. The rate of corrosion of uncontaminated steel is zero below 60% relative humidity. In fact, 50% relative humidity is widely accepted as the point of "no corrosion" as it ensures a margin of safety. At 30% relative humidity, salt-contaminated steel may still corrode because salt is hygroscopic and removes moisture from the air. In addition, salt also tends to cause moisture to condense.

Given these conditions, a comprehensive dehumidification system is necessary to lower the amount of moisture in the air, reduce the dew-point temperature, prevent moisture from condensing on the steel, and lower the rate of corrosion. Another function of dehumidification is in aiding the curing of paints. It regulates moisture condensation in the coating film and expedites the release of solvents.

Thus, the surface temperature falls as the solvents are released. If the surface temperature nears the dew point temperature, water condensation may set in. Solvent entrapment in the film if the solvents do not evaporate is another concern. Air can only hold a certain amount of solvent a given temperature. Since water is a solvent itself, there is little room in the air left for the solvents if relative humidity is high. Hence, lower relative humidity is needed as it allows more solvent to evaporate into the air.

With Airblast B.V's refrigerated type dehumidifiers, all your dehumidification needs are met. The units come complete with a weatherproof control panel and can easily be transported by crane or forklift for your convenience.

Main Specifications	
Model	DH 5000 ME Enhanced Version
Power supply	3-phase plus earth 380V 60 Hz
Operation modes	Dehumidifying with refrigerant cooling and heating and post electric heat
Special Features	New generation refrigerant compressors with few moving parts for reliability, easy maintenance, low starting current, and higher efficiency. Easy maintenance with good accessibility to coils, drain pan and fans. System design for high dehumidification loads with optimum and balanced design of condenser, cooling reheat coils, compressors and refrigerant line piping and protectors.
Process airflow	5,000 CMH
Static pressure	2000Pa (8.03"H2O)
Compressor	30 Nominal Ton Scroll
Process Blower	5.5 kW
Condenser Fans	3kWx2
Reheating capacity	30 kW electric reheat
Power consumption	56 to 77 kW 125 amperes 415v 3ph 50hz
Max. compressor capacity	215kW (184 Mcal/hr)
Cooling media	Air
Refrigerant	R22 (upgradeable to R404A)
Air intake condition	5 deg.C to 50 deg.C RH 24 to 100%
Discharge condition	22-32 deg.C RH below 45%
Cooling step control	50% - 100%
Dew point	5 - 13 deg. C
Evaporator	Copper tube/ Aluminium fins
Condenser	Copper tube/ Aluminium fins
Machine structure	Mobile containerized canopy
Discharge dimension	2 x dia 250mm" nipple
Contactors	Telemecanique - France
Control panel	IP54, Cooling dewpoint temp,, phase sequence control, low & high supply voltages cutout and overload protection.
Temperature control	PLC with multi-stage Controller
Fault status display	Wrong phase/ high & low-R22 pressure fault, overloading, compressor motor winding high temp
Pressure display/ switch	High and low pressure display + safety cutout
Air intake filtration	Washable air filter HF350 white in removable cover filter frames
Weight	3.0 metric ton
External dimension	L2500 x W2000 x H2200