

Namib Series Compressed Air Dryers

Namib units are of the heatless regenerative adsorption type.

They do not remove heat from the compressed air stream in order to condense moisture but remove it by the process of adsorption.

Depending upon the model, a dryer consists of two, four or six vessels mounted in a frame. Half of this number is “on line” and employed to dry the air stream while the remainder is “off line” being regenerated.

Each vessel is filled with desiccant – an inert chemical compound which, when exposed to wet air, attracts and holds water vapour on its outer surface area. It releases the moisture when dry air is passed over it.

Compressed air enters the dryer via a coalescing prefilter which traps bulk oil and water vapour. Air is coursed upwards through one, two or three vessels where water vapour is held by the desiccant. Dry air emerges at the

outlet. Meanwhile a small volume of the dry air is expanded to near atmospheric pressure and passed downwards through the opposite vessel/s to atmosphere taking with it the moisture trapped on the previous cycle.

Dryer operation is automatic and controlled by an electro-mechanical cam timer which activates solenoid valves and cycles the air stream between the vessel banks.

Dried air leaves the dryer via a particulate afterfilter which traps all solid particles greater than 3 microns. Alternatively an activated carbon adsorber may be used to remove remaining oil vapours.

Namib dryers deliver compressed air with a dew point of minus 3°C at 7 bar g as standard - remaining moisture is less than 0,3 grams per 1000 litres of air. Dew points down to minus 40 °C on request.

These units are of simple, robust construction and are not adversely affected by environmental factors such as corrosive atmosphere, dust or humid conditions. Because of their simplicity they are extremely reliable, require little maintenance and can be serviced by untrained personnel.

