SOLARTECH
WHERE SOLAR MEETS ART & TECHNOLOGY

Solar Energy South Africa

Large drying room for wind turbine generator

Overview

What is the right way to dry a wind turbine?

The right way to dry your wind turbine depends on your specific dry-air strategy and how much consideration has been given to the issue of unwanted humidity.

Why do wind turbines need dry-air?

Nearshore and offshore wind turbines (offshore in particular) are exposed to harsh weather conditions and the corrosive combinations of airborne humidity and salts 365 days a year, for the entire duration of their service lives, can have a detrimental impact to the turbine's profitability if there isn't an effective dry-air strategy in place.

Do wind turbines need a dry air dehumidifier?

All wind turbines need a dry-air solution – onshore, offshore or nearshore. From manufacturing through installation, operation and maintenance, Cotes adsorption dehumidifiers protect your assets and production output.

How to dehumidify a dry room?

Large drying rooms and cleanrooms can ideally be dehumidified by use of the stationary adsorption dryers serially numbered from TTR 800 to TTR 13500. They come equipped with the Monoventic control for the regulation of dry air. Another option is the FlowMatic control by use of which the volumetric flow of the dry air is kept constantly.

How does airborne moisture affect a wind turbine?

Such airborne moisture combines with acidic salts in the air to cause corrosion and condensation inside the wind turbine, as well as giving rise to bacterial growth, mould problems and a risky working environment.

Which mobile adsorption dryer is best for dehumidification?

The mobile adsorption dryers of the TTR series are ideal for these high requirements during dehumidification. At present the electronics and semiconductor industry is the sector putting the highest requirements on dehumidification in cleanrooms. For instance, a manufacturer of lithium-ion batteries asks for a relative humidity of only 2 per cent.

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Wind Farms Turbines Humidity Control Solutions

DEHUM has developed a specialist approach to solving the particular issues around wind farms to apply our engineered dry air solutions to wind turbines, both land-based and offshore. The DEHUM Overpressure System is a method of ...

Offshore: Preventing corrosion

Dry room climate reduces maintenance costs. Power plant operators can choose between several high-performance device series from Trotec for dehumidification in wind turbines - by the way, the devices have been developed and produced ...

Dehumidification in wind turbine component depots

Dehumidification in drying rooms. In the production of electronic equipment and semiconductors humidity can lead to electrostatic charge. For this reason, sensitive processing steps are being performed in cleanrooms and drying ...

7 Best Home Wind Turbines (Summer 2024)

The Marsrock Horizontal Wind Turbine Generator is a great, low-cost generator that can work anywhere. With a required wind speed of 2 m/s

(rated at 12 m/s), it can produce up to 400 Watts of power. At 22lbs, the wind ...

Electrical Generators for Large Wind Turbine: Trends ...

The aim of this work is to present the recent commercial designs of electrical generators in large wind turbines. Both the strengths and weaknesses of the existing systems are discussed. The most

Dry-air Solutions for Wind Turbines

The right way to dry your wind turbine depends on your specific dry-air strategy and how much consideration has been given to the issue of unwanted humidity. We provide different dry-air solutions from design collaboration through to ...

Offshore wind turbines operating conditions and the ...

Cotes investigates the effects of uncontrolled humidity in offshore turbines when a non-Cotes adsorption solution causes issues for a Scandinavian wind farm owner. We look at the difference between having no dry-air solution, having ...

How does a wind turbine work?

What is a wind turbine? Wind turbines are the modern version of a windmill. Put simply, they use the power of the wind to create electricity. Large wind turbines are the most visible, but you can also buy a small wind turbine ...

The 5 Best Home Wind Turbines for Clean Energy ...

Rated power: 2000 W; Voltage: 24 V; Cut-in Wind Speed: 7 mph; Wind speed rating: 28 mph Maximum wind speed: 110 mph; The Nature Power Marine Wind Turbine is a great option if you live in an especially wet ...

Dehumidification in drying rooms

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