

Humidity Control for Electrode Storage

Welding is an important tool for efficient maintenance of plants and quality fabrication in industry. The welding electrode or rod consists of a metal wire with a baked chemical/mineral coating. The coating of the electrode holds the key to quality welding

Welding defects caused due to poor quality and weak welding are a nuisance because

- It is unsafe and unreliable
- Weak welds are dangerous for heavy machinery or large structures
- It gives a flawed finish

Effects of Uncontrolled Humidity

- Increased arc voltage
- Spatter loss (liquid metal expelled from welding process. Spatter leaves behind undesirable dots of metal.)
- Underbead cracking (which is not directly visible and which may result in premature breaking of the joint)
- Poor slag removal
- Porosity in weld deposit

Causes of Uncontrolled Humidity

The susceptibility to increased hydrogen from atmospheric exposure is a function of electrode manufacturer, packaging method, storage time and possibly diameter. Within manufacturers, the conditions that may influence the rate of moisture absorption include factors such as percent fill of electrode, tightness of joint, rolling vs. drawing, fluxing ingredients and lubricant types

Bry-Air Solution

Bry-Air Dehumidifiers: ensures longer shelf life of electrodes and eliminates welding defects.

Bry-Air Desiccant Dehumidifiers have effectively maintained the exact condition for welding electrode storage not only at L&T but also at Philips, Alstom Power, Cochin Shipyard, Indian Oxygen, etc. A relative humidity of 40±5% RH at ambient temperature during manufacture, storage prior to packaging, packaging and bulk user storage is essential for retaining the quality of the mineral coating of the welding electrode. Bry-Air's large range of standard and engineered Dehumidifiers ensure longer shelf life of electrodes.

