



NIHONWELD

STORAGE AND HANDLING

Recommendations for Storage, Redrying and Handling of NIHONWELD Covered Electrodes

GENERAL

All covered electrodes should be properly handled and stored to prevent moisture reabsorption. Moisture reabsorption is very likely to happen in all covered electrodes.

STORAGE

Bulk storage of covered electrodes require not less than 21°C air temperature. Unopened boxes of electrodes should be stored under warm and dry conditions that are maintained at all times to avoid possible absorption of moisture that permeates through the packaging and the flux coating. Once the boxes have been opened, the flux coating readily absorbs moisture. The rate of moisture absorption, however, depends on the prevailing atmospheric conditions at the place of storage or work site.

REDRYING

Rutile Electrodes

Mild steel and acid electrodes normally need no redrying because they require a small amount of moisture for best running characteristics. But if the electrodes become damp, redrying at a temperature between 70°C – 170°C can be done for 30 minutes. If possible, test weld the electrodes for running characteristics during the redrying period, to avoid over drying.

Cellulosic Electrodes

Cellulosic electrodes should not be redried because they require a fairly high percentage of moisture for optimum operating characteristics. Redrying, however, can be done at temperature between 60°C – 90°C for 30 - 60 minutes, when the electrodes become over damp. Redrying condition specified in the box of electrodes should be followed.

Low-hydrogen Electrodes

These electrodes should be redried at temperature between 300°C – 400°C for a period of 30 – 60 minutes.

Acid Rutile Stainless Electrodes

Redry the acid rutile stainless electrodes especially if they have not been stored under sufficiently dry condition. Doing so will restore its usability.

REDRYING CONDITION

Both the redrying temperature and holding time are specified in the product data sheet of each welding electrode and in the label of the boxes. Redrying time or holding time starts when the redrying temperature is reached. The pile of electrodes in the drying oven should not be more than four (4) layers to ensure uniform redrying. It is also not recommended to redry covered electrodes more than three (3) times.

PRECAUTIONS IN THE WORK SITE

When welding on site, the electrodes should be stored in portable oven near or beside the welder, and kept at temperature between 21°C – 100°C.

A welding shop should have dented cabinets with perforated shelves, wherein the electrodes will be stored at temperature between 21°C – 100°C, depending on the type of electrode.