

Storing, Re-drying and Recycling of Flux

For Submerged Arc Welding

● **Storage**

Common rule for stock is: first-in, first-out / separating flux lot-No., including recycled fluxes.

Unopened flux bags, drums or big-bags must be kept under properly maintained and controlled storage conditions as follows:

- Temperature Should be between 5°C and 50°C
- Relative Humidity As low as possible, not exceeding 80%

Fluxes stored according to these conditions could store 3 years after date of manufacturing. The content of unprotected flux hoppers must be placed in a drying cabinet or should be kept in heated flux hoppers at $150 \pm 25^{\circ}\text{C}$. Remaining flux from opened bags or drums must also be kept at $150 \pm 25^{\circ}\text{C}$ before actual use. The pile-up of pallets shall be no more than 3 stacks to prevent damaging packages. Product shall not put on the floor directly. There are always wooden pallets existing between packages and floor to remain ventilation.

● **Re-drying**

1. It is recommended to Re-dry the flux at a temperature of 300°C to 350°C for a minimum of 1 hours before using.
2. When handled and stored as mentioned above, the PEAL bag flux can normally be used as they are. It need not baking when first time open the package.
3. If, however, a severe application (as given by the material specification) is considered, re-drying of the flux is recommended.
4. Severe moisture contamination may increase the time at temperature required for complete drying.
5. Drying temperatures in excess 450°C is not recommended.
6. Do not attempt to re-dry flux in drums or any large containers where penetration of the heat throughout the entire mass is difficult.
7. Re-drying should be made maximum three times.

● **Recycling**

- 1) For cleaning or collecting non-fused flux, only proper wire-brushes should be used to avoid flux contamination.
- 2) Moisture and oil must be removed in a suitable way from the compressed air used in the flux-recovery system.
- 3) Sieve out the slag and impurities from the flux with #10 sieve(ASTM).
- 4) When the recycled flux is used in the following days, the flux must be re-dried at 350°C for one hour before use.
- 5) When re-dry the flux, stack the flux not exceeding 50mm to ensure drying uniformly.
- 6) The rate of recycled flux addition is not more than 1/2.