JOBSITE HANDLING & STORAGE SUGGESTIONS FOR CONDENSER & HEAT EXCHANGER TUBING

A wood box full of tubes and suitably banded is essentially a beam of uniform section and weight per foot. Therefore, its center of gravity is also the geometric center of the package. Within our plant, we normally lift boxes using a 60 foot (18.3 meters) long steel I-beam measuring 10" x 10" (254 mm x 254 mm) weighing approximately 77 lbs/foot (115 kg/m). We use 8 foot long (2.44 m) nylon web slings measuring 2" wide (51 mm) rated at 6,400 pounds (2,900 kg) for basket configuration lifts. These slings are spaced equally along the length of the box at approximately 6 foot (1.8 m) intervals, slung under the box and attached to each side of the spreader beam by large construction hooks bolted to the beam flanges.

Spreader beam/sling design and use is a relatively well known technology, but care in use and operation is a vital factor for safe use. All lifting equipment must be suitably rated, inspected, and approved; and operators should be well trained. Boxes should be carefully handled and not dropped.

Inside storage of boxes in a clean dry environment is recommended, but boxes may be stored outside if adequate precautions are taken.

Boxes may be stacked 4-high, and should be place on a concrete pad or on equally spaced railroad ties or other heavy timber which are level and elevated sufficiently to prevent ground water, surface runoff, etc. from coming into contact with the boxes. If temporary roofing is not available, the stacked boxes should be covered with a tarpaulin, heavy duty plastic, or a suitable alternative to provide protection from the external environment. Arrangement of the cover should allow for sufficient ventilation to prevent temperature and humidity buildup within the boxes during seasonal changes. The cover should not rest on the top row of boxes and it should be adequately secured to prevent blowing off during windy periods. When securing the cover, caution should be exercised to prevent nails or other objects from penetrating any of the boxes. The cover should be checked regularly to assure that it remains intact.

Whereas contamination is not normally a problem with packaged tubes, reasonable care should be taken to keep the boxes and the tubes free of dirt, debris, excessive water, acids, urine, small animals, and other environments that may be harmful; acidic, sulfide, and ammonia atmospheres should be avoided where moisture is present.

It is especially important to keep water out of the tubes during times when freezing temperatures may be expected.

These suggestions are provided as a service by Fineweld Tube and should not be construed as an acceptance of liability for damage to property or persons.