

Technical Resource

EXPORT PACKAGING RECOMMENDATIONS

Export shipments require various demands to packaging that are not normally seen with domestic shipments. Exporters should keep four potential problems in mind when designing an export shipping crate: breakage, moisture/corrosion, pilferage and excess weight. These recommendations are going to focus on moisture and the corrosion that can occur due to moisture, salt air and other contaminants.

Generally, cargo is carried in containers, but sometimes it is still shipped as break bulk cargo. During the voyage, goods may be stacked on top of the deck or down below. Both scenarios pose significant challenges in terms of corrosion. Overseas, handling facilities may be less sophisticated than in the United States and the cargo could be dragged, pushed, rolled, or dropped during unloading, while moving through customs, or in transit to the final destination. All of these occurrences can put the cargo at risk of corrosion unless packaged properly.

Moisture is a constant concern because condensation may develop in the hold of a ship even if it is equipped with air conditioning and a dehumidifier. Another aspect of this problem is that cargo may also be unloaded in precipitation, or the foreign port may not have covered storage facilities leaving the cargo exposed for lengths of time to severe weather. Use of ARMOR VCI products are advantageous as they eliminate the need for greases and oils and keep the units being packaged, clean, dry and corrosion free, when used properly.

Buyers are often familiar with the port systems overseas, so they will often specify stringent packaging requirements. If the buyer does not specify this, be sure the goods are prepared using these guidelines:

- Pack in strong containers, adequately sealed and filled when possible.
- Line the container with at least a 4 mil, <u>quality</u> VCI bag. Be sure to seal properly.
- To provide proper bracing in the container, regardless of size, make sure the weight is evenly distributed.
- Goods should be palletized and when possible containerized.
- Packages and packing filler should be made of moisture-resistant or VCI (vapor corrosion inhibitor) materials.
- To avoid pilferage, avoid writing contents or brand names on packages. Other safeguards include using straps, seals, and shrink wrapping.
- It is best to use a combination of ARMOR VCI films, papers, emitter and desiccants for best overall protection.

See ARMOR "Packaging Recommendation Illustrations" and application photos for further clarification of proper packaging methods.

Please note that these recommendations are based upon "Best Practices" developed by Armor Protective Packaging® professionals in conjunction with our customers. Since every situation is different, ARMOR recommends conducting a "real life" test shipment for best results.

For additional information, visit <u>www.armorvci.com</u> or contact <u>info@armorvci.com</u>