

PROVEN SOLUTION LONG TERM PRESERVATION EXPORT SHIPMENT COVER FOR C-130 PROPELLER



Application

A large aircraft manufacturer was experiencing problems with corrosion occurring on propellers for C-130 aircraft upon receipt from suppliers and when shipping spares to customers. The fourteen foot diameter propellers are mainly constructed from composite materials, however the hub contains sensitive control mechanisms that are susceptible to corrosion.

Solution

Heritage Packaging designed and fabricated a two piece circular cover from Cepac HD200 (a heavy duty barrier lamination from Controlled Environment Packaging, Inc. of Buford GA). The cover has 1/4" PE foam sealed at key locations on its interior surface to cushion against protruding points. The cover's design allows for "thru-bolting" the propeller to a mobile dolly while maintaining an airtight seal. 16 unit Desipacks are strategically placed inside the cover. The two pre-made parts of the cover are then heat sealed together around the outer perimeter. Then, utilizing a one way valve installed in the cover by Heritage Packaging, a vacuum is drawn, the cover is nitrogen flushed, and then a final vacuum is drawn. The goal was to maintain consistent interior humidity readings below 40%.

Results

Humidity levels are monitored on a monthly basis using a digital read-out thermo hygrometer. The covers have consistently maintained humidity levels below 20%.

