

Advanced Adhesive Bond Shape Tailoring for Large Composite Primary Structures Subjected to Cryogenic and Ambient Loading Environments

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DESCRIPTION

This technology is a adhesive bond shape tailoring system for bonding large composite primary tube structures in cryogenic environments. The system has a surface along a predefined outer boundary of a bond area for defining remaining open area, where the surface is applied with a strip of adhesive. Another surface is affixed onto the strip of adhesive before the strip of adhesive is cured. The strip of adhesive is allowed to substantially cure and initially bond the former and the latter surfaces. Another strip of adhesive is applied to cover the remaining open area and substantially fill a void between the former and the latter surfaces within the bond area.

FEATURES AND BENEFITS

- The adhesive has a shape that enables its application on the primary structures accurately and precisely, so that bond strength can increased for meeting requirement, thus reducing susceptibility to cryogenic temperatures and high stress environments, and hence reducing need for cleaning primary structure areas that have limited access.

APPLICATIONS

- Bonding Composites

FOR MORE INFORMATION

If you are interested in more information or want to pursue transfer of this technology, GSC-15377-1, please contact:

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