

MANUFACTURING ENCAPSULATING PROCESS CAPABILITY

Maritime Services provides manufacturing and through-life support services of highly complex electronic integrated systems, sub-systems and modules for high integrity applications.



Conformal coating

Parylene deposition using Parylene plant 2060PC, for coating of conventional type PEC's, microwave type substrates, antenna assemblies and high voltage electronic modules

- Windows driven PC for controlled process management / monitoring throughout process cycle
- Chamber dimensions: - 55cm depth x 43cm dia
- Coating thicknesses ranging from 2 microns up to 50 microns
- Parylene dimer type DPX-C (with UV trace to aid visual inspection)
- In-line adhesion promotion (to aid production turn-around)
- Inbuilt safety features to comply with Safety, Environmental and Health regulations in the event of an enforced emergency shutdown
- Inbuilt ups (uninterrupted power supply) for protection of operators and work items in the event of an emergency shutdown.

Vacuum impregnation using an autoclave

- Encapsulation of high voltage equipment using epoxy resins, silicone adhesives and varnishes whilst under vacuum, where the exclusion of air is paramount
- Ability to pressurise vacuum impregnated items during the cycle up to 70psi.

Spraying application of conventional conformal coating (varnishes etc)

- Acrylics (humiseal range)
- Polyurethanes (single pack and twin packs)
- Modified silicones (single pack)
- Modified alkyd urethanes.

Encapsulating using all types of epoxy resins and adhesives

- General encapsulation of electronic assemblies both high and low voltage
- Addition of fillers and silica's if required.



Vapour condensation reflow capability

- For the reflow of solders on equipment requiring components to be hermetically sealed
- Machine type ASSCON VP-6000 for high melting point solders (96 S etc) (whilst under vacuum)
- Machine type ASSCON VP-53 for low melting point solders (62 S etc) (not under vacuum).



Mass spectrometer

- Machine type Edwards Spectron 600T
- For checking hermeticity of fitted components, within microwave type products, using helium
- Used within ranges of 1×10^{-2} and 1×10^{-9} .

BAE Systems Maritime Services

Broad Oak, The Airport, Portsmouth
Hampshire, PO3 5PQ, United Kingdom
Tel: +44 (0) 2392 226000
Fax: +44 (0) 2392 226001
email maritime.services@baesystems.com
www.baesystems.com/maritimeservices

Disclaimer and copyright

This document gives only a general description of products and services and except where expressly provided otherwise shall not form part of any contract. From time to time, changes may be made in the products or conditions of supply.

Unpublished work © 2014 BAE SYSTEMS. All rights reserved.

The information contained in this document is proprietary to BAE SYSTEMS unless stated otherwise and is made available in confidence; it must not be used or disclosed without the express written permission of BAE SYSTEMS. This document may not be copied in whole or in part in any form without the express written consent of BAE SYSTEMS which may be given by contract.

BAE SYSTEMS is a registered trade mark of BAE Systems plc.

02.12.BC108907A.v06