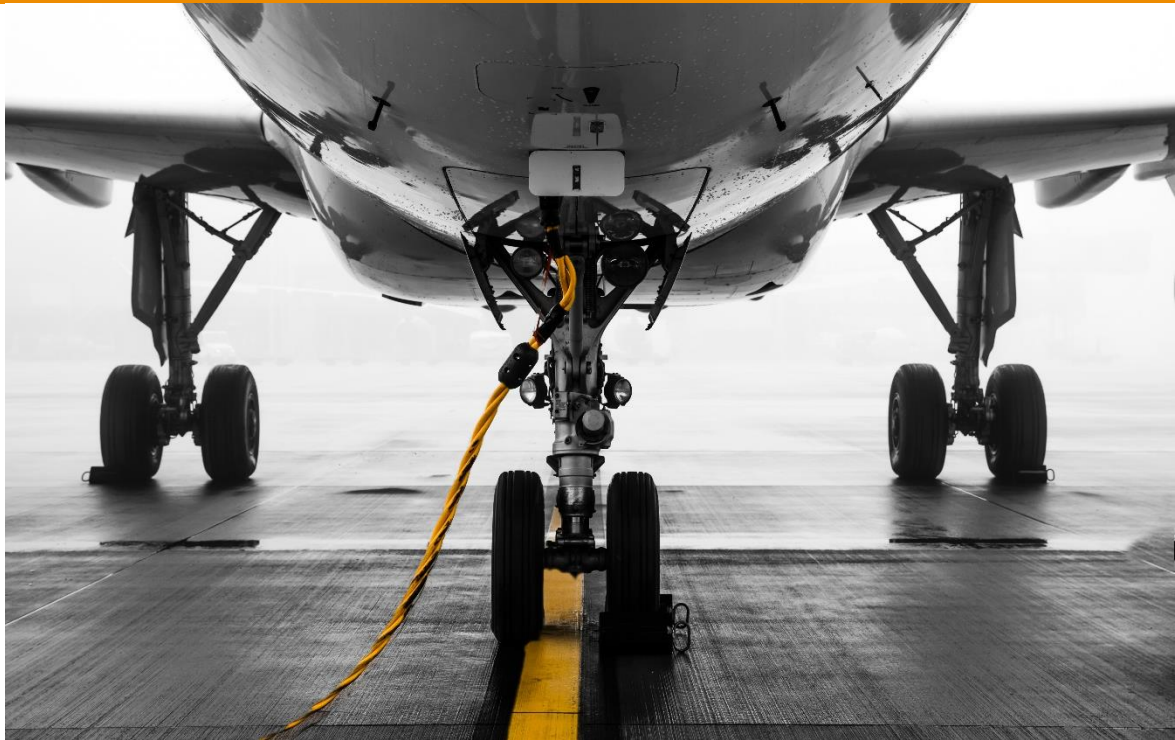


Dymax SpeedMask®

UV curing temporary
masking liquid

Dymax BlueWave® 200

UV curing system



Customer

Aerospace landing gear
and actuation
manufacturer

Customer benefits

- Process time reduction to under 45 minutes
- Improved part quality
- Reduced scrap and rework

Improving masking process for electroless nickel plating in Aerospace and Defense applications

An international company specialising in manufacturing and repairing landing gear and actuation systems for the aerospace market was looking for efficiencies in their electroless nickel plating process. Their target was to automate the masking process and increase throughput.

The customer's original process involved applying 2-3 coats of lacquer-based temporary mask to achieve the necessary thickness prior to the electroless nickel plating of landing gear components. The customer's manual brush application time of the lacquer temporary mask was 45 minutes per coating (between 1.5 and 2.5 hours per component). Air-drying the parts also added a minimum of 8 hours to their production time. The customer ran production one shift per day; the masking (application and drying) process took up to 3 days (72 hours). Inconsistencies in the manual brush masking application caused rework and a scrap rate of 10%.

Following a meeting with the customer to review their process and understand their needs, the Dymax team selected a UV-curing masking liquid and light curing equipment that addressed the customer's needs. They proposed Dymax SpeedMask® 7601 temporary mask, to be applied with a spray valve system and cured with the Dymax BlueWave® 200 UV curing system. The SpeedMask changes colour from pink to yellow-green upon proper curing, providing straight-forward visual quality control assistance.

By adopting the Dymax masking process, the customer was able to considerably reduce cycle times to less than 45 minutes. In addition, the spray application

continued on next page

improved part quality, and consistency and reliability of the SpeedMask helped to reduce scrap and rework.

Paul Whitehead, Strategic Accounts Manager at Intertronics, said:

“Many of our aerospace and defence customers have found that Dymax Speedmask® materials, as a replacement for tapes, waxes and lacquers, offer the ability to mask complex shapes in one application and cure quickly on demand. This in turn has reduced work in progress, improved quality and increased throughput.”

Dymax SpeedMask UV Curing Temporary Masking Liquid

- Apply and cure in seconds
- Reduce labour, rework and scrap
- Easy to automate
- Environmentally and worker friendly
- Metallurgically neutral
- Minimal capital investment
- Major OEM approvals

Applications include: Masking for acid stripping, anodising, chemical milling, and plating. Dymax advanced technology SpeedMask UV resins, curing lamps and accessories simplify regulatory compliance, and bring efficiency and cost reduction to new parts manufacturing, overhaul and repair, turbine and metal finishing, as well as orthopaedic implant, surgical instrument and medical device component processing. Clean burn-off grades and peelable and water soluble masks are available.

Dymax BlueWave 200 UV Curing System

- More than 17,000 mW/cm² initial intensity – for fast, reliable cures
- Patented intensity adjustment feature – giving you full control
- Easy-to-read, back-lit front panel LCD display with enhanced unit status and notification displays
- Improved user interface for easier operation
- Up to 2,000 hours useful bulb life, 2,000 hours bulb warranty
- Integral shutter with digital timer
- Foot pedal or PLC integration
- Proprietary “Cool Blue™” filter virtually eliminates lightguide degradation
- Wide range of lightguides available (liquid/fibre, single/multi-pole, various lengths)
- Bulb changes in less than one minute
- Universal power input operates worldwide
- Controlled power-up sequence ensures correct intensity is achieved before use
- Smooth front panel surface that is easy to clean, suitable for cleanroom use

Applications include: UV curing of adhesives, coatings, encapsulants, and masking liquids



Contact us for more information on our temporary masking materials and UV curing equipment

t 01865 842842
e info@intertronics.co.uk
www.intertronics.co.uk

intertronics

Station Field Industrial Estate
Banbury Road, Kidlington
Oxfordshire, England OX5 1JD

201910