

# Medical device adhesive case study published in BP&R

Thank you to [British Plastics and Rubber](#) magazine, who feature one of our [recent application stories](#) regarding [Brandon Medical](#) in the latest issue. The company used one of our [LED UV curing plastic bonding adhesives](#) to save production time.

## ADHESIVES & BONDING | NEWS

**CASE STUDY: INVENTORABLE UV ADHESIVE SYSTEM CURES TIME PROBLEM FOR BRANDON MEDICAL**

UK-based manufacturers of medical and hospital lighting products, Brandon Medical, says it has saved a "considerable amount" of time in the production process of a theatre lamp thanks to the use of a UV adhesive system.

Brandon Medical was experiencing problems bonding three polycarbonate lenses together to make the stage front lens of its 'Queen of the' operating theatre lamp, where extended curing times for adhesives were creating a bottleneck in the production process and interrupting workflow.

"The two-part epoxy we were using had an intended set time, so we were looking for an adhesive which allowed us to handle and position the parts easily with an intended set time, and then to cure quickly using UV light," explained Brandon Medical's Technical Director, Nigel Davis.

The problem with this approach was that, although the parts to be bonded are visually checked, the material has UV absorbing properties so getting the right amount of light curing energy to the joint appeared to be tricky.

Adhesive systems specialists, Interfrank, provided a solution in the form of its Dynas 2225-15G adhesive to bond the lenses.

"Our Dynas 2225-15G is highly suited to this application - it is a single part UV curable light



Brandon Medical now the UV adhesive system for the manufacture of its theatre-lamp lens.

curable adhesive which bonds to polycarbonate and many other plastics," explained Interfrank's Matt Baskley.

The adhesive is readily dispensed - in the case of Brandon Medical by using a syringe robot - and typically cures in a few seconds. The adhesive used also has properties of colour change features, known as Dynas FlowCure (S2), where the product goes from clear to clear when fully cured, so that dispensing and cure can be checked visually.

Baskley continued: "Brandon Medical can have reassurance of the correct adhesive amount in the bottlenecks and adequate cure. No required in-line UV curing lamp

with a 100W/cm<sup>2</sup> emitting window, allowing it to be mounted on the robot, which dispenses the adhesive to 300cm high intensity spot over the UV absorbance of the polycarbonate, providing enough light curing energy to give Brandon Medical fast cure, with less heat introduced into the polycarbonate modules compared with broad spectrum lamps."

Concluding, Davis says that the use of the UV adhesive system "very successfully resolved things" and saved Brandon Medical a "considerable amount of time in the production process."

[WWW.INTERFRANK.CO.UK/ADHESIVES](http://WWW.INTERFRANK.CO.UK/ADHESIVES)

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