

Press release
February 2020

ContiFoam ensures quality at reduced costs

The British manufacturer ASD Lighting PLC has been producing a wide range of lights for various applications since 1983. To keep the promise "delivery in one week", the sealing process is now carried out in-house. The high-precision ContiFoam foam dosing technology from Reinhardt-Technik selected for this purpose ensures high production quality at reduced costs.

The challenge:

Around 250 employees at ASD Lighting in Rotherham in the UK manufacture all types of luminaires with a high level of technical expertise. Until recently, one of the few externally contracted jobs was sealing the luminaires to IP65 standard. "This production step was carried out by a supplier 300 km away. The large, powder-coated die-cast aluminium parts had to be packed in a complex way, which resulted in high costs and frequent delivery problems", explains project engineer David Butler. In order to implement the philosophy "delivery within one week after order", the company invested extensively in in-house production.

For this, ASD set out in search of the perfect sealing foam. A 2-component application was not an option because of the necessary handling of the harmful isocyanate. After intensive market research, the moisture-curing 1-component sealing foam "Dynafoam" from Saint-Gobain proved to be the ideal solution. For a safe and high-quality application, the manufacturer from Belgium recommended the proven ContiFoam dosing system from Reinhardt-Technik. For ASD, this combination of sealing foam and application proved to be the most economical solution in terms of machine investment and running costs.

Prior to the purchase decision, components were foamed with a 6-axis robot and the ContiFoam dosing unit in the Reinhardt-Technik technical centre in Kierspe. The results in the laboratory convinced ASD Lighting right away that Reinhardt-Technik was the right partner for a reliable application.

The solution:

The components are placed in special holders by the operator. A 6-axis robot first carries out the plasma pretreatment and then the exact foam application.

The material is conveyed to the foaming unit from a 200 litre delivery container. There it is physically foamed by means of controlled and monitored in-line nitrogen dosing, homogenised and supplied to the dosing and outlet unit. This is mounted on the 6th axis of the robot. For faster curing, the foam is finally wetted by a spray nozzle.



During the application the working area is protected by a light screen. After processing, the operator places the components on a conveyor belt, where at the end the finished foamed components are packed.

In order to use the operator's removal and loading time, additional components are processed in parallel with plasma and foam application. A second robot automatically removes these components from a component stillage, places them in the component holders and then deposits them back in the component stillage.

The customer experience:

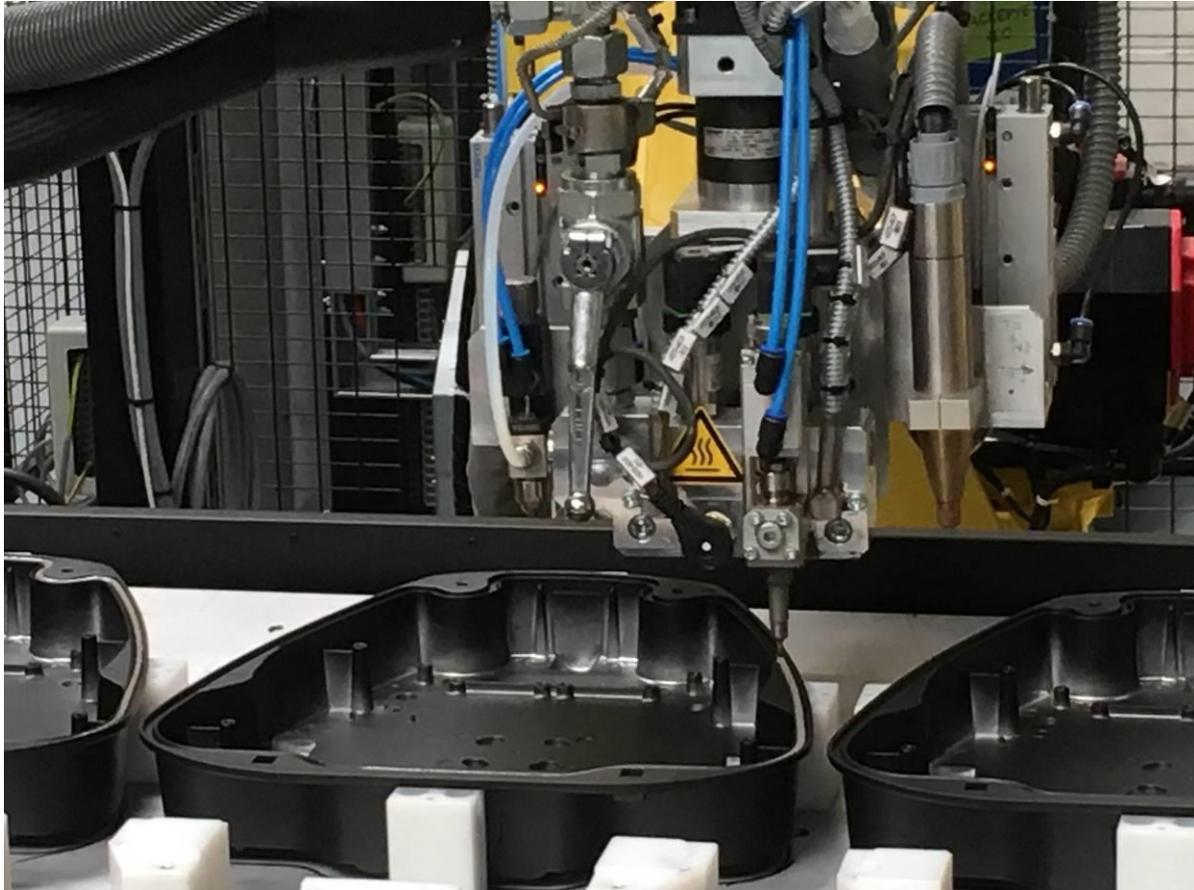
Thanks to the innovative and reliable ContiFoam foam dosing technology from Reinhardt-Technik, ASD can safely meet the total processing time of approximately one week between receipt of order and delivery.

The metered inline gas injection, the exact pressure control and the uniform temperature control of the ContiFoam system from Reinhardt-Technik offer highest process reliability and achieve qualitatively excellent results. The mechanical coupling of the volumetric gear metering with the outlet valve results in high metering accuracy and dynamics.

"The comprehensive and competent advice, the immediately successful application tests and the valuable support provided by Reinhardt-Technik during the project phase were a great help to us," says David Butler. Thanks to clearly structured software and intuitive user interface, the system could be operated by ASD itself immediately after installation and commissioning.

At the same time, the ContiFoam dosing system has proven to be very low-maintenance and user-friendly. All in all, ASD has been able to greatly minimise the logistical effort compared to outsourced production.

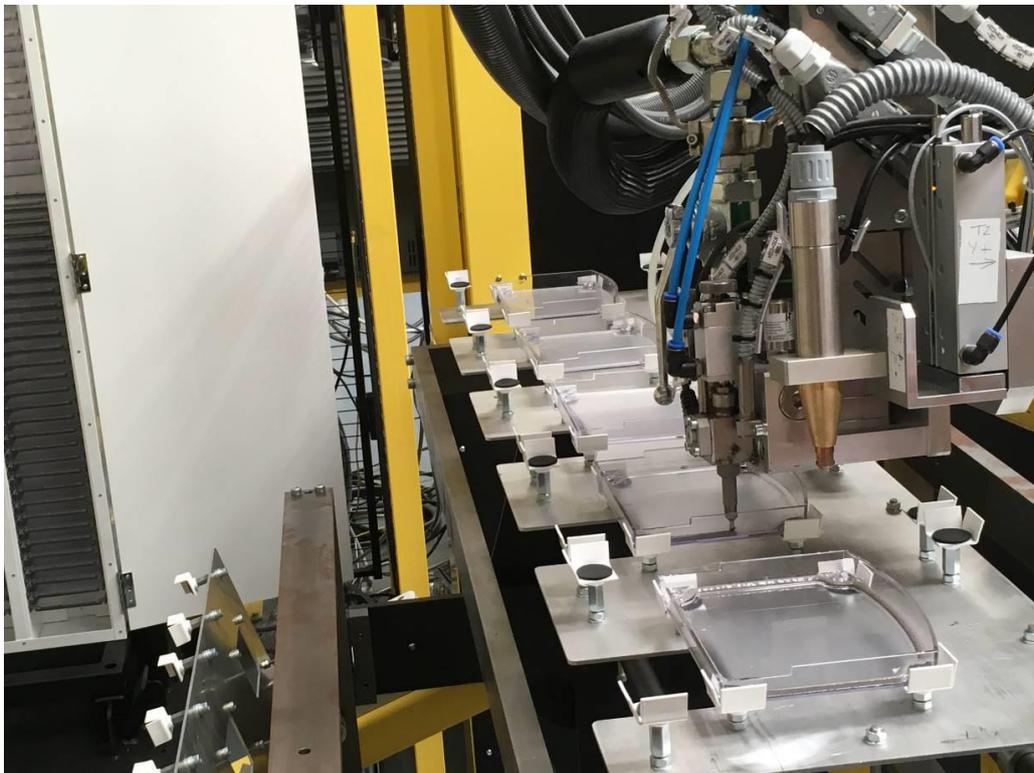
With the ContiFoam dosing technology, ASD saves costs and ensures a high quality standard in the long term. At the same time, know-how in foam application has also been gained. This helps ASD to increase its market position and to bring technological advantages to new developments for its customers.



Picture 1: Dosing and outlet unit, as well as plasma head and spray nozzle on the 6th axis of the robot



Picture 2: Component warehouse with automatic removal and loading by means of a handling robot



Picture 3: Application of the sealing foam to the components from the component stillage



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About Reinhardt-Technik GmbH:

Within the WAGNER Group we represent the worldwide competence center for bonding and sealing. We are one of the leading suppliers of dosing and mixing technology for the processing of liquid plastics in the areas of bonding, sealing, potting and surface coating. Furthermore, we offer our customers the complete automation of the systems in cooperation with partners as a complete solution.

More information at www.reinhardt-technik.com

About WAGNER Group:

J. Wagner GmbH is one of the world's leading manufacturers of equipment and systems for surface coating with powder and liquid lacquers, paints and other liquid materials. The WAGNER Group portfolio also includes bonding, sealing and encapsulation technology including injection moulding with the brands WAGNER, Titan, Walther Pilot, Reinhardt-Technik and CA Technologies. The beginnings of the company go back to the year 1947. Today the innovative coating technologies of WAGNER are used in industry as well as by craftsmen and do-it-yourselfers and set standards in the industry. The WAGNER Group is represented worldwide by around 1,600 employees in 15 operative companies and around 300 agencies. Owners of the WAGNER Group are the Josef Wagner Foundations, which pursue exclusively charitable goals.

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