

Press release  
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## Automated adhesive dosing reduces unit costs

**The success of a new fuel filter made it necessary for a well-known filter manufacturer in Germany to switch to automatic encapsulation. Reinhardt-Technik GmbH, a member of the WAGNER Group, had the solution with a complete automation cell including robot and modular 2K dosing technology.**



The filter solutions of a globally present manufacturer from Germany meet the highest quality requirements in all industries and branches. In addition to oil, air, fuel and hydraulic filters for mobile and stationary applications, the product range also includes special product areas. These include ventilation and air-conditioning technology, water filtration, protective ventilation systems for e.g. landfill vehicles, soot particle filters for industrial trucks and many other areas of application.

The production of filters is a high-precision process. Narrow tolerances and fine materials require precise assembly processes, in which many work steps have to be carried out manually. A decisive factor for the stability and longevity of filters is the bonding between the filter surface and the receptacles. The dosage and filling of the special adhesive significantly determines the quality of the product. A newly developed fuel filter for the automotive industry was a complete success and enjoyed steadily increasing quantities. In order to ensure the readiness for delivery and the quality level even at high output, the filter encapsulation, which had previously been carried out manually, had to be automated.

### **The solution is an automation cell with Vecdos eTwin**

The filter manufacturer's technicians looked for a partner for a technical encapsulation application that would enable maximum process reliability with short cycle times. In addition, an expandable system was required which could be continuously adapted to the increasing quantities.

In cooperation with Schnaithmann Maschinenbau GmbH, Reinhardt-Technik GmbH presented an automation concept with the Vecdos eTwin 2K dosing system which exactly met the requirements of the management and development department of the filter manufacturer. "The precise, modular dosing technology exactly met our requirements for a flexible, process-reliable and expandable dispensing solution," says the customer's development and production manager.

The Vecdos series from Reinhardt-Technik belongs to the servo-driven high-performance dosing systems. These have been specially developed for demanding applications in shot operation. The volumetric dosing units are modular and can be flexibly combined to process different mixing ratios according to customer requirements. The Vecdos product range is especially designed for difficult and abrasive materials as well as for very small shot volumes.



The complete automation cell including robot and dosing system



The 2K dosing system Vecdos eTwin precisely and reliably doses the casting compound with short cycle times.

"The closed control loop of dosing technology offers unsurpassed reliable and repeatable precision for every dosing application. The modular 2K dosing system Vecdos eTwin, used by our customer, is mounted on a frame next to the application point. This ensures short hose runs. As a general contractor, we know how to develop and implement the complete dosing process from the technical inquiry to the turnkey, automated solution together with our customer", explains Guido Hamel, Area Sales Manager North/West at Reinhardt-Technik.

### **The test runs at Reinhardt-Technik are definitely convincing**

In the pilot plant of Reinhardt-Technik GmbH in Kierspe, the dosing technology was set up for trials. This allowed the networked system to be thoroughly tested and the optimum adherence to the dosing parameters of the adhesive to be determined. The responsible persons of the filter manufacturer were equally convinced by the high competence of Reinhardt-Technik in adhesive and plant technology as well as by the price-performance ratio. It quickly became clear that this dosing cell with Vecdos eTwin technology would reduce unit costs and at the same time increase the quality level of production. After the successful trials, the automation was jointly designed by Reinhardt-Technik and Schnaithmann. After completion, Reinhardt-Technik delivered the complete turnkey solution to the filter manufacturer's production line and carried out commissioning and training there.



Reinhardt-Technik and Schnaithmann Maschinenbau GmbH delivered the complete turnkey automation cell including robot and dosing.

Immediately after commissioning and product training, the automated casting of the filters started. After one year of production, the filter manufacturer's production manager draws a positive conclusion: "We had high expectations of Reinhardt-Technik, which were even exceeded. Thanks to automation, we manufacture the new fuel filter in large quantities with maximum process reliability. The precise dosing enables minimum consumption of the potting compound. Together with the reduction of manual operations, the unit costs decreased measurably. With the automation cell, robot and Vecdos eTwin 2K dosing system, Reinhardt-Technik has supplied us with an automated system that more than meets our requirements and is designed for future expansion."



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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. In addition, we offer our customers complete system automation as a complete solution from a single source.

More information is available at [www.reinhardt-technik.de](http://www.reinhardt-technik.de)

#### 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.

More information is available at [www.wagner-group.com](http://www.wagner-group.com)