

V&V Engineering increases production capacity through automation

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Christophe Michiels

V&V Engineering is a specialist in the rapid development of injection and thermoplastic moulding of prototypes and small series, but can also produce medium-sized and larger series. This Ypres-based SME also performs maintenance work on external moulds.

Currently, the company only produces moulds during the day, but to ensure it can continue meeting demand, V&V Engineering ought to have multiple daily production runs. The challenge was to make this happen with the lowest possible investment and without requiring additional staff.

The company and Sirris experts examined where they could optimise processes within the framework of the Factory 4.0 project. Currently, all material from the injection moulding machine is collected in a single receptacle. After the production process has been running for a few hours, the receptacle is overflowing and needs to be manually replaced and processed.

Dual solution

A decision was made to split the issue. The solution required the design of a system to separate the effective product from the waste material, along with another system to automate the waste flow distribution into multiple receptacles.

Research was conducted into the various options for both challenges, then the findings were submitted to V&V Engineering. The company decided which solution would be the best fit for both the separation of material streams and for the autonomous navigation of waste material to multiple receptacles.

Both machines have been purchased and delivered. Once they have been installed, it should be possible to start a new run in the late afternoon, to continue all night. If everything goes as planned, it should be possible to conduct research into and implement further optimisation of the processing of the finished product.

The research conducted at V&V Engineering shows that a 'relatively simple' automation solution can significantly increase production capacity.

Authors



Christophe Michiels