

Moules & Outillages de Bourgogne

Mould Maker Integrates Three Vero Software Packages

A leading French mould, die and tool maker, who uses wax model injection technology, integrates WorkNC CAM software with the WorkXplore 3D file viewer and WorkPLAN manufacturing software solution, to run all parts of its business.

Moules & Outillages de Bourgogne designs and manufactures a variety of moulds and tooling equipment for foundries which use the lost wax casting process. This manufacturing process is particularly well adapted to the most demanding markets, requiring high levels of quality and state-of-the-art engineering in sectors such as aeronautics, energy and medical prosthetics; three domains in which MOB has successfully built its reputation.

Every stage of the job is managed by one of the three packages from Vero Software. The process begins when Jean Etienne Patenet, CEO, uses WorkXplore 3D to open CAD files sent by customers and makes a detailed analysis to quickly check and determine the required tooling equipment to be produced.

"The comprehensive set of easy-to-use analysis tools is particularly useful for helping us to appreciate any potential difficulties in order to provide the most accurate quotations. Dynamic sectioning means we can quickly and precisely examine the interior of a part or assembly. Planar face, curve and minimum radius analysis provide a rapid way of evaluating the most time-consuming and problematic tasks."

He says staff with no CAD experience can easily use WorkXplore 3D to examine any type of file, whatever their origin, and pass on key information to customers, colleagues and suppliers. "Predefined scenes, including views of the model and different orientations, along with notes and dimensions, can all be added. And WorkXplore also generates a stand-alone application containing the 3D model and assemblies, which can be emailed. Recipients can immediately open and work on the file without having to dispose of the original CAD application in which the model was initially created.

"This allows mould designs to be validated rapidly, and saves us a great deal of time."

Even greater levels of efficiency are achieved with WorkPLAN Manufacturing Software Solution. The Planning module is their main indicator for monitoring the production workload, allowing them to be proactive, reactive, and anticipate any bottlenecks. "Being able to indicate reasonable, reliable and realistic lead times to our customers significantly enhances our credibility."

Jean Etienne Patenet adds: "We were working with a different system, but switched to WorkPLAN which met our requirements perfectly, as it's specifically designed for custom manufacturing." All information coming from all parts of the business, including the sales team, administration, production,



About The Company:

Name:
Moules & Outillages de Bourgogne

Business: Mould, die & tool maker

Web:
<http://www.moules-outillages-bourgogne.com/en/>

Benefits Achieved:

- Can quickly and precisely examine the interior of a part or assembly.
- Able to provide reliable, realistic and sustainable lead times which considerably increases credibility with customers.
- Establish accurate quotes extremely quickly, guaranteeing margins and profitability.

Comments:

"As WorkNC is so easy to use, parts can be machined extremely quickly, and thanks to the quality finishing toolpaths, there are very few traditional milling phases or manual reworking such as polishing or adjusting, to be done afterwards. WorkNC offers a remarkable level of surface finish quality."

Laurent Thibert
CAM and NC Manager

Vero Software Ltd

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engineering office and the purchasing department are centralized and easily accessible thanks to the Information Management module. And he says being able to provide reliable, realistic and sustainable lead times considerably increases their credibility with customers.

Also, WorkPLAN's Quotation module helps MOB remain competitive and cost effective. "Using search criteria, we find relevant data from similar projects, helping us establish accurate quotes extremely quickly, guaranteeing our margins and profitability. An offer is turned into an order in just a few clicks, and we follow progression constantly, taking any necessary measures to avoid late deliveries or cost increases."

Touch screens have been installed in the workshop and time management is performed rigorously on a daily basis. Information is given to shopfloor operators, making them aware of time spent on each task, compared to planned times.

"WorkPLAN improves our efficiency at all levels, and throughout every phase of a project."

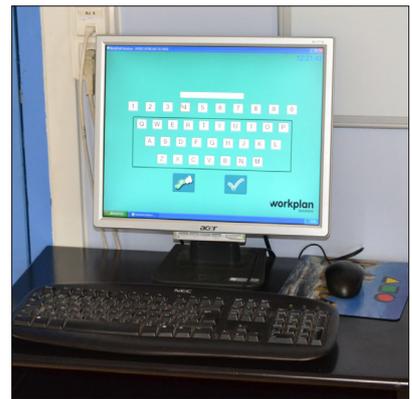
MOB's range of moulds, dies and fixtures are all manufactured with the specialist WorkNC CAM software in their 600 square-metre workshop. CAM and NC Manager Laurent Thibert uses it daily in the production engineering office where he manages CNC machine programming and machining tasks for their two Huron K2X10 3-axis, and two Hermle C3OU 5-axis, machine tools.

He says after examining the type of 3- or 5-axis part, along with the possible clamping setups and positioning of the part in the clamping system, they create a CAM strategy, including roughing, re-roughing, finishing and corner picking. "This essential information is transferred onto a program sheet and includes details such as tool lengths, Z minimums, toolpath numbers, rotational angles and machining times, along with images of the part."

According to Laurent Thibert, the roughing strategies are especially good at removing large amounts of stock material before carrying out semi-finishing and finishing operations. "WorkNC's dynamic stock model management feature allows the stock model to be updated in real time throughout the machining process, ensuring high precision remachining toolpaths." Other toolpaths frequently used by MOB are Z-level Finishing, Optimised Z-Level, Z-Level Remachining and Contour Remachining.

He says they constantly need to create new CNC programs as each order is made to measure, and each part is different, requiring new set up tooling equipment and an individual manufacturing process.

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