

worknc

Bemap Aranda

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WorkNC is a premier CAM solution providing 2D to 5-axis machining for the most demanding industries such as Automotive, Aerospace and Mould & Die.

Bemap Aranda Flies High With WorkNC And WorkPLAN

Processing between 30 and 60 new tooling projects every day, industrial mechanics specialists Bemap Aranda say WorkNC CAM software is the core element of their manufacturing operation. "It allows the workshop to function around the clock without supervision," says Director Michel Gauthier.

And accurate production control is achieved by using the WorkPLAN Management System to plan and monitor all their projects.

Based in the Hautes-Pyrénées region of France, the company undertakes a variety of machining work and tooling equipment repairs, mainly in the aerospace and aeronautics industries, but also for the automotive and railway sectors, too.

The engineering office imports customer CAD data of the part into CATIA, and designs the tooling equipment for it. Then the production planning department analyses each tool component and defines the CAM process using WorkNC, from Vero Software.

Bemap Aranda use both 3-axis and 3+2-axis programs for their Forest Line, Breton Flymill, Mori Seiki, Doosan and Eumach CNC machines. The modules create roughing and re-roughing cutpaths – and depending on the tooling geometry they use one of two finishing processes: either Z-Level finishing, optimisation and remachining with a small tool; or planar finishing and final finishing with a small diameter cutter.

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He says toolpath trajectories are easily modified in the graphic display by deleting specific zones or passes, according to the areas to be machined, while still maintaining the same reliability, due to the collision management module. "We don't have the staff to operate three shifts, but WorkNC gives us the means to optimise our productivity by safely producing components, unsupervised, through the night."



About The Company:

Name:
Bemap Aranda

Business:
Industrial Mechanics Specialists

Website: www.bemap-aranda.fr

Benefits Achieved:

- Programming is very quick and easy
- Able to revise quotations to ensure they are competitive, whilst maintaining profitability
- Can adapt manufacturing processes, improving workshop cost efficiency and increase profitability

Comments:

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Michel Gauthier - Director

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Bemap (Bureau d'Etude Mécanique Adour Pyrénées) was founded in 2001 and acquired Aranda three years later. "Without WorkNC we wouldn't be able to produce all the tools that we do today. Each of our tools is unique, and requires individual project management, working on a just-in-time basis."

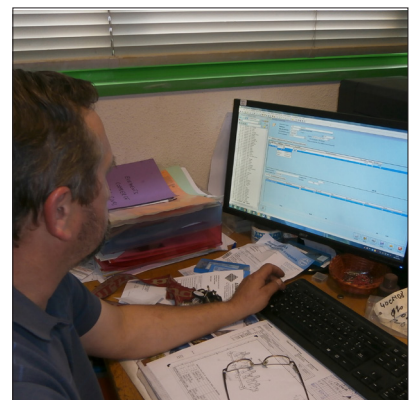
He says the company can always find the ideal solution for manufacturing their tooling equipment. The global roughing and re-roughing toolpath is optimised for reduced fresh air cuts, with localised retracts and corner smoothing for high speed machining, and also for automatic detection and machining of flat surfaces. And the full set of finishing toolpaths, especially Z-Level, ensures reduced machining times and improved quality with automatically generated corner lead-ins preventing the parts being marked.

Extending the factory to a total of 1,500 square metres, and purchasing two new 5-axis machining centres, meant they could diversify production into manufacturing volume parts, and increasing the number of employees from six in 2008, to 22.

But with the excellence in engineering that WorkNC provides, comes the need for additional sophistication in production control. Bemap Aranda uses WorkPLAN, Vero Software's fully-scalable family of manufacturing solutions, to automate and manage processes for around 160 different projects a month, such as job costing, quotations, sales order processing, planning, quality, time, purchasing and stock management. Five members of staff use WorkPLAN, which Company Secretary and Accountant, Marie Capdeville describes as a valuable resource for controlling their volume part operation.

"The aeronautics industry, in particular, is extremely demanding regarding delivery lead times, quality and prices. Aranda have obtained ISO EN9100 accreditation thanks to WorkPLAN, which has allowed us to ensure full organisational compliance."

By using specific filters to edit spreadsheets, the Quotation module shows the per-centage of unconfirmed quotations and those converted into orders. "This enables us to revise quotations to ensure they are competitive, while maintaining profitability. We've won new market share and new customers by establishing offers using past quotes or projects as models, which means they're as accurate as possible."



Job Management performs daily tracking tasks. "All technical and financial data linked to a project are available in real time and are easily accessible, meaning we can control progression and take remedial action if required.

"With the Time Management module we regularly compare operation times spent on any given machine, or by any of the operators, which allows us to make the best use of their skills and machine capabilities. It means we can adapt our manufacturing processes, improve workshop cost efficiency and increase profitability.

Full and precise analysis is provided through a large number of spread sheets and summaries using filters. Reports include the ratio between tool manufacturing and volume part production in relation to the overall turnover; the delivery of parts and tooling equipment, respecting lead times and outstanding invoices; and machine performance such as time spent, turnover generated, and cost.

Marie Capdeville says before installing WorkPLAN, they used several different software applications for individual tasks such as quotes and invoicing, which made it impossible to keep track of projects in progress, finished jobs, or future ones. "We evaluated three systems, and chose WorkPLAN for its ease of use, clear environment, and the fact that all functionality was readily available on the monitors. We can now manage the full chain from quotes through to invoicing in one single environment."

The system's flexibility means they have been able to adapt WorkPLAN to obtain the exact information they need.

