



Customer Spotlight Medical

At the heart of the Manufacturing Process Rescoll Manufacturing

Rescoll Manufacturing who specializes in medical components seizes opportunity for rapid growth with the help of ESPRIT CAM.

The market for medical devices has grown at a considerable rate in Europe, representing over 20 billion euros in revenue. In 2013 France had more than one thousand ISO13485 certified manufacturers, compared to only one-hundred and forty-four ten years prior. The medical devices made today involves the machining of increasingly complex high value-added parts that drives manufacturers to evolve rapidly.

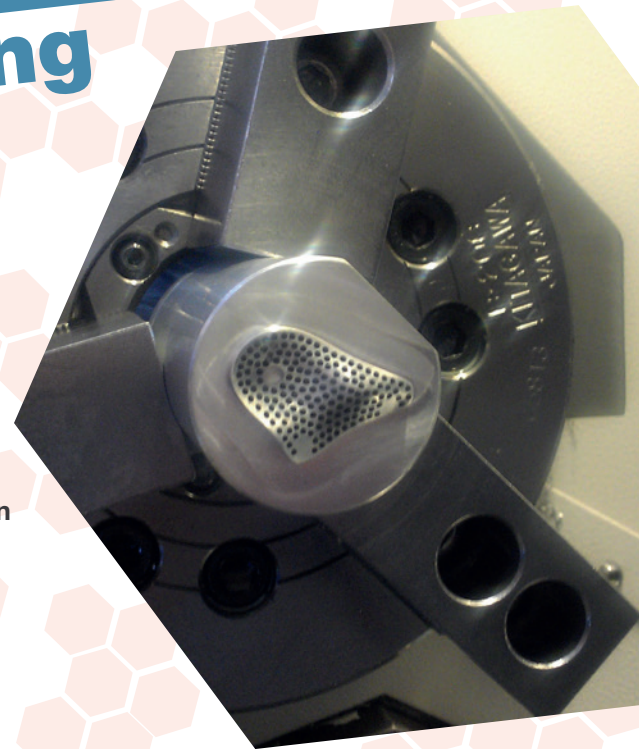
In the city of Pessac near Bordeaux, France the managers of Rescoll Manufacturing have seized the opportunity for rapid growth in the medical sector using ESPRIT CAM software.

Historical Expertise

The Rescoll entity was founded in 2001 as a private research laboratory providing chemical, mechanical, and physio-chemical expertise of

materials. Most of their requests are to certify the conformity of those materials that make up aircrafts from Airbus. In the medical field, Rescoll tests many polymers, especially for implants.

In 2012 they created Rescoll Manufacturing and became ISO13485 certified as a dedicated manufacturer of medical devices.



They also machined test tubes and tests fixtures specific to their company's needs.

Today, the Rescoll Manufacturing team dedicates most of their production time to the medical industry and the rest to the aeronautics and robotics sectors.

Their manufacturing activity primarily focuses on dental or spine bolting, stems, maxillofacial, and cervical plates. They are also in the process of developing highly crafted medical parts such as intravenous implants or cages.

“Our wish was to integrate a reliable CAM solution that could be adapted to our entire range of Swiss and 3-5 axis machines. We knew ESPRIT’s potential and the distributor Usin’concept reinforced our choice”

-- Fabien Guillaume, Methods Manager, Rescoll Manufacturing, France

The essential turn to CAM software

Over the year’s manufacturers have been turning to Rescoll Manufacturing for projects that are increasingly complex. The projects they were receiving not only included simple turning operations, but also the machining of complex parts, requiring more 5-axis milling and surface finishing operations, making part programming increasingly difficult.

In 2014 the managers at Rescoll Manufacturing decided to invest in a CAM software. *“Our wish was to integrate a reliable CAM solution that could be adapted to our entire range of Swiss and 3-5 axis machines. We knew ESPRIT’s potential and the distributor Usin’concept reinforced our choice,”* explains Fabien Guillaume, methods manager.

A rapid rise in productivity

Aware of the evolution of the medical market Rescoll

Manufacturing managers then decided to implement ESPRIT CAM and immediately train their programmers on ESPRIT’s turning, 5-axis milling, and multi-tasking modules.

“After we began using ESPRIT we quickly realized that the software offers us a lot of flexibility and possibilities when programing parts”, says Fabien Guillaume.



In the workshop, a dozen machines make it possible to machine complex parts in turning-milling.

Rescoll’s programmers instantly started autonomously programing various 5-axis parts, and optimized the full use of their workshops CNC machines, rapidly increasing their productivity. In addition, the Methods department also created a library of standard machining processes using ESPRIT to automate, facilitate and improve the generation of CNC programs.

Process archiving and automatic shape recognition helped cutting tool managers fully utilize ESPRIT CAM’s functions for intelligent machining. With production in the shop on the rise, Rescoll Manufacturing faced their latest challenge that involved programming a cervical plate with complex 3D surfaces which required 5-axis machining on a milling lathe.

With the help of ESPRIT CAM the Rescoll Manufacturing team could not only machine the part in just one operation, but also exactly meet the customer’s expectations.

Capturing Evolving Markets

For Rescoll Manufacturing the integration of ESPRIT CAM software solved many machining difficulties related to tight tolerance intervals, weak machines, and refractory materials. *“We had problems completing a grooving operation on a 3-axis machine, and ESPRIT allowed us to simply program the machine using trochoidal cutting movements which solved all our problems”,* describes Frédéric Combarous, head of Rescoll Manufacturing.

The growing experience of Rescoll’s programmers also made it possible to diversify the typology of parts and improve quality to extend their use. Moreover, the simulation integrated within ESPRIT clearly was an advantage for Rescoll Manufacturing to be able to visualize everything from the machine environment, to the machining of the part, to the possible interferences.

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-- Frédéric Combarous, head of Rescoll Manufacturing, France



Sébastien Cain, distributor-integrator Usin'concept and H el ene Horent visit the workshops with Fabien Guillaume, Methods Manager.

opportunities!", rejoices Fabien Guillaume.
In the future Rescoll Manufacturing plans to acquire new 5-axis machines to produce even more complex parts, and to increase their presence in Europe with ESPRIT CAM at the heart of their manufacturing process.

This allowed them to correctly program the part quickly and easily. *"ESPRIT is a very reliable tool that allows you to anticipate errors and optimize the set-up times on the machine"*, says Fabien Guillaume.

After using ESPRIT CAM for just a few months, Rescoll Manufacturing has dramatically reduced its programming time and enhanced its production capabilities.

"With ESPRIT, we can optimize toolpaths, test manufacturing processes, and save on programming and cycle times" summarizes Fr ed eric Combar nous.

Today programmers at Rescoll Manufacturing respond quickly to customer requests and can attack the medical and aeronautic markets in total adequacy with ESPRIT CAM software.

"We had the choice between partitioning ourselves into basic parts or capturing evolving markets. Without ESPRIT, we would have missed out on many



Implant plate programmed with ESPRIT and machined in a single operation on a 5-axis lathe.

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