



WorkNC[®] DENTAL

Biotech combines quality and expertise with WorkNC Dental CAD CAM



« The fact that WorkNC Dental is an open, flexible and easy-to-use solution, not only helps us in our day-to-day work, but also helps us maintain our reputation and, most importantly, our competitiveness. »

Alain Richard,
founder of Biotech, France

Highlights

- WorkNC Dental CAD CAM enables Biotech to optimize machining time and quality to compete with low-cost countries.
- Because WorkNC Dental is so easy to use, 3+2 axis machining can be carried out by technicians without any CAM training.
- Raw material is very expensive – Biotech is able to reduce costs using WorkNC Dental for nesting operations.
- With WorkNC Dental, the Biotech team can machine up to six crowns an hour, instead of the three that were possible using traditional methods.

■ Prosthesis Laboratory... An important player in the dental sector

Alain Richard set up Biotech 2003 and his laboratory benefits from his 26 years' experience in the industry. Its philosophy is to remain a friendly, manageable size and to investigate and adopt the latest technologies, whether these relate to CNC machining, implantology or innovative materials. Biotech aims to provide its customers with prostheses of improved aesthetic quality and comfort.

The "dental chain" starts with the patient and the practitioner who recommends a solution (crown, implant, prosthesis, etc.). Then the prosthetist steps in to produce the solution prescribed by the dental

surgeon. According to Alain, "Our work is all about quality and precision. It's down to us to select the best material and shape it to fit the oral cavity of the patient perfectly, delivering the solution prescribed by the practitioner. With tough competition from other European countries, particularly Sweden, and Asian countries, mainly China, French prosthetists have had to adapt and develop compelling arguments for maintaining or repatriating production to France. Biotech is one of a number of innovative companies that have adopted cutting-edge technologies to strengthen their competitive position. It's their know-how that is making the difference".



■ **Prosthetist: Two jobs in one**

Creating a reliable and comfortable prosthesis, crown or implant at a competitive price is obviously the prime objective of any prosthetist. Nowadays, machining has become the prosthetist's second job and its associated technology has become an essential tool. Alain says, *"The 'turnkey' approach is fundamental to our mission, which has changed considerably in recent years. The art of making implants still requires a high level of expertise. Producing it using the best methods possible, with the best material, as quickly as possible, has become our second objective. That way we stay competitive and this is why we need to make the best use of 3+2 and 5 CNC axis machining"*.

Sescoi has been one of the pioneers in the field of Dental CNC machining with its WorkNC Dental CAD CAM software. Incorporating dental manufacturing best practices and its own experience in the CAM field spanning almost 25 years, the solution has been specifically developed to meet the requirements of dental prosthetists.

Alain adds, *"90% of the work does not involve the machining process, but it's the remaining 10% where we can make a big difference, in terms of both price and delivery times, and claw back market share from our low-cost competitors"*.

■ **The advantages of dental CAM**

At Biotech, once the prosthesis CAD model has been retrieved using the Dental Wings CAD software, the production process starts. Here, Alain points out *"machining quality depends on the CAD mesh quality"*.

After the scan of the oral cavity, the model of the tooth is created in order to determine its insertion axis and automatically eliminate undercuts. WorkNC Dental then suggests different insertion scenarios according to the material stocks already referenced in the software. Alain explains, *"It's vital we have all this information because the raw material is very expensive. We reduce our end costs by optimizing the nesting process"*.

A CNC machine is then selected, either a WITECH MIC5 for 5 axis machining, an MOCN specifically designed for dental laboratories, or a 3+2 machine. *"It takes us 4 minutes per product for CAD operations and only 1 minute for CAM preparation"*. The machining sequence is automatically selected using the templates available in the software. *"No-one needs CAM expertise, staff find the process totally transparent and easy. Some of us have attended a two-day training program, but that's it"*.

Biotech is currently able to machine 6 crowns per hour. This compares to three per hour before it used WorkNC Dental.

The prosthesis is then engraved to ensure its traceability. This data can be stored in the ERP system.

■ **Biotech going forward**

A recent move to larger premises is an indicator of the success that the Biotech team has managed to achieve in only 8 years. *"On the technology side, the company started machining 6 years ago, with a table-top machine for unitary dental prostheses. We have moved up a gear since the arrival of WorkNC Dental and the WITECH machines"*.

Biotech's future will continue to be technology-focused - digital impression scanning, intraoral camera, etc - tools designed to improve risk management and save time. Alain concludes, *"The fact that WorkNC Dental is an open, flexible and easy-to-use solution, not only helps us in our day-to-day work, but also helps us maintain our reputation and, most importantly, our competitiveness. Implantology is a promising sector. I'm convinced we are equipped to rise to the challenges it presents. We know that we have real expertise and the right technologies at our disposal"*.