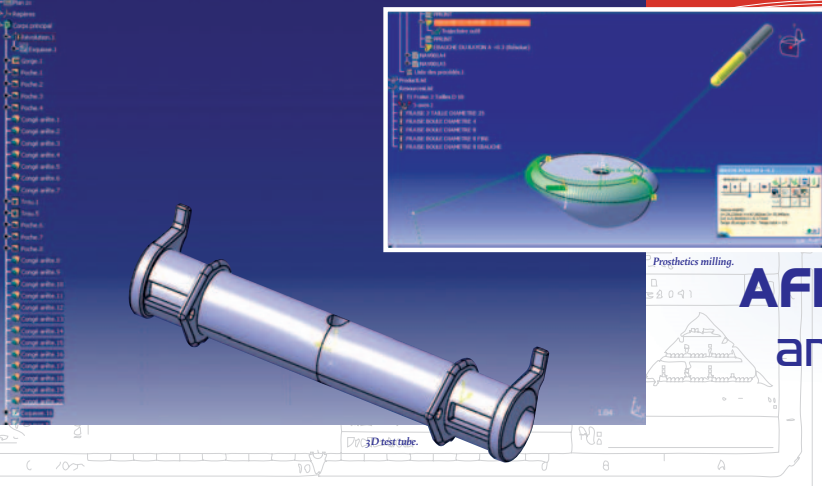




By Anne-Catherine Delecroix



Prosthetics milling.

AFM Navattoni: Machining and Precision Mechanics in Action

AFM Navattoni, a supplier specialising in machining and precision mechanics, uses Dassault Systèmes V5 PDM to facilitate exchanges with its clients, process complex shapes, and penetrate new markets.

AFM Navattoni is a family-owned French company founded in 1958 and currently managed by Mr Philippe Navattoni, the founder's grandson. Its main business is sub-contracting machining and precision mechanics (prototypes, small and mid-range series). One of its main lines of business is manufacturing metal test tubes and composite materials. "100% of our turnover, approximately € 1.1 million in 2006, is generated by sub-contracting, with 95% in the aerospace industry. We frequently work with local industries and our clients are major companies such as EADS, Airbus, and Dassault Aviation. Our close proximity to our clients enables us to be very reactive with delivery times and technical support," says Mr Navattoni, the company's CEO.

CLIENT EXPECTATIONS

AFM Navattoni started using a CATIA V5 workstation in 2003.

"Most of our clients were already using the CATIA solutions so we decided to make it easier for them and adopt these solutions ourselves, thereby optimising the exchange of information. CATIA V5 is the universally recognised standard in our business. We felt compelled to meet their expectations. One of our major clients is Dassault Aviation for

whom we perform the machining of test tubes to study materials, mostly composite and carbon materials."

The development of new materials leads clients to modify some major aircraft components in order to optimise weight and increase resistance (e.g.: central plan, fins, etc.). These new materials need to be pre-tested for their resistance to traction, compression, and bending.

"We receive, by e-mail, 3D sets and tubes + tooling in the form of a 'Catpart'. CATIA V5 allows us to decompose these sets to separate the tube parts from the tooling in order to conduct the test. With CATIA V5 we can dimension all shapes of the various parts and make blueprints for our operators to work from. For complex shapes, CATIA V5 has the capacity to generate machining programs directly imported into an NC machine using a USB key. These shapes, designed by our clients and transformed by CATIA V5 into 'machine language' with a post-processor, correspond exactly to client requirements." CATIA V5 is thus a very efficient and user-friendly means of communication and exchange between client and supplier.

Mr Navattoni stresses that, in the case of the Mirage ejector seat, using CATIA V5

With CATIA V5 we can dimension all shapes.

promotes time-saving in the manufacturing of the parts. "We receive blueprints in English that are very difficult to use and synonymous with time loss during manufacturing. With CATIA V5 we create the part in 3D and then convert it to 2D, enabling us to add dimensions that are adapted to machining." This new 3D design saves time, in particular where modifications are necessary, thanks to the interoperability between 2D and 3D.

INNOVATION IN ORDER TO BE PRESENT IN NEW MARKETS

"We now programme our 5-axis machine directly from the CATIA V5 Manufacturing data, which ensures reliability of the data and avoids programming errors. The upgrade of our CATIA V5 station with the acquisition of the 3-axis and 5-axis machining to pilot our new production equipment (additional electro-erosion machines and a HAAS 5-axis NC) helped us win new contracts and, in particular, penetrate new markets such as the medical industry, which requires specific processing of complex shapes and surfaces." Today AFM Navattoni is actively diversifying into the growing medical sector. Indeed, one of its new clients specialises in prosthetics for plastic surgery (breast, muscle, gluteal implants, etc.). This new market already

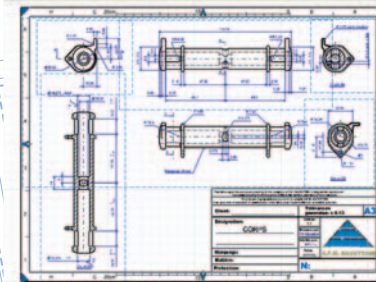
represents approximately 5% of its turnover. Mr Navattoni adds: "We work in close collaboration with our technical and business partner T-Systems. Together we fully handle the design of new moulds. Our client make requests for precise volumes. In collaboration with T-Systems we design a 3D mock-up that can be parameterised, and which we process in CATIA V5 in order to obtain a volume matching the various requests while maintaining the basic anatomic shape."

"Thanks to CATIA V5 solutions and our experience and technical expertise, we are now considered more as a partner than as a supplier, since we bring added value to

our clients. We manufacture between 10,000 and 12,000 parts per year, which represents approximately 1,600 production runs. Our objective is to acquire an additional workstation in 2007 and hire a new operator for this station. This would help us continue our penetration of new markets and to offer innovative solutions to our clients" *

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Fabrication drafting.



5 axis milling center.

