

Tekka Implants put to severe testing

The Tekka company specialised in creating implants for cranio-maxillo-facial, dental and orthodontic surgery subjected its new implant to severe and standardised mechanical tests. An essential factor in order to target the international market!

Tekka obtained the label granted by standard ISO 14 801 based on the force tests carried out on the Twinkon® implant. An original bioconcept which was the first project within the Tekka company to benefit from inherent development, the mono-block Twinkon® implant represents a new implantology approach, for the profile as well as the external connector technology. Hence the idea and necessity to validate this innovation which is a real technological breakthrough that promotes tissue integration and wound healing. "All the materials were clinically and biologically validated (TA6V ELL, Grade 5 titanium alloy), however,

it is the innovative connector technology that required mechanical validation of the assembly", stated Jean-Philippe Picon, deputy manager of the design office at Tekka.

Validating the shape

In addition to the material, it is in fact the shape of the implant and the type of prosthesis link that determine the quality and efficiency of the mechanical engineering. Now, the shape given to this new implant was fully determined by biology, physiology and the clinical expertise of the surgeons. Result: a reefed emergence profile around which the gum is clamped with an implant authorising various angulations while having a



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mechanical blocking and an anti-rotational system. Bonus: the curved triangle above the implant allows the prosthetic part to be repositioned without surgical intervention. "These mechanical tests were aimed at determining the failure modes and the resistance level of this implant", continued Jean-Philippe Picon. After having defined a precise protocol for positioning and installing the implant and prosthesis pair, Tekka obtained the test results from Cetim mid-2008. In the end, the tested and CE marked Twinkon® product was launched in March 2009 after almost four years of development and tests. It is now marketed to dental surgeons in France and abroad.

OUR CUSTOMER

Corporate name
Tekka

Activity
Designer and manufacturer of prosthesis, implants and osteosynthesis products for maxillo-facial surgery, dental and orthodontal implantology, Tekka is a French company whose registered office is located in Brignais (Rhône, 69).

Sales turnover
EUR 5.8 million in 2008

Workforce
75 people in 2008

Cetim's asset

Cetim has a structure dedicated to the biomechanical activity which notably satisfies the requirements of experimental protocols in the orthopaedic and dental fields. Its experts assist customers as regards the selection of methodologies and use of the test results.

