



BOLOGNA

Italian passion for German precision

Italian inventors and dentists had a major influence on the development of dental implant technology - we think of names such as Giordano Muratori and Ugo Pasqualini and their sheet implants, Pier Luigi Mondani and his intraoral welding or Dino Garbaccio and his self-tapping bicortical screw.

In addition, given the incredible number of more than 350 implant manufacturers in Italy, it is amazing how few Italian suppliers have successfully made the jump over the Brenner Pass. One exception is C-Tech Implant, who will soon be in their tenth year, and have found a loyal following within German dentists.

pip visited the manufacturer in the scenic surroundings of Bologna.

As with so many dental implant manufacturers, at C-Tech their origins lay in orthopaedics.

Similar to other parts of Europe, in the Bologna area clusters of businesses formed in different areas of activity, here it was medical technology, which had less to do with raw materials and logistics and more to do with the supply of well-trained and specialised staff. The automotive industry and other manufacturing sectors are active in fine and high-precision mechanical engineering these days, however it is not so easy for a mechatronics expert to move from an automotive industry CNC machine to a multi-axis machine for manufacturing dental implants.

When asked about the fact that C-Tech managed to establish themselves in the German market as one of the few Italian manufacturers, Germany Manager Lütfü Agic explains: "We didn't expect anyone to be waiting urgently for us in Germany, even though we bring together a total of more than 80 years' experience in the area of dental implant technology. Equally, from past activities both in sales and management we were aware of the special requirements and idiosyncrasies of dentists in Germany. We made

a lot of efforts to align ourselves accordingly.

Also in our studies, we didn't assume that our Italian way of doing things would be accepted immediately, but instead we selected the active partner for our studies to be the respected University of Frankfurt."

High-precision and safety

When visiting the impressive manufacturing facility, with 25 CNC machines alone, you will also come across the "Mercedes" of manufacturing technology such as the Swiss Tornos, a five-axis machine, which at C-Tech is purely tasked with the manufacture of mini-implants. Currently they are the largest manufacturer in Europe for this specific type of implant. Mini-implants are popular as a minimally-invasive option for creating an immediate restoration, which is currently a highly sought-after alternative for fast and good functional care of older patients. An impressive neighbour is the Willemin Macodell (the Rolls-Royce of CNC machines), which can be fitted with 48 different CNC cutters. It can change tools in 1.4 seconds and can be used in any conceivable axis,



C-Tech yesterday ... and today.

including for the manufacture of angled mini-abutments. C-Tech was one of the first companies to move over to cooling all computer-controlled machine tools using water-miscible bio-lubricants. The plant-based oil is odour-free, improves machining and even has a wider range of applications than mineral oil products. “And even though of course we run extensive cleaning processes for the finished parts, it’s still one risk factor less”, comments Lütfü Agic with respect to the recently published independent surface study by the University of Cologne, where the C-Tech implant surfaces were tested as an example, in testing applied to very few dental implant surfaces on the dental market.

Implants alla Bolognese

A “Bolognese sauce” never goes together with Spaghetti - it is normally Tagliatelle which is selected as the best pasta for the meaty sauce. And a “Ragú alla Bolognese” is also not something that comes from a jar or is quickly prepared, since only time and leisurely cooking under the watchful eye of a skilled cook turn all of the ingredients into the delicious end product. Similarly at the implant manufacturer C-Tech, only the greatest care in the selection of the “ingredients” together with the touch of experienced specialists results in the fully finished article. The implant series offers solutions for every indication, from bone-level



CAD/CAM-Workflow.

through gingiva-level implants up to narrow-diameter and mono-block-implants. In Germany according to the country manager Lütfü Agic, the SD - Small Diameter implants and EL - Esthetic Line are especially popular.

The Small Diameter implant system comprises a family of one-piece implants with diameters of 1.8 mm; 2.1 mm; 2.4 mm and 2.5 mm. The options of an aggressive self-tapping thread or fine thread, with or without collar, ball head or square head - for every diameter - result in the breadth of one of the largest ranges of dental implants in the market for this specific indication.

The system is ideally suited to practitioners who are looking for minimally-invasive solutions for stabilising overdentures where space conditions and bone volume are limited and the treatment costs are subject to constraints. The EL - Esthetic Line are conical-shaped implants with a generously sized apical thread, which provides excellent primary stability especially with weak bone. A conical screw connection ensures additional security against the



It does not work without production specialists - Lütfü Agic (right) with his team

loosening of abutments, micro-movements and the formation of gaps. The prosthetic part of the EL implant system with Platform Switching and concave aesthetic concept offers a wide spectrum of care options and ideal possibilities for tissue formation. Despite the great flexibility in the choice of prosthetics, with a single prosthetic connection for all implant diameters the system remains simple and easy to use. At C-Tech, digital processes have also become standard, and therefore the implant range is augmented by the manufacture of templates for Guided Surgery and a milling centre for the production of CAD/ CAM prosthetic pieces.



Guided Surgery planning.

A fitting end to the visit with a trip to the nearby Lamborghini museum, overflowing hospitality and stomach-expanding tasting of the real Bolognese specialties was summed up with: Typically Italian!

K

**C-Tech in Germany:
FULL SMILE – Dental Partner,
Lütfü Agic,**

Phone.: 0721 60953238
www.c-tech-implant.com