

Progress through synergies.



- Dentaurum and Concept Laser.

Synergies between the leading supplier of clinically proven non-precious alloys and the pioneer in the sector of generative metal laser melting technology (LaserCUSING® process).

*"Coming together is a beginning,
keeping together is progress,
working together is success."*

Henry Ford



"It is natural for us to use our decades of expertise in dental materials to develop optimally adapted materials for new technologies like LaserCUSING®. By entering into this alliance, we are ensuring that our customers gain maximum benefit from the fields of expertise of both partners."

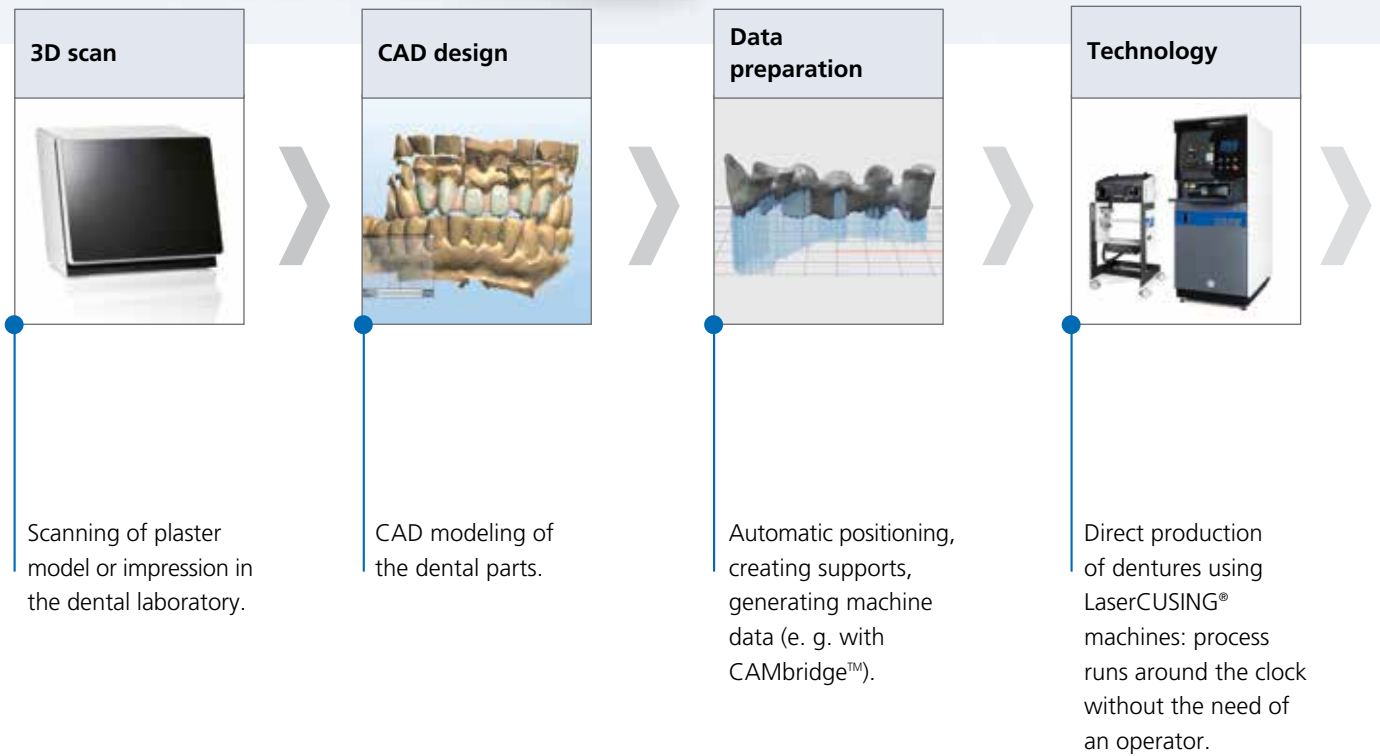

Mark Stephen Pace
CEO Dentaaurum Group



"The development of the unique LaserCUSING® technology highlights our claim to be the pioneers in the laser melting segment. By cooperating with Dentaaurum, we hope to increase access to the dental market. The most important aspect is the confidence of customers in a high-quality medical product that we are now able to provide with remanium® star CL from Dentaaurum."


Frank Herzog
Chairman & CEO Concept Laser

• The process.





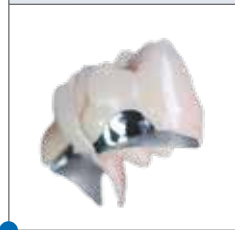
Material



Material specially adapted for LaserCUSING®:

- remanium® star CL
- rematitan® CL

Processing



Veneering with high-quality ceramics: The ceraMotion® concept offers a complete, consistent and well structured ceramic range for excellent aesthetics.

Final product



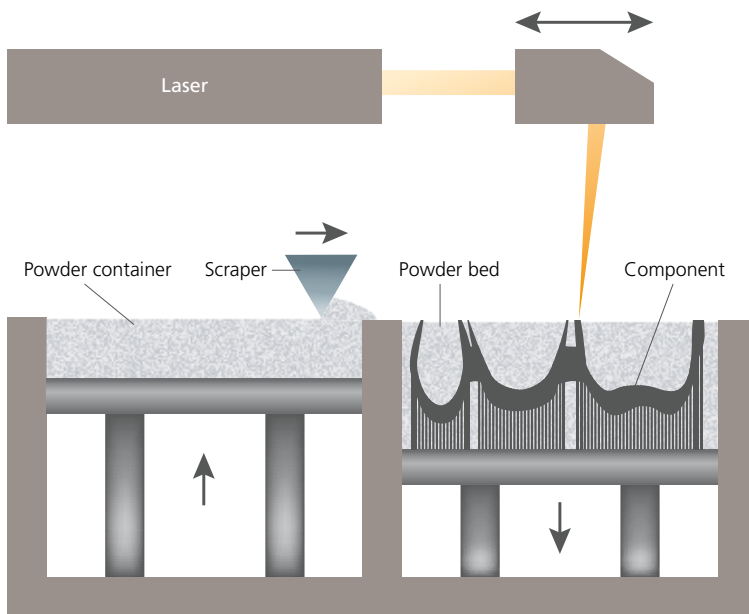
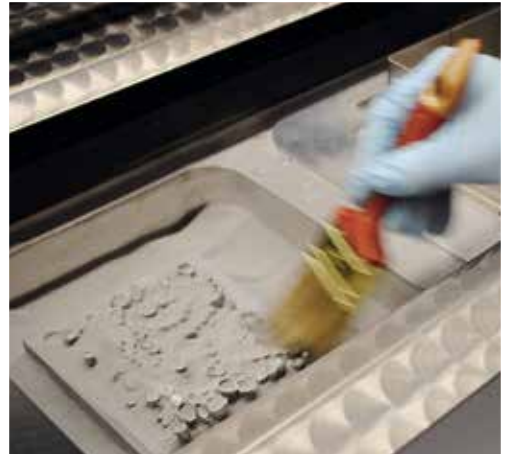
Aesthetic denture made from clinically proven and certified materials.

Service



A comprehensive range of services and expert advice.

The technology.



In the laser melting process, metal in powder form is locally fused using a high-energy laser beam with high energy density. The components are built up layer by layer.

With the LaserCUSING® process, dental products such as crowns, bridges, cast partial dentures and secondary structures can be produced cost-effectively and with a constantly good level of quality using a standardized manufacturing process.

Products resulting from the LaserCUSING® process comply with the requirements of the Medical Devices Act.





• The material.





remanium®
star CL 

rematitan®
CL 

- premium quality
- finest powder, optimally adapted for the LaserCUSING® technology of Concept Laser
- clinically time-tested
- used millions of times in prosthetics
- optimal composition for crowns, bridges and cast partial dentures
- only the purest materials are used
- high corrosion resistance and scientifically confirmed biocompatibility
- excellent bond strength with veneering ceramics (especially with ceraMotion®)



The alloys.

The perfect material for the LaserCUSING® process.



The CoCr alloy – **remanium®** *star CL*

"The high strength and elasticity of the CoCr alloy remanium® star CL result in longer life cycles with laser melting compared with conventionally produced cast parts using the same material."



Dr. Christoph Schippers
Technical Manager, Dentaureum

The composition.

- Co: 60.5%
- Cr: 28 %
- W: 9%
- Si: 1.5%
- Other elements <1%: Mn, N, Nb, Fe
- Free from nickel, beryllium and gallium

* CoCr alloy in powder form according to DIN EN ISO 9693-1 / DIN EN ISO 22674, type 5

The fields of application.

- crowns and bridges
- frameworks for metal-ceramic veneering
- components of cast partial dentures
- primary and secondary components for combined dentures
- implant superstructures
- rapid palatal expander
- snoring devices



The titanium alloy – rematitan[®] CL ^{**}

"The mechanical properties of rematitan[®] CL are comparable to those of a CoCr alloy. However, the elastic modulus is only half as high."



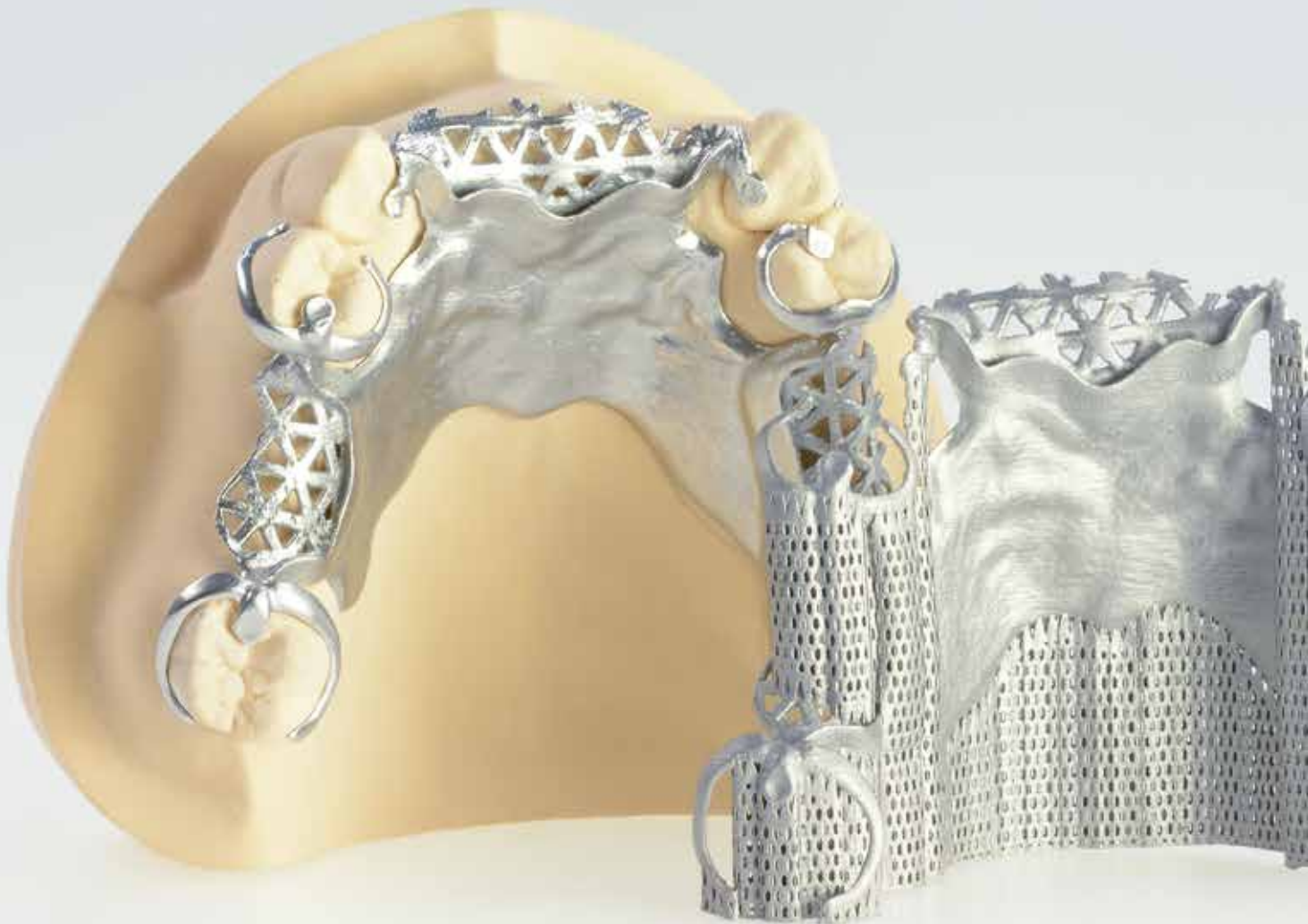
Dr. Christoph Schippers
Technical Manager, Dentaurum

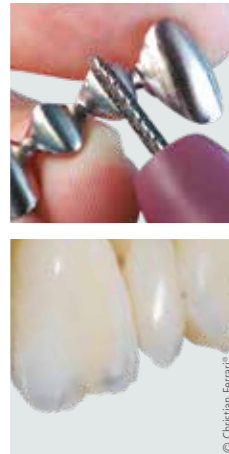
The composition.

- Ti: 90%
- Al: 6 %
- V: 4%
- Other elements <1%: N, C, H, Fe, O

** Titanium alloy in powder form according to DIN EN ISO 9693-1 / DIN EN ISO 22674, type 5

- Processing.





The working steps.

Separating: The supports, which are essential for fabricating the components, can generally be removed without using separating discs.

Smoothing: The small connection points are smoothed with appropriate tungsten carbide burs.

Sandblasting: By sandblasting with aluminium oxide, surfaces comparable to those of a dental casting can be obtained.

Surface processing: Further processing is identical with that of the common casting technique.

Ceramic veneering: ceraMotion® is a veneering ceramic range particularly suited for these alloys. ceraMotion® Me includes a paste opaque, serving also as a bonder, and is particularly suited for remanium® star CL. Rapid firing cycles without long-term cooling and an easy layering technique make work much easier.

ceraMotion® Ti is available for rematitan® CL. It is a titanium ceramic based on the time-tested "Triceram®" ceramic.

• The ceramics.

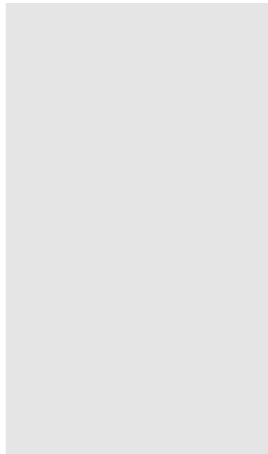


The ceraMotion® range of ceramics.

ceraMotion® ceramics have been specially designed for the remanium star® and rematitan® alloys and guarantee high bond strength and easy processing for a high-quality result.

The ceraMotion® concept provides a uniformly structured range of ceramics incorporating veneering and press ceramics. The Touch Up special ceramic materials complement the basic assortment of the ceraMotion® main ranges and enable not only excellent aesthetics but also save time due to easier processing. One build-up technique for all framework materials and maximum shade stability ensure reliable veneering.

• The service.



The requirements of our customers are our top priority. Meeting them has always been an essential part of our company philosophy.

We want to react swiftly to the changing requirements of our customers and offer excellent service in order to maintain a trustworthy and long-term relationship with them.

Our customers appreciate the quality of our products, our reliability and our extraordinary range of services, all of which we keep improving and expanding continuously.

The range of services.

- alloys and veneering ceramics developed and produced by Dentaureum
- possibilities of analyzing metallurgical properties
- provision of processing instructions and certificates
- trouble shooting
- prosthetic hotline

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and in more than 130 countries worldwide.



DENTAURUM
QUALITY
WORLDWIDE
UNIQUE



Date of information: 02/19
Subject to modifications

