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LASAK

Implant systems and regenerative solutions

Easy and effective

Dental implantology

More than 20 years of experience

WHY LASAK?

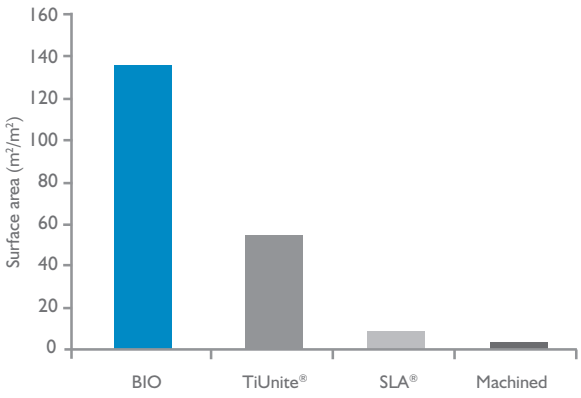
- More than 20 years of experience in dental implantology
- Long-term scientific documentation
- 15 years of unique hydrophilic BIO-surface
- Modern solutions at the highest technological level – in-house research and development

MEDICAL MANUFACTURER WITH A LONG TRADITION

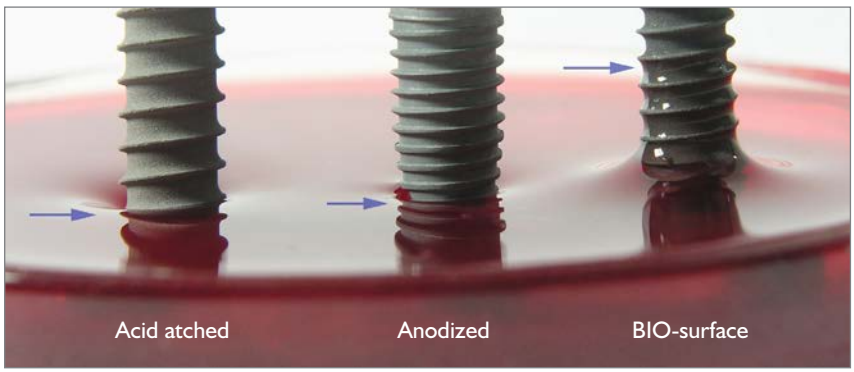
Since 1992, LASAK Ltd., as a research-oriented medical technology company, has been focusing on the systematic research and development of bone regeneration materials and implants used in dental implantology, neurosurgery, orthopedics and traumatology. LASAK offers its clients modern, safe and clinical verified solutions at the highest technological level.

HYDROPHILIC, BIOACTIVE SURFACE

As a result of long-term, continuous research into biomaterial – body environment interactions, LASAK was the first manufacturer of an implant system on the European market that has been able to offer a unique hydrophilic, nanostructured, bioactive surface treatment. The invention of the BIO-surface has given LASAK a leading global position in the development of implant surface modifications. LASAK's unique BIO-surface modification speeds up the formation of a functional bone-implant interface, thus improving the implant's secondary stability in the early healing phase. Thanks to the BIO-surface, the stability dip (often observed in nonbioactive surfaces) is eliminated. The outstanding performance of LASAK BIO-surface implants has been documented for even the most demanding indications.



Surface area

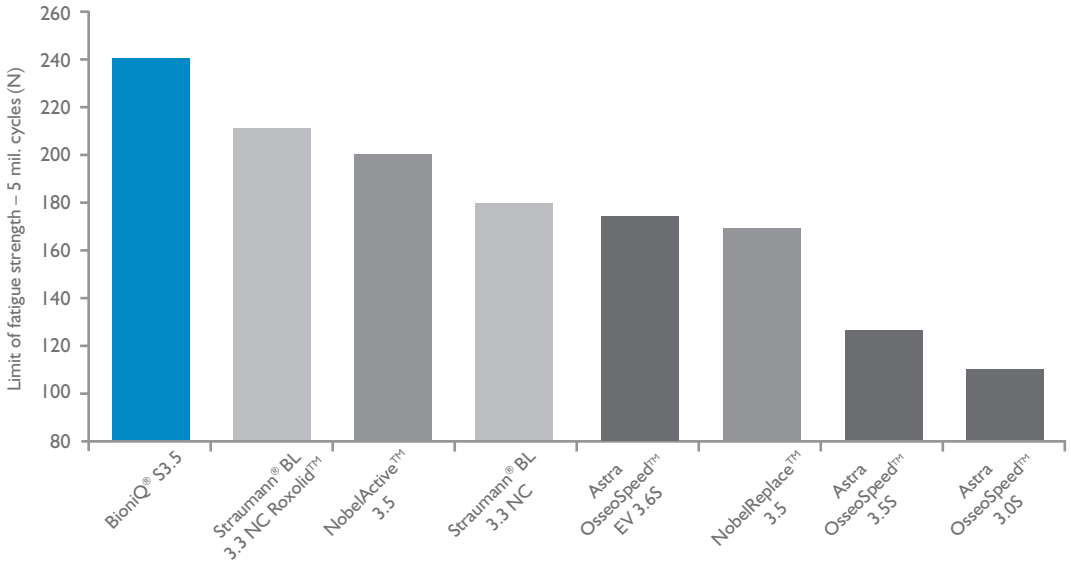


THE BIONIQ® DENTAL IMPLANT SYSTEM

- Unique hydrophilic, nanostructured, bioactive titanium surface
- Instruments for tapered and straight implants for both soft and dense bone in one organizer
- Option of reduced treatment time – safe early and immediate loading
- One universal prosthetic platform yielding maximum flexibility
- Wide range of prosthetic components ensuring perfect esthetic results

The BioniQ® implant system includes tapered implants offering easy insertion and high primary stability in soft bone as well as straight implants for easy positioning in dense bone. The horizontal and vertical set-off of the implant-abutment connection from the bone level, together with the implant mini-threads, contribute to the stability of the marginal bone and soft tissues surrounding the abutment and provide improved restoration esthetics. The state-of-the-art implant construction enables safe and precise insertion and optimized load distribution in the bone tissue. Implants are available with a unique hydrophilic, nanostructured, bioactive surface (BIO). A single system organizer provides instruments for the insertion of implants with both tapered and straight design. The Q-Lock implant-abutment connection is a unique combination of four stabilizing components – a deep cone ensuring stability and tight seal of the connection, a solid hexagon as anti-rotation element, a reinforcing cylinder (tube in tube) and a cone under the screw head.

HIGH FATIGUE STRENGTH OF THE IMPLANT-ABUTMENT CONNECTION (ISO 14801)



Sources: M. Wieland, H. Hornberger, Mechanical testing of fatigue strength, Bone level implant scientific overview, Starget 2010–1, experimental data of LASAK, Report – Accredited testing laboratory for mechanical tests of ČVUT Praha.

Bone regeneration

OssaBase-HA

- Macro and nano bone-like structure
- Excellent volume maintenance
- Low substitution rate

OssaBase-HA is a synthetic, macro and nanoporous bone regeneration material based on hydroxyapatite with a low substitution rate. It is used for bone regeneration of missing or lost bone tissue independently, or in combination with autologous bone tissue, blood or PRP.

PORESORB-TCP

- Resorbability
- High chemical and phase purity
- Osteoconductivity

PORESORB-TCP is a synthetic, bioactive, resorbable matrix with an interconnecting porosity based on β-tricalcium phosphate. The material has osseoconductive and osseoinductive properties which significantly increase the treatment efficiency. As a fully synthetic material, it avoids any potential immunological or infection risks arising from materials of biological origin.

SCIENTIFIC DOCUMENTATION

Dental implants: **Development of Implant Stability During Early Healing of Immediately Loaded Implants**; Simunek A., Kopecka D., Brazda T., Strnad J., Capek L., Slezak R.: Int J Oral Maxillofac Implants 2012; 27 : 619–627 • **Changes in Stability After Healing of Immediately Loaded Dental Implants**; Simunek A., Strnad J., Kopecka D., Brazda T., Pilathadka S., Chauhan R., Slezak R., Capek L.: Int J Oral Maxillofac Implants, Vol. 25, No. 6, 2010, p. 1085–1092.
Bone regenration materials: **Guided bone regeneration in the pre-implantation phase**; Polenik P.: Implantologie Journal 5/2007.

We will be glad to send you a 74-page summary of selected clinical and experimental studies documenting the long-term clinical performance and scientific background of LASAK products.

LASAK

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