



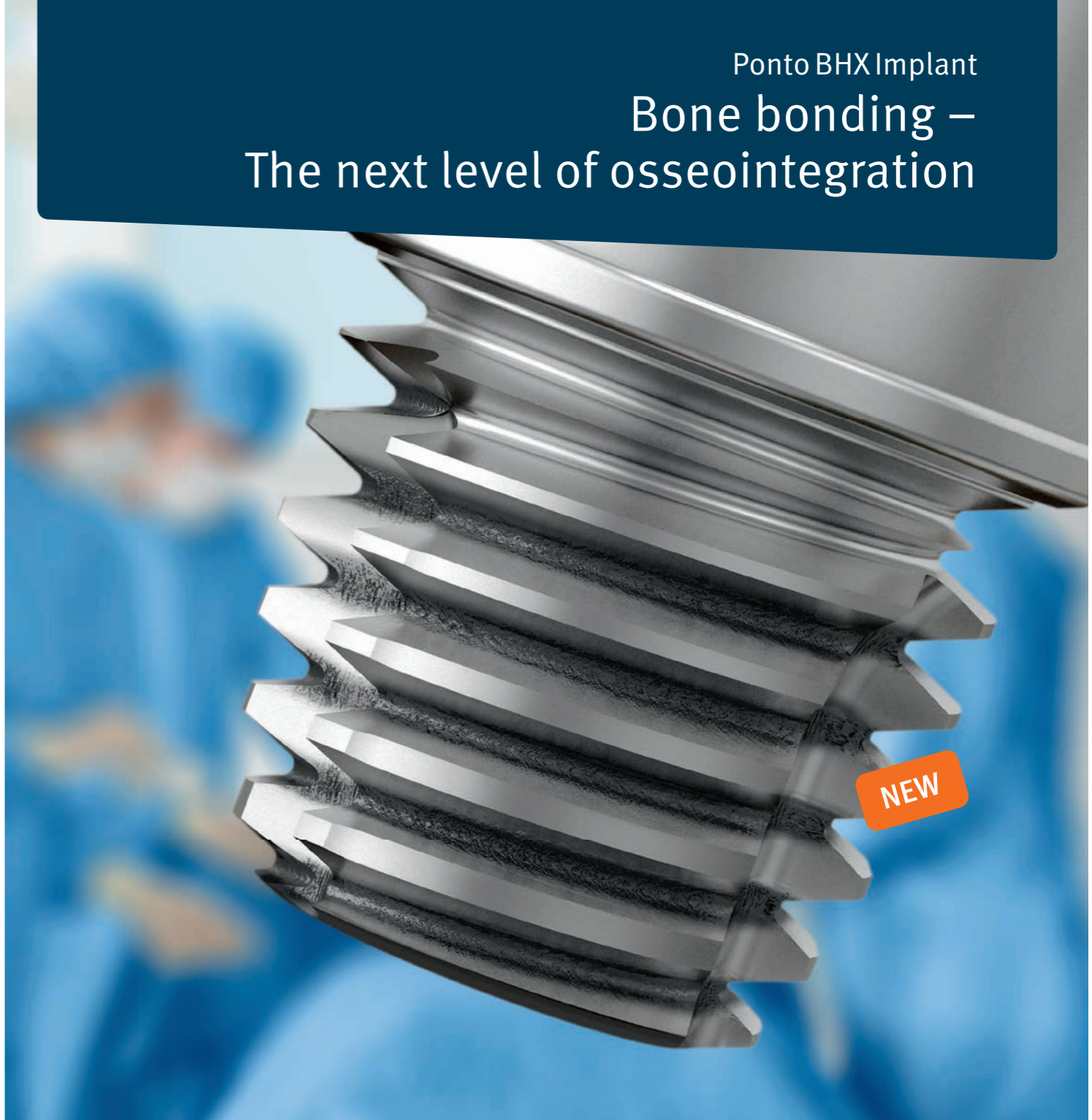
Because sound matters

Oticon Medical is a global company in implantable hearing solutions, dedicated to bringing the magical world of sound to people at every stage of life. As a member of one of the world's largest groups of hearing healthcare companies, we share a close link with Oticon and direct access to the latest advancements in hearing research and technologies. Our competencies span more than a century of innovations in sound processing and decades of pioneering experience in hearing implant technology.

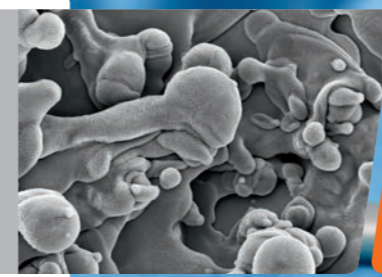
By working collaboratively with patients, physicians and hearing care professionals, we ensure that every solution we create is designed with user needs in mind. We share an unwavering commitment to provide innovative solutions and support that enhance quality of life for people wherever life may take them. Because we know how much sound matters.

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Ponto BHX Implant
**Bone bonding –
 The next level of osseointegration**



Ponto™ System
 – A better way
 to the optimal
 hearing experience



NEW Ponto BHX Implant

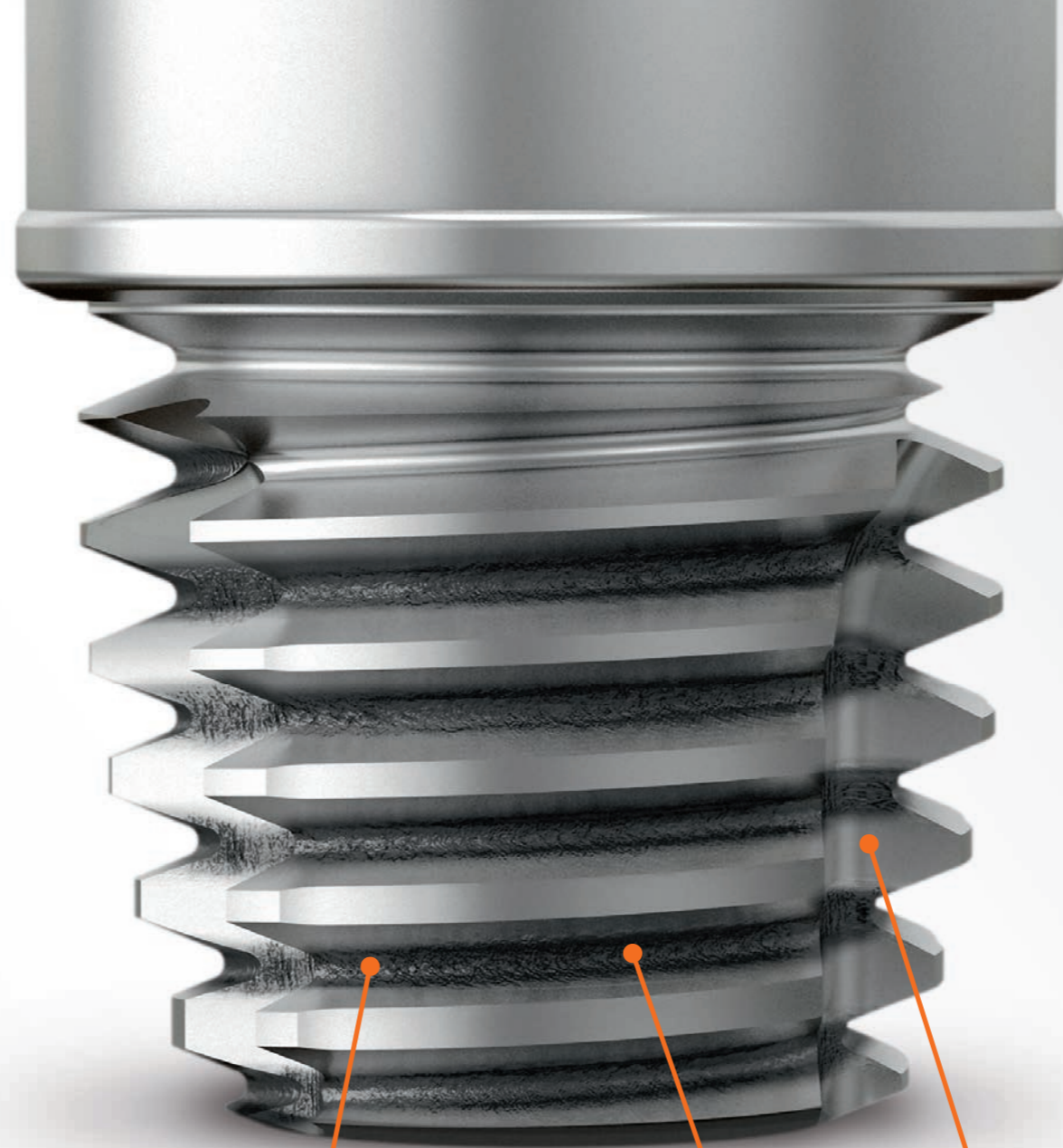
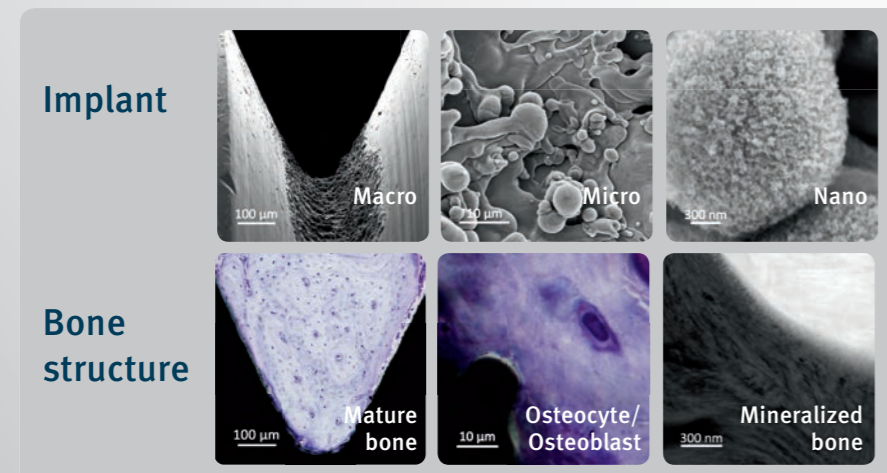
Setting new standards for implant technology

The Ponto BHX Implant is the perfect match between the proven OptiGrip™ geometry and the latest surface technology. With its micro- and nano-sized structures it takes osseointegration to the next level – **bone bonding**.

First laser-ablated titanium surface

Biohelix™ is the outcome of the latest research from the world leading experts of osseointegration in Gothenburg, Sweden. The unique Biohelix™ laser ablation technology enables a site-specific modification at the root of the threads of the proven OptiGrip™ geometry. This creates a three level surface topography matching the natural bone structure at macro-, micro-, and nano-scale.

The surface of Ponto BHX Implant matches the building blocks of bone:

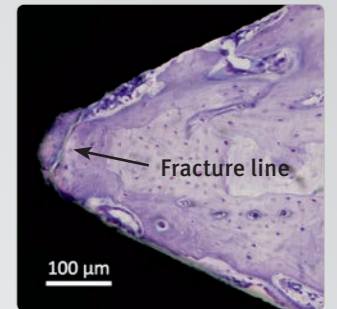
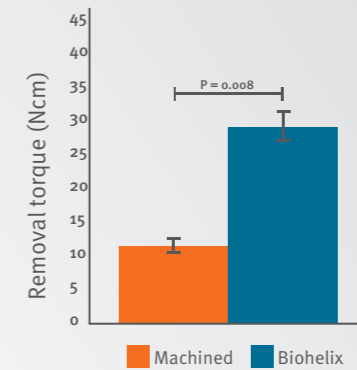


Biohelix™ site-specific laser ablated surface for fast and strong bone formation

OptiGrip™ macro geometry for high initial implant stability

Stronger than bone

Biohelix™ increases the strength of the bone-to-implant interface by more than 150%.¹ Studies prove that the bone bonding to the BHX implant is in fact stronger than the bone itself.

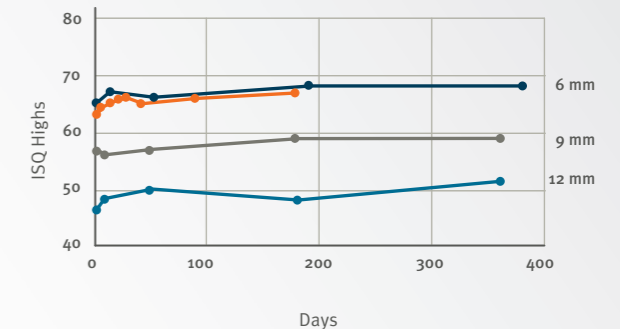


Mean removal torque, which is a measure of the degree of osseointegration, increased by 153% for Ponto BHX implants compared to the machined-only implants at 8 weeks of healing.¹

Mineralized bone grow directly on the surface of a laser-ablated titanium implant. Removal torque tests prove that fracture occurs within the bone.¹ This indicates bone bonding at nano level.

Highest stability from day one

The OptiGrip™ geometry has the highest initial stability of all bone anchored hearing implants.² Studies show a maintained and increased stability over time together with excellent clinical results.^{3,4,5}



“Nanometer roughness plays an important role in osseointegration. The improvement in biomechanical capacity is even greater than I imagined.”

R. Brånemark, Associate Professor MD Msc. PhD

- Johansson M L, Omar O, Palmquist A, Simonsson H, Emanuelsson L, Norlindh B, Thomsen P, “Site-specific laser modification promotes higher osseointegration of titanium implants”. Present. at Osseo, Lake Louise, Canada, May 2015
- Westerkull P, Jinton L, “The new wide Ponto implant design – clinical and surgical aspects,” Oticon Medical white paper, M51162, 2012.
- Nelissen R C, den Besten C A, Mylanus E A, Hol M K, “Stability, survival, and tolerability of a 4.5-mm-wide bone-anchored hearing implant: 6-month data from a randomized controlled clinical trial,” Eur Arch Otorhinolaryngol, E-pub: Mar 20, 2015.
- Hultcrantz M, “Stability testing of a wide bone-anchored device after surgery without skin thinning.” BioMed Res Int, E-pub: Article ID 853072, 2015.
- Foghsgaard S, Caye-Thomasen P, “A new wide-diameter bone-anchored hearing implant-prospective 1-year data on complications, implant stability, and survival,” Otol Neurotol, 35(7), pp. 1238-41, 2014.