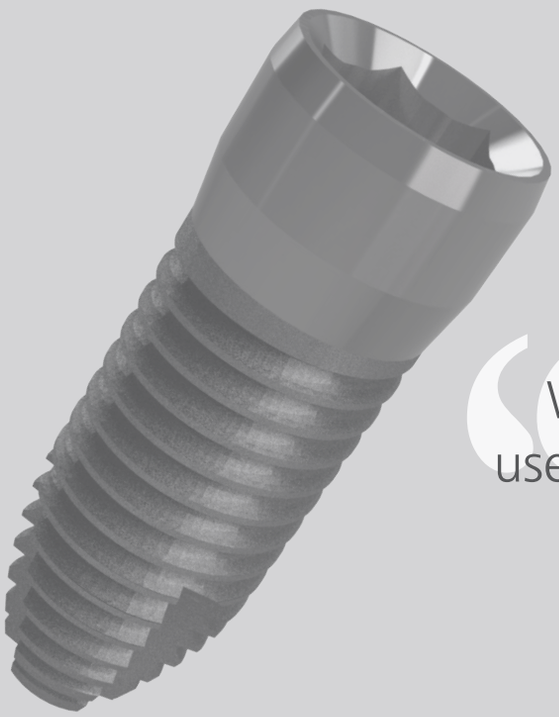
Rex Implants®
minimally invasive technology

PiezoImplant System

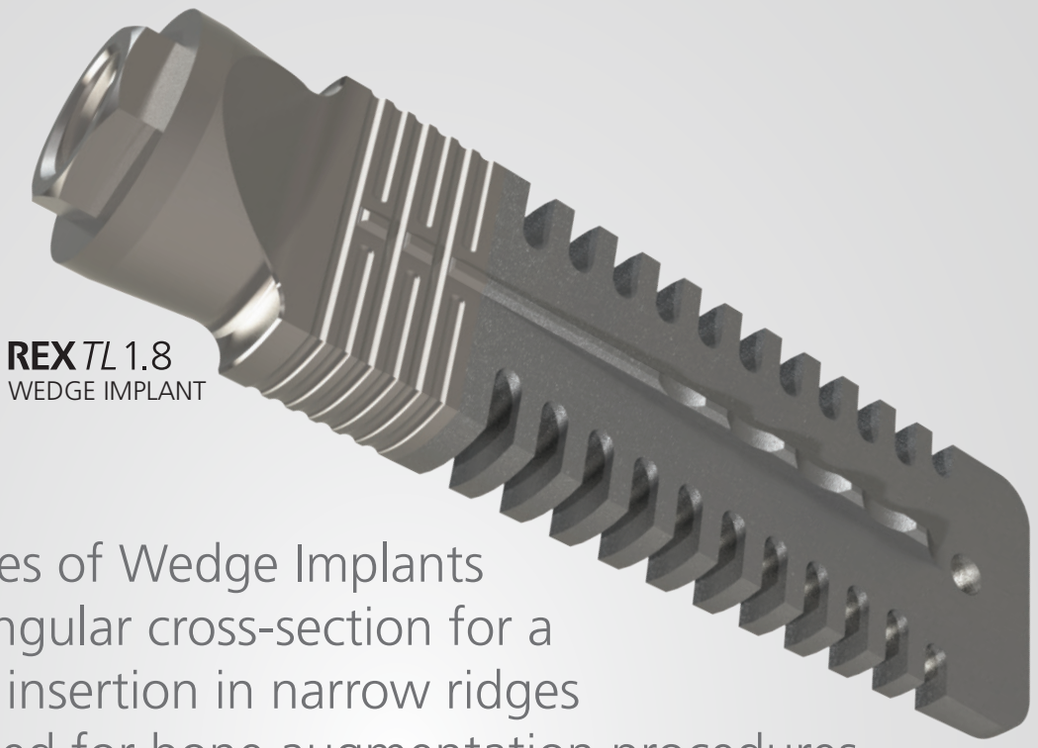
Narrow ridges? Problem solved

SCREW IMPLANT



“Why should you be forced to use round implants when other shapes would better fit your patients' anatomy?

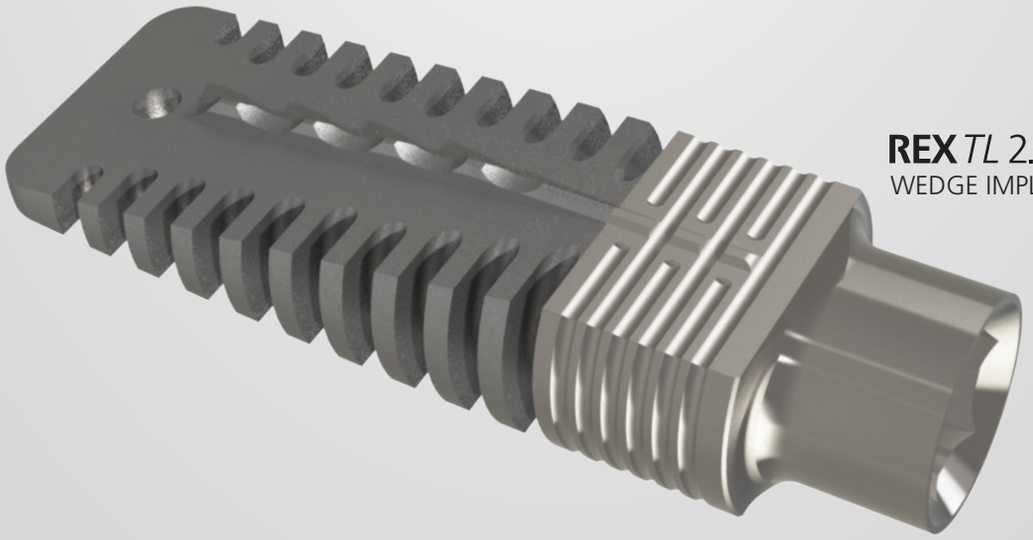
A new shape in implantology: introducing wedge PiezoImplants



REX *TL* 1.8
WEDGE IMPLANT

Advantages of Wedge Implants

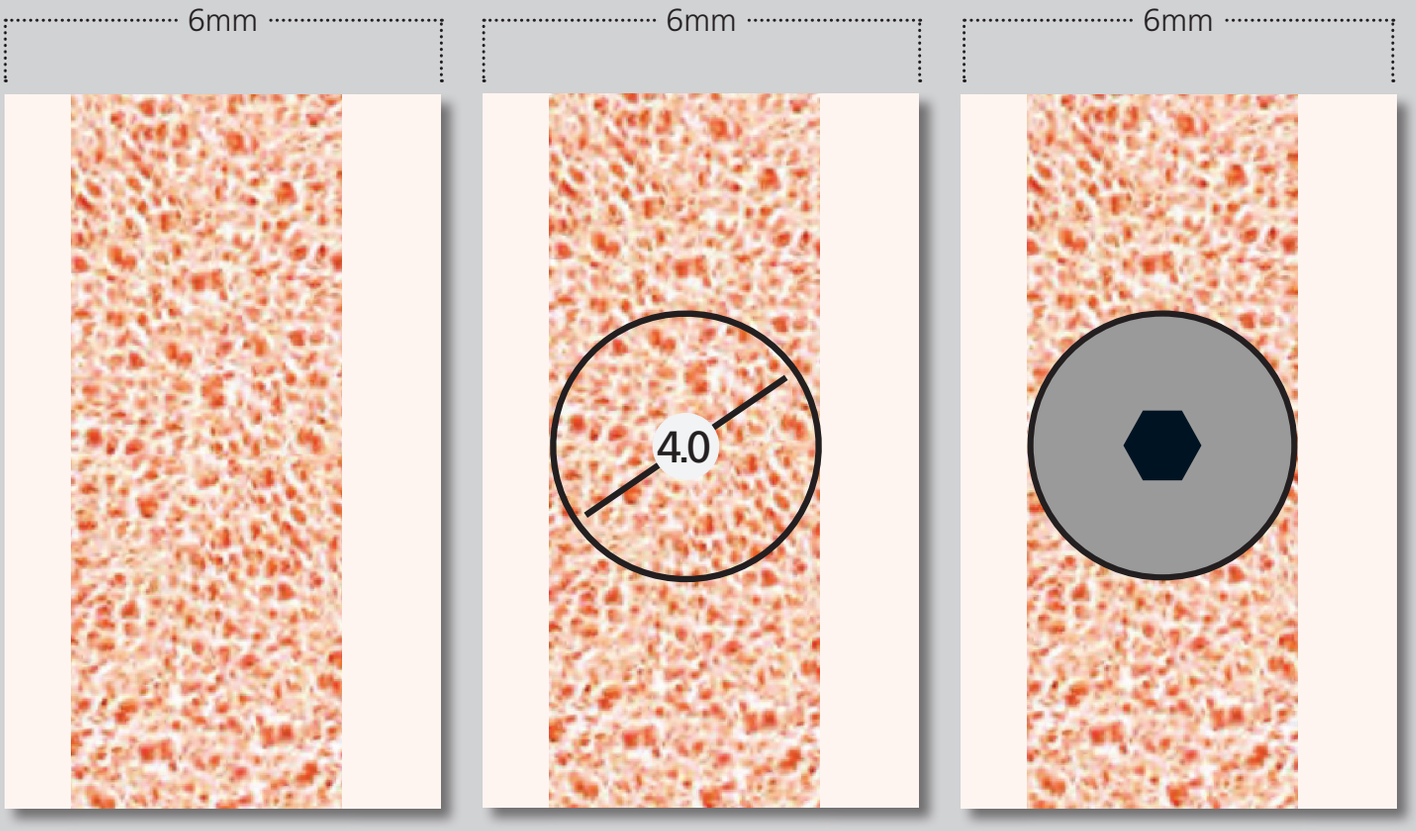
- Rectangular cross-section for a smart insertion in narrow ridges
- No need for bone augmentation procedures
- Implant site preparation with PIEZOSURGERY favors healing and osseointegration
- Simple surgical protocol for standard implant surgery
- Mechanically as strong as standard screw implants



REX *TL* 2.9
WEDGE IMPLANT

Clinical rationale in implantology

The minimum crestal bone width for traditional implant placement depends on the size of the implant but, in general, requires at least 1mm of bone buccally and lingually. [2]



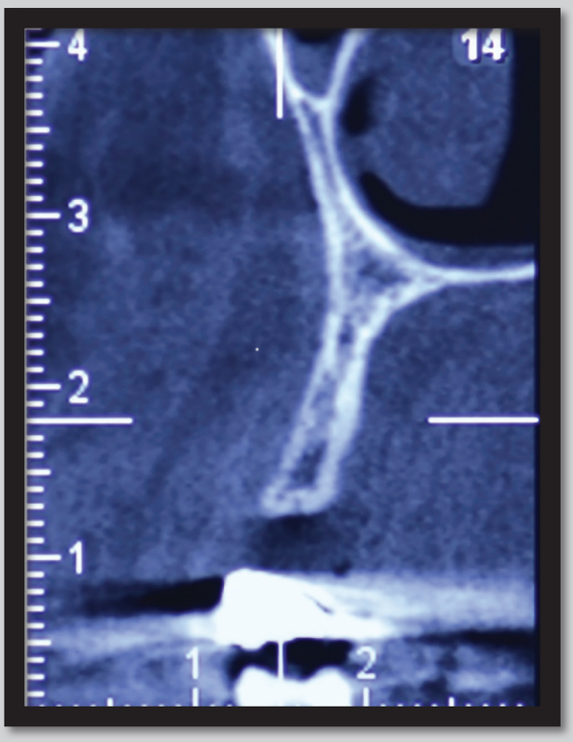
What happens when the crestal width is less than 6mm?

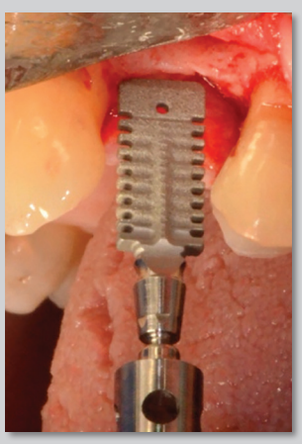
Bone augmentation procedures are required, thus increasing:

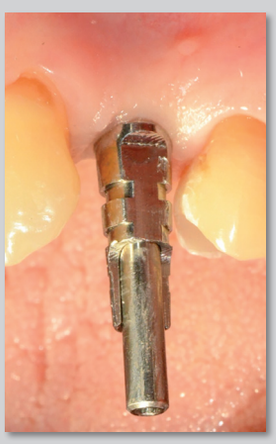
- surgical risk
- clinical complications [3]
- timing and cost [4,5]
- patient morbidity [5]

Reshaping implantology

REX PiezoImplants have a unique rectangular cross-section that mimics the anatomy of the residual crest, preserving vascular supply even in atrophic ridges. This allows clinicians to spare bone in narrow ridges and avoid regenerative procedures.







> REX PiezoImplants allows you to treat narrow ridges with the ease of routine implant surgery. [6]

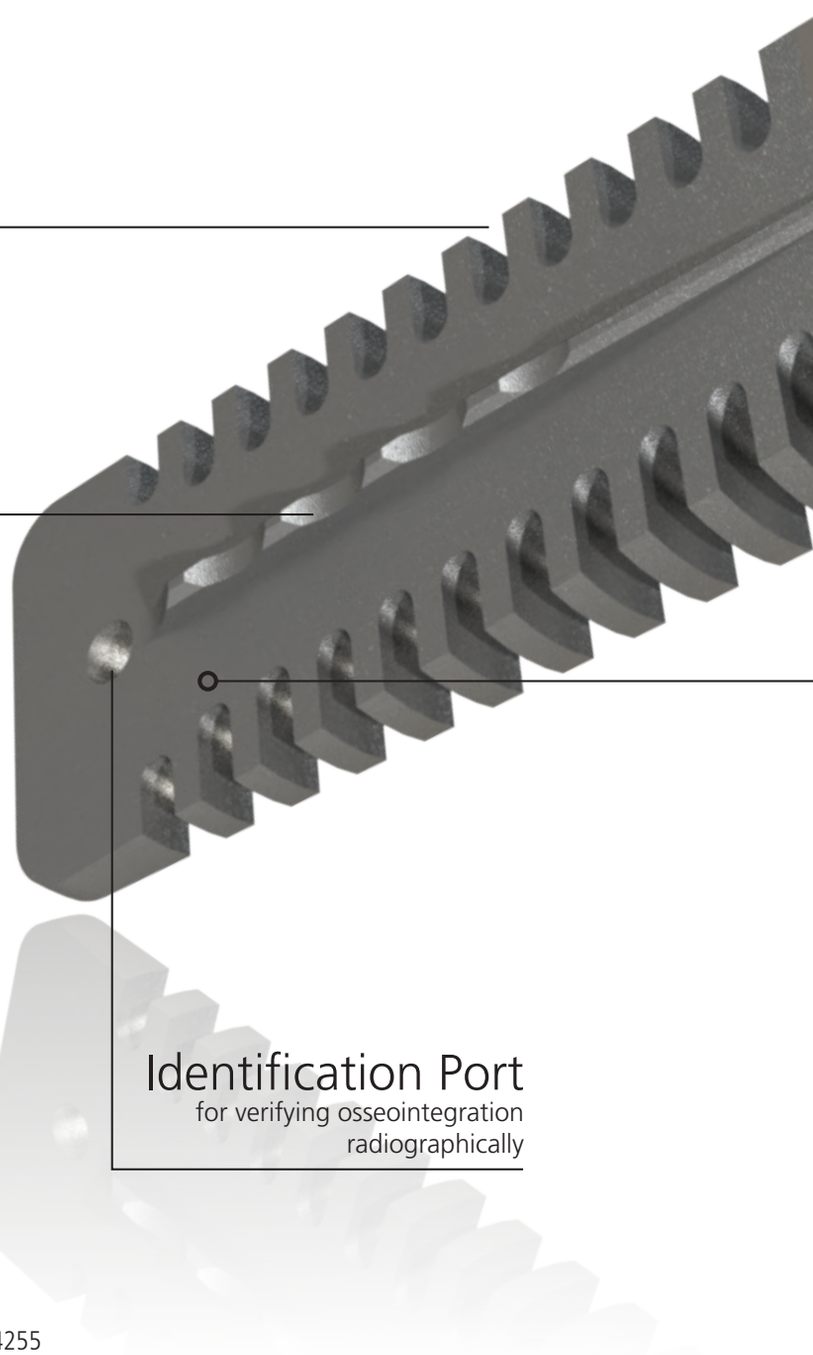
Characteristics of the REX PiezoImplant TL

REX PiezoImplants TL (tissue level) have a unique shape aimed at correcting horizontal defects in a minimally invasive way. PiezoImplants are 5mm wide and available in maximum thicknesses of 1.8mm and 2.9mm, and four lengths (9mm, 11mm, 13mm, 15mm).

Machined Transcortical Surface
to help prevent crestal bone resorption and peri-implantitis [7-11]

Macro Grooves
to promote cancellous osseointegration [12-14]

Sagittal Fin
for improved press-fit and initial stability

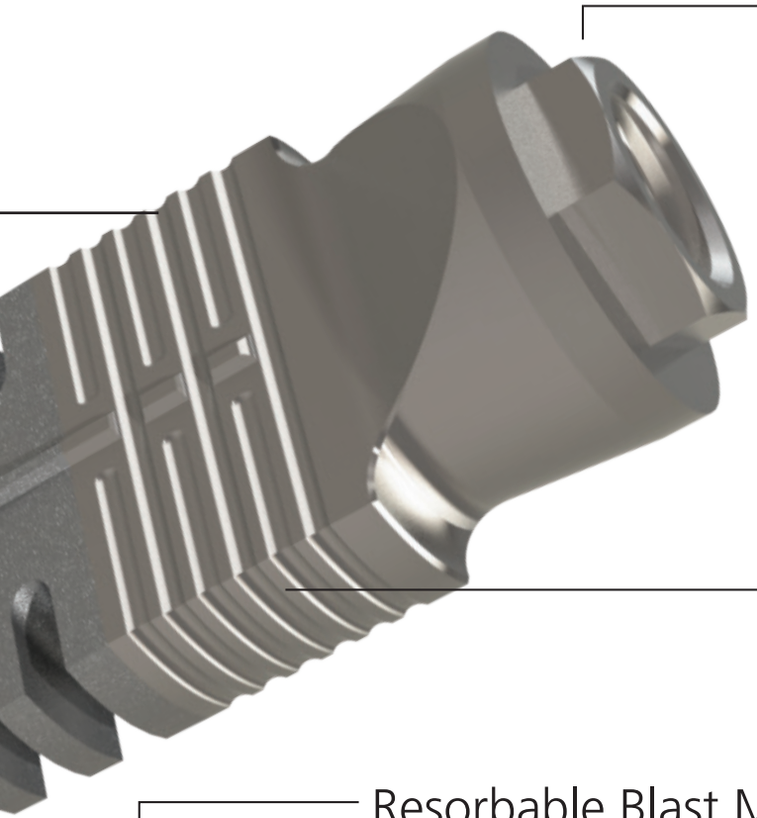


Identification Port
for verifying osseointegration radiographically

> A unique press-fit implant that respects bone structural integrity during insertion.

Patented Design: US 956613BZT, EP 25095301BI, IT1397334, JP5814255

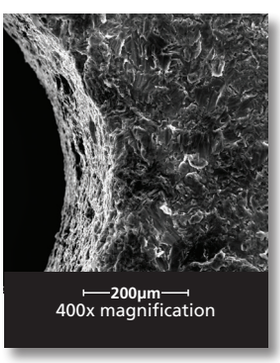
Standard Prosthetic Connection
for ease of restoration



Micro Grooves
to promote cortical osseointegration [14]

Resorbable Blast Media (RBM) Surface Treatment

REX PiezoImplants TL are grit-blasted with hydroxylapatite and acid-passivated to increase the roughness of the implant and promote osseointegration. [15-17]

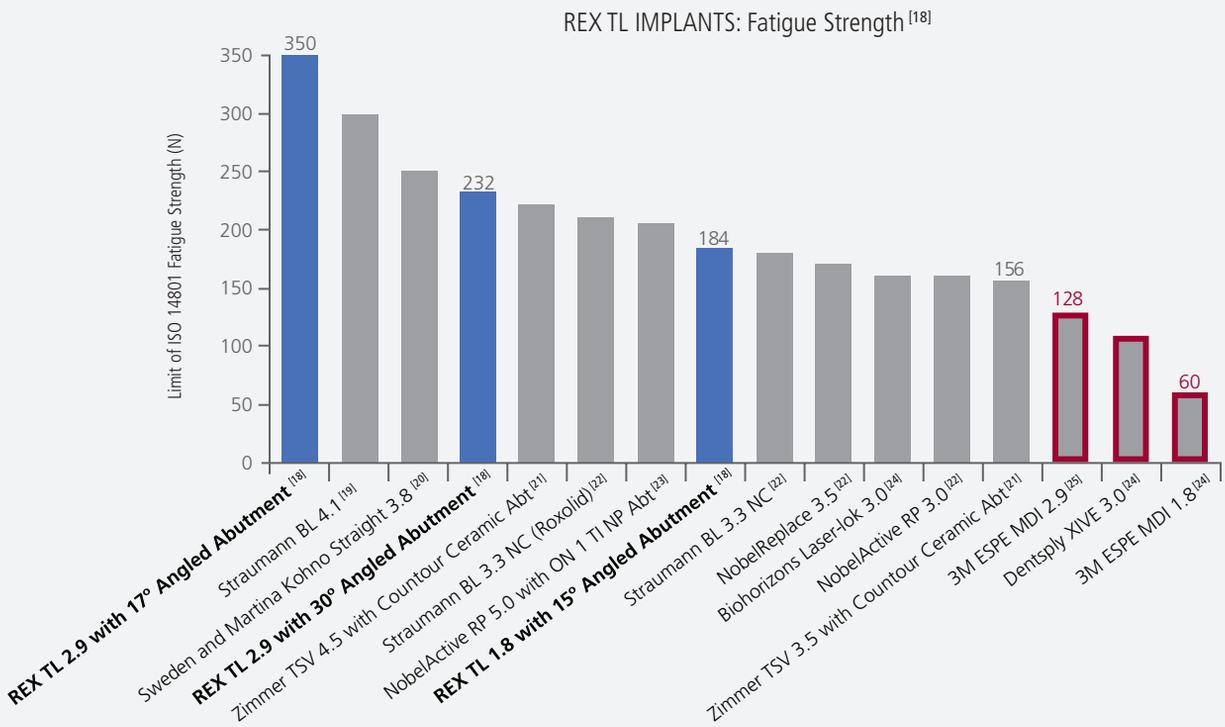


Thin but strong

Our patented implant designs incorporate the best concepts of modern implantology in a new, innovative shape.

Thinnest Section, Maximum Performance

The unique geometry of our REX TL PiezoImplants makes them mechanically more robust than conventional implants used for treating narrow ridges.



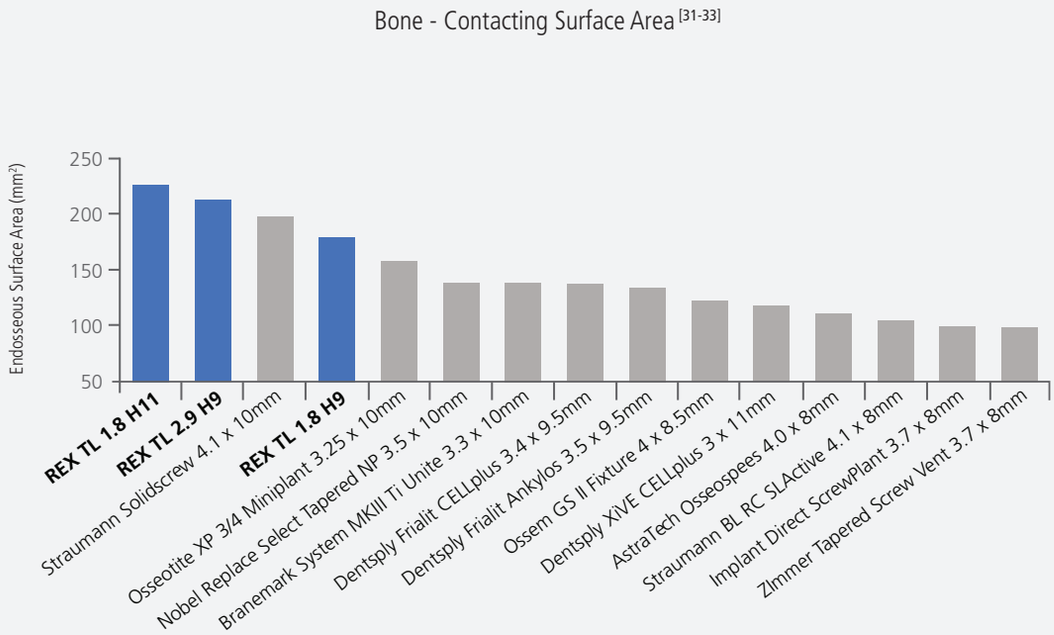
The science behind PiezoImplants

REX Piezoimplants are the first implants designed to be placed exclusively with ultrasonic implant site preparation (UISP).

UISP allows clinicians to create implant osteology of any shape, thus optimizing the use of the residual crestal anatomy. [13] Additionally, UISP promotes faster osseointegration process increasing peri-implant bone density as shown in literature. [27-30]

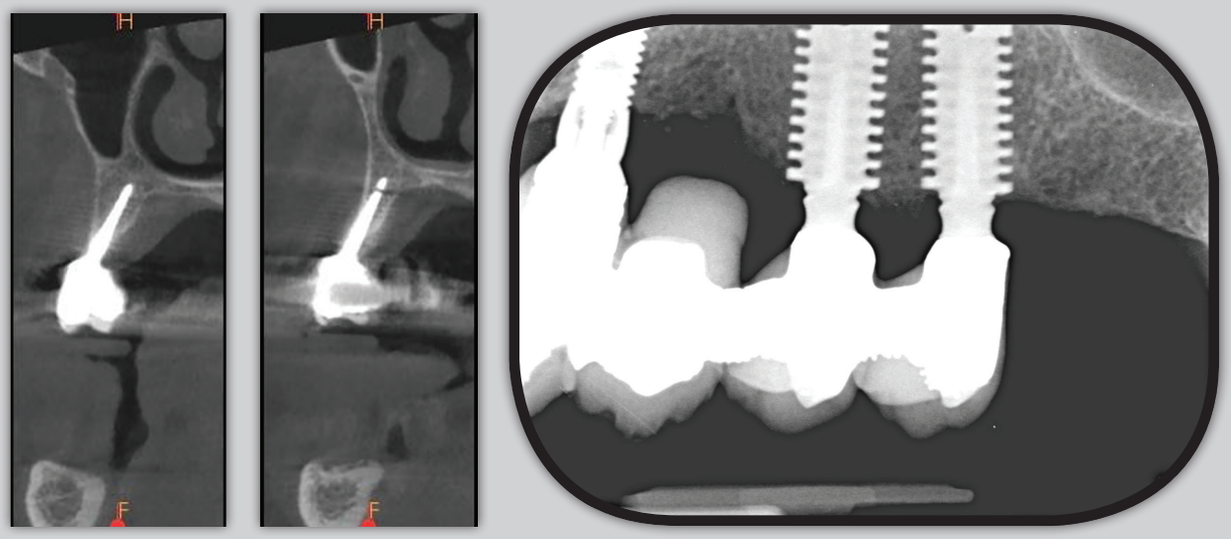
Incredible Bone-Implant Contact Surface

The combination of our patented surface features and RBM surface treatment dramatically increases our implants' surface area, for a bone-implant contact that exceeds that of conventional implants used for treating narrow ridges.



Radiographic results

Over the past decade, building on the unique features of UISP, we worked on identifying the implant design and shapes characterized by the best performance. Our research culminated in a pilot clinical study that has shown that REX TL PiezoImplants' unique shape allows clinicians to treat narrow ridges in a single stage surgery, reliably and with success rates comparable to those implants placed in ample native bone. [6]



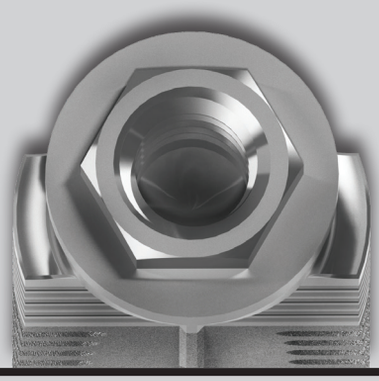
Intraoral rx, with comparison Time 0 and 6 years after surgery

Restorative versatility

Our REX PiezoImplants TL combine an innovative intraosseous design with standard prosthetic connections, thus allowing for an easy, hassle-free restoration even of severely atrophic edentulous crests.

> Easy restoration with standard connection.

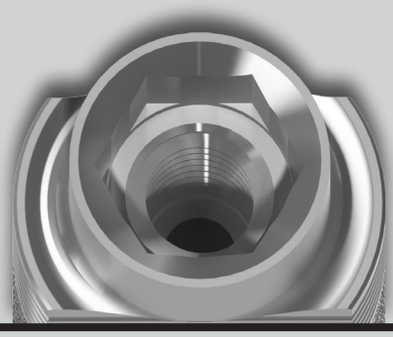
REX *TL* 1.8



REX *TL* 1.8
External Hex
restorative platform.

External Hexagon: 2.7 mm
Platform: 4.1 mmD

REX *TL* 2.9



REX *TL* 2.9
Internal Hex
restorative platform,
ø3.5mm connection.

Internal Hexagon: 2.45 mm
Platform: 3.5 mmD

Experience REX PiezoImplants

Clinical expertise, didactic exposition, and organization allow each surgeon to experience in detail and through hands-on practice how REX PiezoImplants simplify the surgical management of horizontal crest defects.

> It is time to offer patients a less invasive treatment for narrow ridges.

References

[1] Schropp et al. 2003. Int J Periodontics Restorative Dent. 23:313-23. [2] Fu and Wang. 2011. Int J Periodontics Restorative Dent. 31:429-36. [3] Diotallevi.et al. 2014. J. Osseointegration 6:11–14. [4] Dal Carlo et al. 2013. Ann. Oral Maxillofac. Surg. 1(4):33. [5] Hughes, R. 2013. Transcript of the FDA Dental Products Devices Panel on the Classification of Blade-Form Endosseous Dental Implants. doi:10.4324/9781410610348 [6] Internal data. 94% survival rate at 3 years post-implantation. [7] Abrahamsson and Berglundh. 2009. Clin. Oral Implants Res. 20:207-15 [8] Berglundh, et al. 2007. Clin. Oral Implants Res. 18:655–61. [9] Ibañez et al. 2016. Int. J. Oral Maxillofac. Implants 31:398–405. [10] Romeo et al. 2005. Clin. Oral Implants Res. 16:9–18. [11] Romeo et al. 2007. Clin. Oral Implants Res. 18:179–87. [12] Roberts, R.A., 1996. Types, uses, and evaluation of the plate-form implant. J. Oral Implantol. 22: 111–18. [13] Vercellotti and Stacchi. 2016. in: Cullum, D.R., Deporter, D. (Eds.), Minimally Invasive Dental Implant Surgery. Wiley & Sons, Inc., pp. 227–237. [14] Golab et al. 2016. Connect. Tissue Res. 57:10–19. [15] Jemat et al. 2015. Biomed Res. Int. Article ID 791725 [16] Gansukh et al. 2016. Biomed Res. Int. 2016:1–9. [17] Todisco and Trisi. 2006.. J. Oral Implantol. 32:153–66. [18] Internal data. EN ISO 14801 Fatigue Testing. [19] Straumann USA, 2009. Bone Level Implant Scientific Overview. USLIT 302 12/09. [20] Marchetti et al. 2014. Implant Dent. 23:665–71. [21] Joo, W., 2008. Zimmer ® Contour Ceramic Abutments, A985, Rev 1/08. [22] LASAK Ltd., 2016. Bioniq Product catalog 2016/2017. [23] Fuchs et al. 2017. IADR General Session. Poster 335. [24] Biohorizons, 2017. Website. URL http://www.biohorizons.com/laserlok30.aspx (accessed 6.15.17). [25] 3M ESPE. 2012. 3M ESPE MDI Technical Data Sheet. [26] Intra-Lock System Europa, Spa. 2012. Intra-Lock Milo 3.0 Catalog. S4EN-15-01 [27] Vercellotti et al. 2005. Int. J. Periodontics Restorative Dent. 25:543–49. [28] Vercellotti, T. 2009. Essentials in piezosurgery : clinical advantages in dentistry. Quintessence Publishing. [29] Preti, G. Et al. 2007. J. Periodontol. 78:716–22. [30] Da Silva Neto et al. 2014. Br. J. Oral Maxillofac. Surg. 52:149–53. [31] Internal data. [32] Schicho et al. 2007. Clin. Oral Implants Res. 18: 459–64. [33] Gottlow and Sennerby. 2010. Academy of Osseointegration 25th Anniversary Meeting. Abs P193.

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minimally invasive technology

PiezoImplant System

Narrow ridges? Problem solved

For the past several years we have been working to develop an innovative concept that builds on Piezosurgery®'s unique features to simplify narrow ridge treatment.

We are excited to announce that our research and development has culminated in the creation of a revolutionary product line to address the problem of narrow ridges.

We think you will appreciate the REX PiezoImplant solution, committed to simplifying the treatment of reduced anatomy, and developed according to the highest quality and performance standards.

Manufactured by:

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43215, USA
www.reximplants.com

Distributed in Italy by:

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