PiezoImplant System

Narrow ridges? Problem solved
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

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
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

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

Identification Port
for verifying osseointegration radiographically

Patented Design: US 956613BZT, EP 25095301BI, IT1397334, JP5814255
Resorbable Blast Media (RBM) Surface Treatment

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

Standard Prosthetic Connection

for ease of restoration

Micro Grooves

to promote cortical osseointegration [14]
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.

![Graph showing fatigue strength comparison](image)

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. Additionally, UISP promotes faster osseointegration process increasing peri-implant bone density as shown in literature.
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 PiezolImplants’ 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]
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.

**RESTORATIVE VERSATILITY**

**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.

**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.

**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.

**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.

**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.

**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.
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.

References

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.