

leading regeneration

Geistlich



# Smart partners for your regenerative treatments

Oral surgery instruments by  
META Technologies S.r.l.



# SAFE- SCRAPER TWIST

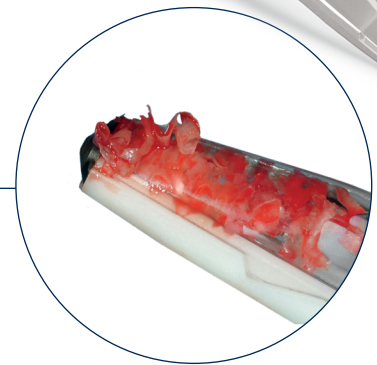
The gold standard  
in intraoral bone  
harvesting

**SAFESCRAPER TWIST**  
provides a quick and  
accurate method to obtain  
ideal autogenous cortical  
bone for grafts in any  
type of dental defects.



## Maximum cutting efficiency

The exclusive cutting performance of the semicircular blade allows cortical shavings to be collected, while preserving high cell vitality, which is essential for graft integration.



**Quick,  
safe, and  
effective**



The bone collected is already combined with blood and ready to be positioned in the defect, or it can be temporarily maintained in aseptic conditions in the transparent chamber during the procedure.

## Ready to use

Disposable, individually packaged

## Minimally invasive

Manual harvesting is non-traumatic and well tolerated by patient

## Useful

Harvesting from any intraoral site including close to defect

## Versatile

Ideal for both extensive and minor procedures

## High cell vitality

Living and well-preserved bone cells: particularly osteocytes, but also osteoblasts, osteoclasts, and osteoprogenitor cells<sup>1</sup>

## Ideal morphology

Elongated and convoluted shaving of a mean length of 1.3 mm and thickness between 150 and 250  $\mu$ m

# SAFE- SCRAPER TWIST CURVE VOLUMIZER

## Extra volume version

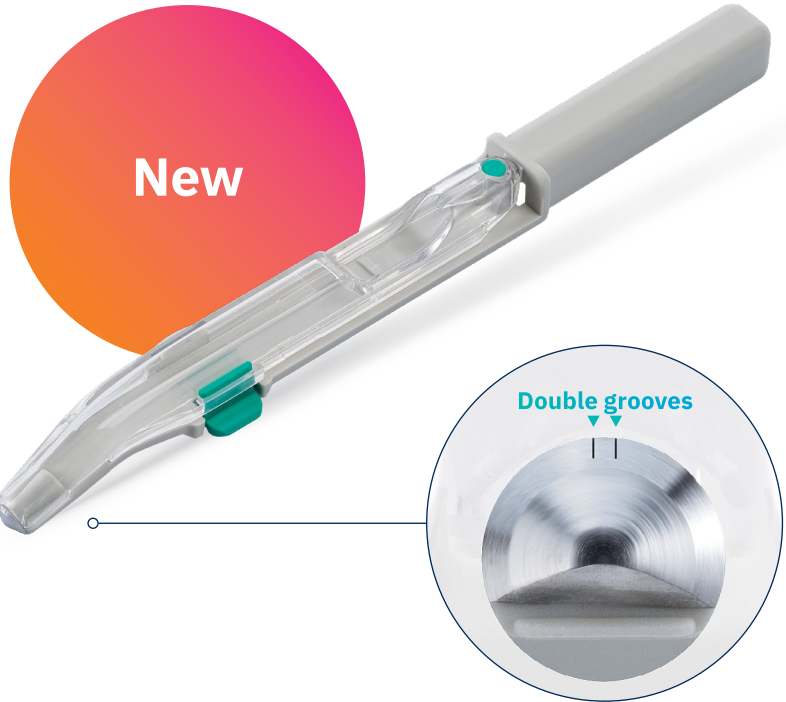
Same performance  
while collecting  
larger bone volume

- > Developed from the longstanding experience of the **SAFESCRAPER** family
- > Enables rapid and accurate collection of autogenous cortical bone

Autogenous bone is a precious asset in alveolar ridge augmentation. Collecting enough can be a challenge, especially for large augmentation procedures. Sometimes, even resorting to extraoral surgery sites is necessary, which can cause additional discomfort for the patient.

## Redesigned blade

- > Double grooves in the blade allow for three collecting surfaces
- > Cutting performance reduces patient discomfort
- > Blade has a cutting range of 160° (just like the whole SAFESCRAPER family)
- > Works on plane, concave and convex surfaces



## Established benefits

The VOLUMIZER continues to provide the established benefits of the proven SAFESCRAPER TWIST curve:

- > Based on state-of-the-art technology and current medical practices
- > Ergonomic curved body easier for surgeons to use
- > Devices are disposable and come ready to use in single sterile packages
- > Quality of harvested bone means presence of many viable osteocytes
- > Promotes graft acceptance, neovascularization and bone regeneration<sup>2,3</sup>



Collected bone already contains  
blood and is ready to use

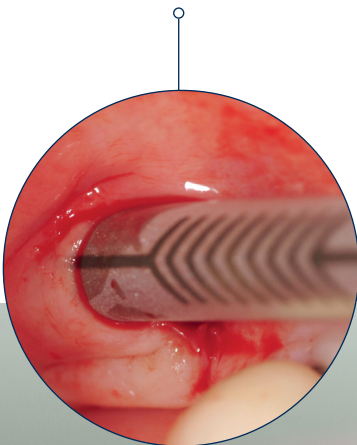
# MICROSS

## Making bone harvesting a handy procedure

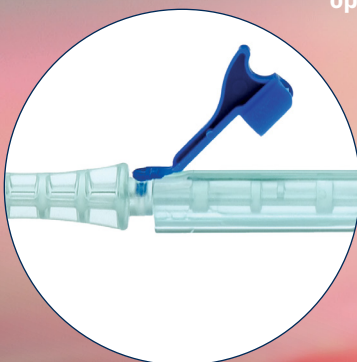
**MICROSS** is a minimally invasive disposable device for manual cortical bone harvesting. With its special shape and just 5 mm in diameter, it can even be inserted into tissue tunnels in the intraoral area e.g., external oblique line, cortical palatine, and zygomatic process.

### Tunnel harvesting technique

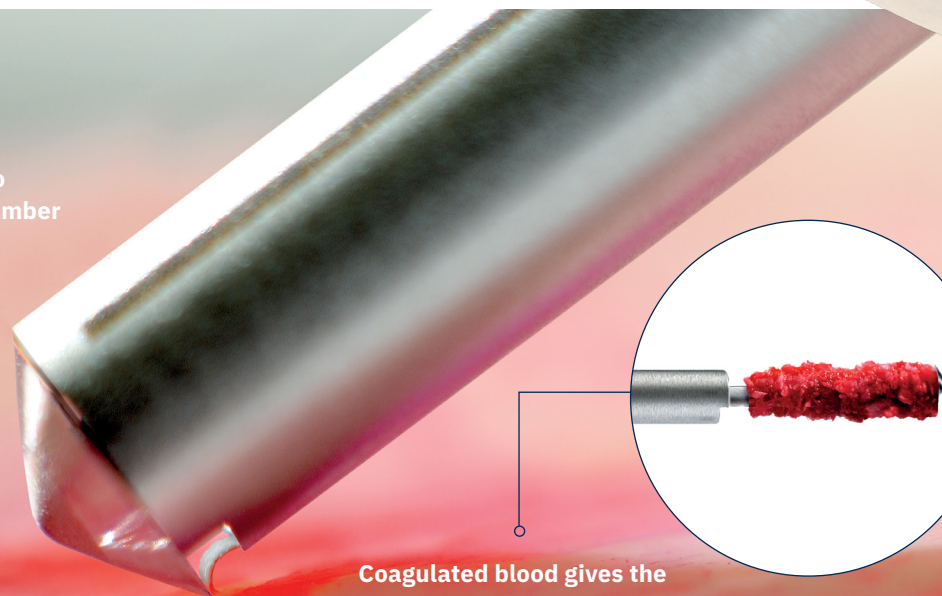
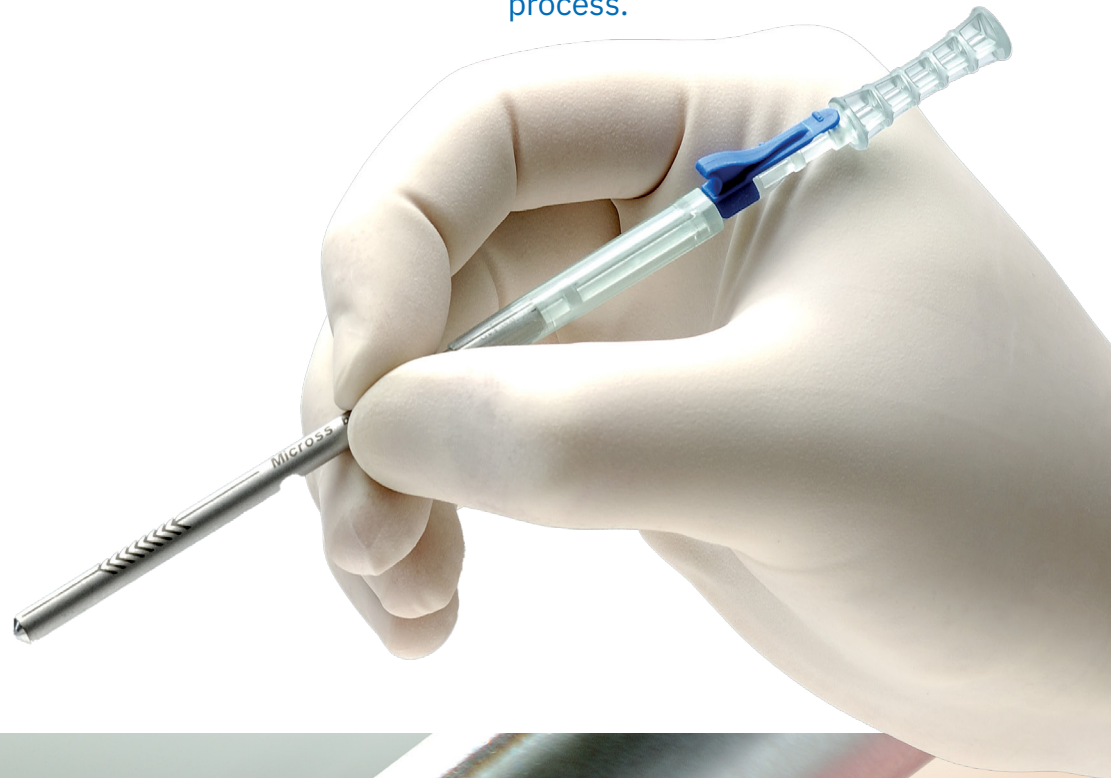
MICROSS is a bone harvesting device specifically studied for tunnel surgical techniques that minimize post-operation discomfort.



Unlock to open chamber



The exclusive microblade facilitates excellent cutting performance making the collection of autogenous bone shavings easy – even in narrow and hard to reach areas.



Coagulated blood gives the collected tissue excellent biological plasticity. The curly morphology has a volumizing effect and therefore reduces the quantity needed to fill the defect and minimizes invasiveness.

# Excellent synergy

# Joint usage of META instruments and Geistlich biomaterials



Geistlich takes pride in the quality and safety of our products. Strict manufacturing processes and rigorous testing ensure that all Geistlich products exceed expectations and meet established regulatory requirements.



**Geistlich Bio-Oss®**  
Stable scaffold for new bone.<sup>4-6,7</sup> The slow resorption of Geistlich Bio-Oss® increases the stability of the augmentation material<sup>8</sup> – the best prerequisite for long-term implant survival rates.<sup>9</sup>

**Geistlich Bio-Gide®**  
Stabilizes the grafted area, protecting bone particles from dislocation.<sup>10</sup> The natural collagen structure allows homogeneous vascularization and permits prompt and optimal tissue integration and wound stabilization.<sup>11</sup> The combination of flexibility, good adhesion, and tear resistance contribute to easy handling, in turn saving time, and simplifying the surgical procedure.<sup>12</sup>



## META Product Range

Ref.-Nr.	Product	Description
Ref. 3987	SAFESCRAPER TWIST curve	3 disposable units, chamber capacity: 2.5 cc
Ref. 4049	MICROSS	1 disposable unit, chamber capacity: 0.25 cc
Ref. 5501	SAFESCRAPER TWIST curve VOLUMIZER	3 disposable units, chamber capacity: 2.5 cc

For more information , please visit:  
[www.geistlich.us](http://www.geistlich.us)

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## Your Partner in a Strong Foundation

### Assurance

*Your assurance, our long-term  
evidence. Scientifically proven in  
over 1400 publications.*

### Proven Outcomes

*Over 15 million successfully  
treated patients worldwide.<sup>12</sup>*

### Trustworthy

*Every 15 seconds a  
Geistlich product is used.<sup>12</sup>*

- 1 Zaffe D, D'Avenia F: Clin Oral Implants Res 2007; 18 (4): 525-33. (Clinical study)
- 2 Righesso, L A R et al. "Dynamic contrast-enhanced magnetic resonance imaging for monitoring neovascularization during bone regeneration-a randomized in vivo study in rabbits." Clinical oral investigations vol. 25,10 (2021): 5843-5854. doi:10.1007/s00784-021-03889-6
- 3 Zaffe, Davide, and Ferdinando D'Avenia. "A novel bone scraper for intraoral harvesting: a device for filling small bone defects." Clinical oral implants research vol. 18,4 (2007): 525-33. doi:10.1111/j.1600-0501.2007.01368.x
- 4 Orsini G et al.: J Biomed Mater Res B Appl Biomater 2005; 74 (1): 448-57. (Clinical study)
- 5 Piattelli M et al.: Int J Oral Maxillofac Implants 1999; 14 (6): 835-40. (Clinical study)
- 6 Sartori S et al.: Clin Implants Res 2003; 14 (3): 369-72. (Clinical study)
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- 8 Orsini G et al.: Oral Dis 2007; 13 (6), 586-93. (Clinical study)
- 9 Jung RE et al.: Clin Oral Implants Res 2013; 24 (10): 1065-73. (Clinical study)
- 10 Perelman-Karmon M et al.: Int J Periodontics Restorative Dent 2012; 32 (4): 459-65. (Clinical study)
- 11 Rothamel D et al.: Clin Oral Implants Res 2005; 16 (3): 369-78. (Pre-clinical study)
- 12 Data on file. Geistlich Pharma AG, Wolhusen, Switzerland