

# **Viteo<sup>®</sup> Base Ti**

THE TITANIUM BASE FROM THE MATERIALS SPECIALISTS



**THE BASE  
FOR SUCCESS**

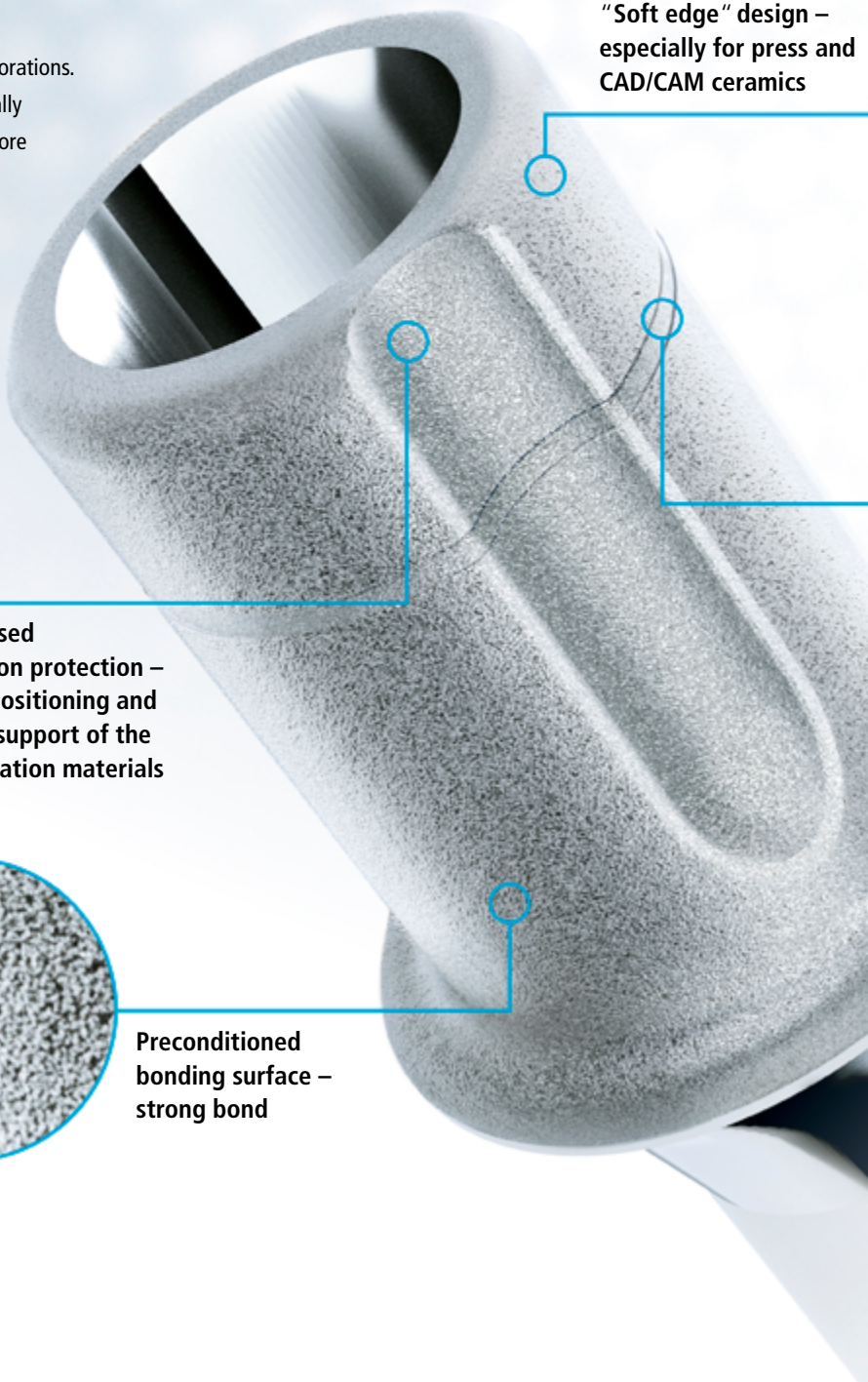


# THE BASE FOR SUCCESS

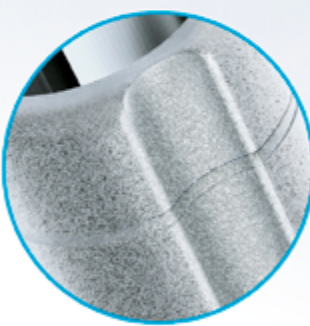
## THE TITANIUM BONDING BASE FROM THE MATERIALS SPECIALISTS

Viteo® Base Ti is a titanium bonding base for single tooth restorations. The special, "soft edge" design of the bonding surface is ideally suited to the Ivoclar Vivadent restoration materials and therefore supports long-term clinical use.


The connection between the titanium bonding base and the implant has been certified and coordinated with the most commonly used implant systems.



"Soft edge" design –  
especially for press and  
CAD/CAM ceramics



Recessed  
rotation protection –  
safe positioning and  
ideal support of the  
restoration materials



Preconditioned  
bonding surface –  
strong bond

## MATERIALS

Viteo Base Ti can be used in conjunction with temporary and permanent restorative materials. It doesn't matter whether the restoration is pressed or fabricated using the CAD/CAM technique.

### Telio® CAD

- Highly cross-linked, clinically proven PMMA blocks\* and discs for temporary restorations



### IPS e.max® CAD / IPS e.max® Press

- Esthetic, high-strength lithium disilicate glass-ceramic for permanent restorations
- Blocks\* for CAD/CAM applications
- Ingots for the press procedure
- Special, burn-out Viteo Base Press Sleeves for the press technique

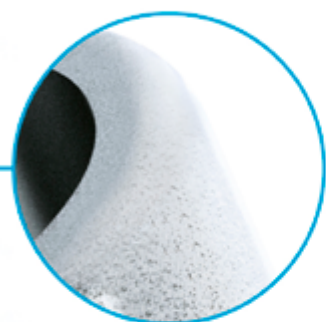


Would you like to learn more about the processing of Viteo Base Ti? Information on the Viteo Base CAD libraries is available in the download centre at [www.ivoclarvivadent.com](http://www.ivoclarvivadent.com).

## SERVICE+

As an alternative, the fabrication of hybrid abutments and hybrid abutment crowns with Viteo Base Ti can be outsourced to the Service+ milling centre in Naturns, Italy.

\* Currently only available for Planmeca systems



Adjustable abutment height – from 6 mm to 4 mm



Tried-and-tested implant connection





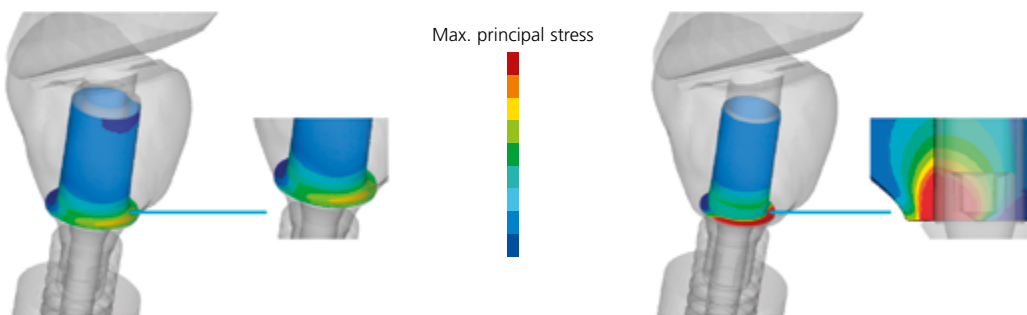
# THE BASE FOR MATERIALS

## SOFT EDGE DESIGN REDUCES TENSION

When the restoration is subjected to stress or tension, the rounded design of the bonding surface, without edges and rotation pins, allows a uniform distribution of force - comparable to the design of a framework with veneering materials.

The result: The tensile or compressive stress on the titanium base is evenly distributed. (Excessive) stress in selective areas is avoided. This reduces the risk of fractures.

### Comparison of different titanium bonding base designs with force initiation of 300 N\*



#### VITEO® BASE

- Even distribution of stress throughout the restoration
- No stress peaks within the restoration

#### CONVENTIONAL TITANIUM BONDING BASE

- High stress on the luting composite in selective areas
- Distinct stress peaks within the restoration

\* Corresponds to the maximum force possible on an implant-supported molar FEM simulation. Source: Dr Siegwald Heintze; Dr Eng. Atılım Eser, Pre-Clinic, R&D Ivoclar Vivadent, Schaan, Liechtenstein, 2019

## ADJUSTABLE ABUTMENT HEIGHT ENSURES IDEAL SUPPORT OF MATERIALS

Implants are often inserted at the bone level, so that the vertical distance to the antagonist tooth is increased. In this case, the titanium bonding base, with its long shaft height, ideally supports the restoration material. With a shorter vertical distance, a shorter shaft height is advantageous.

Viteo Base Ti can be shortened from 6 to 4 mm. A laser marking on the shaft indicates the minimum permissible height. The shaft is cut at a height of 4 mm with a separating disc. Subsequently, the Viteo Base Trimmer is used to restore the soft-edge design. Viteo Base Ti provides maximum flexibility and ideally supports the restoration material.



### THE OPTIMAL HEIGHT

An evaluation of more than 1,000 data files from milling centres showed an average abutment height of 8.53 mm\*. The smallest height (4.95 mm) was measured in the molar region, the largest in the anterior region (13.12 mm).

This shows: Viteo Base Ti has an ideal design with a shaft height of 6 mm or 4 mm, and meets the preparation guidelines and wall thickness of the restoration materials used.

\* Titanium base and abutment, measured from the cervical area of the hybrid abutment restoration up to the edge. Source: Goran Burger, MDT, R&D Ivoclar Vivadent, Schaan, Liechtenstein, 2016



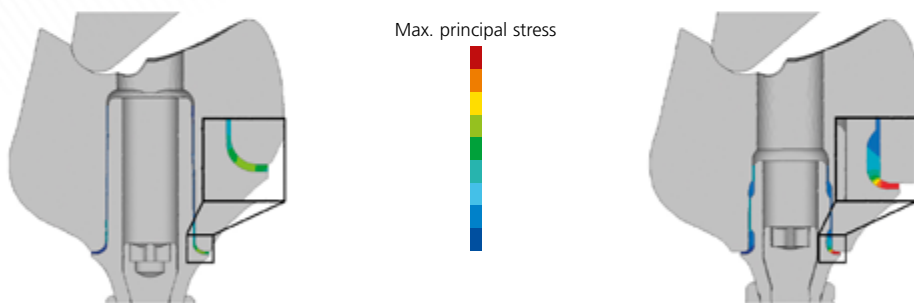
# THE BASE FOR A STRONG BOND

## RECESSED ROTATION PROTECTION SUPPORTS THE RESTORATION MATERIAL

The inner anti-rotation protection is located vertically throughout the entire height of the shaft. It enables precise positioning of the hybrid abutment and the abutment crown during cementation.

Due to the recessed design, the wall thickness of the restoration material is not reduced. Since there is a uniform cement gap, there is no tension.

### Comparison of different titanium bonding base designs with force initiation of 300 N\*



#### VITEO® BASE TI

- Uniform thickness of the luting composite
- No stress peaks within the luting composite
- Supports the restoration material

#### CONVENTIONAL TITANIUM BONDING BASE

- Uneven thickness of luting composite due to bonding surface design
- High stress in the luting material
- Edges / undercuts weaken the restoration material

FEM simulation. Source: Dr Siegward Heintze; Dr Eng. Atilim Eser, Pre-Clinic, R&D Ivoclar Vivadent, Schaan, Liechtenstein, 2019

## PRECONDITIONED BONDING SURFACE SAVES TIME

The bonding surface of Viteo Base Ti is industrially preconditioned. Sandblasted surfaces in combination with the appropriate luting system (Multilink® Hybrid Abutment) ensure a good bond between the titanium base and the restoration material.

This saves time and ensures a reliable marginal seal after cementation. The risk of bacterial penetration is reduced. This is of particular importance close to the bone.



A good marginal seal is important in the vicinity of the bone.

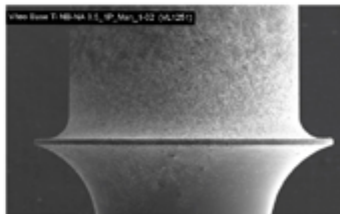
Source: Dr Lukas Enggist, Marie Reinhardt, Pre-Clinic, R&D Ivoclar Vivadent, Schaan, Liechtenstein, 2016

## Industrially conditioned Viteo® Base Ti vs manually sandblasted titanium bonding base

The industrial preconditioning ensures that the surface on the implant connection remains undamaged.



Cervical and emergence profile areas remain untouched.



Significant damage to the surface at the margin and in the emergence profile area.

SEM image. Source: Goran Burger, MDT, R&D Ivoclar Vivadent, Schaan, Liechtenstein, 2016



## CONDITIONING – MONOBOND® PLUS AND SR CONNECT

The correct conditioning of the restoration material as well as the appropriate cementation method form the basis for long-lasting implant restorations.

### MONOBOND® PLUS

The universal primer conditions the bonding surfaces of Viteo Base Ti as well as those of the permanent restoration (IPS e.max® CAD, IPS e.max® Press).



### SR CONNECT

The bonding agent conditions the bonding surface of the temporary restoration (Telio® CAD) in preparation for cementation to Viteo Base Ti.





# GUARANTEE – FOR SATISFIED PATIENTS



## VITEO BASE TI ABUTMENT SOLUTIONS

If the entire prosthetic implant restoration is produced with Ivoclar Vivadent restoration materials, you will receive an additional guarantee on the products used\*.

\* More information on the guarantee:  
[www.ivoclarvivadent.com/viteo](http://www.ivoclarvivadent.com/viteo)

## CEMENTATION MULTILINK® HYBRID ABUTMENT

The self-curing luting composite Multilink® Hybrid Abutment is used for the permanent cementation of the titanium bonding base Viteo Base Ti to ceramic or PMMA structures, such as those made from IPS e.max CAD, IPS e.max Press or Telio CAD. Two different levels of opacity help to achieve an ideal esthetic appearance.



# DIGITAL EXPERTISE UNDER ONE ROOF

Ivoclar Digital is a competent digital partner, which supports dentists and dental technicians along the entire digital process chain. A great deal of importance is placed on simple and understandable procedures. The portfolio for the digital work process is divided into four areas:

## CONSULT

IvoSmile<sup>1</sup>, the innovative software application based on Augmented Reality, supports the dialogue between dental professionals and their patients

## DESIGN

Versatile scanners, intuitive design software from our partners and exclusive add-ons

## DECIDE

High-performance materials such as IPS e.max® – the world's most used all-ceramic system<sup>2</sup>

## PRODUCE

Technologically high-quality equipment for the production of esthetic restorations

## S E R V I C E +

**Service+** The offer is complete with Service+. The service provision makes your entry into digital production easier and serves as a back-up partner for dental laboratories. \*

\* Service+ is available in the following countries: Austria, Belgium, Croatia, Czech Republic, Denmark, Finland, France, Germany, Greece, Holland, Hungary, Ireland, Italy, Liechtenstein, Luxembourg, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, and United Kingdom.

<sup>1</sup> IvoSmile is currently only available in the following countries: Bosnia-Herzegovina, Brazil, China, Croatia, Liechtenstein, Montenegro, Romania, Switzerland, Serbia, Slovenia, and the US. It will be launched in additional countries starting as from April 2019.

<sup>2</sup> Based on sales figures

web/2019-10-30

#### Manufacturer and distributor:

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9494 Schaan, Liechtenstein  
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Fax +423 235 33 60  
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#### Distribution:

[www.ivoclarvivadent.com/distributors](http://www.ivoclarvivadent.com/distributors)

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