

# NobelProcera™ Abutment Zirconia MZ

## HANDLING GUIDE VERSION 1

NobelProcera individualized CAD/CAM zirconia abutments are now available for other major implant systems, including an extended warranty.\*

Advantages of NobelProcera Abutment Zirconia MZ:

- Experience CAD/CAM technology at its best.
- Full freedom of abutment design.
- Choice of shaded zirconia for superior esthetics.
- Compatibility with a wide variety of implant systems.
- Industrial precision of fit.
- Guaranteed quality.

### What is NobelProcera Abutment Zirconia MZ?

---

The NobelProcera Abutment Zirconia MZ (“Metal in Zirconia”) is an abutment consisting of three components:

1. Custom-designed and industrially milled NobelProcera zirconia component.
2. Standard titanium “MZ adapter” (comprising the necessary implant interface and platform size), which is inserted and cemented into the zirconia component.
3. Standard TorqTite clinical screw.



### What does the MZ adapter look like?

---

The MZ adapter is a small, standard titanium component, consisting of:

- Three small anti-rotational “lobes” to inhibit abutment rotation.
- Retentive grooves for mechanical retention and increased surface area when cementing zirconia component.
- The necessary implant interface.



### How does this differ from a NobelProcera two-piece zirconia abutment?

---

The NobelReplace Abutment Zirconia consists of two components:

- Custom-designed NobelProcera zirconia component.
- Standard titanium component, which is held in place mechanically.

Conversely, an abutment using an MZ adapter is held in position both mechanically and chemically.

\*Nobel Biocare extends a warranty to patient cases where an implant-supported NobelProcera prosthetic solution on a non-Nobel Biocare platform has been used, and the implant manufacturer no longer maintains the implant warranty with the argument that a NobelProcera restoration was used. A key warranty condition is that the non-Nobel Biocare implant's safety and efficacy are supported by at least two years of clinical data for this specific implant based on reported data of a minimum of 10 patients published in a peer-reviewed journal.

### Which platforms are available for NobelProcera Abutment Zirconia MZ?

---

- Straumann® Standard/Standard Plus 4.8 mm (RN).
- Straumann® Bone Level (NC, RC).
- Astra Tech® OsseoSpeed (Yellow, Aqua, Lilac).
- Additional platforms to follow in 2010.

### What will you receive when ordering NobelProcera Abutment Zirconia MZ?

---

You will receive a package from a NobelProcera production facility containing three components:

1. Individualized zirconia component (custom designed).
2. Titanium MZ adapter (standard product).
3. TorqTite clinical screw (standard product).

The adapter and screw are standard products that are co-packed with the individualized zirconia component, which is produced according to data received from the NobelProcera Software and Scanner.

**For cementation of the Zirconia Abutment to the MZ adapter a self-curing resin cement should be used. Nobel Biocare recommends Ivoclar Vivadent Multilink Implant® cement.**

### What is the required work flow to cement NobelProcera Zirconia Abutment onto the MZ adapter using Multilink Implant®?

---

#### 1 Preparation of the components prior to cementation

- The following steps require close attention by the operator.

##### *Mark anti-rotational lobe position on MZ adapter*

- Transfer marking to zirconia part.

##### *Pre-treat zirconia part*

- Only sandblast zirconia surface that will be in contact with cement.
- Sandblast using aluminum oxide 50–100 µm and max. 1 bar.
- Clean surface with ethanol.

##### *Pre-treat MZ titanium interface*

- Sandblast the surface that will be in contact with cement.
- Sandblast using aluminum oxide 50–100 µm and max. 2 bar.
- Clean surface with ethanol.

#### Notes:

- Before sandblasting, attach implant replica to protect the implant connection.
- Prior to cementation, add wax to screw access hole to avoid cement blockage.



Multilink Implant® luting composite and universal primer Monobond® Plus

## 2 Application of pre-bonding agent Monobond® Plus

- Monobond® Plus serves as a bonding agent and is used to create a durable chemical bond between luting composites, oxide ceramics and metal.
- Apply a thin coat of Monobond® Plus with a brush to the pretreated zirconia and titanium surface.
- Allow the material to react for 60 seconds.
- Subsequently, disperse any remaining excess with a strong stream of air.

## 3 Cementation using Multilink Implant®

- Use Multilink Implant®, self-curing luting composite with light-curing option for the cementation of the NobelProcera™ Abutment Zirconia MZ.
- Use Multilink Implant® shade MO O (opaque), for cementation of MZ adapters, in order to get masking effect of the MZ adapter to increase the esthetics of the final restoration.
- For each application attach a new mixing tip to the syringe. Store automix syringe with mixing tip attached after use.
- Dispense Multilink Implant® MO O from the automix syringe and apply the desired quantity directly to the pretreated surface.
- Press and hold together abutment and MZ adapter using finger pressure.

### Notes:

- The two pieces need to be inserted and placed together according to the rotational lobes on the MZ adapter.
- Allow the surplus material to flow out without any modification prior to light curing.

## 4 Pre-polymerization

- Excess material is light-cured with a polymerization light (approx. 650 mW/cm<sup>2</sup>), table top lamp, for 2–4 seconds per quarter (mesial, distal, buccal and lingual) surfaces at a distance of approx. 0–10 mm.
- Subsequently, excess material can be easily removed with an implant scaler.

## 5 Prior to final polymerization

- Carefully remove any surplus cement material.
- Check and remove any surplus cement material in screw channel.
- Coat the margins/cement gap between the zirconia part and the MZ adapter with a glycomin gel/air block (e.g. SR Gel).

## 6 Final polymerization

- Place abutment in light furnace for final polymerization.
- 7 minutes of light exposure.
- After curing, rinse away the gel, polish and smooth the interface between abutment/MZ adapter using a silicon rubber.

**NobelProcera – quality assurance and warranty**

**Quality assurance**

Quality is of highest importance at Nobel Biocare. All products manufactured at Nobel Biocare’s production sites are CE-certified and FDA-cleared.

NobelProcera milling processes are quality-assured under ISO and monitored on a 24-hour basis. All NobelProcera products are quality controlled using high precision gauges, and state-of-the-art optical and tactile measurement equipment.

**Product warranty**

NobelProcera guarantees all CAD/CAM abutments with a 5-year product warranty. The NobelProcera Product Warranty covers the NobelProcera products. It does not include any additional costs. NobelProcera also provides certificates of material authenticity.

The NobelProcera warranty also extends to non-Nobel Biocare implant systems.\*

In case of implant failure, the customer will receive:

- New NobelReplace implant by Nobel Biocare
- New NobelProcera implant-supported prosthetic framework

Visit [www.nobelbiocare.com](http://www.nobelbiocare.com) for detailed terms and conditions.



\*Nobel Biocare extends a warranty to patient cases where an implant-supported NobelProcera prosthetic solution on a non-Nobel Biocare platform has been used, and the implant manufacturer no longer maintains the implant warranty with the argument that a NobelProcera restoration was used. A key warranty condition is that the non-Nobel Biocare implant’s safety and efficacy are supported by at least two years of clinical data for this specific implant based on reported data of a minimum of 10 patients published in a peer-reviewed journal. For further information please visit [www.nobelbiocare.com](http://www.nobelbiocare.com)

NobelProcera Abutment Zirconia MZ – article numbers	White	Light	Medium	Intense
<b>Straumann® Standard/Standard Plus 4.8 mm (RN)</b>				
NobelProcera Zirconia Abutment for Straumann Octagon 4.8	24238	24242	24247	24252
<b>Straumann® Bone Level (NC, RC)</b>				
NobelProcera Zirconia Abutment for Straumann Bone level NC3.3	23451	24239	24244	24249
NobelProcera Zirconia Abutment for Straumann Bone level RC4.1/4.8	23452	24240	24245	24250
<b>Astra Tech® OsseoSpeed™ (Yellow, Aqua, Lilac)</b>				
NobelProcera Zirconia Abutment for Astra Tech Yellow	23202	24229	24232	24235
NobelProcera Zirconia Abutment for Astra Tech Aqua	23429	24230	24233	24236
NobelProcera Zirconia White Abutment for Astra Tech Lilac	23450	24231	24234	24237

All NobelProcera Abutments, including those for non-Nobel Biocare platforms, are supplied with a Nobel Biocare TorqTite clinical screw, which allows for increased clamping force. This unique carbon-coated screw decreases friction, allowing for increased pre-loading.

Straumann® is a registered trademarks of Institut Straumann AG. Astra Tech® and OsseoSpeed™ are trademarks of Astra Tech Group. Multilink Implant® is a registered trademark of Ivoclar Vivadent AG.