NobelEsthetics®

PROCEDURES MANUAL

Introduction page 4
Temporary implant restorations page 6
Solutions for existing teeth page 14
Final implant restorations page 26
Overdenture solutions page 67
Appendices page 86
Note: In order to improve readability, Nobel Biocare does not use ™ or ® in the running text. By doing so, however, Nobel Biocare does not waive any right to the trademark or registered mark and nothing herein shall be construed to the contrary.

The following third-party trademarks apply:
3i® is a trademark of Biomet Group.
Ankylos® is a trademark of Dentsply Friadent Group.
Astra Tech® is a trademark of Astra Tech Group.
Camlog® is a trademark of Camlog Biotechnologies Group.
Dolder® is a trademark of Cendres+Metaux SA.
Lifecore® Biomedical Restore is a trademark of Lifecore Biomedical Group.
Locator® is a trademark of Zest Anchors Inc.
Sterngold® Implamed is a trademark of Sterngold Group.
Straumann® is a registered trademark of Institut Straumann AG.
Telio® is a registered trademark of Ivoclar Vivadent Group.
Zimmer® Dental is a trademark of Zimmer Group.

Disclaimer: Some products may not be regulatory cleared/released for sale in all markets. Please contact the local Nobel Biocare sales office for current product assortment and availability.
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduction</strong></td>
<td>Prosthetic solutions for all indications</td>
</tr>
<tr>
<td><strong>Temporary implant restorations</strong></td>
<td>Planning the temporary solution</td>
</tr>
<tr>
<td></td>
<td>Using final abutments</td>
</tr>
<tr>
<td></td>
<td>Immediate Temporary Abutment</td>
</tr>
<tr>
<td></td>
<td>QuickTemp™ Abutment Conical</td>
</tr>
<tr>
<td></td>
<td>Temporary Abutment</td>
</tr>
<tr>
<td><strong>Solutions for existing teeth</strong></td>
<td>NobelProcera® on existing teeth</td>
</tr>
<tr>
<td></td>
<td>Cementation</td>
</tr>
<tr>
<td></td>
<td>NobelProcera® Crown</td>
</tr>
<tr>
<td></td>
<td>NobelProcera® Bridge Zirconia</td>
</tr>
<tr>
<td></td>
<td>NobelProcera® Bridge Alumina</td>
</tr>
<tr>
<td></td>
<td>NobelProcera® Bridge Titanium</td>
</tr>
<tr>
<td></td>
<td>Procera® Lamine</td>
</tr>
<tr>
<td><strong>Final implant restorations</strong></td>
<td>Implant restoration overview</td>
</tr>
<tr>
<td></td>
<td>Procera® Esthetic Abutment</td>
</tr>
<tr>
<td></td>
<td>NobelProcera® Abutment</td>
</tr>
<tr>
<td></td>
<td>Snappy™ Abutment</td>
</tr>
<tr>
<td></td>
<td>Esthetic Abutment</td>
</tr>
<tr>
<td></td>
<td>Platform shifting – NobelProcera® Abutment Zirconia</td>
</tr>
<tr>
<td></td>
<td>Platform shifting – Procera® Esthetic Abutment PS</td>
</tr>
<tr>
<td></td>
<td>Multi-unit Abutment</td>
</tr>
<tr>
<td></td>
<td>NobelProcera® Implant Bridge Zirconia</td>
</tr>
<tr>
<td></td>
<td>NobelProcera® Implant Bridge Titanium</td>
</tr>
<tr>
<td></td>
<td>Single Tooth Abutment NobelReplace®</td>
</tr>
<tr>
<td></td>
<td>Narrow Profile Abutment NobelActive®</td>
</tr>
<tr>
<td></td>
<td>GoldAdapt™ Engaging</td>
</tr>
<tr>
<td></td>
<td>GoldAdapt™ Non-Engaging</td>
</tr>
<tr>
<td><strong>Overdenture solutions</strong></td>
<td>NobelProcera® Implant Bar Overdenture</td>
</tr>
<tr>
<td></td>
<td>Gold Abutment Bar/Gold Coping Bar</td>
</tr>
<tr>
<td></td>
<td>Ball Abutment Titanium</td>
</tr>
<tr>
<td></td>
<td>Locator® Abutment</td>
</tr>
<tr>
<td><strong>Appendices</strong></td>
<td>Glossary</td>
</tr>
<tr>
<td></td>
<td>Implant/abutment interface diameter</td>
</tr>
<tr>
<td></td>
<td>Abutment selection</td>
</tr>
<tr>
<td></td>
<td>Extraction Screw NobelActive®</td>
</tr>
<tr>
<td></td>
<td>Impression techniques – implant level</td>
</tr>
<tr>
<td></td>
<td>Impression techniques – abutment level</td>
</tr>
<tr>
<td></td>
<td>Cementation on abutments</td>
</tr>
<tr>
<td></td>
<td>Prosthetic instrumentation</td>
</tr>
<tr>
<td></td>
<td>Torque guide</td>
</tr>
<tr>
<td></td>
<td>Cleaning and sterilization</td>
</tr>
<tr>
<td></td>
<td>Frequently asked questions</td>
</tr>
<tr>
<td></td>
<td>Index in alphabetical order</td>
</tr>
<tr>
<td></td>
<td>Nobel Biocare worldwide</td>
</tr>
</tbody>
</table>
Solutions for all patient needs
For years, Nobel Biocare has provided clinicians and dental technicians with an expansive portfolio of individualized (CAD/CAM) and standard prosthetic solutions that support the entire range of tooth- and implant-supported restorations.

This manual contains comprehensive instructions for using Nobel Biocare prosthetic solutions. Following these instructions will help ensure that patients leave the treatment room satisfied and comfortable with functioning, esthetically pleasing teeth.

Standard prosthetics
Nobel Biocare offers a comprehensive prosthetic portfolio, designed to work in harmony with the versatility of each implant system and its respective prosthetic connection.

The standard assortment includes components for supporting crowns and bridges, as well as healing abutments and cover screws.

Whether for one- or two-stage, immediate temporization or delayed-loading procedures, Nobel Biocare offers a prosthetic solution that satisfies the clinical situation and meets the needs of the patient.

Individualized prosthetics
Nobel Biocare’s individualized prosthetics (NobelProcera) are produced using state-of-the-art computer-aided design (CAD) software and computer-assisted manufacturing (CAM) processes.

NobelProcera produces prosthetics for both tooth- and implant-supported dental restorations, from single crowns to full-arch bridges and overdenture bar solutions.
Broad choice of materials
Nobel Biocare prosthetics are produced from a variety of materials for safe and predictable results. Materials include shaded zirconia, alumina, titanium and acrylic (Telio® CAD). In addition, materials and products are continually being added.

Additional information
The focus of this manual is on prosthetic procedures. For more detailed information on laboratory procedures, please see the Dental Laboratory manual. Additional information on implant prosthetics for NobelActive, NobelReplace, NobelSpeedy Replace Select and Brånemark System can be found in various print materials and on the website nobelbiocare.com

NobelGuide® treatment concept
NobelGuide is Nobel Biocare’s solution for state-of-the-art diagnostics, treatment planning and guided surgery. Using NobelGuide, dental professionals can make all relevant decisions before surgery, allowing them to control everything according to prosthetic needs. Moreover, NobelGuide brings predictable and stress-free treatments, by aligning the entire team and facilitating communication with the patient.
Planning the temporary solution.

Treatment planning should consider the entire treatment sequence, including the final prosthetic solution. Several different methods and products can be used to create temporary restorations depending on the planned final solution.

**Temporary components**
Temporary crowns and bridges can be placed on temporary and final abutments for use as temporary restorations.

**Temporary restorations**
Temporary restorations range from standard acrylic crowns/bridges created chair-side to laboratory produced CAD/CAM temporary crowns/bridges. Regardless of which solution you provide, it is important to have a smooth contour on the temporary crown to avoid irritating the soft tissue.

When preparing for a temporary restoration, remove any cement or impression material in order to avoid contaminating the surgical site.

**One-stage procedure**
In a one-stage with immediate temporization procedure, a temporary restoration is placed at the time of implant insertion. Depending on the strategy for the final solution, you can use temporary abutments on implants or copings on final abutments, along with your choice of temporary prosthetic solution.

**Two-stage procedure**
The two-stage procedure is used when it is desirable to cover the implants to allow healing prior to placing a temporary restoration.

Before implants are uncovered:
To create a temporary restoration for the fully edentulous patient, use the existing denture, if available. Be sure to adjust and reline the denture. For the partially edentulous patient, use suitable conventional temporization procedures after implant insertion.

After implants are uncovered:
As with the one-stage procedure, use temporary components as the planning strategy requires. Indexing at the time of implant insertion enables the fabrication and delivery of an abutment and/or temporary restoration at the time of implant uncovering.

**Connecting a temporary restoration**
For screw-retained temporary restorations:
The temporary restoration is fastened with the corresponding abutment screw/prosthetic screw. Fill the screw access hole with a suitable material such as gutta-percha, silicone, or temporary filling.

For cement-retained temporary restorations:
The temporary restoration must be cemented with retrievable temporary cement. Remove any excess cement.

Occlusion should be adjusted for both types of restorations.
### Using final abutments

<table>
<thead>
<tr>
<th>Abutment Type</th>
<th>Single</th>
<th>Multiple</th>
<th>Temporary Coping</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procera® Esthetic Abutment</td>
<td></td>
<td>×</td>
<td></td>
<td>28</td>
</tr>
<tr>
<td>Snappy™ Abutment</td>
<td>×</td>
<td></td>
<td>×</td>
<td>8, 35</td>
</tr>
<tr>
<td>Esthetic Abutment</td>
<td>×</td>
<td></td>
<td>×</td>
<td>8, 38</td>
</tr>
<tr>
<td>Multi-unit Abutment</td>
<td></td>
<td>×</td>
<td>×</td>
<td>11, 47</td>
</tr>
</tbody>
</table>

### Using temporary abutments

<table>
<thead>
<tr>
<th>Abutment Type</th>
<th>Single</th>
<th>Multiple</th>
<th>Temporary Coping</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate Temporary Abutment</td>
<td>×</td>
<td></td>
<td>×</td>
<td>9</td>
</tr>
<tr>
<td>QuickTemp™ Abutment Conical</td>
<td>×</td>
<td></td>
<td>×</td>
<td>10</td>
</tr>
<tr>
<td>Temporary Abutment Non-Engaging</td>
<td>×</td>
<td></td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>Temporary Abutment Engaging</td>
<td></td>
<td>×</td>
<td>×</td>
<td>11</td>
</tr>
</tbody>
</table>
Using final abutments.

Temporary Copings on final abutments
For quick temporization, ideal with immediate loading, fabricate a temporary restoration using a Temporary Coping on a final abutment.

For multi-unit copings, follow the procedures on page 11.

Making temporary restoration
– Try-in the plastic coping.
– Fabricate a temporary crown or bridge with traditional methods using either acrylic or composite.
– Cement using temporary cement.

Warning: Do not use polyurethane cement with plastic/temporary copings; the cement will not cure.
Immediate Temporary Abutment.

The Immediate Temporary Abutment consists of two parts: an abutment and a plastic coping.

Indications:
- Single-unit implant restorations, made chair-side

1 Abutment connection
Attach the abutment onto the implant and tighten to 35 Ncm with the Screwdriver Machine Multi-unit and Manual Torque Wrench Prosthetic.

2 Making a temporary crown
- Fabricate a temporary crown with traditional methods using either acrylic or composite.
- Cement using temporary cement.

Warning: Do not use polyurethane cement with plastic/temporary copings; the cement will not cure.
The QuickTemp Abutment Conical consists of two parts: an abutment and a plastic coping.

Indications:
- Multi-unit implant restorations, made chair-side

1 Abutment connection
Attach the abutments onto the implants and tighten to 35 Ncm with the Unigrip Screwdriver and Manual Torque Wrench Prosthetic.

2 Try-in of plastic copings
Try-in the plastic copings; they should securely snap onto the abutments.

3 Making a temporary bridge
Fabricate a temporary bridge with traditional methods using either acrylic or composite.

4 Cementation
Cement using temporary cement.

Warning: Do not use polyurethane cement with plastic/temporary copings; the cement will not cure.
Temporary Abutment.

Temporary Abutments, used for the fabrication of temporary screw-retained restorations, are made of titanium or plastic. The retentive grooves on the abutments/copings help to retain the acrylic material when constructing the temporary restoration.

These restorations are made either at a dental laboratory or chair-side. For the direct chair-side method, an acrylic mold can be made for the temporary restoration.

### Plastic and Titanium

**Indications:**
- Non-Engaging: multiple-unit implant restorations
- Engaging: single-unit implant restorations

<table>
<thead>
<tr>
<th>Implant level</th>
<th>Abutment level</th>
</tr>
</thead>
<tbody>
<tr>
<td>manual torque only</td>
<td>torque to 35 Ncm</td>
</tr>
<tr>
<td>manual torque only</td>
<td>torque to 15 Ncm</td>
</tr>
</tbody>
</table>

**1 Abutment connection**
- Attach the abutment onto the implant and tighten to above torque specification, using the Unigrip Screwdriver and/or Manual Torque Wrench Prosthetic.
- Adjust the abutment post for height and clearance.
- Block out undercuts on adjacent teeth, if necessary.
- Fill the screw access hole with suitable material.

**2 Making the temporary restoration**
Fill the plastic mold with temporary crown and bridge material and seat it.
3 Remove the restoration and make final adjustments
   – Drill a hole through the mold and remove the material from the screw access holes.
   – Loosen the screws to remove the restoration.
   – Remove the mold.
   – Make final adjustments.

4 Connection of temporary restoration
   – Fasten the temporary restoration.
   – Fill screw access holes with suitable material.
<table>
<thead>
<tr>
<th>Product list for clinical procedures</th>
<th>Internal conical</th>
<th>External hex</th>
<th>Internal tri-channel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate Temporary Abutment</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
</tr>
<tr>
<td>Includes:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastic Coping Immediate Temporary Abutment</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
</tr>
<tr>
<td>QuickTemp™ Abutment Conical</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
</tr>
<tr>
<td>Includes:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastic Coping QuickTemp™ Abutment Conical</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
</tr>
<tr>
<td>Temporary Abutment Titanium Engaging with Abutment Screw</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
</tr>
<tr>
<td>Temporary Abutment Titanium</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
</tr>
<tr>
<td>Non-Engaging with Abutment Screw</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temporary Abutment Plastic Engaging without Abutment Screw</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
</tr>
<tr>
<td>Temporary Abutment Plastic Non-Engaging without Abutment Screw</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
</tr>
<tr>
<td>Temporary Coping Multi-unit Titanium with Prosthetic Screw</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
</tr>
<tr>
<td>Temporary Coping Multi-unit Plastic without Prosthetic Screw</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
</tr>
</tbody>
</table>
NobelProcera® on existing teeth.

The preservation and restoration of existing teeth with crowns, bridges and laminates is the daily business of dental professionals. For existing teeth, NobelProcera offers a complete range of prosthetics which demonstrates excellence in precision of fit, biocompatibility and esthetics.

Crowns and bridges
NobelProcera offers crown and bridges in zirconia, alumina, and titanium. Alumina is used in the esthetic region due to its translucent properties. Zirconia, which is available in four shades (white, light, medium and intense), can be used in all indications due to its strength.

NobelProcera all-ceramic bridges are milled from pre-sintered homogeneous blanks ensuring biocompatibility, strength, high precision of fit and optimal esthetics.

NobelProcera Bridge Titanium is milled from a homogeneous block of titanium. The extra strength provided satisfies all clinical requirements.

NobelProcera Bridge Zirconia and Titanium are available in full arches (up to 14 units), whereas NobelProcera Bridge Alumina is indicated for anterior use, up to 4 units, for optimal translucency and esthetics.

All tooth-supported crowns and bridges follow conventional cementation techniques.

Laminates
Procera Laminates are 0.25 mm thin veneers made from alumina that have been designed to cover only the outside of existing teeth. Laminates possess excellent masking capabilities and are applied using standard tooth preparation and bonding techniques.

NobelProcera product warranty
NobelProcera products on teeth and implants are guaranteed for five years*; the NobelProcera Product Warranty only covers the NobelProcera products and does not include any additional costs.

Preparation instruments
Working with NobelProcera products requires only your conventional preparation techniques, a moderate chamfer margin and rounded internal line angles. Preparation kits are available for NobelProcera restorations. The shapes of the tools are of standard design and can also be purchased separately from other suppliers. Each of the preparation kits includes the necessary diamond drills for preparation.

* Excluding temporary restorations.
Cementation.

**Conventional cementation (e.g., glass-ionomer cement (GIC) or self-adhesive universal resin cement)**

1. Try-in the veneered NobelProcera Crown or Bridge ensuring that no major adjustments are necessary.
2. Clean and dry the internal surface of the crown or bridge.
3. Clean, condition, dry and isolate the preparations according to manufacturer’s instructions.
4. Mix cement according to manufacturer’s recommendations.
5. Apply cement to the internal surface of the crown or bridge.
6. Seat the crown/bridge with finger pressure, paying attention to moisture control.
7. Remove excess material after complete hardening.
8. Perform a final check of occlusion, adjust if necessary, and polish.

For occlusal adjustments, use low speeds, new diamond drills, rubber polishing points, copious water irrigation and light pressure, followed by polishing with a diamond polishing paste.

**Adhesive cementation with resin cement**

1. Try-in the veneered NobelProcera Crown or Bridge ensuring that no major adjustments are necessary.
2. Intaglio surface cleaning after try-in.
   - Sandblast internal surface with 50µm Al₂O₃ (1 bar pressure, 10 mm distance).
3. Clean in an ultrasonic solution of Iso-Propanol for 2–3 minutes and air-dry.
4. When applicable, apply ceramic primer containing phosphate monomer (MDP) on the internal surface of the crown or bridge according to manufacturer’s recommendations.
5. Condition the preparations according to manufacturer’s recommendations, paying attention to moisture control.
6. Mix resin cement and apply to the internal surface of the crown or bridge.
7. Seat the crown/bridge with finger pressure, paying attention to complete seating.
8. Remove excess material and light cure resin.
9. Perform a final check of occlusion, adjust if necessary, and polish.

For occlusal adjustments, use low speeds, new diamond drills, rubber polishing points, copious water irrigation and light pressure, followed by polishing with a diamond polishing paste.
NobelProcera® Crown.

Zirconia (shaded)
Indications:
– Any position in the mouth
– Tooth- and implant-supported restorations
– NobelProcera Crown Zirconia, 0.4 mm, is indicated for use in the esthetic region, premolar to premolar

Alumina
Indications:
– Any position in the mouth – mainly anterior region for translucency
– Tooth- and implant-supported restorations
– NobelProcera Crown Alumina, 0.4 mm, is indicated for use in the esthetic region, premolar to premolar

Titanium
Indications:
– Any position in the mouth
– Tooth- and implant-supported restorations
– Minimum thickness 0.4 mm

1 Preparation
– Eliminate sharp edges, undercuts, and grooves.
– Provide sufficient reduction (1.2 mm to 1.5 mm).
– Provide adequate space for the coping and veneering material.
– Avoid sharp angles on the occlusal surface.
– Avoid creating a deep fossa/cavity.
– Provide sufficient (1.5 mm to 2 mm) occlusal/incisal reduction.
– Avoid preparations that are excessively tapered or too close to parallel. The ideal total occlusal convergence is 6–10°.
2 Impression
– Take a conventional crown and bridge impression using your preferred impression material and method.
– Send the impression to the laboratory.

3 Laboratory procedures
A model is fabricated from the impression. The model is then scanned, and the coping designed and ordered using NobelProcera Scanner and Software. The design data is transferred to a NobelProcera industrial production facility where the coping is milled. Following milling, the coping is sent to the laboratory for veneering.

4 Cementation
Gently seat the restoration on the tooth and check both the occlusion and the interproximal contacts. The restoration should be in light occlusion. Excursive contact should be minimal (see instructions on page 15).

Note: Do not use temporary cement due to an increased risk of fracturing all-ceramic crowns.
NobelProcera® Bridge Zirconia.

Indications:
- All positions in the mouth
- Tooth- and implant-supported restorations
- Bridge spans of 2–14 units, designed to fit into a disc, 60 mm in diameter and 20 mm in height
- The connector dimension of a multiple-unit framework depends on the distance between the supporting teeth (see table below)

Contraindications:
- Cases where the anterior/posterior cantilevers have a length of more than one unit
- Bruxism

1 Preparation
- Eliminate sharp edges, undercuts, and grooves.
- Establish tapered axial walls.
- Provide adequate space for the coping and veneering material.
- Provide sufficient reduction (1.2 mm to 1.5 mm).
- Only select cases where you have the ability to result in a 3 mm connector height.
- Avoid sharp angles on the occlusal surface.
- Provide sufficient occlusal/incisal reduction (1.5 mm to 2 mm).
- Avoid preparations that are excessively tapered or too close to parallel. The ideal total occlusal convergence is 6–10°.
2 Impression
- Take a conventional crown and bridge impression using your preferred impression material and method.
- Send the impression to the laboratory.

3 Laboratory procedures
A model is fabricated from the impression. The model is then scanned, and the bridge designed and ordered using NobelProcera Scanner and Software. The design data is transferred to a NobelProcera industrial production facility where the bridge is milled. Following milling, the bridge is sent to the laboratory for veneering.

4 Cementation
To save chair time, the NobelProcera Bridge Zirconia can be cemented using conventional crown and bridge cement or it can be bonded (see instructions on page 15).
NobelProcera® Bridge Alumina.

Indications:
- Esthetic region, premolar to premolar
- Tooth- and implant-supported restorations,
- Bridge spans of 2–4 units
- Connectors require a minimum cross-sectional area of 6.0 mm²

Contraindications:
- No cantilevers and a maximum of one pontic between supporting teeth/abutments
- Bruxism

1 Preparation
- Eliminate sharp edges, undercuts and grooves.
- Establish tapered axial walls.
- Provide adequate space for the coping and veneering material.
- Provide sufficient reduction (1.2 mm to 1.5 mm).
- Only select cases which result in a 3 mm connector height.
- Avoid sharp angles on the occlusal surface.
- Provide sufficient occlusal/incisal reduction (1.5 mm to 2 mm).
- Avoid preparations that are excessively tapered or too close to parallel. The ideal total occlusal convergence is 6–10°.
2 Impression
- Take a conventional crown and bridge impression using your preferred impression material and method.
- Send the impression to the laboratory.

3 Laboratory procedures
A model is fabricated from the impression. The model is then scanned, and the bridge designed and ordered using NobelProcera Scanner and Software. The design data is transferred to a NobelProcera industrial production facility where the bridge is milled. Following milling, the bridge is sent to the laboratory for veneering.

4 Cementation
To save chair time, the NobelProcera Bridge Alumina can be cemented using conventional crown and bridge cement or it can be bonded (see instructions on page 15).
NobelProcera® Bridge Titanium.

Indications:
- All positions in the mouth
- Tooth- and implant-supported restorations
- Minimum thickness 0.4 mm
- Bridge spans of 2–14 units, designed to fit into a block, 80 mm × 80 mm × 30 mm (length, width, height)
- The connector dimension of a multiple-unit framework depends on the distance between the supporting teeth (see table below)

Contraindications:
- Cases with lengths that exceed the maximum limits
- Bruxism

<table>
<thead>
<tr>
<th>Type – any position</th>
<th>Maximum length</th>
<th>Minimum connector and cross section</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a = Arc length [mm]</td>
<td>e = Extension length [mm]</td>
</tr>
<tr>
<td>Free hanging arc</td>
<td>a ≤ 21.0</td>
<td>3.0 × 2.5 / 6.0</td>
</tr>
<tr>
<td>Free hanging arc</td>
<td>21.0 &lt; a ≤ 35.0</td>
<td>4.0 × 3.0 / 9.4</td>
</tr>
<tr>
<td>Extension</td>
<td>e ≤ 10.0</td>
<td>4.0 × 3.0 / 9.4</td>
</tr>
</tbody>
</table>

1 Preparation
- Eliminate sharp edges, undercuts, and grooves.
- Establish tapered axial walls.
- Provide adequate space for the coping and veneering material.
- Provide sufficient reduction (1.2 mm to 1.5 mm).
- Only select cases where you have the ability to result in a 3 mm connector height.
- Avoid sharp angles on the occlusal surface.
- Provide sufficient (1.5 mm to 2 mm) occlusal/incisal reduction.
- Avoid preparations that are excessively tapered or too close to parallel. The ideal total occlusal convergence is 6–10°.
2 Impression
– Take a conventional crown and bridge impression using your preferred impression material and method.
– Send the impression to the laboratory.

3 Laboratory procedures
A model is fabricated from the impression. The model is then scanned, and the bridge designed and ordered using NobelProcera Scanner and Software. The design data is transferred to a NobelProcera industrial production facility where the bridge is milled. Finally, the bridge is returned to the laboratory for veneering.

4 Cementation
To save chair time, the NobelProcera Bridge Titanium can be cemented using conventional crown and bridge cement or it can be bonded (see instructions on page 15).
Procera® Laminate.

Alumina
Indications:
– Any position in the mouth where the preparation requirements can be met

1 Preparation
– Use general veneer preparation techniques.
– In general, you should perform a reduction in order to:
  – Eliminate sharp line angles and edges
  – Establish tapered axial walls
  – Provide adequate space for the coping and the veneering material
– Conservative facial reduction (0.6 mm to 1.0 mm) is recommended.
– Extend the palatal preparation by 1 mm (minimum) to 3 mm (maximum).
– You can extend the preparation beyond the contact points to a maximum of 1 mm.

Note: The laminate core is only 0.25 mm thick.

2 Impression
– Take a conventional crown and bridge impression.
– Send the impression to the dental laboratory.

3 Laboratory procedures
A model is made from the impression and scanned for producing a Procera Laminate core. After production, the core is veneered.
4 Bonding
- Try-in the veneered Procera Laminate ensuring that
  no major adjustments are necessary.
- Sandblast internal surface with 50µm Al₂O₃
  (1 bar pressure, 10mm distance).
- Clean in an ultrasonic solution of Iso-Propanol for
  2–3 minutes and air-dry.
- Apply ceramics primer containing phosphate monomer
  (MDP) on the internal surface of the laminate according
  to the manufacturer’s recommendations.
- Condition the preparations according to the manufacturer’s
  recommendations, paying attention to moisture control.
- Mix resin cement and apply to the internal surface
  of the laminate.
- Seat the laminate with finger pressure, paying attention
  to complete seating.
- Remove excess material and light cure resin.
- Perform a final check of occlusion, adjust if necessary,
  and polish.

For occlusal adjustments, use low speeds, new diamond drills,
rubber polishing points, copious water irrigation and light pres-
sure, followed by polishing with a diamond polishing paste.

Note: Procera Laminates must be bonded.
Implant restoration overview.

Nobel Biocare’s extensive portfolio of cement- and/or screw-retained implant solutions for single-unit, multiple-unit and full-arch restorations use straightforward and predictable procedures to achieve excellent esthetic and long-term results.

Nobel Biocare offers both individualized (CAD/CAM) and standard prosthetic components for all indications, clinical requirements and patient budgets.

For ultimate esthetic results, NobelProcera provides CAD/CAM precision of fit and material homogeneity with individually designed and produced crowns, bridges, bars and abutments.

<table>
<thead>
<tr>
<th>Cement-retained</th>
<th>CAD/CAM</th>
<th>Single</th>
<th>Multiple</th>
<th>Overdenture</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procera® Esthetic Abutment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>28</td>
</tr>
<tr>
<td>NobelProcera® Abutment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>32</td>
</tr>
<tr>
<td>Snappy™ Abutment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>35</td>
</tr>
<tr>
<td>Esthetic Abutment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>38</td>
</tr>
<tr>
<td>Single Tooth Abutment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>59</td>
</tr>
<tr>
<td>NobelReplace®</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Narrow Profile Abutment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>61</td>
</tr>
<tr>
<td>NobelActive®</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GoldAdapt™ Engaging</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>63</td>
</tr>
</tbody>
</table>
### Screw-retained

<table>
<thead>
<tr>
<th>Details</th>
<th>CAD/CAM</th>
<th>Single</th>
<th>Multiple</th>
<th>Overdenture</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>NobelProcer® Abutment</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td>32</td>
</tr>
<tr>
<td>Multi-unit Abutment</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>47</td>
</tr>
<tr>
<td>NobelProcer® Implant Bridge</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td>51, 55</td>
</tr>
</tbody>
</table>

### Overdenture

<table>
<thead>
<tr>
<th>Details</th>
<th>CAD/CAM</th>
<th>Single</th>
<th>Multiple</th>
<th>Overdenture</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>NobelProcer® Implant Bar Overdenture</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>67</td>
</tr>
<tr>
<td>Gold Abutment Bar</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>71</td>
</tr>
<tr>
<td>Multi-unit Abutment Gold Coping Bar Multi-unit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>71</td>
</tr>
<tr>
<td>Ball Abutment Titanium</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>74</td>
</tr>
<tr>
<td>Locator® Abutment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>77</td>
</tr>
</tbody>
</table>
Procera® Esthetic Abutment.

Indications:
– Single- and multiple-unit implant restorations
– Cement-retained

Contraindications:
– Procera Esthetic Abutment for NobelActive is not indicated for posterior use

1 Abutment try-in
– Measure the height of the soft tissue and select the correct abutment according to the illustration chart.
– Place the clean and sterilized abutment on the implant.
  Slightly tighten the abutment screw using the Unigrip Screwdriver Manual.
– Check the shape and fit.
– Mark any area in need of modification.

2 Modification
– Remove the abutment and place it into the corresponding Protection Analog. Mount and tighten the Handle for Protection Analog.
– Modify extra-orally, using a high-speed turbine with new diamond drills and copious water irrigation.
– Connect the abutment to the implant, hand tighten.

Notes:
– When modifying the abutment, make sure that the thickness of the ceramic material is at least 0.9 mm and up to a height of 3 mm from the implant platform.
– For Procera Esthetic Abutment for NobelActive: never modify the area of the abutment marked in red.
3 Impression
- Block out abutment screw holes.
- Take a conventional crown and bridge impression.
- Send the impression to the dental laboratory.

4 Temporary restoration
- Try-in a temporary crown of correct size.
- Protect the screw access opening with cotton or some other easily removable block-out material.
- Fill the temporary crown with a small amount of resin/composite.
- Place in correct position in mouth and light cure.
- Remove the crown and abutment.
- Make the final fill-up with composite outside the mouth thereby avoiding excess composite in the soft tissue.
- Polish the cervical area extra-oraly.

5 Abutment connection
- Connect the abutment to the implant.
- Tighten the abutment screw to 35 Ncm using the Manual Torque Wrench Prosthetic and Unigrip Screwdriver Machine.
- Fill the screw access channel with a block-out material to preserve access to the abutment screw.

Notes:
- A radiograph can help to confirm accurate seating of the abutment.
- Do not use temporary cement on zirconia abutments due to increased risk of fractures.

6 Final restoration
- Follow established prosthetic procedures for final restoration delivery after a sufficient healing period.
Options:
- NobelProcera Crown (veneered by laboratory)
- NobelProcera Bridge (veneered by laboratory)
### Brånemark System® and NobelReplace® (including abutment screw)

<table>
<thead>
<tr>
<th>NP</th>
<th>Angle</th>
<th>In mm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10°</td>
<td>2.6</td>
</tr>
<tr>
<td></td>
<td>10°</td>
<td>3.6</td>
</tr>
<tr>
<td></td>
<td>10°</td>
<td>10.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RP</th>
<th>Angle</th>
<th>In mm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10°</td>
<td>2.4</td>
</tr>
<tr>
<td></td>
<td>10°</td>
<td>3.9</td>
</tr>
<tr>
<td></td>
<td>10°</td>
<td>10.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RP</th>
<th>Angle</th>
<th>In mm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15°</td>
<td>2.4</td>
</tr>
<tr>
<td></td>
<td>15°</td>
<td>3.2</td>
</tr>
<tr>
<td></td>
<td>15°</td>
<td>8.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WP</th>
<th>Angle</th>
<th>In mm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10°</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td>10°</td>
<td>3.7</td>
</tr>
<tr>
<td></td>
<td>10°</td>
<td>11.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WP</th>
<th>Angle</th>
<th>In mm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15°</td>
<td>2.8</td>
</tr>
<tr>
<td></td>
<td>15°</td>
<td>3.5</td>
</tr>
<tr>
<td></td>
<td>15°</td>
<td>8.9</td>
</tr>
</tbody>
</table>
NobelActive® (including abutment screw)

### NP

<table>
<thead>
<tr>
<th>In mm</th>
<th>2.7</th>
<th>3.7</th>
<th>4.6</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.5</td>
<td>7.5</td>
<td>8.5</td>
<td>9.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### RP

<table>
<thead>
<tr>
<th>In mm</th>
<th>2.7</th>
<th>3.7</th>
<th>4.6</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.5</td>
<td>7.5</td>
<td>8.5</td>
<td>9.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Instrumentation

**Procera Esthetic Abutment Selection Kit**

- Unigrip Screwdriver Manual 36 mm
- Handle for Protection Analog
- Protection Analog NP
- Protection Analog RP
- Protection Analog WP
NobelProcera® Abutment.

Zirconia (shaded) and Titanium
NobelProcera Abutments are designed and ordered in NobelProcera Software
Indications:
– Single- and multiple-unit implant restorations
– Cement- and screw-retained

Contraindications:
– Zirconia abutments for NobelActive are not indicated for posterior use

1 Impression
– Place the Impression Coping onto the implant and take a conventional implant level impression.
– Connect the temporary restoration or healing abutment and send the impression to the dental laboratory.

2 Laboratory procedures
A model is fabricated from the impression. The model is then scanned, and the abutment designed and ordered using NobelProcera Scanner and Software. The design data is transferred to a NobelProcera industrial production facility where the abutment is milled. Finally, the abutment is returned to the laboratory for coping/bridge fabrication or direct veneering (screw-retained crown).
Notes:
– If final preparation is needed, make sure that the thickness of the ceramic material is at least 0.9 mm for a height of 3 mm from the implant platform and use a high-speed turbine with new diamond drills and copious water irrigation.
– For NobelProcera Abutment NobelActive: never modify the area of the abutment marked in red.

3 Abutment connection
– Ensure that the implant platform is free from any soft-tissue or bone remnants.
– Position the abutment/screw assembly into the implant and secure the screw in the implant using the Unigrip Screwdriver.
– Tighten the abutment to 35 Ncm using the Manual Torque Wrench Prosthetic and Unigrip Screwdriver Machine. For other major implant systems, always consult the respective instructions for use.

Notes:
– A radiograph can help to confirm accurate seating of the abutment.
– When using the NobelProcera Abutment with external connection to compatible hex implants, use the screw supplied with the abutment.

4 Cementation of final restoration
– Gently seat the restoration on the abutment and check both the occlusion and the interproximal. The restoration should be in light occlusion. Excursive contact should be minimal.
– Fill the screw access channel with a block-out material to preserve access to the abutment screw.
– Cement the restoration (see instructions on page 98).

Note: Do not use temporary cement on zirconia abutments due to increased risk of fractures.
NobelProcera® Abutment
Includes: Abutment Screw

<table>
<thead>
<tr>
<th>Product list for clinical procedures</th>
<th>Internal conical</th>
<th>External hex</th>
<th>Internal tri-channel</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NobelProcera® Abutment</strong></td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
</tr>
<tr>
<td>Impression Coping Implant Level Closed Tray</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
</tr>
<tr>
<td>Alternative for internal conical (NobelActive® RP only):</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
</tr>
<tr>
<td>– Low Profile</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
</tr>
<tr>
<td>Alternatives for internal tri-channel:</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
</tr>
<tr>
<td>– Low Profile</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
</tr>
<tr>
<td>– Plastic</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
</tr>
<tr>
<td>Impression Coping Implant Level Open Tray</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
</tr>
<tr>
<td>Alternative for internal conical (NobelActive® RP only):</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
</tr>
<tr>
<td>– Low profile</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
</tr>
<tr>
<td>Implant Replica</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
</tr>
</tbody>
</table>

**NobelProcera Abutment for other major implant systems**

Depending on scanner model and software version, NobelProcera Abutment Zirconia and Titanium can be produced for other major implant systems.

Follow the laboratory procedures for NobelProcera Abutment and the clinical procedures for each respective implant system.
Indications:
- Single- and multiple-unit implant restorations,
  ideal for posterior restorations
- Cement-retained

Note: The NobelDirect Posterior Implant has an integrated abutment portion that is identical to the Snappy Abutment and thus uses the same prosthetic components.

1 Abutment connection
- Position the abutment/screw assembly into the implant and secure the screw until resistance is felt using the Unigrip Screwdriver.
- Tighten the abutment screw to 35 Ncm using the Manual Torque Wrench Prosthetic and Unigrip Screwdriver Machine.

Note: A radiograph can help to confirm accurate seating of the abutment.

2 Impression
- Press the Impression Coping onto the abutment, making sure that the arrow on the top of the coping is pointing buccally. An audible “snap” indicates that the coping is fully engaged and well-adapted to the margin of the abutment.
- Take a standard impression. When the impression is pulled, the Impression Coping will disengage from the Snappy Abutment and is picked up in the impression.
- Send the impression to the dental laboratory for model and prosthetic fabrication. Notify the dental laboratory regarding which abutment heights (4.0 and 5.5) have been used and in which positions.

Note: For Snappy Abutment 4.0 use only Impression Copings for Snappy Abutment 4.0. The 5.5 Impression Coping will not engage properly. For Snappy Abutment 5.5 use only Impression Copings for Snappy Abutment 5.5. The 4.0 Impression Coping will not engage properly.
3 Temporary restoration
– Clean and remove any debris from the Snappy Abutment.
– Use the Manual Torque Wrench Prosthetic to verify abutment screw torque to 35 Ncm.
– Temporize the Snappy Abutment chair-side using the plastic/temporary coping, or use the healing cap that is included in the Snappy Abutment package.

Warning: Do not use polyurethane cement with plastic/temporary copings; the cement will not cure.

4 Laboratory procedures
A model is made and the restoration is produced.
Options:
– NobelProcera Crown (veneered by laboratory)
– NobelProcera Bridge Zirconia, Alumina or Titanium (veneered by laboratory)
– Plastic/temporary coping Snappy Abutment as a burnout pattern in a cast restoration

Note: When fabricating the model, use only Snappy Abutment 4.0 Abutment Replica in corresponding 4.0 Impression Coping and Snappy Abutment 5.5 Abutment Replica in corresponding 5.5 Impression Coping. Verify correct fit before casting the model.

5 Cementation of final restoration
– Remove the healing cap or temporary prosthesis.
– Verify the abutment screw torque to 35 Ncm and block out the screw access hole.
– Cement the restoration over the abutment. For all-ceramic restorations, a final cement must be used. For other restorations, a temporary cement may be used if greater ease of retrievability is desired (see instructions on page 98).

Note: Do not use temporary cement when cementing ceramic crowns or bridges due to increased risk of fractures.
### Product list for clinical procedures

<table>
<thead>
<tr>
<th>Snappy™ Abutment</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Snappy™ Abutment</strong></td>
<td>Internal conical</td>
<td>External hex</td>
<td>Internal tri-channel</td>
</tr>
<tr>
<td><strong>Includes:</strong> Abutment Screw, Healing Cap, Impression Coping, Temporary Coping Engaging</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Snappy™ Abutment 4.0</th>
<th>Snappy™ Abutment 5.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Image]</td>
<td>![Image]</td>
</tr>
<tr>
<td>![Image]</td>
<td>![Image]</td>
</tr>
<tr>
<td>![Image]</td>
<td>![Image]</td>
</tr>
<tr>
<td>![Image]</td>
<td>![Image]</td>
</tr>
</tbody>
</table>

**Note:** Use only 4.0 components for Snappy Abutment 4.0 and 5.5 components for Snappy Abutment 5.5.
Indications:
- Single- and multiple-unit implant restorations
- Cement-retained

The abutment is designed with a scalloped margin that profiles natural soft tissue contours with various collar heights, based on the implant platform and system.

The following description is based on straight Esthetic Abutments. The same procedure is used for the 15° Esthetic Abutment.

Note: Procedures for Esthetic Abutments can also follow an implant level impression protocol (see page 92). As a consequence, abutments are selected and adjusted by the dental technician.

1 Abutment connection
- Position the abutment/screw assembly into the implant and tighten the screw until resistance is felt using the Unigrip Screwdriver.
- Tighten the abutment screw to 35 Ncm using the Manual Torque Wrench Prosthetic and Unigrip Screwdriver Machine.

Note: A radiograph can help to confirm accurate seating of the abutment.
3 Temporary restoration
   – Clean and remove any debris from the Esthetic Abutment.
   – Use the Manual Torque Wrench Prosthetic to verify abutment screw torque to 35 Ncm.
   – Temporize the Esthetic Abutment using the plastic/temporary coping.

Warning: Do not use polyurethane cement with plastic/temporary copings; the cement will not cure.

4 Laboratory procedures
In the laboratory, a model is made and a restoration is produced.
Options:
   – NobelProcera Crown (veneered by laboratory)
   – NobelProcera Bridge (veneered by laboratory)
   – Plastic/temporary coping Esthetic Abutment as a burnout pattern in a cast restoration.
5 Cementation of final restoration

- Verify abutment screw torque to 35 Ncm and block out the screw access hole.
- Gently seat the restoration on the abutment and check both the occlusion and the interproximal contacts. The restoration should be in light occlusion. Excursive contact should be minimal.
- Cement the restoration using temporary or final cement (see instructions on page 98).

Note: Do not use temporary cement when cementing ceramic crowns and bridges due to increased risk of fractures.
<table>
<thead>
<tr>
<th>Product list for clinical procedures</th>
<th>Internal conical</th>
<th>External hex</th>
<th>Internal tri-channel</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Esthetic Abutment</strong>&lt;br&gt;Includes: Abutment Screw</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Esthetic Abutment 15°</strong>&lt;br&gt;Includes: Abutment Screw</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Impression Coping Implant Level Closed Tray</strong>&lt;br&gt;Alternative for internal conical (NobelActive® RP only):&lt;br&gt;– Low Profile&lt;br&gt;Alternatives for internal tri-channel:&lt;br&gt;– Low Profile&lt;br&gt;– Plastic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Impression Coping Implant Level Open Tray</strong>&lt;br&gt;Alternative for internal conical (NobelActive® RP only):&lt;br&gt;– Low profile</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Implant Replica</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Plastic/Temporary Coping Esthetic Abutment</strong>&lt;br&gt;Available as straight/15°</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Platform shifting* – NobelProcera® Abutment Zirconia.

Platform shifting

Platform shifting is the concept of “stepping down” the size of an implant platform to increase the volume of soft tissue around the implant platform during implant treatment. In practice, platform shifting adapters convert regular (RP) and wide (WP) platform implants to narrow (NP) and regular (RP) platform implants, respectively. Platform shifting also converts an internal tri-channel platform to an external hexagonal platform (i.e., shifting from a Replace fitting to a Brånemark System fitting).

NobelProcera Abutment Zirconia and Procera Esthetic Abutment are the only available abutments for the concept. They are used together with special screws that have the length and design to go into implants with internal connections.

NobelProcera Abutment Zirconia

Indications:
– Single- and multiple-unit implant restorations
– Cement-retained

1 Placing adapter
– If applicable, remove healing abutment or temporization.
– Ensure that the implant interface is free from any soft-tissue or bone remnants. Place Adapter PS RP–NP into RP implant or Adapter PS WP–RP into WP implant. Check that the lobes on the adapter are fully engaged in the internal channels of the implant.

Note: Ideally the Adapter PS should be placed the same day as the implant placement, in order not to disturb tissue integration.

* Not available in the U.S.
2 Impression
– Place the Impression Coping PS RP–NP or Impression Coping PS WP–RP onto the implant. Use the Unigrip Screwdriver and tighten the screw.
– Take an implant level impression using the closed tray technique and send it to the dental laboratory.

3 Abutment connection
– Remove the Healing Abutment PS.
– Dispose of the abutment screw packaged together with the NobelProcera Abutment Zirconia Brånemark System. Use Abutment Screw PS RP–NP (#34553) or Abutment Screw PS WP–RP (#34554) instead.

**Note:** If preparation is necessary, make sure that the thickness of the ceramic material is at least 0.9 mm. This thickness limit is applicable up to a height of 3 mm above implant level. Use the high-speed turbine with new diamond drills and copious water irrigation.

– Place the NobelProcera Abutment Zirconia onto the implant. Use the Unigrip Screwdriver and tighten the abutment screw.
– Tighten the abutment screw to 35 Ncm using the Manual Torque Wrench Prosthetic and Unigrip Screwdriver Machine.

**Note:** A radiograph can help to confirm accurate seating of the abutment.
4 Cementation of final restoration
– Gently seat the restoration on the abutment and check both the occlusion and the interproximal contacts. The restoration should be in light occlusion. Excursive contact should be minimal.
– Fill the screw access hole.
– Cement the restoration (see instructions on page 98).

Note: Do not use temporary cement when cementing ceramic crowns and bridges due to increased risk of fractures.

<table>
<thead>
<tr>
<th>Product list for clinical procedures</th>
<th>Internal tri-channel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adapter PS</td>
<td>![Adapter Image]</td>
</tr>
<tr>
<td>Impression Coping PS</td>
<td>![Impression Coping Image]</td>
</tr>
<tr>
<td>Healing Abutment PS</td>
<td>![Healing Abutment Image]</td>
</tr>
<tr>
<td>Abutment screw PS</td>
<td>![Abutment Screw Image]</td>
</tr>
<tr>
<td>Implant Replica PS</td>
<td>![Implant Replica Image]</td>
</tr>
</tbody>
</table>
Platform shifting* – Procera® Esthetic Abutment PS.

Indications:
– Single- and multiple-unit implant restorations
– Cement-retained

1 Placing adapter
– If applicable, remove healing abutment or temporization.
– Ensure that the implant interface is free from any soft-tissue or bone remnants. Place Adapter PS RP-NP into RP implant or Adapter PS WP-RP into WP implant. Check that the lobes on the adapter are fully engaged in the internal channels of the implant.

Note: Ideally the Adapter PS should be placed the same day as the implant placement, in order not to disturb tissue integration.

2 Abutment connection
– Try-in and modify the applicable Procera Esthetic Abutment PS.

Note: If preparation is needed, make sure that the thickness of the ceramic material is at least 0.9 mm. This thickness limit is applicable up to a height of 3 mm above implant level. Use a high-speed turbine with new diamond drills and copious water irrigation.

– Place the Procera Esthetic Abutment PS onto the implant. Use the Unigrip Screwdriver and tighten the abutment screw.
– Tighten the abutment screw to 35 Ncm using the Manual Torque Wrench Prosthetic and Unigrip Screwdriver Machine.

Note: A radiograph can help to confirm accurate seating of the abutment.

* Not available in the U.S.
3 Final restoration
Follow established prosthetic procedures for the final restoration after a sufficient healing period.
Options:
– NobelProcera Crown (veneered by laboratory)
– NobelProcera Bridge (veneered by laboratory)

Product list for clinical procedures

<table>
<thead>
<tr>
<th>Product</th>
<th>Internal tri-channel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adapter PS</td>
<td></td>
</tr>
<tr>
<td>Procera® Esthetic Abutment PS</td>
<td></td>
</tr>
<tr>
<td>Abutment screw PS</td>
<td></td>
</tr>
</tbody>
</table>
Indications:
– Multiple-unit restorations
– Screw-retained
– May be used in combination with framework design if not all implants benefit from abutments
– Used to elevate restoration platform when restoration-to-implant level is not practical nor indicated due to depth or angle of implant

Note: There are specially designed Multi-unit Abutments for Zygoma implants. Use the same prosthetic procedure as for ordinary Multi-unit Abutments.

1a Abutment connection Straight Multi-unit Abutment
– Measure the soft tissue thickness to determine the appropriate abutment collar height.
– Use the premounted plastic holder to place the abutment onto the implant and screw the abutment into the correct position.
– If necessary, shorten the holder with a pair of scissors.
– When the abutment is seated, remove the plastic holder with a slight bending movement.
– Tighten the abutment screw to 35 Ncm using the Manual Torque Wrench Prosthetic and Screwdriver Machine Multi-unit.

Note: A radiograph can help to confirm accurate seating of the abutment.

1b Abutment connection 17° and 30° Multi-unit Abutment
– Measure the soft tissue thickness to determine the appropriate abutment collar height.
– The abutment is placed over the implant by using the premounted abutment holder. Please note that there are several possible positions in which to place the abutment.
– Tighten the abutment screw using a Unigrip Screwdriver until resistance is felt.
– The holder is then unscrewed from the abutment by turning it counter-clockwise.

(continued on next page)
1b Abutment connection 17° and 30°

Multi-unit Abutment – continued

- Tighten the abutment screw to 15 Ncm using the Manual Torque Wrench Prosthetic and Unigrip Screwdriver Machine.

Notes:
- A radiograph can help to confirm accurate seating of the abutment.
- Be sure not to exceed 15 Ncm.

2a Closed tray – abutment level impression

- Connect the Impression Coping to the abutment.
- Inject impression material and record the impression.
- After setting, remove the impression and disconnect the Impression Copings. Attach the Abutment Replicas to each coping.
- Place the impression coping abutment replica assembly into its corresponding location in the impression.
- Connect the temporary restoration (see Temporary implant restorations, pages 6–13) or healing cap and send the impression to the dental laboratory.

2b Open tray – abutment level impression

- Connect the Impression Coping on the abutment and tighten using the Unigrip Screwdriver.
- Relieve and perforate the impression tray to allow full seating of the tray and protrusion of the guide pins. If there is a large opening, close it with baseplate wax, with the guide pins indenting or perforating the wax.
2b Open tray – abutment level impression – continued
- Inject impression material and seat the impression tray fully so that the tips of all the guide pins are identified. After setting, unscrew the guide pins and remove the impression tray.
- Connect the temporary restoration (see Temporary implant restorations, pages 6–13) or healing cap and send the impression to the dental laboratory.

3 Laboratory procedures
In the laboratory, a model is made and a restoration is produced.
Options:
- NobelProcera Implant Bridge (veneered by laboratory)
- Gold Coping Multi-unit cast restoration

4 Connection of final restoration
- Verify abutment screw torque to 35 Ncm. For angled abutments, torque should be 15 Ncm.
- Connect the restoration to the abutments with prosthetic screws. Start with the mid region post and tighten the remaining screws, alternating left and right sides.
- Tighten the prosthetic screws to 15 Ncm using the Manual Torque Wrench Prosthetic and Unigrip Screwdriver Machine.
- Fill the screw access holes with a suitable material, such as gutta-percha, silicone, or temporary filling material.
## Product list for clinical procedures

<table>
<thead>
<tr>
<th>Product</th>
<th>Internal conical</th>
<th>External hex</th>
<th>Internal tri-channel</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Multi-unit Abutment</strong></td>
<td><img src="image1" alt="Image" /></td>
<td><img src="image2" alt="Image" /></td>
<td><img src="image3" alt="Image" /></td>
</tr>
<tr>
<td>Available in straight, 17°, and 30°</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Includes: Abutment Screw</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| **Prosthetic Screw Multi-unit** | ![Image](image4) |             |                      |
| for connection of NobelProcera® Implant Bridge |                  |              |                      |

| **Impression Coping Closed Tray Multi-unit** | ![Image](image5) |
|                                              |                  |

| **Impression Coping Open Tray Multi-unit** | ![Image](image6) |
|                                            |                  |

| **Abutment Replica Multi-unit** | ![Image](image7) |
|                                |                  |

| **Healing Cap**                | ![Image](image8) |             |                      |
| Available as regular/wide      |                  |              |                      |

| **Adapter NobelReplace® 6.0 to WP** | ![Image](image9) |
| The Adapter NobelReplace® 6.0 to WP is a bushing that adapts a 6.0 Nobel Biocare implant with an internal connection to the WP Straight Multi-unit Abutment. The use of the adapter adds 0.5 mm to the total abutment height, which should be considered when choosing the Multi-unit Abutment. |
NobelProcera® Implant Bridge
Zirconia.

Indications:
– Multiple-unit implant restorations
– Implant or abutment level*
– Screw-retained
– All positions in the mouth
– A bridge, designed to fit into a disc, 60 mm in diameter and 20 mm in height
– Requires a minimum of $4 \times 2.5$ mm connector between units (height $\times$ width) and a minimum cross-sectional area of $8$ mm$^2$

Contraindications:
– Cases where the mesial/distal cantilevers have a length of more than one unit
– There should be no more than two pontics between the supporting implants
– Bruxism

Note: When restoring NobelActive Implants using a NobelProcera Implant Bridge, Healing Abutment Bridge NobelActive should be used.

1a Implant level impression
– Place Impression Copings onto the implants and take an implant level impression.
– Connect the temporary restoration or healing abutment and send the impression to the laboratory.

Note: For impression, use Impression Coping Bridge Open Tray NobelActive.

1b Abutment level impression
– Place the Impression Coping Multi-unit on the Multi-unit Abutments.
– Connect the temporary restoration (see chapter Temporary implant restoration, pages 6–13) or healing cap and send the impression to the laboratory.

*Abutment level available Fall 2010.
3 Connection of final restoration

- Ensure that the implants are free from any soft tissue or bone remnants.
- Connect the restoration to the implants with abutment screws using the Unigrip Screwdriver. Starting with the implant nearest to the middle of the bridge, tighten the remaining screws, alternating left and right sides.
- Tighten the abutment screws to 35 Ncm using the Manual Torque Wrench Prosthetic and Unigrip Screwdriver Machine.
- Fill the screw access holes with a suitable material, such as gutta-percha, silicone, or temporary filling material.

Notes:
- Abutment screws must be ordered separately.
- A radiograph can help to confirm accurate seating of the restoration.
- When using NobelProcera Implant Bridge with external connection to compatible hex implants, use screw intended for the Brånemark System platform.
### Product list for clinical procedures

<table>
<thead>
<tr>
<th>Component</th>
<th>Internal conical</th>
<th>External hex</th>
<th>Internal tri-channel</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NobelProcera® Implant Bridge Zirconia – implant or abutment level</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does not include Abutment Screws</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Implant level components</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Screw Ceramic Abutment NobelReplace®</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Screw Ceramic Abutment Bränemark System®</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impression Coping Implant Level Closed Tray</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternatives for internal tri-channel:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Low Profile</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Plastic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impression Coping Implant Level Open Tray</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impression Coping Bridge Open Tray NobelActive®</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Implant Replica</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Abutment level components</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multi-unit Abutment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available in straight, 17° and 30°</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Includes: Abutment Screw</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prosthetic Screw Multi-unit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>for connection of NobelProcera® Implant Bridge</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impression Coping Closed Tray Multi-unit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impression Coping Open Tray Multi-unit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Abutment Replica Multi-unit</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Healing Cap</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available as regular/wide</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Abutment level available Fall 2010.
NobelProcera Implant Bridge for other major implant systems

Depending on scanner model and software version, NobelProcera Implant Bridge can be produced for other major implant systems at both implant and Nobel Biocare Multi-unit Abutment level.

Follow the laboratory procedures for NobelProcera Implant Bridge and the clinical procedures for each respective major implant system.
NobelProcera® Implant Bridge
Titanium.

Indications:
– Multiple-unit implant restorations
– Implant or abutment level
– Screw-retained

Contraindications:
– Cases where the mesial/distal cantilevers have a length of more than one unit
– Bruxism

Note: When an implant level NobelProcera Implant Bridge is planned to be connected to a NobelActive implant, a Healing Abutment Bridge NobelActive should be used.

1a Implant level impression
– Place Impression Copings onto the implants and take an implant level impression.
– Connect the temporary restoration or healing abutment and send the impression to the laboratory.

Note: For impression, use Impression Coping Bridge Open Tray NobelActive.

1b Abutment level impression
– Place the Impression Coping Multi-unit on the Multi-unit Abutments.
– Connect the temporary restoration (see chapter Temporary implant restoration, pages 6–13) or healing cap and send the impression to the laboratory.

2 Laboratory procedures
– A model is made and a resin framework fabricated. These are then scanned using NobelProcera Scanner and sent to a NobelProcera production facility.
– The framework is milled from a solid, biocompatible, monobloc of titanium and sent to the laboratory for veneering.
3a Connection of final restoration at implant level
– Ensure that the implants are free from any soft tissue or bone remnants.
– Connect the restoration to the implants with abutment screws using the Unigrip Screwdriver. Starting with the implant nearest to the middle of the bridge, tighten the remaining screws, alternating left and right sides.
– Tighten the abutment screws to 35 Ncm using the Manual Torque Wrench Prosthetic and Unigrip Screwdriver Machine.
– Fill the screw access holes with a suitable material, such as gutta-percha, silicone, or temporary filling material.

Notes:
– Abutment screws must be ordered separately.
– A radiograph can help to confirm accurate seating of the restoration.
– When using NobelProcera Implant Bridge with external connection on compatible hex implants, use screw intended for the Brånemark System platform.

3b Connection of final restoration at abutment level
– Connect the restoration to the abutments with prosthetic screws. Starting with the implant nearest to the middle of the bridge, tighten the other screws, alternating left and right sides.
– Tighten the prosthetic screws to 15Ncm using the Manual Torque Wrench Prosthetic and Unigrip Screwdriver Machine.
– Fill the screw access holes with a suitable material, such as gutta percha, silicone, or temporary filling material.

Notes:
– Abutment and prosthetic screws must be ordered separately.
– A radiograph can help to confirm accurate seating of the restoration.
<table>
<thead>
<tr>
<th>Product list for clinical procedures</th>
<th>Internal conical</th>
<th>External hex</th>
<th>Internal tri-channel</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NobelProcera® Implant Bridge Titanium – implant or abutment level</strong> Does not include Abutment Screws/Prosthetic Screws</td>
<td><img src="image1.png" alt="Image" /></td>
<td><img src="image2.png" alt="Image" /></td>
<td><img src="image3.png" alt="Image" /></td>
</tr>
<tr>
<td><strong>Implant level components</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abutment Screw Titanium</td>
<td><img src="image4.png" alt="Image" /></td>
<td><img src="image5.png" alt="Image" /></td>
<td><img src="image6.png" alt="Image" /></td>
</tr>
<tr>
<td>Screw Ceramic Abutment Bränemark System®</td>
<td><img src="image7.png" alt="Image" /></td>
<td><img src="image8.png" alt="Image" /></td>
<td><img src="image9.png" alt="Image" /></td>
</tr>
<tr>
<td>Impression Coping Implant Level Closed Tray Alternatives for internal tri-channel:</td>
<td><img src="image10.png" alt="Image" /></td>
<td><img src="image11.png" alt="Image" /></td>
<td><img src="image12.png" alt="Image" /></td>
</tr>
<tr>
<td>– Low Profile</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>– Plastic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impression Coping Implant Level Open Tray</td>
<td><img src="image13.png" alt="Image" /></td>
<td><img src="image14.png" alt="Image" /></td>
<td><img src="image15.png" alt="Image" /></td>
</tr>
<tr>
<td>Impression Coping Bridge Open Tray NobelActive®</td>
<td><img src="image16.png" alt="Image" /></td>
<td><img src="image17.png" alt="Image" /></td>
<td><img src="image18.png" alt="Image" /></td>
</tr>
<tr>
<td><strong>Implant Replica</strong></td>
<td><img src="image19.png" alt="Image" /></td>
<td><img src="image20.png" alt="Image" /></td>
<td><img src="image21.png" alt="Image" /></td>
</tr>
<tr>
<td><strong>Abutment level components</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multi-unit Abutment Available in straight, 17° and 30° Includes: Abutment Screw</td>
<td><img src="image22.png" alt="Image" /></td>
<td><img src="image23.png" alt="Image" /></td>
<td><img src="image24.png" alt="Image" /></td>
</tr>
<tr>
<td>Prosthetic Screw Multi-unit for connection of NobelProcera® Implant Bridge</td>
<td><img src="image25.png" alt="Image" /></td>
<td><img src="image26.png" alt="Image" /></td>
<td><img src="image27.png" alt="Image" /></td>
</tr>
<tr>
<td>Impression Coping Closed Tray Multi-unit</td>
<td><img src="image28.png" alt="Image" /></td>
<td><img src="image29.png" alt="Image" /></td>
<td><img src="image30.png" alt="Image" /></td>
</tr>
<tr>
<td>Impression Coping Open Tray Multi-unit</td>
<td><img src="image31.png" alt="Image" /></td>
<td><img src="image32.png" alt="Image" /></td>
<td><img src="image33.png" alt="Image" /></td>
</tr>
<tr>
<td>Abutment Replica Multi-unit</td>
<td><img src="image34.png" alt="Image" /></td>
<td><img src="image35.png" alt="Image" /></td>
<td><img src="image36.png" alt="Image" /></td>
</tr>
<tr>
<td>Healing Cap Available as regular/wide</td>
<td><img src="image37.png" alt="Image" /></td>
<td><img src="image38.png" alt="Image" /></td>
<td><img src="image39.png" alt="Image" /></td>
</tr>
</tbody>
</table>
NobelProcera Implant Bridge for other major implant systems

Depending on scanner model and software version, NobelProcera Implant Bridge can be produced for other major implant systems at both implant and Nobel Biocare Multi-unit Abutment level.

Follow the laboratory procedures for NobelProcera Implant Bridge and the clinical procedures for each respective major implant system.
Single Tooth Abutment NobelReplace®.

Indications:
– Single-unit implant restorations with limited interdental space
– Cement-retained

1 Impression
– Place the Impression Coping Implant Level onto the implant and take an implant level impression.
– Connect the healing abutment or temporary restoration and send the impression to the laboratory.

2 Laboratory procedures
A model is made, the abutment is modified if necessary, and a restoration is made.
Options:
– NobelProcera Crown (veneered by laboratory)
– Conventional crown

3 Abutment connection
– Remove the temporary restoration. Ensure that the implant platform is free from any soft tissue or bone remnants.
– Connect the abutment and tighten the screw using the Unigrip Screwdriver.
– Tighten the abutment screw to 35 Ncm using the Manual Torque Wrench Prosthetic and Unigrip Screwdriver Machine.

Note: A radiograph can help to confirm accurate seating of the abutment.
4 Cementation of final restoration

– Fill the screw access hole with a suitable material, such as gutta percha, silicone, or temporary filling material.
– Cement the restoration using temporary cement or final cement. The restoration should be in light occlusion and excursive contact should be minimal (see instructions on page 98).

**Note:** Do not use temporary cement when cementing ceramic crowns due to increased risk of fractures.

---

**Product list for clinical procedures**

<table>
<thead>
<tr>
<th>Product</th>
<th>Internal tri-channel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Tooth Abutment NobelReplace® NP</td>
<td></td>
</tr>
<tr>
<td>Includes: Abutment Screw</td>
<td></td>
</tr>
<tr>
<td>Impression Coping Implant Level Closed Tray</td>
<td></td>
</tr>
<tr>
<td>Impression Coping Implant Level Open Tray</td>
<td></td>
</tr>
<tr>
<td>Implant Replica</td>
<td></td>
</tr>
</tbody>
</table>
Narrow Profile Abutment NobelActive®.

Indications:
– Single- and multiple-unit implant restorations with limited interdental space
– Cement-retained

1 Impression
– Place the Impression Coping Implant Level onto the implant and take an implant level impression.
– Connect the healing abutment or temporary restoration and send the impression to the laboratory.

2 Laboratory procedures
A model is made, the abutment is modified if necessary, and a restoration is made.
Options:
– NobelProcera Crown (veneered by laboratory)
– Conventional crown

3 Abutment connection
– Remove the temporary restoration. Ensure that the implant platform is free from any soft tissue or bone remnants.
– Connect the abutment and tighten the screw using the Unigrip Screwdriver.
– Tighten the abutment screw to 35 Ncm using the Manual Torque Wrench Prosthetic and Unigrip Screwdriver Machine.

Note: A radiograph can help to confirm accurate seating of the abutment.
4 Cementation of final restoration

– Fill the screw access hole with a suitable material, such as gutta percha, silicone, or temporary filling material.
– Cement the restoration using temporary cement or final cement. The restoration should be in light occlusion and excursive contact should be minimal (see instructions on page 98).

Note: Do not use temporary cement when cementing ceramic crowns and bridges due to increased risk of fractures.

Product list for clinical procedures

<table>
<thead>
<tr>
<th>Internal conical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Narrow Profile Abutment NobelActive®</td>
</tr>
<tr>
<td>– Narrow Platform, 7mm and 9mm lengths</td>
</tr>
<tr>
<td>– Regular Platform, 7mm and 9mm lengths</td>
</tr>
<tr>
<td>Includes: Abutment Screw</td>
</tr>
</tbody>
</table>

Impression Coping Implant Level Closed Tray

Impression Coping Implant Level Open Tray

Implant Replica
GoldAdapt™ Engaging.

Indications:
– Single-unit, screw-retained implant restorations
– Single- and multiple-unit, cement-retained implant restorations
– Screw access hole location is through the occlusal surface of posterior teeth or cingulum of anterior teeth without angle correction
– Limited interocclusal and/or interdental space

Note: The instructions below are for screw-retained restorations.

1 Impression
– Place the Impression Coping Implant Level onto the implant and take an implant level impression.
– Connect the healing abutment or temporary restoration and send the impression to the laboratory.

2 Laboratory procedures
A model is made at the dental laboratory, a GoldAdapt is connected, and a conventional crown and bridge restoration is produced.

3 Connection of final restoration
– Ensure that the implant platform is free of any soft tissue or bone remnants.
– Connect the abutment and tighten the screw using the Unigrip Screwdriver.
– Tighten the abutment screw to 35 Ncm using the Manual Torque Wrench Prosthetic and Unigrip Screwdriver Machine.
– Fill the screw access holes with a suitable material, such as gutta-percha, silicone, or temporary filling material.

Note: A radiograph can help to confirm accurate seating of the abutment.
### Product list for clinical procedures

<table>
<thead>
<tr>
<th></th>
<th>Internal conical</th>
<th>External hex</th>
<th>Internal tri-channel</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GoldAdapt™ Engaging</strong></td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
</tr>
<tr>
<td>Includes: Abutment Screw</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Impression Coping Implant Level Closed Tray**

Alternative for internal conical (NobelActive® RP only):
- Low Profile

Alternative for internal tri-channel:
- Low Profile
- Plastic

**Impression Coping Implant Level Open Tray**

Alternative for internal conical (NobelActive® RP only):
- Low profile

**Implant Replica**

| ![Image] | ![Image] | ![Image] |
Indications:
- Multiple-unit, screw-retained implant restorations
- Limited interocclusal space
- Screw access hole location is through the occlusal surface of posterior teeth or cingulum of anterior teeth without angle correction
- Implants with less than 40° overall divergence to allow path of insertion

1 Impression
- Place the Impression Copings Implant Level onto the implant and take an implant level impression.
- Connect the temporary restoration or healing abutments and send the impression to the dental laboratory.

2 Laboratory procedures
A model is made at the dental laboratory, a GoldAdapt is connected, and a conventional crown and bridge restoration is produced.

3 Connection of final restoration
- Ensure that the implant platforms are free of any soft tissue or bone remnants.
- Position the restoration/screw assembly on the implants and tighten the screws until resistance is felt using a Unigrip Screwdriver.
- Check both the occlusion and the interproximal contacts. The restoration should be in light occlusion and excursive contact should be minimal.
- Tighten the abutment screws to 35 Ncm using the Manual Torque Wrench Prosthetic and Screwdriver Unigrip Machine.
- Fill the screw access holes with a suitable material, such as gutta-percha, silicone, or temporary filling material.

Note: A radiograph can help to confirm accurate seating of the abutment.

GoldAdapt™ Non-Engaging.
<table>
<thead>
<tr>
<th>Product list for clinical procedures</th>
<th>Internal conical</th>
<th>External hex</th>
<th>Internal tri-channel</th>
</tr>
</thead>
<tbody>
<tr>
<td>GoldAdapt™ Non-Engaging</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
</tr>
<tr>
<td>Includes: Abutment Screw</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impression Coping Implant Level Closed Tray</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
</tr>
<tr>
<td>Alternatives for internal tri-channel:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>− Low Profile</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>− Plastic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impression Coping Implant Level Open Tray</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
</tr>
<tr>
<td>Impression Coping Bridge Open Tray NobelActive®</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
</tr>
<tr>
<td>Implant Replica</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
</tr>
</tbody>
</table>
NobelProcera® Implant Bar Overdenture.

Indications:
- Implant or abutment level
- Multiple-unit restorations
- Screw-retained
- Fixed-removable implant bar solutions

Contraindications:
- Cases with lengths that exceed the maximum limits

<table>
<thead>
<tr>
<th>Bar type</th>
<th>Bar shape</th>
<th>Max. cantilever</th>
<th>Max. span</th>
<th>Min. diagonal section</th>
<th>Min. bar link height</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dolder® Resilient Regular</td>
<td>Fixed shape</td>
<td>20 mm</td>
<td>40 mm</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Dolder® Resilent Small</td>
<td>Fixed shape</td>
<td>13.5 mm</td>
<td>35 mm</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Dolder® Rigid Regular</td>
<td>Fixed shape</td>
<td>20 mm</td>
<td>40 mm</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Dolder® Rigid Small</td>
<td>Fixed shape</td>
<td>13.5 mm</td>
<td>35 mm</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Hader</td>
<td>Fixed shape</td>
<td>20 mm</td>
<td>40 mm</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Round</td>
<td>Fixed shape</td>
<td>10 mm</td>
<td>25 mm</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Free Form Milled Bar</td>
<td>Free form</td>
<td>30 mm</td>
<td>45 mm</td>
<td>2.9 mm</td>
<td>2.5 mm</td>
</tr>
<tr>
<td>Montreal and Montreal Lingual Metallic</td>
<td>Free form</td>
<td>40 mm</td>
<td>45 mm</td>
<td>2.9 mm</td>
<td>2.5 mm</td>
</tr>
<tr>
<td>Paris</td>
<td>Free form</td>
<td>22 mm</td>
<td>40 mm</td>
<td>2.9 mm</td>
<td>2.5 mm</td>
</tr>
<tr>
<td>Wrap Around</td>
<td>Free form</td>
<td>25 mm</td>
<td>50 mm</td>
<td>N/A</td>
<td>2.5 mm</td>
</tr>
</tbody>
</table>

1 Preparation
Discuss with the laboratory technician the type of bar/special abutment planned and the respective retentive elements.

2 Impression
- Use a custom-made rigid impression tray with occlusal screw access holes following an open tray impression protocol.
- Syringe an elastomeric impression material around the impression copings intra-ornally and take an impression.
- After complete setting of the impression material unscrew the impression coping screws and remove the impression tray.
- Make preliminary interocclusal records.
- Inspect the impression for discrepancies and send it to the laboratory.
3 Laboratory procedures
A model and wax rims are fabricated for inter-occlusal records and sent to the clinician.

4 Intra-oral jaw-relation records
Use the wax rims and a face-bow for establishing jaw-relation records.

5 Laboratory procedures
A diagnostic tooth set-up is made.

6 Intra-oral try-in of set-up
Try-in the diagnostic tooth set-up to verify functional and esthetic parameters.

7 Laboratory procedures
- The model and set-up are scanned locally, or sent out for centralized scanning, using NobelProcera Scanner.
- The bar is designed in NobelProcera Software.
- The design is sent to a NobelProcera industrial production facility, where it is milled and polished.
- The ready-to-use bar is shipped to the dental laboratory, including clinical screws and attachments.
- The laboratory produces the restoration and sends the complete package to the clinician.

8 Intra-oral verification of framework fit
Check precision of fit of delivered Implant Bar Overdenture intra-orally. A passive and precise fit is essential. A forced fit can result in stress concentration on one or more implants, potentially leading to implant failure.
9 Laboratory procedures
– An overdenture is fabricated or an existing denture is modified according to standard protocols.
– Where applicable, the housings of the selected retentive elements are integrated in the overdenture.

10a Connection of the Implant Bar Overdenture at implant level
– Ensure that the implants are free of any soft tissue or bone remnants.
– Connect the bar to the implants with clinical screws using the Unigrip Screwdriver. Starting with the implant nearest to the middle of the bar, tighten the remaining screws, alternating left and right sides.
– Tighten the clinical screws to 35 Ncm using the Manual Torque Wrench Prosthetic and Unigrip Screwdriver Machine.

Notes:
– A radiograph can help to confirm accurate seating of the restoration.
– Only clinical screws provided by Nobel Biocare should be used with the Implant Bar Overdenture.

10b Connection of the Implant Bar Overdenture at abutment level
– Connect the bar to the Multi-unit Abutments with prosthetic screws. Starting with the implants nearest to the middle of the bar, tighten the remaining screws, alternating left and right sides.
– Tighten the prosthetic screws to 15 Ncm using the Manual Torque Wrench Prosthetic and Unigrip Screwdriver Machine.

Note: Only clinical screws provided by Nobel Biocare should be used with the Implant Bar Overdenture, unless stated otherwise.
### Product list for clinical procedures

<table>
<thead>
<tr>
<th>Description</th>
<th>Internal conical</th>
<th>External hex</th>
<th>Internal tri-channel</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NobelProcera® Implant Bar Overdenture – at Implant Level or Abutment Level</strong></td>
<td><img src="image1" alt="Image" /></td>
<td><img src="image2" alt="Image" /></td>
<td><img src="image3" alt="Image" /></td>
</tr>
<tr>
<td>Includes: Abutment Screws/Prosthetic Screws</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Implant level components</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abutment Screw Titanium</td>
<td><img src="image4" alt="Image" /></td>
<td><img src="image5" alt="Image" /></td>
<td><img src="image6" alt="Image" /></td>
</tr>
<tr>
<td>Screw Ceramic Abutment Brånemark System®</td>
<td><img src="image7" alt="Image" /></td>
<td><img src="image8" alt="Image" /></td>
<td><img src="image9" alt="Image" /></td>
</tr>
<tr>
<td><strong>Impression Coping Implant Level Open Tray</strong></td>
<td><img src="image10" alt="Image" /></td>
<td><img src="image11" alt="Image" /></td>
<td><img src="image12" alt="Image" /></td>
</tr>
<tr>
<td><strong>Impression Coping Bridge Open Tray NobelActive®</strong></td>
<td><img src="image13" alt="Image" /></td>
<td><img src="image14" alt="Image" /></td>
<td><img src="image15" alt="Image" /></td>
</tr>
<tr>
<td><strong>Implant Replica</strong></td>
<td><img src="image16" alt="Image" /></td>
<td><img src="image17" alt="Image" /></td>
<td><img src="image18" alt="Image" /></td>
</tr>
<tr>
<td><strong>Abutment level components</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multi-unit Abutment</td>
<td><img src="image19" alt="Image" /></td>
<td><img src="image20" alt="Image" /></td>
<td><img src="image21" alt="Image" /></td>
</tr>
<tr>
<td>Available in straight, 17°, and 30°</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Includes: Abutment Screw</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prosthetic Screw Multi-unit</td>
<td><img src="image22" alt="Image" /></td>
<td><img src="image23" alt="Image" /></td>
<td><img src="image24" alt="Image" /></td>
</tr>
<tr>
<td>For connection of NobelProcera® Implant Bar Overdenture</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Impression Coping Open Tray Multi-unit</strong></td>
<td><img src="image25" alt="Image" /></td>
<td><img src="image26" alt="Image" /></td>
<td><img src="image27" alt="Image" /></td>
</tr>
<tr>
<td><strong>Abutment Replica Multi-unit</strong></td>
<td><img src="image28" alt="Image" /></td>
<td><img src="image29" alt="Image" /></td>
<td><img src="image30" alt="Image" /></td>
</tr>
<tr>
<td><strong>Healing Cap</strong></td>
<td><img src="image31" alt="Image" /></td>
<td><img src="image32" alt="Image" /></td>
<td><img src="image33" alt="Image" /></td>
</tr>
<tr>
<td>in regular and wide</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Gold Abutment Bar/Gold Coping Bar.

Indications:
– Fully edentulous arch
– Extensive bone or soft tissue loss
– Compromised patient manual dexterity
– Necessity for soft tissue support
– Phonetic concerns

Implant supported overdenture:
– Maxilla: 6 to 8 implants
– Mandible: 4 or more implants
– The number of implants is important in determining the load distribution, but not the only factor

Resilient tissue-supported overdenture:
– Maxilla: 4 or more implants
– Mandible: 2 or more implants

1a Implant level impression
– Place the Impression Copings Implant Level onto the implant and take an implant level impression.
– Impression Coping Bar facilitates the procedure when using a custom-made impression tray, or when relining an existing denture.

1b Abutment level impression
Place the Impression Coping Bar Multi-unit onto the abutments and take an impression.

2 Laboratory procedures
A model is made and an occlusal rim with incorporated Gold Abutments/Gold Copings is produced.
3 Jaw relationship
– Secure the occlusal rim to the implants or abutments with abutment screws or prosthetic screws, respectively.
– Record the jaw relationship.

4 Laboratory procedures
The bar is soldered to the Gold Abutments/Gold Copings and a tooth set-up in wax is produced.

5 Clinical try-in
Evaluate the wax set-up.

6 Laboratory procedures
The overdenture is processed.

7a Connection of final restoration – implant level
– Deliver the denture. Adjust the retention. Verify the occlusal relationships, confirm resiliency and hinge axis movement, if applicable.
7b Connection of final restoration – abutment level
- Verify prosthetic screw torque.
- Tighten the prosthetic screws to 15 Ncm using Manual Torque Wrench Prosthetic and Unigrip Screwdriver Machine.
- Deliver the denture. Adjust the retention. Verify the occlusal relationships, confirm resiliency and hinge axis movement, if applicable.

<table>
<thead>
<tr>
<th>Product list for clinical procedures</th>
<th>External hex</th>
<th>Internal tri-channel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gold Abutment Bar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Includes: Abutment Screw</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gold Coping Bar Multi-unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Includes: Prosthetic Screw</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impression Coping Bar Implant Level Closed Tray</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impression Coping Implant Level Closed Tray</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternatives for internal tri-channel:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Low Profile</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Plastic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impression Coping Implant Level Open Tray</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implant Replica</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impression Coping Bar Closed Tray Multi-unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abutment Replica Multi-unit</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Indications:
- Fully edentulous arch
- Extensive bone or soft tissue loss
- Compromised patient manual dexterity
- Necessity for soft tissue support
- Phonetic concerns
- Implant placed too far posterior to connect with a bar
- Allows for misangulation of up to 30° between implants

1a Abutment connection
- Install the Ball Abutments. The top of the collar should be slightly supragingival.

- Tighten to 15 Ncm using the Manual Torque Wrench Prosthetic and Screwdriver Machine Ball Abutment.

1b Adapting platform WP to RP
- The Adapter NobelReplace WP to RP is a bushing that adapts a WP Nobel Biocare implant with an internal connection to the RP Ball Abutment Titanium. The use of the adapter adds 0.5 mm to the total abutment height, which should be considered when choosing the Ball Abutment.
- Push the Ball Abutment RP through the adapter into the implant. Tighten to 15 Ncm using the Manual Torque Wrench Prosthetic and Screwdriver Machine Ball Abutment.
2 Impression
– Record an impression using a custom tray.
– Insert the Ball Abutment Replicas in the impression and send the impression to the dental laboratory.

3 Laboratory procedures
A model is made and an occlusal rim is produced.

4 Jaw relationship
Make sure the rim does not make contact with the Ball Abutments. Record the jaw relationship.

5 Laboratory procedures
A tooth set-up in wax is produced.

6 Clinical try-in
Evaluate the wax set-up. Make sure that the rim does not make contact with the Ball Abutments.

7 Laboratory procedures
The Gold Caps are processed into the overdenture.
8 Delivery of final restoration
– Verify Ball Abutment torque to 15 Ncm.
– Deliver the denture. Verify the occlusal relationship. Adjust the retention and, if applicable, confirm the hinge axis movement.
– The desired retention force of the Gold Caps can be adjusted by turning the lamellae retention insert clockwise (increased retention) or counter-clockwise (decreased retention) using the Screwdriver/Activator for Gold Cap.

Note: Do not turn the Screwdriver/Activator more than one turn.

Product list for clinical procedures

<table>
<thead>
<tr>
<th>Instrumentation</th>
<th>External hex</th>
<th>Internal tri-channel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ball Abutment Titanium</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abutment Replica Ball Abutment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gold Cap Ball Abutment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gold Cap Ball Abutment Insert</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adapter NobelReplace® WP to RP</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Instrumentation

| Screwdriver Machine Ball Abutment    |              |                      |
| Screwdriver/Activator               |              |                      |
Locator® Abutment.

**Indications:**
- Fully edentulous arch
- Extensive bone or soft tissue loss
- Compromised patient manual dexterity
- Necessity for soft tissue support
- Phonetic concerns
- Implant placed too far posterior to connect with a bar
- Allows for misangulation of up to 40° between implants

**Resilient tissue-supported overdenture**
- Maxilla: 4 or more implants
- Mandible: 2 or more implants

**Standard prosthetic procedure**

**1a Implant level impression**
- Place the Impression Coping Implant Level onto the implant and take an implant level impression.
- As a consequence, abutments are selected by the dental technician on the master cast. Selected abutments are delivered together with the final denture, to be connected intra-orally by the dentist.

**1b Abutment level impression**
Before impression taking, abutments are selected and connected by the dentist. For impression on abutment level, special Locator impression components are used.

**2 Select abutment height**
- Select the height of the Locator Abutment by determining the height of the gingiva at its highest point.
- Choose the corresponding abutment tissue cuff height or the next closest higher size available.
- The correct tissue cuff height of Locator Abutment should create a functional attachment 1.5 mm above the surrounding gingival level and not be submerged below the tissue.
- For NobelActive Locator Abutment height considerations, see page 83.

**Note:** Connecting the prosthesis is easier for the patient if the tops of the Locator Abutments are level with one another.
3 Abutment connection
- Hand tighten the Locator Abutment to the implant using the Latch Type Torque Wrench Driver connected to the Manual Torque Wrench Adapter Prosthetic.
- Tighten the abutment to 35 Ncm using the Manual Torque Wrench Prosthetic.

4 Place spacer and impression coping
- Place a white block-out spacer ring on each abutment. The spacer ring is used to block out the area surrounding the abutment.
- Place the Locator Impression Copings on the Locator Abutments.

5 Impression
- Take an impression utilizing the muco-dynamic technique.
- Send the impression to the dental laboratory.

6 Final restoration
The finished Locator overdenture is delivered by the dental laboratory with black processing males in place.
7 Select replacement male
Select replacement males by considering preferred retention and angle of implant divergence.

**Note:** Initially, select replacement males with the lowest retention values.

<table>
<thead>
<tr>
<th>Less than 10° divergence</th>
<th>5Lbs/2270g</th>
<th>3Lbs/1360g</th>
<th>1.5Lbs/680g</th>
</tr>
</thead>
<tbody>
<tr>
<td>10–20° divergence</td>
<td>4Lbs/1820g</td>
<td>1.5Lbs/680g</td>
<td></td>
</tr>
</tbody>
</table>

8 Remove processing male
Remove the black processing males from the housing using the Locator Core Tool (see page 82).

9 Insert replacement male
Insert the replacement males using the Locator Core Tool (see page 83).

10 Insert finished denture
Insert the finished denture, and check the occlusion and desired retention.
**Chair-side prosthetic procedure**

For an existing and well-functioning overdenture, the Locator system can be implemented through a chair-side procedure.

1 Select abutment height
   - Select the height of the Locator Abutment by determining the height of the gingiva at its highest point.
   - Choose the corresponding abutment tissue cuff height or the next closest higher size available.
   - The correct tissue cuff height of Locator Abutment should create a functional attachment 1.5 mm above the surrounding gingival level and not be submerged below the tissue.
   - For NobelActive Locator Abutment height considerations, see page 83.

   **Note:** Connecting the prosthesis is easier for the patient if the tops of the Locator Abutments are level with one another.

2 Abutment connection
   - Hand tighten the Locator Abutment to the implant using the Latch Type Torque Wrench Driver connected to the Manual Torque Wrench Adapter Prosthetic.
   - Tighten the abutment to 35 Ncm using the Manual Torque Wrench Prosthetic.

3 Place block-out spacer and denture caps
   - Place a white block-out spacer ring on each abutment. The spacer ring is used to block out the area surrounding the abutment.
   - Place the denture caps with the black processing males onto the Locator Abutments.
4 Hollow out denture base
– Use an appropriate method to mark the locations of the Locator Abutments on the existing denture.
– Hollow out the existing denture base in the areas of the Locator Denture Caps.

**Note:** Ensure that the denture caps are fixed on the abutments and do not touch the prosthesis.

5 Anchor denture caps
– Fill the receptor sites with prosthetic self-curing resin.
– Apply suitable bonding agent onto Locator Denture Caps. Lingual connecting holes may be used to anchor the denture caps in the denture.
– Seat denture and confirm proper occlusion.
– Cure resin in light occlusion without compression of the soft tissue.
– Once the resin has cured, remove the denture from the mouth and discard the white block-out spacers.
– Remove any excess resin and polish the denture.

**Caution:** You may not be able to remove the denture if resin flows into undercuts around attachments and is cured. To prevent resin from flowing under the caps, two or more Locator block-out spacers can be stacked.

6 Select replacement male
Select replacement males by considering the preferred retention and angle of implant divergence.

**Note:** Initially, select replacement males with the lowest retention values.
7 Remove processing male
Remove the black processing males from the housing using the Locator Core Tool (see page 82).

8 Insert replacement male
Insert the replacement males using the Locator Core Tool (see page 83).

9 Insert finished denture
Insert the finished denture, and check the occlusion and desired retention.
**Locator Core Tool**

The Locator Core Tool is a three-piece multifunctional instrument.

1. Unscrew the tip of the Locator Core Tool by two full turns counterclockwise. A gap should be visible between the tip and the middle section.

2. To remove a Locator male from the titanium metal housing: insert the tip into the cap/male assembly and push straight into the bottom of the male. Then tilt the tool so that the sharp edge of the tip grabs hold of the male and pull it out of the cap.

3. To remove the male from the instrument, turn the tip screwed clockwise completely onto the middle section. This activates the loosening pin inside the tip, which releases the male.
**Male Seating Tool**
Separate the Male Removal Tool section from the Locator Core Tool and use the Male Seating Tool end to place a new male into the empty titanium metal housing. The male is fixed firmly in the cap when a click is heard.

**Abutment Driver**
The gold-colored end of the Locator Core Tool is used for screwing and unscrewing the Locator Abutments to and from the replicas.

**Height consideration for Locator Abutment for NobelActive**
Due to NobelActive’s unique internal connection, the Locator Abutment height is computed by measuring the total soft tissue depth and subtracting 0.5 mm for the platform shifting area to determine the proper Locator Abutment height.

For example:
- Soft tissue depth: 4.5 mm
- Conical height: -0.5
- NobelActive Locator height: 4.0 mm

(An additional 1.5 mm extends above the tissue)
## Product list for clinical procedures

<table>
<thead>
<tr>
<th>Product</th>
<th>Internal conical</th>
<th>External hex</th>
<th>Internal tri-channel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locator® Abutment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impression Coping Bar Implant Level Closed Tray</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impression Coping Implant Level Closed Tray</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternatives for internal tri-channel:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>– Low Profile</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>– Plastic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impression Coping Implant Level Open Tray</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implant Replica</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Locator® Impression Coping</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Locator® Female Analog</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Locator® Male Processing Pkg</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Locator® Core Tool</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Locator® Latch Type Driver</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Abutment
A component screwed to the top of the implant that provides support and retention for a temporary or final prosthetic restoration.

### Abutment level impression
An impression taken on the abutment, using conventional techniques or using an abutment level impression coping. Used to transfer the position of the abutment from the patient’s mouth to a master model.

### Abutment screw
A screw that secures the abutment to the implant that is torqued to a final position.

### Cement-retained restoration
A restoration cemented over the abutment or the prepared teeth.

### Cover screw
A screw used to seal the implant during the healing phase after placement.

### Final abutment
An abutment designed to remain permanently in the patient’s mouth.

### Healing abutment
A temporary abutment used during a healing phase. It is removed before the final abutment/restoration is placed.
**Immediate Function** – A clinically documented protocol that allows a temporary or final prosthetic solution to be delivered immediately following implant placement; only applicable if required final seating torque meets or exceeds 35 Ncm.

**Immediate loading** – Immediate occlusal loading.

**Implant level impression** – An impression taken on the implant. Used to transfer the position of the implant from the patient’s mouth to a master model.

**Impression coping** – A device used to register the position of the implant or abutment when taking an impression. It stays in the impression or must be removed from the oral cavity and repositioned in the impression.

**Manual Torque Wrench Prosthetic** – A torque wrench used to tighten abutments and restorations to the desired torque measurement.

**NobelProcera Software** – State-of-the-art 3D CAD package for designing and ordering NobelProcera individualized dental prosthetics, including crowns, bridges, implant bars overdenture, abutments and veneers.
**Replica (abutment or implant)** – A replica of the abutment or implant attached to the impression coping after taking an impression to help create an accurate model.

**Prosthetic screw (1)** – A screw that secures the restoration to the abutment and is torqued to a final position.

**Unigrip Screwdriver Machine/Manual (2)** – A screwdriver used to retain screws for abutments and restorations.

**Screw-retained restoration (3)** – A restoration retained by screws through the crown and threads into the abutment and/or implant.

**Temporary abutment and coping** – Abutment and coping used for making temporary restorations. They are removed prior to securing the final restoration.

**Try-in Abutment** – Used to help select the proper size and shape abutment for the patient. Made of plastic, these abutments can be reused after having been cleaned and sterilized using normal procedures.
Nobel Biocare products are organized according to a “platform concept”, which facilitates treatment planning.

**Narrow Platform (NP)** is designed for indications in which there is limited interdental space or a narrow crest.

**Regular Platform (RP)** is designed for indications ranging from single anterior tooth loss to complete edentulism.

**Wide Platform (WP)** is designed for indications where additional loading can be expected or whenever a wider diameter implant/abutment is considered preferable.

**6.0 Platform (6.0)** is designed for indications where additional loading can be expected or whenever an even wider diameter implant/abutment is considered preferable.

**Internal conical**

NobelActive®

**External hex**

Brånemark System® Mk III Groovy*
NobelSpeedy™ Groovy**
Brånemark System® Mk III*
Brånemark System® Mk IV
Brånemark System® Zygoma TiUnite®
Brånemark System® Zygoma

**Internal tri-channel**

NobelReplace® Tapered Groovy
NobelReplace® Straight Groovy
NobelSpeedy™ Replace
Replace Select™ Tapered
Replace Select™ Straight

**One-piece implants**

NobelDirect® Posterior***

---

*For RP Ø 3.75 and RP Ø 4 implants, use RP prosthetic components.
** For WP Ø 5 and WP Ø 6 implants, use WP prosthetic components.
***Use prosthetic components for Snappy Abutment 4.0.
Abutment selection.

If the final restoration is to meet the esthetic and functional demands of both dentist and patient, selecting the proper abutment is crucial. In some cases, the dentist makes the abutment selection and sends an abutment level impression to the dental laboratory. However in many cases, the dentist takes an implant level impression to facilitate the abutment choice.

When selecting abutments, consider the following:

**Platform/system**
Different implants have different platform systems. The platform of the abutment must correspond to the implant platform. Nobel Biocare offers three different implant connections: internal conical, external hex and internal tri-channel.

**Tissue/cuff height**
To determine the right cuff height, measure the soft tissue depth around the implant replica. Choose a cuff height depending on the importance of esthetics or hygiene.

**Vertical space**
In addition to the height of the selected abutment, an additional 1.5 to 2 mm of space must be available over the prosthetic components to allow for casting and/or veneering material.

**Interdental space**
The available interdental space and desired emergence profile also help determine the choice of abutment and collar height.

**Angulation**
The angulation of each implant will determine which abutment can be used, straight or angled, or whether a customized abutment is needed.

**Type of restoration**
Some abutments in the Nobel Biocare assortment are specifically designed for either single- or multiple-unit restorations.
Cement-retained
Cement-retained restorations based on implants follow the same basic protocol as tooth-supported single- and multiple-unit restorations. While the abutments are screw-retained to the implants, the restoration is cemented over the abutments. The use of temporary cement is recommended for ease of retrievability.

Notes:
- Do not use temporary cement for NobelProcera Crown and Bridge Zirconia and Alumina.
- For bonded restorations follow cement manufacturer’s instructions for proper treatment of preparation / abutment and restoration surfaces.

Screw-retained
A screw-retained restoration is retained by screws that enter through the occlusal or cingulum area of the restoration. The screw passes through the crown or bridge and threads into the abutment or implant. The restoration is retrievable by the dentist.

Try-in Abutments
To facilitate the abutment selection, plastic Try-in Abutments are available with internal or external connections. These are intended to be placed into an implant (intra-orally) or implant replica (dental laboratory) to aid making the selection of an appropriate shape and size abutment.

Try-in Abutments are available for Snappy Abutments, straight and angled Esthetic Abutments, and angled Multi-unit Abutments. A soft-tissue measuring tool is included with the Try-in Abutments.

Try-in Abutments are reusable and indicated for partially or fully edentulous cases.
Extraction Screw NobelActive®.

The Extraction Screw NobelActive may be used when the implant-to-abutment connection is very firm or when the stability of the implant may be compromised during the removal of the abutment, such as during immediate load cases.

The Extraction Screw NobelActive may be used for the following abutments:
- Esthetic Abutment NobelActive
- 15° Esthetic Abutment NobelActive
- Snappy Abutment NobelActive
- Temporary Abutment NobelActive Engaging

Clinical procedure:
1. Remove the abutment screw using the Unigrip Screwdriver.
2. Insert the Extraction Screw into the abutment and screw into place using the Unigrip Screwdriver until the tip of the screw touches the bottom of the hole inside the implant.
3. Apply torque to the Unigrip Screwdriver to release the abutment from the implant.

Note: The abutment screw must be unthreaded from both the internal threads of the implant and the abutment. Use of a small amount of sticky wax on the tip of the Unigrip Screwdriver will aid in retention of the abutment screw head.
Impression techniques – implant level.

Transfers the position of the implant from the patient's mouth to the master model using Impression Copings Implant Level. Both open or closed tray techniques can be used. To create a restoration for an implant, the laboratory model needs to include an implant replica. Using this model, several options for implant level restorations can be proposed.

Indications:
- After a one-stage procedure when indexing of the implant position is desired at the time of implant placement
- After a two-stage procedure, when a healing abutment or temporary restoration has been in place and the soft tissue has healed

Closed tray
Use the closed tray technique:
- When a closed tray is desired and it is possible to re-seat the impression coping optimally.
- When the vertical height is limited.
- When the implant parallelism is sufficient.

**Note:** The closed tray technique is not recommended for multiple implant cases; can be difficult to remove intra-orally.

Open tray
Use the open tray technique:
- When it is preferable to have the impression coping retained in the impression material to avoid uncertainty with re-seating.
- When the lack of implant parallelism would make tray removal difficult using the closed tray technique.
- When the height of the implant level impression coping is significantly below the occlusal plane.

**Note:**
- The open tray technique is recommended for multiple implant cases.
- The open tray technique must be used for implants that diverge more than 25°.
Closed tray technique

– Place the impression coping over the implant. Use the Unigrip Screwdriver to tighten the screw. For impression copings with external connection use only fingers to tighten.
– Block out the Unigrip hole on the guide pin, if applicable. A radiograph may be taken to verify proper seating of the impression coping.

Alternative:
The Impression Coping Closed Tray Plastic NobelReplace, which is intended to be used for single units and short-span bridges with parallel implants.

Place an Impression Coping Closed Tray Plastic NobelReplace. Align the lobes of the impression coping with the internal channels in the implant by orientating the arrow on top of the impression coping buccal/facial. Push the impression coping firmly into place and verify correct seating.

Note: For multiple units, this impression coping should only be used when implants are parallel. The impression coping is delivered sterile and for single use only.

Inject a heavy body impression material (polyether material or polyvinylsiloxane) around each impression coping and into the tray. Record the impression.
– Remove the impression.
– Remove the impression coping and remove the block-out material. Thread the coping onto the corresponding implant replica.
– Place the impression coping implant replica assembly into its corresponding location in the impression and send it to the dental laboratory for model fabrication.

**Note:** Impression Coping Closed Tray NobelReplace should not be removed from the impression.

---

**Open tray technique**

– Place the impression coping over the implant and tighten the guide pin using the Unigrip Screwdriver.
– Relieve and perforate the impression tray to allow full seating of the tray and protrusion of the guide pins. If there is a large opening, it may be closed off using baseplate wax, with the guide pins indenting or perforating the wax.

– Inject impression material around each impression coping and fill the tray; seat the impression tray fully so that the tips of all the guide pins are identified. After the impression material has set, unscrew the guide pins. Remove the impression tray and send it to the dental laboratory.
<table>
<thead>
<tr>
<th>Product list for clinical procedures</th>
<th>Internal conical</th>
<th>External hex</th>
<th>Internal tri-channel</th>
<th>Platform Shift</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impression Coping Implant Level Closed Tray</td>
<td><img src="image" alt="Image of Impression Coping Implant Level Closed Tray" /></td>
<td><img src="image" alt="Image of External hex" /></td>
<td><img src="image" alt="Image of Internal tri-channel" /></td>
<td><img src="image" alt="Image of Platform Shift" /></td>
</tr>
<tr>
<td>Alternative for internal conical (NobelActive® RP only):</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Profile</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternatives for internal tri-channel:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Profile</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impression Coping Implant Level Open Tray</td>
<td><img src="image" alt="Image of Impression Coping Implant Level Open Tray" /></td>
<td><img src="image" alt="Image of External hex" /></td>
<td><img src="image" alt="Image of Internal tri-channel" /></td>
<td><img src="image" alt="Image of Platform Shift" /></td>
</tr>
<tr>
<td>Alternative for internal conical (NobelActive® RP only):</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low profile</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impression Coping Bridge Open Tray</td>
<td><img src="image" alt="Image of Impression Coping Bridge Open Tray" /></td>
<td><img src="image" alt="Image of External hex" /></td>
<td><img src="image" alt="Image of Internal tri-channel" /></td>
<td><img src="image" alt="Image of Platform Shift" /></td>
</tr>
<tr>
<td>NobelActive®</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implant Replica</td>
<td><img src="image" alt="Image of Implant Replica" /></td>
<td><img src="image" alt="Image of External hex" /></td>
<td><img src="image" alt="Image of Internal tri-channel" /></td>
<td><img src="image" alt="Image of Platform Shift" /></td>
</tr>
</tbody>
</table>
Impression techniques – abutment level.

Transfers the position of the abutment from the patient’s mouth to the master model using Impression Copings Abutment Level. Both open or closed tray techniques can be used. To create a restoration for an abutment, the laboratory model needs to include an abutment replica. The only exceptions are abutments that are modified in the mouth. After making standard crown and bridge impressions, these are reproduced in stone or acrylic using methods identical to preparations on existing teeth.

Indications:
– One- and two-stage surgical procedures, following final abutment placement

Closed tray
Use the closed tray technique:
– When a closed tray is desired and it is possible to re-seat the impression coping optimally.
– When the vertical height is limited.
– When the implant parallelism is sufficient.

Note: The closed tray technique is not recommended for multiple implant cases; can be difficult to remove intra-orally.

Open tray
Use the open tray technique:
– When it is preferred to have the impression coping retained in the impression material to avoid uncertainty with re-seating.
– When the lack of implant parallelism would make tray removal difficult using the closed tray technique.
– When the height of the implant level impression coping is significantly below the occlusal plane.
– For multiple implant impressions, when possible.

Note:
– The open tray technique is recommended for multiple implant cases.
– The open tray technique must be used for implants that diverge more than 25°.
Multi-unit Abutment
The impression techniques (closed or open tray) are the same for straight and angled Multi-unit Abutments and for all platforms (NP/RP/WP). Follow the procedures for Multi-unit Abutments, pages 47–50.

Note: The open tray technique must be used for implants that diverge more than 25°.

Snappy Abutment
Follow the procedures for Snappy Abutment, pages 35–37.

Ball Abutment
Follow the procedures for Ball Abutment, pages 73–75.

Locator® Abutment
Follow the procedures for Locator Abutment, pages 76–84.
Cementation on abutments.

Conventional cementation (e.g., glass-ionomer cement (GIC) or self-adhesive universal resin cement)

1. Try-in the veneered NobelProcera Crown or Bridge, ensuring that no major adjustments are necessary.
2. Clean and dry the internal surface of the crown or bridge.
3. Carefully place a retraction cord in the sulcus around each abutment.
4. Clean, dry and isolate the abutment and close the screw head with an appropriate removable material (e.g. cotton pellet).
5. Mix cement according to manufacturer’s recommendations.
6. Apply cement to the internal surface of the crown or bridge.
7. Seat the crown/bridge with finger pressure, paying attention to moisture control.
8. Remove the retraction cord and excess material.
9. Perform a final check of occlusion, adjust if necessary, and polish.

For occlusal adjustments, use low speeds, new diamond drills, rubber polishing points, copious water irrigation and light pressure, followed by polishing with a diamond polishing paste.
Prosthetic instrumentation.

Prosthetic Kit
Includes:
- Manual Torque Wrench Prosthetic
- Unigrip™ Screwdriver Machine 20 mm
- Unigrip™ Screwdriver Machine 30 mm
- Screwdriver Machine Multi-unit 21 mm
Manual Torque Wrench Prosthetic

To ensure prostheses remain secured during daily patient use, tighten abutment and prosthetic screws to the recommended torque specifications.

The Manual Torque Wrench is a convenient tool for achieving the desired torque. It is easy to use, with a scale clearly indicating the two most common torque measurements, 15 Ncm and 35 Ncm.

– Assemble the Manual Torque Wrench by inserting the screwdriver.
– To tighten a screw, adjust the direction indicator so that the arrow is pointing toward the level arm and rotate clockwise.
– To loosen a screw, adjust the direction indicator so that the arrow is pointing away from the level arm and rotate counterclockwise.

Note: For correct handling and torque specifications, see the instructions for use of the individual product.

Warning: Using the wrench body instead of the level arm may result in excessive torque being transferred to the screw and/or implant site.

OsseoSet™ 200

A complete drilling unit for dental work. For restorative applications, all abutment screws and prosthetic screws are tightened electronically to the proper specifications.
Torque guide.

<table>
<thead>
<tr>
<th>Torque Guide</th>
<th>Screw type</th>
<th>Torque Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plastic Temporary Abutment</td>
<td>By hand</td>
<td></td>
</tr>
<tr>
<td>Plastic Temporary Coping</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Healing Abutment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Healing Cap</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prosthetic Screws</td>
<td></td>
<td>15 Ncm</td>
</tr>
<tr>
<td>for final restorations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Titanium Temporary Coping</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ball Abutment</td>
<td></td>
<td>15 Ncm</td>
</tr>
<tr>
<td>17° Multi-unit Abutment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30° Multi-unit Abutment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All other abutments for</td>
<td></td>
<td>35 Ncm</td>
</tr>
<tr>
<td>Nobel Biocare implant systems</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Other major implant systems may require different torque values. Always consult the respective instructions for use.
Cleaning and sterilization.

**Sterile components**
The devices delivered sterile have a “Sterile” marking on the label. Opened packages of components that have never entered the oral cavity of a patient may be cleaned and sterilized/autoclaved again following the procedures stated below.

**Abutments**
Multi-unit Abutments; Snappy Abutments: Quick Temp Abutments and Immediate Temp Abutments are delivered sterile. If re-sterilization is required, use steam sterilization for 5 minutes at 135°C/274°F.

*Note:* For re-sterilization of straight Multi-unit Abutments, remove plastic holder prior to procedure.

**Non-sterile components and instruments**

**Abutments**
For abutments delivered non-sterile, if modifications have been made to abutment, it is recommended to clean and sterilize the abutment prior to placing abutment in oral cavity. For sterilization, use steam sterilization for 5 minutes at 135°C/274°F.

**Procera Esthetic Abutment Selection Kit**
Abutments and kit are delivered non-sterile. For sterilization, use steam sterilization for 5 minutes at 135°C/274°F.

**Try-in Abutments**
Try-in Abutments are reusable. It is recommended to clean and sterilize the abutment prior to placing abutment in oral cavity. For sterilization, use steam sterilization for 5 minutes at 135°C/274°F.

*Note:* The Try-in Abutment Box is not autoclavable.
Instruments, impression copings in metal
and Manual Torque Wrench
Care and maintenance of reusable instruments are crucial for a successful treatment. Well-maintained instruments not only safeguard your patients and staff against infection, but also are essential for the outcome of the total treatment.

Pre-cleaning of instruments
1. Remove residual tissue by immersing the used instrument in cold water (<40°C/104°F). Do not use fixation agents or hot water (>40°C/104°F) as this could influence your subsequent cleaning results. Instruments should be kept in a wet environment until the next step indicated below is initiated.
2. Soak the instruments in 0.5% enzymatic cleaning solution (e.g enzymatic detergent with a pH level between 6–9) prepared with luke warm tap water for 5 minutes. Cleaning agents are available commercially. Please ask your supplier for details.
3. Scrub the outer, and if applicable also inner side of the instruments with a suitable soft bristled nylon brush until all visible soil is removed.
4. Rinse the outer side of the instrument with tap water to remove all cleaning solution.

Automated cleaning, disinfection and drying
1. Place the instruments on an instrument rack and load the instrument rack in the washer disinfector and start the cycle by applying the following:
   a. 2 min pre-cleaning with cold water & emptying
   b. 5 min cleaning at 55°C/131°F with 0.5% cleaner Neodisher mediclean (Enzyme, NTA, Tenside) or equivalent (if not Neodisher mediclean is available in your market) & emptying
   c. 3 min neutralization with tap water & emptying
   d. 2 min intermediate rinsing with cold tap water & emptying
2. Special instructions of the manufacturer of the automated washing machine have to be followed. Cleaning disinfectants are available commercially.
3. Drying the outer side of the instrument through drying cycle of washer/disinfector.
If needed, additional manual drying can be performed through lint free towel. Insufflate cavities of instruments by using sterile compressed air.

**Functional testing and maintenance**
1. Visual inspection for cleanliness with magnifying glasses.

If necessary perform reprocessing process again until the instruments are visibly clean.

**Packaging**
1. Place instruments in sterilization packets

**Sterilization**
1. Sterilize the instruments by applying a fractionated pre-vacuum process (according to ISO 13060 / ISO17665) under consideration of the respective country requirements.

Parameters for the pre-vacuum cycle:
- 3 pre-vacuum phases with at least 60 millibar.

**New Cycle:**
- Heat up to a minimum sterilization temperature of 132°C–134°C/269.6°F–273.2°F; maximum temperature 135°C/ 274°F.
- Minimum Holding time: 3 min.
- Drying time: minimum 10 min.

**Storage**
1. Store the sterilized instruments in a dry, clean and dust-free environment at modest temperatures of 5°C to 40°C/41°F–104°F.
Frequently asked questions.

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What happens if a screw head breaks and I can no longer take it out with the screwdriver?</td>
<td>If all attempts to remove the abutment screw have failed, retrieval instruments or a screw removal kit can be used to retrieve the abutment screw and, if necessary, repair the internal threading of the implant. Detailed instructions on how to use the retrieval instruments/screw removal kit are included in the product packaging.</td>
</tr>
<tr>
<td>Can I prepare a titanium abutment intra-orally?</td>
<td>Yes. Adjustments can be made intra-orally. Use cross-cut carbide burs and copious water irrigation during the preparation.</td>
</tr>
<tr>
<td>Why is the titanium section of the NobelProcera Abutment Zirconia with an internal tri-channel connection removable? How is it fixed?</td>
<td>When the ceramic abutment with an internal connection is used for direct application of veneering material, the titanium part should be removed before firing. Once the titanium part is reinserted into the abutment and the abutment screw is tightened to the recommended torque of 35 Ncm using the Manual Torque Wrench Prosthetic, this titanium part is fixed to the abutment.</td>
</tr>
<tr>
<td>How should I adjust a NobelProcera Abutment Zirconia/Procera Esthetic Abutment?</td>
<td>Use new, sharp diamond instruments to make adjustments to NobelProcera Abutment Zirconia or Procera Esthetic Abutment – excessive heat can cause micro-cracks in zirconia. Make sure you use copious irrigation and light pressure. Note that only minor modifications of the height and/or the margins are recommended (see pages 28 and 33).</td>
</tr>
<tr>
<td>Question</td>
<td>Answer</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>What type of cement is recommended for cement-retained restorations on implant abutments?</td>
<td>For titanium abutments: conventional crown and bridge cements can be used.</td>
</tr>
<tr>
<td></td>
<td>For ceramic abutments: either conventional crown and bridge cements or bonding resins can be used.</td>
</tr>
<tr>
<td>Can I use the Manual Torque Wrench Surgical with the Surgical Adapter for prosthetic tightening?</td>
<td>No. The Surgical Manual Torque Wrench is intended for surgical use. However a Prosthetic adapter can be purchased and used together with the handle of a Surgical Manual Torque Wrench, thus turning it into a Prosthetic Manual Torque Wrench.</td>
</tr>
<tr>
<td>Why are all Nobel Biocare abutment screws tightened to 35 Ncm except the angled Multi-unit Abutment Screw and the Ball Abutment Screw?</td>
<td>For these two screws, a sufficient preload for a secure screw joint is achieved at 15 Ncm.</td>
</tr>
<tr>
<td>Description</td>
<td>Article</td>
</tr>
<tr>
<td>-------------</td>
<td>---------</td>
</tr>
<tr>
<td>Adapter</td>
<td></td>
</tr>
<tr>
<td>Adapter NobRpl WP to RP</td>
<td>31945</td>
</tr>
<tr>
<td>Adapter PS RP-NP</td>
<td>34551</td>
</tr>
<tr>
<td>Adapter PS-RP</td>
<td>34552</td>
</tr>
<tr>
<td>Abutments</td>
<td></td>
</tr>
<tr>
<td>Ball Abutment Titanium</td>
<td></td>
</tr>
<tr>
<td>Ball Abutment Titanium Brånemark System® RP 1 mm</td>
<td>31905</td>
</tr>
<tr>
<td>Ball Abutment Titanium Brånemark System® RP 3 mm</td>
<td>31906</td>
</tr>
<tr>
<td>Ball Abutment Titanium Nobel® RP 1 mm</td>
<td>31907</td>
</tr>
<tr>
<td>Ball Abutment Titanium Nobel® RP 2 mm</td>
<td>31909</td>
</tr>
<tr>
<td>Ball Abutment Titanium Nobel® RP 3 mm</td>
<td>31911</td>
</tr>
<tr>
<td>Ball Abutment Titanium Nobel® RP 4 mm</td>
<td>31912</td>
</tr>
<tr>
<td>Ball Abutment Titanium Nobel® RP 5 mm</td>
<td>31913</td>
</tr>
<tr>
<td>Esthetic Abutment</td>
<td></td>
</tr>
<tr>
<td>Esthetic Abutment Nobel® RP 1 mm</td>
<td>32372</td>
</tr>
<tr>
<td>Esthetic Abutment Nobel® RP 3 mm</td>
<td>32376</td>
</tr>
<tr>
<td>Esthetic Abutment Nobel® RP 4 mm</td>
<td>32377</td>
</tr>
<tr>
<td>Esthetic Abutment Nobel® RP 5 mm</td>
<td>32378</td>
</tr>
<tr>
<td>Esthetic Abutment Nobel® RP 6 mm</td>
<td>32379</td>
</tr>
<tr>
<td>Esthetic Abutment Nobel® RP 7 mm</td>
<td>32380</td>
</tr>
<tr>
<td>Esthetic Abutment Nobel® RP 8 mm</td>
<td>32381</td>
</tr>
<tr>
<td>Esthetic Abutment Nobel® RP 9 mm</td>
<td>32382</td>
</tr>
<tr>
<td>Esthetic Abutment Nobel® RP 10 mm</td>
<td>32383</td>
</tr>
<tr>
<td>Esthetic Abutment Nobel® RP 11 mm</td>
<td>32384</td>
</tr>
<tr>
<td>Esthetic Abutment Nobel® RP 12 mm</td>
<td>32385</td>
</tr>
<tr>
<td>Esthetic Abutment Nobel® RP 13 mm</td>
<td>32386</td>
</tr>
<tr>
<td>Esthetic Abutment Nobel® RP 14 mm</td>
<td>32387</td>
</tr>
<tr>
<td>Esthetic Abutment Nobel® RP 15 mm</td>
<td>32388</td>
</tr>
<tr>
<td>Esthetic Abutment Nobel® RP 16 mm</td>
<td>32389</td>
</tr>
<tr>
<td>Esthetic Abutment Nobel® RP 17 mm</td>
<td>32390</td>
</tr>
<tr>
<td>Esthetic Abutment Nobel® RP 18 mm</td>
<td>32391</td>
</tr>
<tr>
<td>Esthetic Abutment Nobel® RP 19 mm</td>
<td>32392</td>
</tr>
<tr>
<td>15° Esthetic Abutment Nobel® RP 1 mm</td>
<td>32393</td>
</tr>
<tr>
<td>15° Esthetic Abutment Nobel® RP 3 mm</td>
<td>32394</td>
</tr>
<tr>
<td>15° Esthetic Abutment Nobel® RP 5 mm</td>
<td>32395</td>
</tr>
<tr>
<td>15° Esthetic Abutment Nobel® RP 7 mm</td>
<td>32396</td>
</tr>
<tr>
<td>15° Esthetic Abutment Nobel® RP 9 mm</td>
<td>32397</td>
</tr>
<tr>
<td>15° Esthetic Abutment Nobel® RP 11 mm</td>
<td>32398</td>
</tr>
<tr>
<td>15° Esthetic Abutment Nobel® RP 13 mm</td>
<td>32399</td>
</tr>
<tr>
<td>15° Esthetic Abutment Nobel® RP 15 mm</td>
<td>32400</td>
</tr>
<tr>
<td>15° Esthetic Abutment Nobel® RP 17 mm</td>
<td>32401</td>
</tr>
<tr>
<td>15° Esthetic Abutment Nobel® RP 19 mm</td>
<td>32402</td>
</tr>
<tr>
<td>15° Esthetic Abutment Nobel® RP 21 mm</td>
<td>34196</td>
</tr>
<tr>
<td>15° Esthetic Abutment Nobel® RP 23 mm</td>
<td>34197</td>
</tr>
<tr>
<td>15° Esthetic Abutment Nobel® RP 25 mm</td>
<td>34198</td>
</tr>
<tr>
<td>15° Esthetic Abutment Nobel® RP 27 mm</td>
<td>34199</td>
</tr>
<tr>
<td>15° Esthetic Abutment Nobel® RP 29 mm</td>
<td>34200</td>
</tr>
<tr>
<td>15° Esthetic Abutment Nobel® RP 31 mm</td>
<td>34201</td>
</tr>
<tr>
<td>15° Esthetic Abutment Nobel® RP 33 mm</td>
<td>34202</td>
</tr>
<tr>
<td>GoldAdapt® Abutment</td>
<td></td>
</tr>
<tr>
<td>GoldAdapt® Engaging Brånemark System® NP</td>
<td>29004</td>
</tr>
<tr>
<td>GoldAdapt® Engaging Brånemark System® RP</td>
<td>29008</td>
</tr>
<tr>
<td>GoldAdapt® Engaging Brånemark System® WP</td>
<td>29012</td>
</tr>
<tr>
<td>GoldAdapt® Non-Engaging Brånemark System® NP</td>
<td>29005</td>
</tr>
<tr>
<td>GoldAdapt® Non-Engaging Brånemark System® RP</td>
<td>29009</td>
</tr>
<tr>
<td>GoldAdapt® Non-Engaging Brånemark System® WP</td>
<td>29013</td>
</tr>
<tr>
<td>GoldAdapt® Engaging Nobel® NP</td>
<td>29006</td>
</tr>
<tr>
<td>GoldAdapt® Engaging Nobel® NP</td>
<td>29010</td>
</tr>
<tr>
<td>GoldAdapt® Engaging Nobel® WP</td>
<td>29011</td>
</tr>
<tr>
<td>GoldAdapt® Engaging Nobel® 6.0</td>
<td>29989</td>
</tr>
<tr>
<td>GoldAdapt® Non-Engaging Nobel® NP</td>
<td>29007</td>
</tr>
<tr>
<td>GoldAdapt® Non-Engaging Nobel® NP</td>
<td>29015</td>
</tr>
<tr>
<td>GoldAdapt® Non-Engaging Nobel® WP</td>
<td>29990</td>
</tr>
<tr>
<td>GoldAdapt® Non-Engaging Nobel® 6.0</td>
<td>35143</td>
</tr>
<tr>
<td>GoldAdapt® Engaging Nobel® Active NP</td>
<td>35144</td>
</tr>
<tr>
<td>GoldAdapt® Non-Engaging Nobel® Active NP</td>
<td>35145</td>
</tr>
<tr>
<td>GoldAdapt® Engaging Nobel® Active NP</td>
<td>35146</td>
</tr>
<tr>
<td>Gold Abutment Bar</td>
<td></td>
</tr>
<tr>
<td>Gold Abutment Bar Implant Level Nobel® RP</td>
<td>29061</td>
</tr>
<tr>
<td>Gold Abutment Bar Implant Level Nobel® RP</td>
<td>29074</td>
</tr>
<tr>
<td>Gold Abutment Bar Implant Level Nobel® RP</td>
<td>29068</td>
</tr>
<tr>
<td>Locator® Abutment</td>
<td></td>
</tr>
<tr>
<td>Locator® Abut for 3.3 mm Bmk &amp; 8 x 0.73 mm</td>
<td>34596</td>
</tr>
<tr>
<td>Locator® Abut for 3.3 mm Bmk &amp; 2.0 mm</td>
<td>34597</td>
</tr>
<tr>
<td>Locator® Abut for 3.3 mm Bmk &amp; 3.0 mm</td>
<td>34598</td>
</tr>
<tr>
<td>Locator® Abut for 3.3 mm Bmk &amp; 4.0 mm</td>
<td>34599</td>
</tr>
</tbody>
</table>

Index in alphabetical order.
<table>
<thead>
<tr>
<th>Description</th>
<th>Article</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-unit Abutment, Other Implant Systems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multi-unit Abutment for Astra Tech® 3.5</td>
<td>33543</td>
<td>58</td>
</tr>
<tr>
<td>Multi-unit Abutment for Astra Tech® 4.0</td>
<td>33544</td>
<td>58</td>
</tr>
<tr>
<td>Multi-unit Abutment for Astra Tech® 4.5/5.0</td>
<td>33545</td>
<td>58</td>
</tr>
<tr>
<td>Multi-unit Abutment for Camlog® 3.3</td>
<td>33556</td>
<td>58</td>
</tr>
<tr>
<td>Multi-unit Abutment for Camlog® 3.8</td>
<td>33557</td>
<td>58</td>
</tr>
<tr>
<td>Multi-unit Abutment for Camlog® 4.3</td>
<td>33558</td>
<td>58</td>
</tr>
<tr>
<td>Multi-unit Abutment for Camlog® 5.0/8.0</td>
<td>33589</td>
<td>58</td>
</tr>
<tr>
<td>Multi-unit Abutment for Ankylos®</td>
<td>33572</td>
<td>58</td>
</tr>
<tr>
<td>Multi-unit Angled Abutment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17° Multi-unit Abutment Brånemark System® NP 2 mm</td>
<td>29187</td>
<td>50</td>
</tr>
<tr>
<td>17° Multi-unit Abutment Brånemark System® NP 3 mm</td>
<td>29188</td>
<td>50</td>
</tr>
<tr>
<td>17° Multi-unit Abutment Brånemark System® RP 2 mm</td>
<td>29189</td>
<td>50</td>
</tr>
<tr>
<td>17° Multi-unit Abutment Brånemark System® RP 3 mm</td>
<td>29190</td>
<td>50</td>
</tr>
<tr>
<td>17° Multi-unit Abutment Brånemark System® RP 4 mm</td>
<td>29191</td>
<td>50</td>
</tr>
<tr>
<td>17° Multi-unit Abutment Brånemark System® RP 5 mm</td>
<td>29192</td>
<td>50</td>
</tr>
<tr>
<td>30° Multi-unit Abutment Brånemark System® RP 6 mm</td>
<td>29193</td>
<td>50</td>
</tr>
<tr>
<td>17° Multi-unit NobelReplace® NP 2 mm</td>
<td>29235</td>
<td>50</td>
</tr>
<tr>
<td>17° Multi-unit NobelReplace® NP 3 mm</td>
<td>29236</td>
<td>50</td>
</tr>
<tr>
<td>17° Multi-unit NobelReplace® RP 2 mm</td>
<td>29237</td>
<td>50</td>
</tr>
<tr>
<td>17° Multi-unit NobelReplace® RP 3 mm</td>
<td>29238</td>
<td>50</td>
</tr>
<tr>
<td>30° Multi-unit NobelReplace® RP 4 mm</td>
<td>29239</td>
<td>50</td>
</tr>
<tr>
<td>30° Multi-unit NobelReplace® NP 5 mm</td>
<td>29240</td>
<td>50</td>
</tr>
<tr>
<td>17° Multi-u Ab NobelActive® NP 2.5 mm</td>
<td>34188</td>
<td>50</td>
</tr>
<tr>
<td>17° Multi-u Ab NobelActive® NP 3.5 mm</td>
<td>34189</td>
<td>50</td>
</tr>
<tr>
<td>30° Multi-u Ab NobelActive® NP 3.5 mm</td>
<td>34367</td>
<td>50</td>
</tr>
<tr>
<td>30° Multi-u Ab NobelActive® NP 4.5 mm</td>
<td>34368</td>
<td>50</td>
</tr>
<tr>
<td>17° Multi-u Ab NobelActive® RP 2.5 mm</td>
<td>34192</td>
<td>50</td>
</tr>
<tr>
<td>17° Multi-u Ab NobelActive® RP 3.5 mm</td>
<td>34193</td>
<td>50</td>
</tr>
<tr>
<td>30° Multi-u Ab NobelActive® RP 3.5 mm</td>
<td>34369</td>
<td>50</td>
</tr>
<tr>
<td>30° Multi-u Ab NobelActive® RP 4.5 mm</td>
<td>34370</td>
<td>50</td>
</tr>
<tr>
<td>Narrow Profile Abutment NobelActive®</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Narrow Profile Abutment NobelActive® NP 7 mm</td>
<td>34371</td>
<td>61</td>
</tr>
<tr>
<td>Narrow Profile Abutment NobelActive® NP 9 mm</td>
<td>34372</td>
<td>61</td>
</tr>
<tr>
<td>Narrow Profile Abutment NobelActive® RP 7 mm</td>
<td>34357</td>
<td>61</td>
</tr>
<tr>
<td>Narrow Profile Abutment NobelActive® RP 9 mm</td>
<td>34358</td>
<td>61</td>
</tr>
<tr>
<td>NobelProcera® Abutment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NobelProcera® Abutment Ti Brånemark System® NP</td>
<td>n/a</td>
<td>26, 34</td>
</tr>
<tr>
<td>NobelProcera® Abutment Ti Brånemark System® RP</td>
<td>n/a</td>
<td>26, 34</td>
</tr>
<tr>
<td>NobelProcera® Abutment Ti Brånemark System® WP</td>
<td>n/a</td>
<td>26, 34</td>
</tr>
<tr>
<td>NobelProcera® Abutment Ti for Astra Tech® Yellow</td>
<td>n/a</td>
<td>26, 34</td>
</tr>
<tr>
<td>NobelProcera® Abutment Ti for Astra Tech® Aqua</td>
<td>n/a</td>
<td>26, 34</td>
</tr>
<tr>
<td>NobelProcera® Abutment Ti for Astra Tech® LiSi</td>
<td>n/a</td>
<td>26, 34</td>
</tr>
<tr>
<td>NobelProcera® Abutment Ti NobelReplace® NP</td>
<td>n/a</td>
<td>26, 34</td>
</tr>
<tr>
<td>NobelProcera® Abutment Ti NobelReplace® RP</td>
<td>n/a</td>
<td>26, 34</td>
</tr>
<tr>
<td>NobelProcera® Abutment Ti NobelReplace® WP</td>
<td>n/a</td>
<td>26, 34</td>
</tr>
<tr>
<td>NobelProcera® Abutment Ti NobelReplace® 6.0</td>
<td>n/a</td>
<td>26, 34</td>
</tr>
<tr>
<td>NobelProcera® Abutment Ti NobelActive® NP</td>
<td>n/a</td>
<td>26, 34</td>
</tr>
<tr>
<td>NobelProcera® Abutment Ti NobelActive® RP</td>
<td>n/a</td>
<td>26, 34</td>
</tr>
<tr>
<td>NobelProcera® Abutment Ti NobelActive® WP</td>
<td>n/a</td>
<td>26, 34</td>
</tr>
<tr>
<td>NobelProcera® Abutment Ti NobelActive® 6.0</td>
<td>n/a</td>
<td>26, 34</td>
</tr>
<tr>
<td>NobelProcera® Abutment Zr Brånemark System® NP</td>
<td>n/a</td>
<td>26, 34</td>
</tr>
<tr>
<td>NobelProcera® Abutment Zr Brånemark System® RP</td>
<td>n/a</td>
<td>26, 34</td>
</tr>
<tr>
<td>NobelProcera® Abutment Zr Brånemark System® WP</td>
<td>n/a</td>
<td>26, 34</td>
</tr>
<tr>
<td>NobelProcera® Abutment Zr NobelReplace® NP</td>
<td>n/a</td>
<td>26, 34</td>
</tr>
<tr>
<td>NobelProcera® Abutment Zr NobelReplace® RP</td>
<td>n/a</td>
<td>26, 34</td>
</tr>
<tr>
<td>NobelProcera® Abutment Zr NobelReplace® WP</td>
<td>n/a</td>
<td>26, 34</td>
</tr>
<tr>
<td>NobelProcera® Abutment Zr NobelActive® NP</td>
<td>0, 6.0</td>
<td>n/a</td>
</tr>
<tr>
<td>NobelProcera® Abutment Zr NobelActive® RP</td>
<td>0, 6.0</td>
<td>n/a</td>
</tr>
<tr>
<td>NobelProcera® Abutment Zr NobelActive® WP</td>
<td>0, 6.0</td>
<td>n/a</td>
</tr>
<tr>
<td>NobelProcera® Abutment Zr NobelActive® 6.0</td>
<td>0, 6.0</td>
<td>n/a</td>
</tr>
<tr>
<td>NobelProcera® Abutment Zr NobelActive® NP</td>
<td>n/a</td>
<td>44</td>
</tr>
<tr>
<td>NobelProcera® Abutment Zr NobelActive® RP</td>
<td>n/a</td>
<td>44</td>
</tr>
<tr>
<td>Proceras® Esthetic Abutment Selection Kit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proceras® Esthetic Abutment Brånemark System® NP # 1</td>
<td>33756</td>
<td>30</td>
</tr>
<tr>
<td>Proceras® Esthetic Abutment Brånemark System® NP # 2</td>
<td>33755</td>
<td>30</td>
</tr>
<tr>
<td>Proceras® Esthetic Abutment Brånemark System® NP # 3</td>
<td>33754</td>
<td>30</td>
</tr>
<tr>
<td>Proceras® Esthetic Abutment Brånemark System® RP # 1</td>
<td>33757</td>
<td>30</td>
</tr>
<tr>
<td>Proceras® Esthetic Abutment Brånemark System® RP # 2</td>
<td>33756</td>
<td>30</td>
</tr>
<tr>
<td>Proceras® Esthetic Abutment Brånemark System® RP # 3</td>
<td>33755</td>
<td>30</td>
</tr>
<tr>
<td>Proceras® Esthetic Abutment Brånemark System® RP # 4</td>
<td>33750</td>
<td>30</td>
</tr>
<tr>
<td>Proceras® Esthetic Abutment Brånemark System® RP # 5</td>
<td>33759</td>
<td>30</td>
</tr>
<tr>
<td>Proceras® Esthetic Abutment Brånemark System® RP # 6</td>
<td>33760</td>
<td>30</td>
</tr>
<tr>
<td>Proceras® Esthetic Abutment Brånemark System® RP # 7</td>
<td>33761</td>
<td>30</td>
</tr>
<tr>
<td>Proceras® Esthetic Abutment Brånemark System® RP # 8</td>
<td>33762</td>
<td>30</td>
</tr>
</tbody>
</table>

---

NobelEsthetics® Manual // Appendices

109
Description | Article | Page
---|---|---
Snappy™ Abutment 4.0 Bmk Syst NP 2 mm | 35973 | 37
Snappy™ Abutment 5.5 Bmk Syst NP 1 mm | 35846 | 37
Snappy™ Abutment 5.5 Bmk Syst NP 2 mm | 35849 | 37
Snappy™ Abutment 4.0 Bmk Syst RP 1 mm | 35971 | 37
Snappy™ Abutment 4.0 Bmk Syst RP 2 mm | 35974 | 37
Snappy™ Abutment 5.5 Bmk Syst RP 1 mm | 35947 | 37
Snappy™ Abutment 5.5 Bmk Syst WP 1 mm | 35972 | 37
Snappy™ Abutment 4.0 Bmk Syst WP 2 mm | 35975 | 37
Snappy™ Abutment 5.5 Bmk Syst WP 2 mm | 35948 | 37
Snappy™ Abutment 5.5 Bmk Syst WP 3 mm | 35861 | 37
Snappy™ Abutment 4.0 NobAct Int NP 1.5 mm | 35978 | 37
Snappy™ Abutment 5.5 NobAct Int NP 3 mm | 35946 | 37
Snappy™ Abutment 5.5 NobAct Int RP Wide 3 mm | 35961 | 37
Abutment Screw  |  
Screw Ceramic Abutment Brånemark System® NP | 31171 | 30, 34
Screw Ceramic Abutment Brånemark System® RP | 28815 | 30, 34
Screw Ceramic Abutment Brånemark System® WP | 28844 | 30, 34
Screw Ceramic Abutment NobelRpl NP | 28857 | 30, 34
Screw Multi-unit Angled Abutment Brånemark System® NP | 29194 | 50
Screw Multi-unit Angled Abutment Brånemark System® WP | 29195 | 50
Screw Multi-unit Angled Abutment NobelRpl RP | 29242 | 50
Screw Multi-unit Angled Abutment NobelRpl WP | 29343 | 50
Abutment Replica Ball |  
Abutment Replica Ball Abutment NP M1.6 | 29114 | 76
Multi-unit Abutment |  
Abutment Replica Multi-unit Sphg | 29110 | 50
Abutment Replica Multi-unit Brånemark System® WP | 31161 | 50
Locato® Abutment |  
Locato® Female Analog (2-4mm) (4 Pack) | REF08630 | 85
Locato® Female Analog (2-4mm) (20 Pack) | REF08630-20 | 85
Locato® Female Analog (5-8mm) (4 Pack) | REF08618 | 85
Locato® Female Analog (5-8mm) (20 Pack) | REF08618-20 | 85
Snappy™ Abutment |  
Abutment Replica Snappy™ Abutment 4.0 NP | 35982 | 37
Abutment Replica Snappy™ Abutment 5.5 NP | 35984 | 37
Abutment Replica Snappy™ Abutment 4.0 RP | 35983 | 37
Abutment Replica Snappy™ Abutment 5.5 RP | 35985 | 37
Abutment Replica Snappy™ Abutment 4.0 WP | 35984 | 37
Abutment Replica Snappy™ Abutment 5.5 WP | 35986 | 37
Abutment Replica Snappy™ Abutment 4.0 NP/6.0 Bmk WP | 35985 | 37
Abutment Replica Snappy™ Abutment 5.5 NP/6.0 Bmk WP | 35987 | 37
B |  
NobelProcera® Bridge Alumina | n/a | 20
Description | Article | Page
---|---|---
NobelProcera® Bridge Titanium | n/a | 22
NobelProcera® Bridge Zirconia | n/a | 18
Implant bridges – implant level |  
NobelProcera® Impl Bridge Ti Brånemark System® | n/a | 27, 57
NobelProcera® Impl Bridge Ti NobelActive® | n/a | 27, 57
NobelProcera® Impl Bridge Ti NobelReplace® | n/a | 27, 57
NobelProcera® Impl Bridge Ti for LifeCore®/BioMend® 3.75 | n/a | 27, 57, 59
NobelProcera® Impl Bridge Ti for Straumann® AstraTaper-Lock 4.0 | n/a | 27, 58
NobelProcera® Impl Bridge Ti for Straumann® Octagon | n/a | 27, 58
NobelProcera® Impl Bridge Zr Brånemark System® | n/a | 27, 53
NobelProcera® Impl Bridge Zr NobelActive® | n/a | 27, 53
NobelProcera® Impl Bridge Zr NobelReplace® | n/a | 27, 53
NobelProcera® Impl Bridge Zr for 3i® 3.75 | n/a | 27, 54
NobelProcera® Impl Bridge Zr for LifeCore®/BioMend® 3.75 | n/a | 27, 54
NobelProcera® Impl Bridge Zr for Zimmer® Dental Taper-Lock 4.0 | n/a | 27, 54
NobelProcera® Impl Bridge Zr for Sterngold®/Implamed 3.75 | n/a | 27, 54
Implant bridges – abutment level |  
NobelProcera® Impl Bridge Ti Multi-unit | n/a | 27, 57
NobelProcera® Impl Bridge Ti Multi-unit WP | n/a | 27, 57
NobelProcera® Impl Bridge Ti for Ankylos® Implant System | n/a | 58
NobelProcera® Implant Bridge Ti for Astra Tech® Implant System | n/a | 58
NobelProcera® Implant Bridge Ti for Camlog® Implant System | n/a | 58
Final Implant Restorations |  
C |  
NobelProcera® Crown Alumina | n/a | 16
NobelProcera® Crown Titanium | n/a | 16
NobelProcera® Crown Zirconia | n/a | 16
G |  
Gold Cap |  
Ball Abutment |  
Gold Cap Ball Abutment | 29025 | 76
Gold Cap Ball Abutment Insert | 33855 | 76
Gold Coping |  
Multi-unit Abutment |  
Gold Coping Multi-unit Sphg | 29042 | 49
Gold Coping Multi-unit Ti | 29043 | 49
Gold Coping Multi-unit Bmk Syst WP | 29044 | 49
Gold Coping Bar Multi-unit | 29045 | 73
Guide Pin |  
Implant level |  
Guide Pin Implant Level Brånemark System® NP 20mm | 31147 | 53, 57
Guide Pin Implant Level Brånemark System® RP 20mm | 31149 | 53, 57
Guide Pin Implant Level Brånemark System® WP 20mm | 31150 | 53, 57
Guide Pin Implant Level NobelRpl NP 20mm | 31151 | 53, 57
Guide Pin Implant Level NobelRpl WP 20mm | 31152 | 53, 57
Guide Pin Implant Level NobelRpl WP/30mm | 31153 | 53, 57
Multi-unit Abutment |  
Guide Pin Multi-unit 10mm | 31154 | 50, 53, 57
Guide Pin Multi-unit 10mm 50kg | 29102 | 50, 53, 57
Guide Pin Multi-unit Brånemark System® WP 10mm | 31156 | 50, 53, 57
Guide Pin Multi-unit 20mm | 31155 | 50, 53, 57
Guide Pin Multi-unit 20mm 50kg | 29103 | 50, 53, 57
Guide Pin Multi-unit Brånemark System® WP 20mm | 31157 | 50, 53, 57
Handle for Protection Analogs |  
Healing Abutment |  
Healing Abutment Brånemark System® NP Ø 3.5 x 3mm | 33441 | n/a
Healing Abutment Brånemark System® NP Ø 3.5 x 5mm | 33442 | n/a
Healing Abutment Brånemark System® NP Ø 4.5 x 3mm | 33443 | n/a
Healing Abutment Brånemark System® NP Ø 4.5 x 5mm | 33444 | n/a
Healing Abutment Brånemark System® RP Ø 4 x 3mm | 33445 | n/a
Healing Abutment Brånemark System® RP Ø 4 x 5mm | 33446 | n/a
Healing Abutment Brånemark System® RP Ø 5 x 3mm | 29137 | n/a
Healing Abutment Brånemark System® RP Ø 5 x 5mm | 29139 | n/a
Healing Abutment Brånemark System® WP Ø 9 x 3mm | 33447 | n/a

---

110 NobelEsthetics® Manual // Appendices
**Plastic/Temporary Coping**

**Esthetic Abutment**

- Plastic/Temp Coping Esthetic Abutment NP: 32408 41
- Plastic/Temp Coping Esthetic Abutment RP: 32409 41
- Plastic/Temp Coping Esthetic Abutment NobRpl WP: 32410 41
- Plastic/Temp Coping Esthetic Abutment NobRpl 6.0/Bmk WP: 32172 41
- Plastic/Temp Coping 15° Esthetic Abutment NP: 32787 41
- Plastic/Temp Coping 15° Esthetic Abutment RP: 32788 41
- Plastic/Temp Coping 15° Esthetic Abutment NobRpl WP: 32789 41
- Plastic/Temp Coping 15° Esthetic Abutment NobRpl 6.0/Bmk WP: 32790 41

**Snappy® Abutment**

- Plastic/Temp Coping Eng Snappy™ Abutment 4.0 NP/RP: 35986 37
- Plastic/Temp Coping Non-Eng Snappy™ Abutment 4.0 NP/RP: 35987 37
- Plastic/Temp Coping Eng Snappy™ Abutment 5.5 NP/RP: 35988 37
- Plastic/Temp Coping Non-Eng Snappy™ Abutment 5.5 NP/RP: 35989 37
- Plastic/Temp Coping Eng Snappy™ Abutment 4.0 WP: 35987 37
- Plastic/Temp Coping Non-Eng Snappy™ Abutment 4.0 WP: 35988 37
- Plastic/Temp Coping Eng Snappy™ Abutment 5.5 WP: 35989 37
- Plastic/Temp Coping Non-Eng Snappy™ Abutment 5.5 WP: 35990 37
- Plastic/Temp Coping Eng Snappy™ Abut 5.0 NP 6.0/Bmk WP: 35988 37
- Plastic/Temp Coping Non-Eng Snappy™ Abut 5.0 NP 6.0/Bmk WP: 35989 37
- Plastic/Temp Coping Eng Snappy™ Abut 5.0 NR 6.0/Bmk WP: 35990 37
- Plastic/Temp Coping Non-Eng Snappy™ Abut 5.0 NR 6.0/Bmk WP: 35991 37

**Prosthetic Screw**

- Prosthetic Screw Multi-unit: 29285 50, 53, 57
- Prosthetic Screw Multi-unit Brånemark System®: 29286 50, 53, 57

**Protection Analog**

- Protection Analog Brånemark System® NP 5/pkg: 32911 31
- Protection Analog Brånemark System® RP 5/pkg: 32911 31
- Protection Analog Brånemark System® WP 5/pkg: 32911 31
- Protection Analog NobRpl NP 5/pkg: 32912 31
- Protection Analog NobRpl RP 5/pkg: 32912 31
- Protection Analog NobRpl WP 5/pkg: 32912 31
- Protection Analog NobRpl 6.0 5/pkg: 30043 31
- Protection Analog Multi-unit 5/pkg: 29123 48
- Protection Analog Multi-unit Brånemark System® WP 5/pkg: 29124 48
- Protection Analog NobRpl 5.5 PK: 29125 48
- Protection Analog NobRpl Active® 5.5 PK: 29126 48
- Protection Analog NobRpl Active® 5.0 NP 6.0/Bmk WP: 35987 37
- Protection Analog NobRpl Active® 5.5 NP 6.0/Bmk WP: 35988 37
- Protection Analog NobRpl Active® 5.5 WP: 35989 37
- Protection Analog NobRpl Active® 5.0 NP 6.0/Bmk WP: 35990 37
- Protection Analog NobRpl Active® 5.0 NR 6.0/Bmk WP: 35991 37

**Replica Abutment Level**

**Ball Abutment**

- Abutment Replica Ball Abutment NP/RP: 29114 76
- Abutment Replica Ball Abutment Multi-unit 5/pkg: 29110 50
- Abutment Replica Ball Abutment Multi-unit 4.0 RP: 29111 50
- Abutment Replica Ball Abutment Multi-unit Brånemark System® WP 4.0 RP: 32787 50
- Snappy™ Abutment 4.0 NP: 35982 37
- Snappy™ Abutment 5.5 NP: 35983 37
- Snappy™ Abutment 4.0 RP: 35984 37
- Snappy™ Abutment 5.5 WP: 35985 37
- Snappy™ Abutment 4.0 WP: 35986 37

**Denture Abutment**

- Abutment Replica Snappy™ Abutment NP/RP: 32912 31
- Abutment Replica Snappy™ Abutment Multi-unit NP/RP: 32913 31
- Abutment Replica Snappy™ Abutment 5.5 NP/RP: 32914 31
- Abutment Replica Snappy™ Abutment 4.0 RP/RP: 32915 31
- Abutment Replica Snappy™ Abutment 5.5 RP/RP: 32916 31

**Replica Implant Level**

- Implant Replica NobRpl NP: 29498 96
- Implant Replica NobRpl NP 20/pkg: 29499 96
- Implant Replica NobRpl RP: 29500 96
- Implant Replica NobRpl RP 20/pkg: 29501 96
- Implant Replica NobRpl WP: 29502 96
- Implant Replica NobRpl WP 20/pkg: 29503 96
- Implant Replica NobRpl 6.0: 29995 96
- Implant Replica Brånemark System® NP 6.0: 31158 96
- Implant Replica Brånemark System® RP 6.0: 31159 96
- Implant Replica Brånemark System® NP 6.0: 31160 96
- Implant Replica Brånemark System® RP 6.0: 31161 96
- Implant Replica Brånemark System® WP 6.0: 31162 96
- Implant Replica PS WP/RP: 34557 96
- Implant replica NobelActive® NP: 34243 96
- Implant replica NobelActive® RP: 34244 96
Description | Article | Page
--- | --- | ---
Screw Removal Kit NobRpl | 3701 | 106

**Screwdrivers**

**Manual**
- Screwdriver Manual Ball Abutment 22 mm | 29026 | 76
- Unigrip™ Screwdriver Manual 20 mm | 29148 | 88
- Unigrip™ Screwdriver Manual 28 mm | 29149 | 88
- Unigrip™ Screwdriver Manual 38 mm | 29150 | 88
- Screwdriver Manual Multi-unit 25 mm | 29156 | 47
- Screwdriver Manual Multi-unit Bränemark System® WP 25 mm | 29157 | 47

**Machine**
- Screwdriver Machine Ball Abutment 24 mm | 29027 | 75
- Unigrip™ Screwdriver Machine 20 mm | 29151 | 88
- Unigrip™ Screwdriver Machine 25 mm | 29152 | 88
- Unigrip™ Screwdriver Machine 30 mm | 29153 | 88
- Unigrip™ Screwdriver Machine 35 mm | 29154 | 88
- Screwdriver Machine Multi-unit 21 mm | 29158 | 88
- Screwdriver Machine Multi-unit Bränemark System® WP 20 mm | 29159 | 88
- Locato® Latch Type Tøn Wmn Driver 23 mm | REF08913 | n/a
- Locato® Latch Type Tøn Wmn Driver 29 mm | REF08914 | n/a

**Screwdriver/Activator**
- Locato® Core Tool | REF08393 | 83
- Locato® Male Removaal Tool (new tip only) | REF08397 | 83
- Locato® Abutment Driver (gold end only) | REF08390 | 83

**Solutions for Existing Teeth**

T

**Temporary Component**

**Immediate Temporary Abutment**
- Immediate Temporary Abutment NobRpl NP | 31837 | 9
- Immediate Temporary Abutment NobRpl RP | 31839 | 9
- Immediate Temporary Abutment NobRpl WP | 31840 | 9
- Immediate Temporary Abutment NobelActive® 6.0 | 31841 | 9
- Immediate Temporary Abutment Bränemark System® NP | 31843 | 9
- Immediate Temporary Abutment Bränemark System® RP | 31844 | 9
- Immediate Temporary Abutment Bränemark System® WP | 31855 | 9
- Immediate Temp Abut NobelActive® 1.5mm NP | 35269 | 9
- Immediate Temp Abut NobelActive® 3.0mm NP | 35245 | 9
- Immediate Temp Abut NobelActive® 1.5mm RP | 35270 | 9
- Immediate Temp Abut NobelActive® 3.0mm RP | 35246 | 9

**QuickTemp™ Abutment Conical**
- QuickTemp™ Abutment Conical NobRpl NP | 33398 | 10
- QuickTemp™ Abutment Conical NobRpl RP | 33389 | 10
- QuickTemp™ Abutment Conical Bränemark System® NP | 33400 | 10
- QuickTemp™ Abutment Conical Bränemark System® RP | 33401 | 10
- QuickTemp™ Abutment Conical Bränemark System® WP | 33402 | 10
- QuickTemp™ Abutment NobelActive® 1.5mm NP | 34226 | 10
- QuickTemp™ Abutment NobelActive® 3.0mm NP | 35255 | 10
- QuickTemp™ Abutment NobelActive® 1.5mm RP | 34227 | 10
- QuickTemp™ Abutment NobelActive® 3.0mm RP | 35258 | 10

**Titanium**
- Temporary Abutment Engaging Bränemark System® NP | 29028 | 11
- Temporary Abutment Engaging Bränemark System® RP | 29030 | 11
- Temporary Abutment Engaging Bränemark System® WP | 29032 | 11
- Temporary Abutment Non-Engaging Bränemark System® NP | 29029 | 11
- Temporary Abutment Non-Engaging Bränemark System® RP | 29031 | 11
- Temporary Abutment Non-Engaging Bränemark System® WP | 29033 | 11
- Temporary Abutment Engaging NobRpl NP | 29034 | 11
- Temporary Abutment Engaging NobRpl RP | 29036 | 11
- Temporary Abutment Engaging NobRpl WP | 29038 | 11
- Temporary Abutment Non-Engaging NobRpl 6.0 | 31456 | 11
- Temporary Abutment Non-Engaging NobRpl NP | 29035 | 11
- Temporary Abutment Non-Engaging NobRpl RP | 29037 | 11
- Temporary Abutment Non-Engaging NobRpl WP | 29039 | 11
- Temporary Abutment NobelActive® Engaging NP | 34224 | 11
- Temporary Abutment NobelActive® Engaging RP | 35207 | 11
- Temporary Abutment NobelActive® Non-Engaging NP | 34226 | 11
- Temporary Abutment NobelActive® Non-Engaging RP | 35028 | 11

**Plastic**
- Temporary Abutment Plastic Engaging Bränemark System® NP | 30256 | 11
- Temporary Abutment Plastic Engaging Bränemark System® RP | 30257 | 11
- Temporary Abutment Plastic Engaging Bränemark System® WP | 30258 | 11
- Temporary Abutment Plastic Non-Engaging Bränemark System® NP | DCA 1048-0 | 11
- Temporary Abutment Plastic Non-Engaging Bränemark System® RP | DCA 1050-0 | 11
- Temporary Abutment Plastic Non-Engaging Bränemark System® WP | DCA 1052-0 | 11
- Temporary Abutment Plastic Engaging NobRpl NP | 30259 | 11
- Temporary Abutment Plastic Engaging NobRpl RP | 30260 | 11
- Temporary Abutment Plastic Engaging NobRpl WP | 30261 | 11
- Temporary Abutment Plastic Non-Engaging NobRpl NP | 31350 | 11
- Temporary Abutment Plastic Non-Engaging NobRpl RP | 31351 | 11
- Temporary Abutment Plastic Non-Engaging NobRpl WP | 31352 | 11
- Temporary Abutment Plastic Non-Engaging 6.0 | 31353 | 11
- Temporary Coping Plastic Multi-unit | DCA 468-0 | 11
- Temporary Coping Plastic Multi-unit Bränemark System® WP | DCA 705-0 | 11

**Try-In Abutment**
- Try-in Abutments NobRpl NP | 32416 | 88, 91, 103
- Try-in Abutments NobRpl RP | 32417 | 88, 91, 103
- Try-in Abutments NobRpl WP | 32418 | 88, 91, 103
- Try-in Abutments NobelActive® 6.0 | 32419 | 88, 91, 103
- Try-in Abutments Bränemark System® NP | 32420 | 88, 91, 103
- Try-in Abutments Bränemark System® RP | 32421 | 88, 91, 103
- Try-in Abutments Bränemark System® WP | 32422 | 88, 91, 103
- Try-in Abutment Kit Box | 32429 | 88, 91, 103

**Temporary Implant Restorations**

6
## Customer service worldwide

<table>
<thead>
<tr>
<th>Americas</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>Nobel Biocare Brazil</td>
<td>Phone: 0800 16 999 6</td>
</tr>
<tr>
<td>Canada</td>
<td>Nobel Biocare Canada</td>
<td>Phone: +1 800 939 9384</td>
</tr>
<tr>
<td>Chile</td>
<td>Dental Biocare</td>
<td>Phone: +56 220 19282</td>
</tr>
<tr>
<td>Colombia</td>
<td>Hospimedics S.A.</td>
<td>Phone: +57 1 640 0608</td>
</tr>
<tr>
<td>Mexico</td>
<td>Nobel Biocare Mexico</td>
<td>Phone: +52 55 524 974 60</td>
</tr>
<tr>
<td>USA</td>
<td>Nobel Biocare USA</td>
<td>Phone: +1 800 322 5001</td>
</tr>
</tbody>
</table>

| Europe, Middle East and Africa |                |                |
| Austria                    | Nobel Biocare Austria  | Phone: +43 1 892 89 90 |
| Belgium                    | Nobel Biocare Belgium  | Phone: +32 2 467 41 70 |
| Denmark                    | Nobel Biocare Denmark  | Phone: +45 39 40 48 46 |
| Finland                    | Nobel Biocare Finland   | Phone: +358 20 740 61 00 |
| France                     | Nobel Biocare France    | Phone: +33 1 49 20 00 30 |
| Germany                    | Nobel Biocare Germany   | Phone: +49 221 500 850 |
| Hungary                    | Nobel Biocare Hungary   | Phone: +36 1 279 33 79 |
| Ireland                    | Nobel Biocare Ireland   | Phone: 1800 677 306 |
| Italy                      | Nobel Biocare Italy     | Phone: +39 800 53 93 28 |
| Lithuania                  | Nobel Biocare Lithuania | Phone: +370 5 268 3448 |
| Netherlands                | Nobel Biocare Netherlands | Phone: +31 30 635 49 49 |
| Norway                     | Nobel Biocare Norway    | Phone: +47 23 24 86 30 |
| Poland                     | Nobel Biocare Poland    | Phone: +48 22 549 93 52 |
| Portugal                   | Nobel Biocare Portugal  | Phone: +351 800 300 100 |

| Russia                    | Nobel Biocare Russia     | Phone: +7 495 974 77 55 |
| South Africa              | Nobel Biocare South Africa | Phone: +27 11 802 0112 |
| Spain                     | Nobel Biocare Spain      | Phone: +34 900 850 008 |
| Sweden                    | Nobel Biocare Sweden     | Phone: +46 31 81 80 00 |
| Switzerland               | Nobel Biocare Switzerland | Phone: 0800 211 424 |
| United Kingdom            | Nobel Biocare UK         | Phone: +44 208 756 3300 |

| Asia Pacific |                |                |
| Austria      | Nobel Biocare Australia | Phone: 1800 804 597 |
| China        | Nobel Biocare China     | Phone: +86 21 6206 6655 |
| Hong Kong    | Nobel Biocare Hong Kong | Phone: +852 2845 1266 |
| India        | Nobel Biocare India     | Phone: 1800 268 9998 |
| Japan        | Nobel Biocare Japan     | Phone: +81 3 6717 6191 |
| New Zealand  | Nobel Biocare New Zealand | Phone: 0800 441 657 |
| Singapore    | Nobel Biocare Singapore | Phone: +65 6737 7867 |
| Taiwan       | Nobel Biocare Taiwan    | Phone: +886 080 00 779 |

| Distributor markets |                |                |
| Bulgaria, Croatia, Cyprus, Czech Republic, Greece, Iran, Jordan, Kuwait, Lebanon, Malta, Romania, Saudi Arabia, Serbia, Slovenia, Turkey, United Arab Emirates | Phone: +48 22 549 93 55 |