


CUTTING INSTRUMENTS AND RELATIVE ACCESSORIES

For dental use

INSTRUCTIONS FOR USE

1. GENERAL INFORMATION

Cutting instruments and accessories are reusable invasive devices, supplied non-sterile. The Guide

for FAST Countersink Bur ( device) is an invasive, single-use device, supplied non-sterile. The cutting instruments are made of surgical grade stainless steel, the drill stops are made of grade 5 titanium, and the Guide for the FAST Countersink bur is made in acetal resin. In order to use the devices correctly, it is necessary to carefully read and apply the Information for the User provided by Prodent Italia. This information includes these Instructions for Use and the relevant clinical/surgical protocol for each device, as indicated in the INDICATIONS paragraph below. The Information for the User can be found in the company website or by contacting Prodent Italia S.r.l. directly.

2. INDICATIONS

The cutting instruments are used to prepare the bone tissue in the receptor site for the Prodent Italia implant, and are available in versions specifically dedicated to one implant system or range, or common to various implant ranges. Each cutting instrument must be used following the procedure for preparing the implant site described in the corresponding Clinical/Surgical Protocol. Specific instructions for each instrument are given below, indicating the possibility of or the need for using it in conjunction with specific accessories and giving reference to the corresponding Protocol.

- **Tissue punches:** circular scalpels to be used in the flapless surgical technique before the passage of bone burs, connected at contra-angle and at low rotation speed (25 rpm), to remove gingival tissue, creating holes meant for the successive passages of burs; Can also be used to create holes for the removal of cover screws without opening the flap.

N.B.:

- Despite the fact that the shaft is laser-marked "Prodent 3D", the tissue punches Ø 4.3 and Ø 5.5 are NOT intended for Guided Implant surgery.
- The Ø 4.3 and Ø 5.5 tissue punches create a hole with diameter 3.3 and 4 mm, respectively; the diameter marked on the device refers to its maximum dimension; Before proceeding with removal of the gingival tissue by means of tissue punches check to make sure the gum thickness is adequate (at least 1 mm);
- Before using the tissue punches, always check the wear of the cutting edge;
- For complete removal of the gingival tissue after the passage of the tissue punches, it may be necessary to use manual instruments;
- After removing the cover screw, to insert the healing screw, check to make sure the dimensions of the hole are such as to prevent compression of the gingival tissues.
- **Corticotomy bur:** used to make incisions in the cortex. See Protocols CL008 for inserting PRIME and TWINNER implants, CL010 for inserting CONOMET implants, CL007 for inserting PROWIDE implants and CL012 for inserting PROFAST implants.
- **Pilot bur:** used after the corticotomy bur; used to reach the final depth of the receptor site. It can be used with or without the corresponding **drill stops** and it has an O-ring for connecting to those devices. See protocols CL008 for inserting-PRIME and TWINNER implants, CL010 for inserting CONOMET, CL007 for inserting PROWIDE implants and CL012 for inserting PROFAST implants. **N.B.:** The drill stops for pilot bur must be inserted by the sharp end until they are fully tightened and the O-rings have been completely covered.
- **PRIME burs:** used after the pilot bur; available in one version for each implant. They are used to obtain the final shape and size of the implant site, making it suitable for fitting the PRIME and CONOMET implants. Before using the specific bur for the implant to insert, proceed to gradually enlarge the site using smaller diameter burs from the same implant range (**except for the PRIME Ø3.3 ones**), paying attention to the depth you need to reach. See protocols CL008 for inserting PRIME implants, CL010 for inserting CONOMET implants.
- **Cylindrical bone drills:** used after the pilot bur; available in a single variant for each implant diameter. They are used to obtain the final shape and size of the implant site for the TWINNER and PROFAST implants and for enlarging the site before using the PROWIDE Burs. We recommend consulting surgical protocol CL008 for inserting TWINNER implants, clinical protocol CL007 for inserting PROWIDE implants and clinical protocol CL012 for inserting PROFAST implants. **N.B.:** when used for PROWIDE implants, the cylindrical bone drills may be connected to specific **drill stops**, which must be inserted by the sharp all the way down to totally cover the O-rings present on the bur.
- **Burs for compact bone:** to be used after the Cylindrical Bone Drills in case of insertion of TWINNER implants and PROFAST implants in D1-D2 compact bone; these are available in a single variant for each implant diameter. Make it possible to adapt to the surgical site to avoid excessive torques during insertion, keeping it ideal for housing the implants. Ref. CL008 for TWINNER implants and CL012 for PROFAST implants.
- **PROWIDE Burs:** used after passage of the Cylindrical Bone Drills; Available in one version for each implant, used to obtain the final shape and size of the implant site for the PROWIDE implants. Before using the specific bur for the implant, proceed to gradually enlarge the site as instructed in Clinical protocol CL007.
- **PRIME TWINNER Countersink drills:** to be used after the Cylindrical Bone Drills or, where required, the Burs for compact bone; used to obtain the exact size of the TWINNER implant neck in the cortical bone; available in a single version for each implant diameter. Ref. CL008.
- **Screw taps:** can be used only after the last bur as required by the surgical protocol of preparation of the implant site; used to tap the bone and create a calibrated implant site for inserting the implants. We recommend tapping in case of D1-D2 compact bone and as required by the surgical protocols; we recommend using the specific surgical protocol CL008 when inserting PRIME and TWINNER implants, protocol CL010 when inserting CONOMET implants, protocol CL007 when inserting PROWIDE implants and CL012 clinical protocol when inserting PROFAST implants. The screw taps for TWINNER implants, for PROFAST implants and for PROWIDE implants are available in a single variant for each implant diameter. The screw taps for PRIME and CONOMET implants are available in 2 variants for each implant diameter, one exclusively for size 8.5 and one for all the other sizes. All screw taps can be used manually connected to the Digital Wrench or to the Reverse Ratchet, or mechanically connected to the contra-angle using the contra-angle connection.
- **FAST Countersink Bur:** available as a single variant; used in combination with the specific Guide for the FAST Countersink Bur **once the implants have been inserted**; used to obtain the seat suitable for inserting the FAST angled bases in the cortical bone. See protocol CL008 for PRIME and TWINNER implants, CL010 for CONOMET implants and CL011 for PROSHAPE implants. **N.B.:** the Guide for the FAST Countersink Bur is **SINGLE-USE**. **N.B.:** In **PRODENT 3D** Guided Implant surgery, use the FAST countersink bur **ONLY AFTER** removing the guide and with the flap open.

N.B.: all burs must ALWAYS be used connected to the contra-angle, NEVER exceeding 800 rpm. We recommend setting the contra-angle motor to a torque no greater than 45 Ncm and proceeding to drill with caution.

N.B.: all cutting instruments must ALWAYS be used under an abundant irrigation of sterile saline solution.

The **drill stops** may only be used connected to their specific burs; The PROWIDE drill stop variants can be recognised by their colour (ref. protocol CL007); The PRIME, TWINNER and PROFAST drill stop variants can be recognised by their markings (see protocol CL008, CL010 and CL012). We recommend using them to get a better perception of the depth reached by the bur. On reaching the required depth, they rest on the bone preventing further drilling.

3. CHOICE OF INSTRUMENT AND OF DEPTH OF SITE

Select the cutting instruments to use according to the implants to be inserted and their size. The cutting instruments have markings to facilitate identification.

All cutting instruments, except for the corticotomy bur, have maximum hole diameter markings. The burs specific to the FAST implant line are marked with the name of the system/range they belong to. The tissue punches have "Prodent 3D" marking. The burs for PROWIDE implants, the PRIME TWINNER Countersink drills and the Burs for compact bone have item code markings. The cutting instruments for PRIME, TWINNER and CONOMET implants have distinctive coloured elements in accordance with the colour coding of the implants to be used (with the exception of the burs for compact bone). All the PRIME Burs and the Screw Taps for the size 8.5 PRIME implants have markings indicating the height of the implants to be used.

All cutting instruments, except for the tissue punches, the Corticotomy Bur and the FAST Countersink bur, have one or more laser marked depth notches for immediate visual identification of the depth reached. The correct depth is reached by drilling up to the notch, which identifies the height of the device to implant, as indicated in the specific protocol. The tissue punches must be inserted in the mucosa until they make contact with the bone crest, without forcing the cut further.

The Corticotomy Bur must be inserted in the bone up to the end of the cutting edge. The FAST Countersink Bur must be connected to the implant by the specific Guide for FAST Countersink Bur and used without forcing insertion.

NOTE: if the drill stops are used, after connecting them to their specific bur, always check the alignment of their lower face with the depth notch corresponding to the height of the device to implant.

4. CONTRAINDICATIONS

Use the cutting instruments **ONLY** for preparing the receptor site for the implant devices they are specifically designed for. The contraindications concerning Prodent Italia implantable devices are listed in the corresponding Information for the User. The use of screw taps and Burs for compact bone is not recommended in case of bone type D3 or D4.

5. SIDE EFFECTS AND COMPLICATIONS

After oral surgery, patients may experience temporary side effects such as pain, swelling, haematomas, speech problems, and inflammations of the soft tissues. The long-term risks that can be associated to implant-restoration or guided bone regeneration include bone resorption, failure of integration, oedema, chronic pain and dehiscence. The success of implant-restoration or guided bone regeneration treatment is closely related to the correctness of all the phases involved, including the preparation of the receptor site. Correct and careful use of surgical instruments and accessories is a key factor for reducing the risks of implant-restoration or guided bone regeneration treatment failure, in addition to reducing the severity of temporary side effects. Practitioners are asked to report any cases of failure to Prodent Italia S.r.l.

6. PACKAGING AND STERILITY

All devices are provided NON-STERILE and individually packed, inserted in a plastic container sealed inside a secondary packaging. The label identifying each device is on the secondary packaging. No packaging is suitable for sterilisation. Before sterilising the devices, remove them from the packaging and clean them, as indicated in the following paragraph.

7. CLEANING, STERILISATION AND STORAGE

All devices are reusable, **except for the FAST Countersink Bur Guide**. Immediately before use, they **MUST** be **cleaned and sterilised, using a validated method and under the practitioner's responsibility** (Prodent Italia recommends compliance with standard UNI EN ISO 17665 for the development of validation and routine control of the steam sterilisation process, and with standard UNI EN 13060 for determining the testing methods for steam sterilising equipment and for defining the sterilisation cycles to be used). Immediately after use, the devices **MUST** be cleaned to remove all types of residue, using plastic brushes with stiff, non-metal bristles. We recommend washing in an ultrasonic bath using appropriate detergents, avoiding using hydrogen peroxide, oxidising acids (such as oxalic, sulphuric and nitric acids) and high concentrations of chlorine, which can damage the devices. After cleaning each device, replace it in its specific housing in the set. Prodent Italia S.r.l. provides further information on the washing and sterilising processes in the "**Important recommendations for the cleaning and sterilisation of devices**" section of each cutting instrument's relevant protocol. Prodent Italia S.r.l. has tested the efficacy, on devices of its own manufacture, of the sterilisation process in a saturated steam autoclave at 134°C for 5 minutes.



WARNINGS

- Use the devices, **ONLY** after carefully reading the updated Information for the User.
- The name on the device label alone may not be sufficient for identifying its intended use: see Information for the User.
- All the cutting devices and related accessories **MUST ONLY** be used for dental surgical treatment by qualified dental practitioners who are fully knowledgeable with the theoretical and practical aspects of surgical procedures and under their own responsibility.
- When planning the treatment, the practitioner is responsible for selecting the implantable device and the type and size of the cutting instruments.
- The cutting instruments **MUST** be used **EXCLUSIVELY** with the surgical accessories indicated in the specific protocol for each one.
- **ALWAYS** check that the packaging is undamaged before using the device the first time. **DO NOT** use cutting instruments if their packaging is visibly damaged.
- Before each use, **ALWAYS** check if the device is undamaged and whether it is worn. **NEVER** USE cutting instruments if they show signs of damage or wear.
- The practitioner is responsible for verifying the serviceability and suitability of the devices for their envisaged purpose according to the Information for the User. Worn cutting instruments do not guarantee the required performance. If in doubt as to the integrity of the devices, request a check by Prodent Italia.
- To guarantee cutting instruments performance, we recommend using each less than 25 times.
- Take the greatest care during the washing and sterilisation phases, which **MUST** be performed using a validated method by and under the responsibility of the practitioner.
- **NEVER** reuse the Guide for FAST Countersink bur. Reuse may lead to the risk of infection, contamination, damage and loss of functionality.
- **NEVER** use devices with deteriorated markings.
- **ALWAYS** check that burs that require them, are equipped with undamaged and correctly fitted O-rings. **NEVER USE** burs with damaged or absent O-rings.
- Before using the burs make sure they are correctly connected to the contra-angle.
- **NEVER** exceed 800 rpm and 45 Ncm when using the burs.
- **NEVER** exceed 25 rpm and 45 Ncm during mechanical use of screw taps and while using the tissue punches.
- When using burs with drill stops, pay attention to the colour coding and markings to prevent errors or mistaken couplings. Check that the burs and that their dedicated drill stops are completely and correctly connected both before and during use.
- All devices should be handled with special care, to avoid accidental damage that could jeopardise the results of treatment.
- During surgery, handle all devices in aseptic conditions and wearing sterile gloves.
- Cutting instruments have sharp cutting edges with consequent risk of injury to the user.
- The device **MUST** be handled as hospital waste in the event of disposal. The device should therefore only be disposed of after regular cleaning, in a controlled manner and according to applicable legislation, whenever necessary.
- Prodent Italia S.r.l. **ONLY** accepts returned devices in their undamaged original packaging and within the contractual terms provided.
- Prodent Italia S.r.l. declines all responsibility for failure to comply with the updates to the Information for the User.
- Prodent Italia S.r.l. furthermore declines all express or implicit liability in relation to direct, indirect or any other type of damage which may be connected to or arise from any evaluation or professional practice error, made during the use of the various products manufactured by Prodent Italia. The use of dental implants, all surgical treatments and prosthetic restorations must always be made under the practitioner's control, who therefore assumes full liability thereof. The user of Prodent Italia's items is solely responsible for evaluating whether a product is suitable or not for each individual patient and clinical case.

KEY for the symbols present on the label:



Batch code.



Catalogue number.



Caution! The device is associated with warnings not indicated on the label and that are described in the Instructions for Use.



Consult the Instructions for Use inside the pack



DO NOT use if the package is damaged



Manufacturer pursuant to 93/42/EEC and subsequent amendments



DO NOT reuse! The device is **SINGLE-USE** and intended to be used once and on one patient only. Reuse could cause serious risks of cross-infection and/or loss of functionality.

The symbols indicated in the key are only present on the product's label and packaging if applicable.