



RESTORATIVE TECHNIQUE MANUAL



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Implant dentistry is primarily a prosthetic treatment with a surgical aspect. In its simplest form, when a conventional or digital impression of a Bicon abutment is made and the crown is cemented onto it, just like a natural tooth—*no screws nor torque drivers are needed*. This basic technique is familiar to every dental student, even without implant training.

Since 1985, Bicon's unchanged locking taper abutment-to-implant connection, with 360-degree positioning, offers clinical advantages impossible with screw-retained abutments. One key benefit is extra-oral cementing of crowns, eliminating the risk of inflammation from extraneous cement. The simplicity of this connection can be described as *a round peg in a round hole*.

As this manual will demonstrate, Bicon's bacterially-sealed, no-micromovement connection saves time for clinicians, technicians, and patients alike, whether restoring a single crown or a full-arch prosthesis. Intra-oral digital scanning of Scannable Temporary Abutments further reduces, not only chair time, but also patient visits, lowering the chance of failed appointments.

This manual aims to provide you with both basic techniques and nuanced insights to help you benefit from Bicon's remarkable efficiencies and *unmatched clinical capabilities*.

Sincerely,

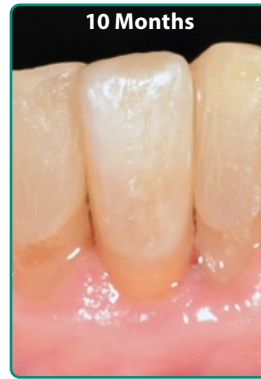
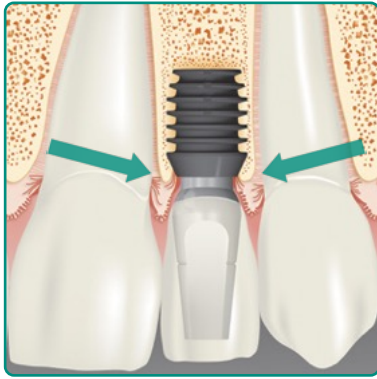
A handwritten signature in blue ink that reads "Vin".

Vincent J. Morgan, DMD

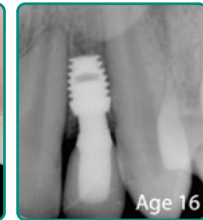
President, Bicon

UNMATCHED CLINICAL CAPABILITIES

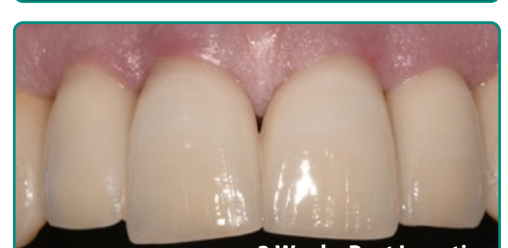
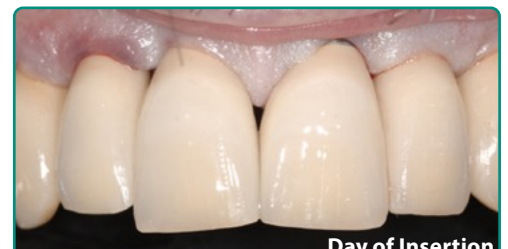
While Bicon's unique surgical capabilities are often highlighted, the system's unique restorative benefits are just as significant for dentists, technicians, and especially patients. Ultimately, patients seek not just implants — *but natural-looking prosthetic teeth with healthy interdental papillae*. The following clinical images showcase the results achievable with Bicon Implants and TRINIA® prosthetics.



Bicon's sloping shoulder provides room for bone to support papillae, which improve aesthetically over time



Improvement of bone and papillae over 12 years



Even non-parallel abutments can be restored with TRINIA® and Bicon's unique method of inserting restorations

Improvement of papillae over 3 weeks



View case study video here:

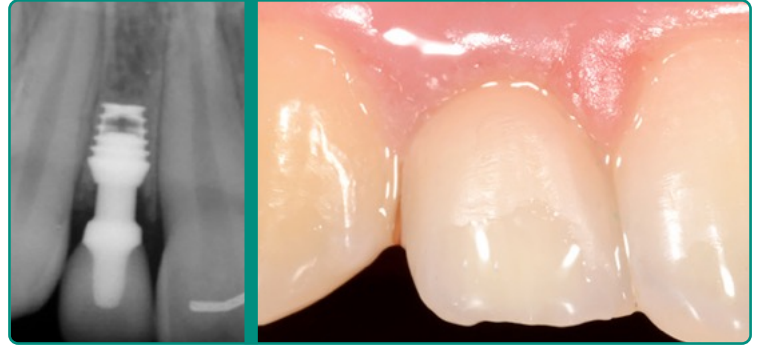
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THE BICON DESIGN was created in 1985 not as a research project to study osseointegration, but rather as a means to restore dentition.

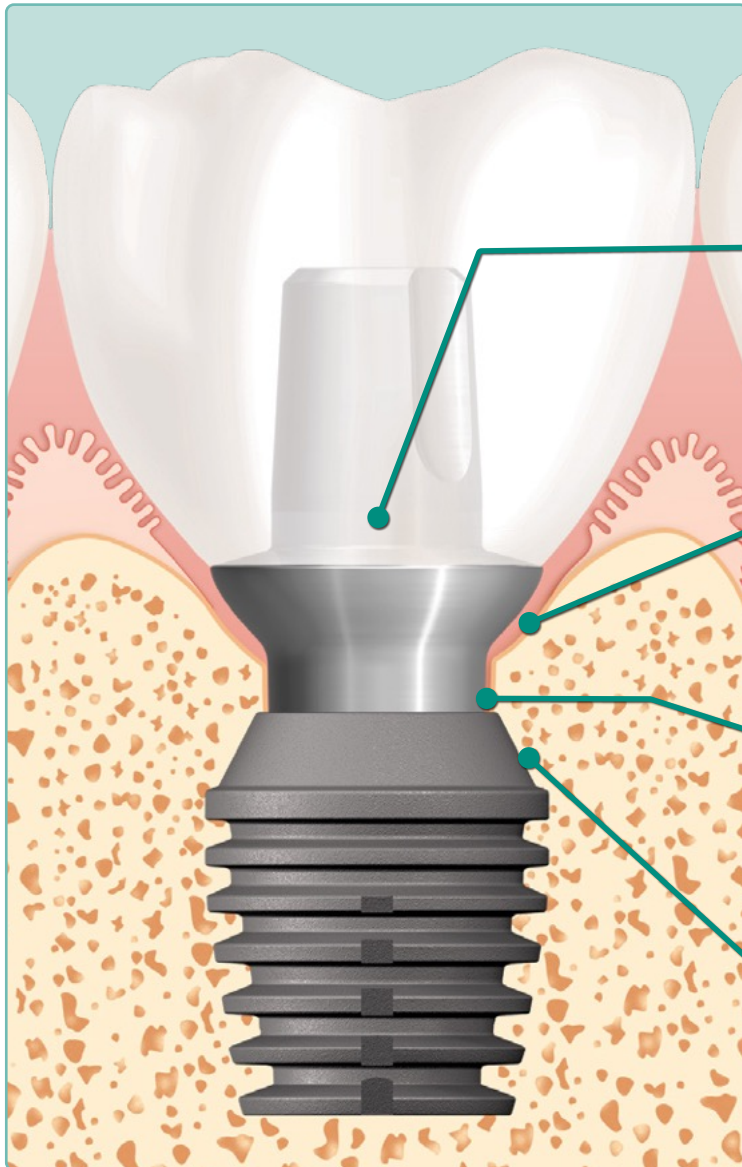
Bicon is different — but **different by design**.

The different shape, different geometry, and different surgical and restorative protocols lead to different clinical capabilities achieved with not only minimal chairtime, but also fewer patient visits.

The design has remained consistent and unchanged since 1985 and has truly passed the test of time.



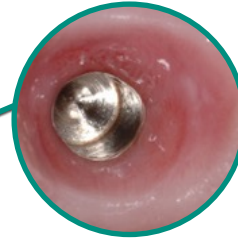
Bicon's sloping shoulder provides room for bone to support interdental papillae resulting in gingival aesthetics that improve over time.



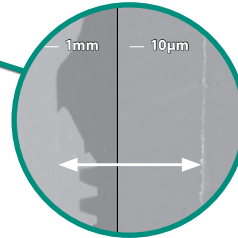
Scannable Temporary Abutments allow the clinician to fabricate the prosthesis while the implant is integrating.



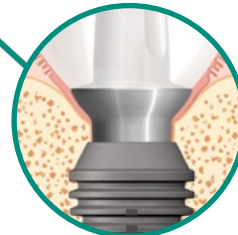
The 1.5° locking taper allows for 360° rotation, no screws or torque drivers, extraoral cementation, efficient CAD/CAM restorations with superior aesthetics, and eliminates the need for splinting.



The 1.5° locking taper allows for subcrestal implant placement and eliminates the bacterial flux and odor present in threaded implants with screw components. Note the lack of inflammation after 10 years when the abutment is removed.

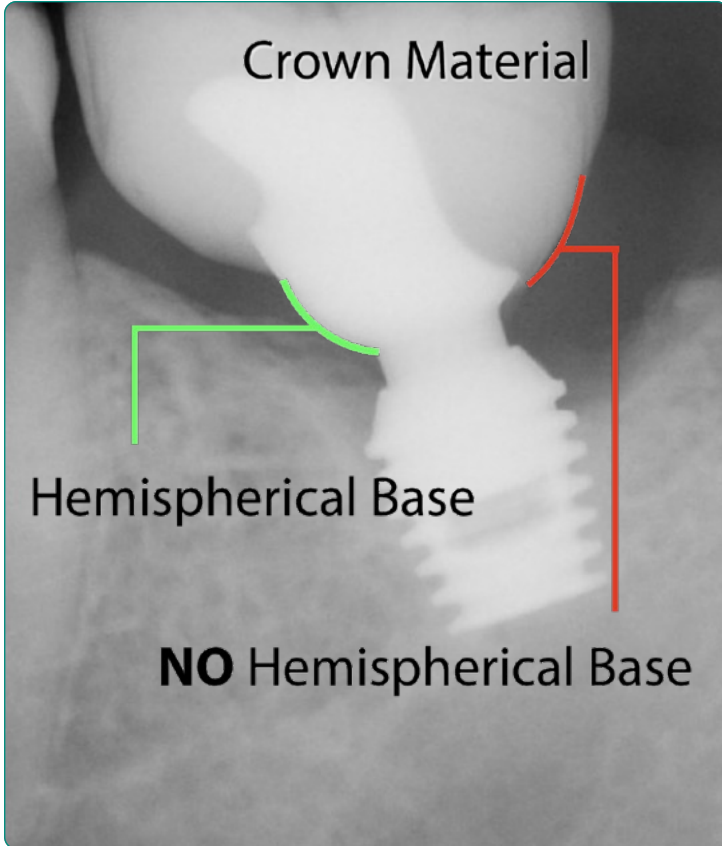


The 1.5° locking taper connection provides a seal at the implant to abutment interface, avoiding the microbial leakage issues that can result in inflammation and odor.

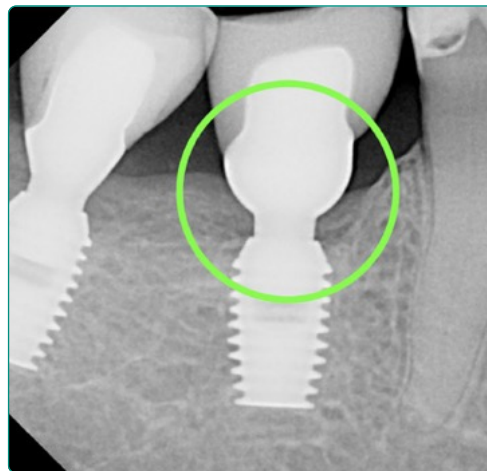
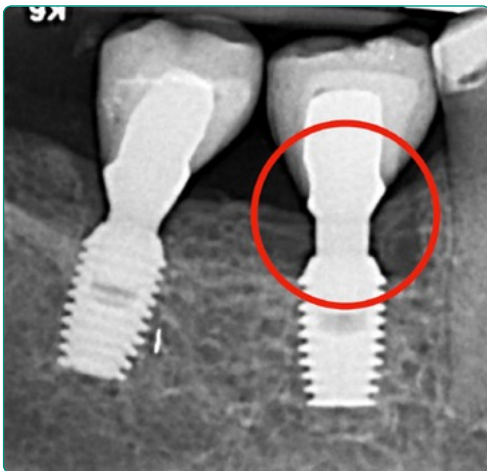


The subcrestally placed implant with a sloping shoulder provides more room for bone over the implant, along with sensible narrow emergence profile support papillae that improve over time.

HEMISPHERICAL BASE

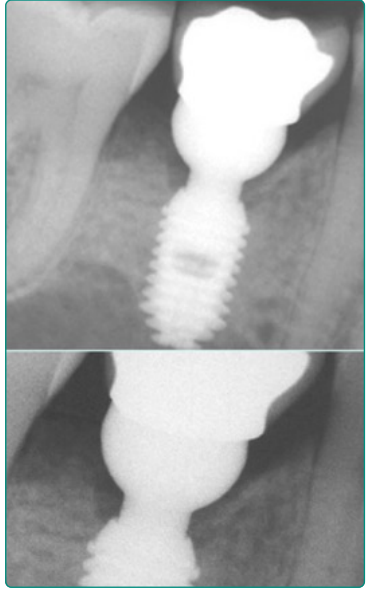


Bicon abutments feature a solid titanium hemispherical base designed to contact soft tissue, promoting optimal bone maintenance and growth. Note the bone gain on the mesial with the hemispherical base.

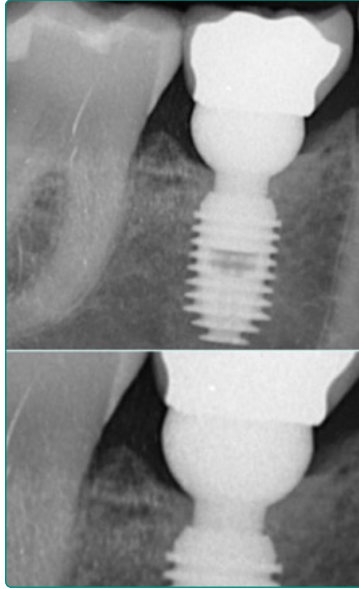


Note the vast improvement in bone levels simply by changing the restoration with an abutment with a hemispherical base.

RADIOGRAPHIC EXAMPLES

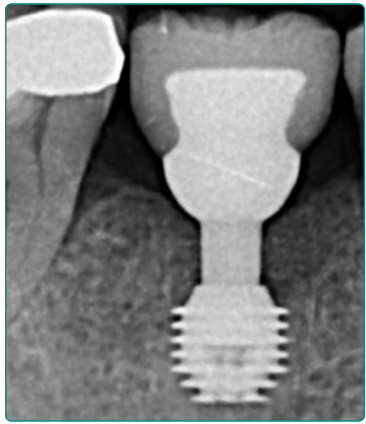


1998

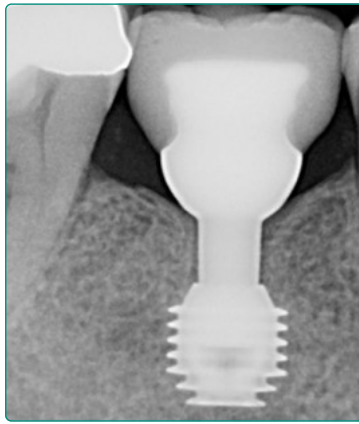


2011

Distinct hemispherical base and bone gain over thirteen years.

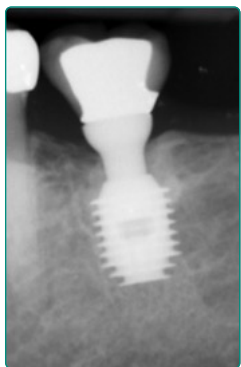


2010

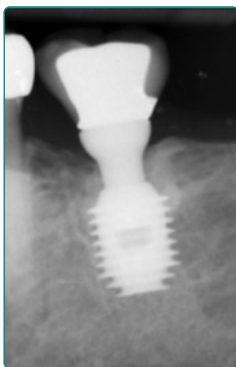


2014

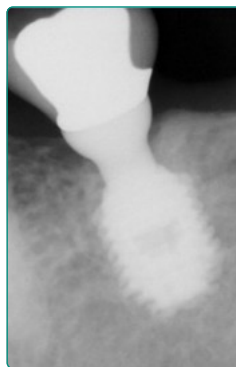
Distinct hemispherical base and bone gain over four years.



2000



2013



2017

Distinct hemispherical base and bone gain over seventeen years.

ABUTMENTS



Scannable Temporary Abutments

PAGE 11–12



Temporary Abutments

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Sinus Lift Abutments

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Thin Crestal Temporary Abutments

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Universal Abutments

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Non-Shouldered Abutments

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Shouldered Abutments

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Millable Abutment Blanks

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Laboratory Abutments

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Fixed-Detachable Universal Abutments

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FDUA Transitional Implants

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Fixed-Detachable Abutments

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TRINIA® CAD/CAM Material

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Brevis™ Abutments

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Overdenture Abutments

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RESTORATIVE KIT (260-101-096)

- 1 Instrument Holder (260-101-395)**
Designed with a threaded end for fastening the 2.0 and 2.5mm Abutment Prep Holder Tips and any threaded instrument. Its locking taper end is designed to hold a 3.0mm post abutment or the Shoulder Depth Gauge.
- 2 Shoulder Depth Gauge (260-101-380)**
Designed to facilitate selecting an appropriate abutment height. It may be attached to the locking taper end of the Instrument Holder.
- 3 Threaded Straight Handle (260-101-016)**
Designed to be used with all threaded instrumentation: hand reamers, sulcus formers, inserters/retrievers, tissue punches, osteotomes, chisels, bone expanders, and seating tips.
- 4 Threaded Offset Handle (260-101-009)**
Designed to be used with implant and abutment seating tips when direct access is not possible.
- 5 Healing Plug Removal Instrument (260-101-114)**
Designed to facilitate the removal of the previously cut black healing plug from the implant's well during the second stage surgical procedure.
- 6 2.0mm Implant/Angled Abutment Seating Tip (260-101-010)**
Designed for use with a threaded straight or offset handle to facilitate the correct seating of an implant or an abutment.



RESTORATIVE KIT

7 Standard Abutment Seating Tip (260-101-012)

Designed for use with a threaded straight or offset handle to facilitate the correct seating of an abutment.



8 Large Abutment Seating Tip (260-101-019)

Designed for use with a threaded straight or offset handle to facilitate the correct seating of an abutment.



9 Crown Seating Tip (260-101-015)

Designed for use with a threaded straight or offset handle and a custom thermoplastic seating jig to facilitate directing the seating forces in the long axis of the implant well for an extraorally cemented crown.



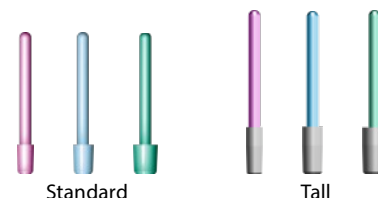
10 Abutment Prep Holder Tips (260-701-382 and 260-701-385)

Designed to be fastened to the instrument holder for securing a 2.0 or 2.5mm post abutment while it is being modified. The holes facilitate the removal of the seated abutment from the tip by placing an instrument through the hole and lifting.



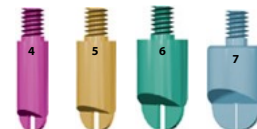
11 Standard and Tall Guide Pins (260-101-180, 186, and 183 • 260-101-280, 286, and 283)

Designed to be placed into the corresponding well diameter of an implant as a guide for a sulcus former. They are available in three color-coded diameters and two shaft lengths, standard and tall. They may also be used to assess the integration and trajectory of an implant.



12 Sulcus Formers (260-101-440, 260-101-450, 260-101-465, and 260-101-475)

Designed to remove any soft tissue or bone above the implant that could prevent the correct engagement of the abutment's locking taper connection to the implant. They are used in conjunction with the guide pins in #11 above. They are available in diameters consistent with the hemispherical base of the intended abutment.



13 Threaded Knob (260-101-014)

Designed to be used with threaded instrumentation (sulcus formers, inserters/retrievers, tissue punches, and hand reamers) where there is limited access.



Surgical Mallet (260-801-165) (Not depicted in kit picture)

Used along with other instruments to facilitate applying the appropriate force for seating an abutment into the well of an implant, or an implant into an osteotomy. The mallet is also used with other instruments such as bone expanders or chisels.



Abutment Carrying Forceps (260-801-002) (Not depicted in kit picture)

Designed to transport abutments and other components intraorally.

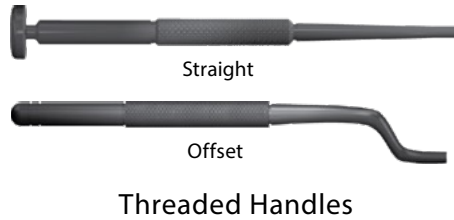
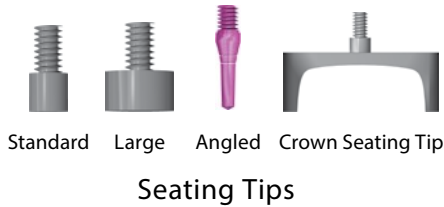


NOTE: The instrument tray may be sterilized at temperatures up to 273° F (134° C).



View product information:

bicon.com/kits



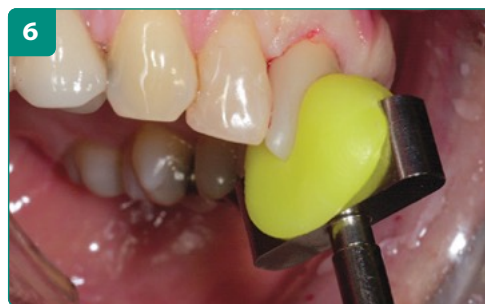
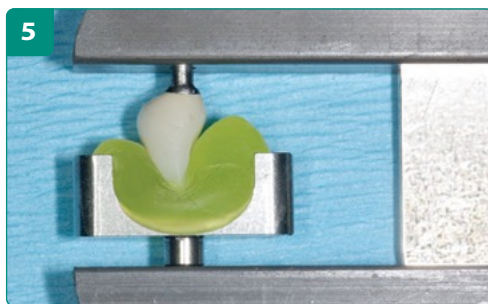
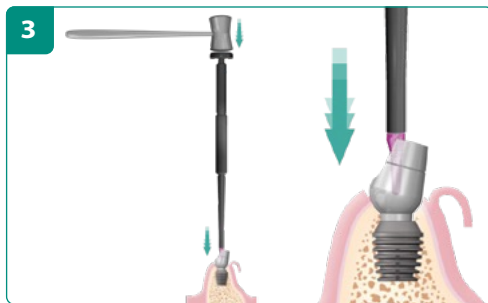
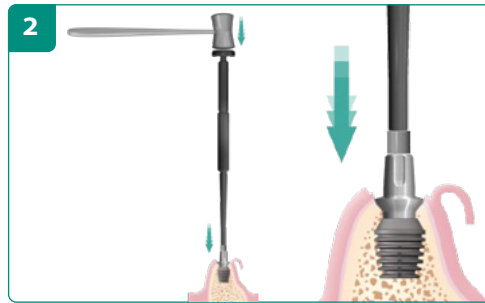
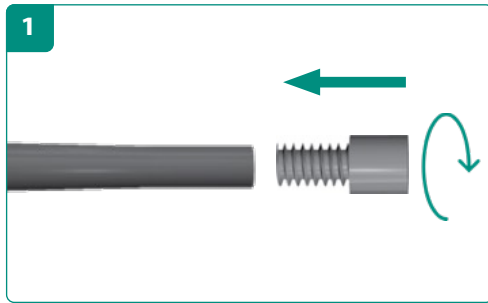
Seating tips are used to facilitate the definitive engagement of the 1.5 degree locking taper connection with a few gentle taps on properly positioned abutments or crowns.

Standard and Large Abutment Seating Tips: Use with a threaded straight or offset handle to facilitate the definitive seating of an abutment. [Fig. 1-2]

Angled Abutment Seating Tip: Use with a threaded straight or offset handle to facilitate the definitive seating in the notch of the angled abutment. [Fig. 3]

Crown Seating Tip: Use with a threaded straight or offset handle and a custom thermoplastic seating jig to facilitate directing the seating forces in the long axis of the implant well for an extraorally cemented crown. [Fig. 4-6]

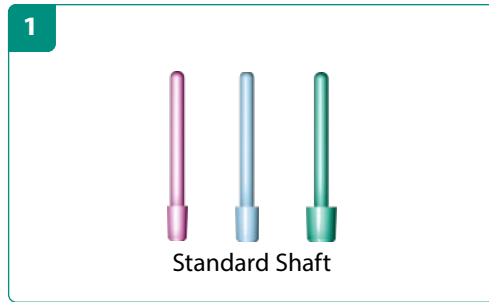
SEATING ABUTMENTS AND CROWNS



1. Fasten the appropriate seating tip onto a straight or offset threaded handle.
2. Gently tap the handle with a few taps using a surgical mallet to definitively seat the abutment. The force necessary to seat an abutment is equivalent to dropping a one-ounce weight the distance of eight inches. It is critical that the tapping force be directed in the long axis of the abutment post and implant well.
3. Some angled abutments have a notch to allow for the use of an angled abutment seating tip to facilitate directing the seating force in the long axis of the abutment post and implant well.
4. View of the Crown Alignment Device.
5. When definitively seating an extra-orally cemented crown and abutment it is often better to use a thermoplastic seating jig formed with a crown seating tip within a crown alignment device, especially when it is an angled abutment.
6. The thermoplastic seating jig facilitates applying the seating force in line with the long axis of the abutment post and well of the implant.

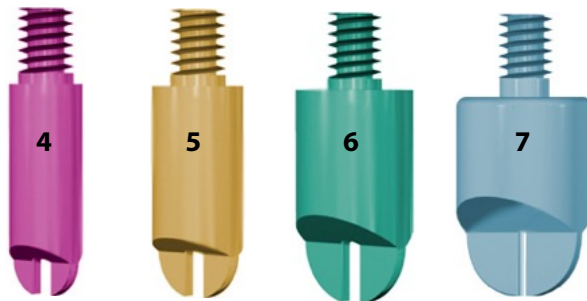
GUIDE PINS AND SULCUS FORMERS

SELECTING A GUIDE PIN

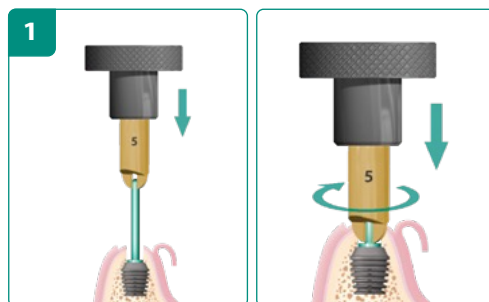


1. Guide pins are color-coded by the diameter of the corresponding implant's well: red for 2.0mm, blue for 2.5mm, or green for 3.0mm.
2. Tall shaft guide pins are two-colored and sit 3.0mm above the implant, which is 2.0mm higher than the standard shaft guide pin

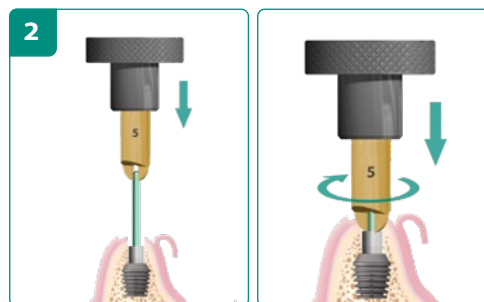
CHOOSING A SULCUS FORMER



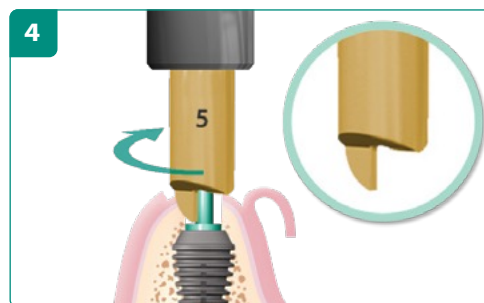
[SERIES-DIAMETER]



Standard Shaft

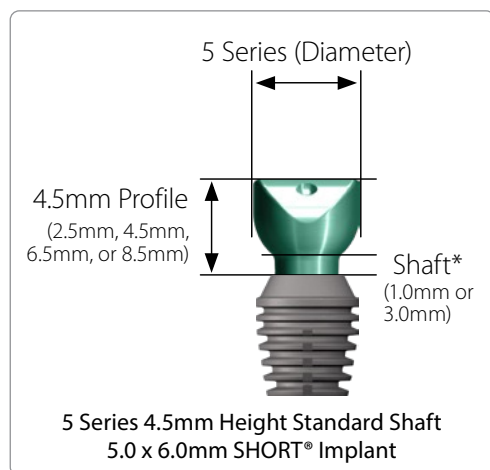


Tall Shaft



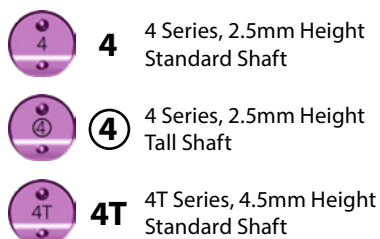
1. Choose a color-coded sulcus former with a diameter corresponding to the diameter of the intended abutment's hemispherical base and fasten it to a threaded knob, straight handle, or threaded instrument adapter prior to placing it onto the guide pin seated in the well of the implant. Standard shaft guide pins provide for removal of tissue above the implant which could prevent the seating of the intended abutment.
2. Tall shaft guide pins are 2.0mm taller than standard guide pins and provide for removal of tissue above the implant which could prevent the seating of the intended abutment, avoiding unnecessary removal of crestal bone for deeply-positioned implants.
3. If there is minimal vertical clearance, seat the sulcus former and the threaded knob as a unit onto a guide pin seated in the implant's well.
4. If there is inadequate lateral clearance to rotate the sulcus former 360 degrees, remove one tip of the sulcus former with a carbide bur and only rotate it less than 180 degrees.

SCANNABLE TEMPORARY ABUTMENTS

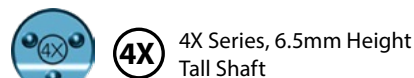


The occlusal view of the Scannable Temporary Abutments communicates a variety of information. The abutment color and number of dimples denote the post diameter. The numeral denotes the series, which is the approximate diameter in mm of the abutment, and the letter denotes the profile's relative height. A circle around the numeral and letter denotes a tall shaft, which is the portion of the abutment post above the top of the implant.

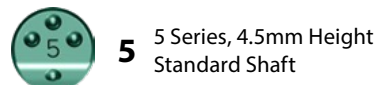
Red 2.0mm Post (Two Dimples)



Blue 2.5mm Post (Three Dimples)



Green 3.0mm Post (Four Dimples)



*TALL SHAFTS are 2.0mm taller than standard shafts and are helpful for deeply-positioned implants often avoiding the need for removing bone over the implant with sulcus formers.

2.0mm Post (Series/Profile-Height)



View product information:

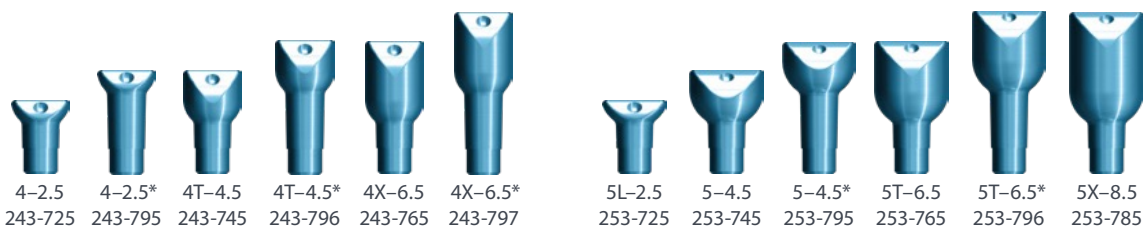
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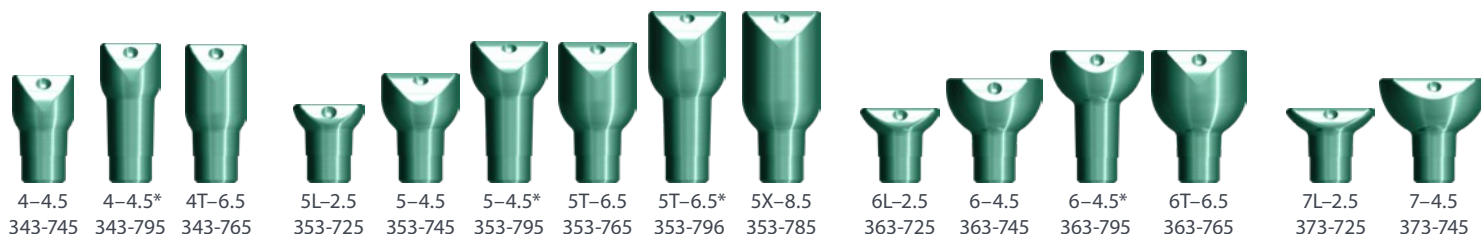
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2.5mm Post (Series/Profile-Height)

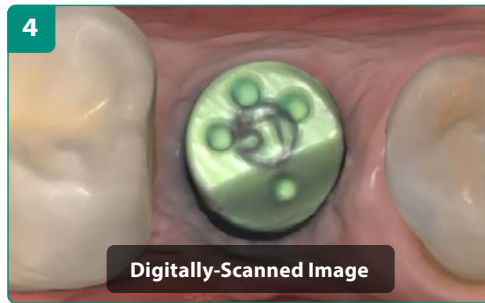
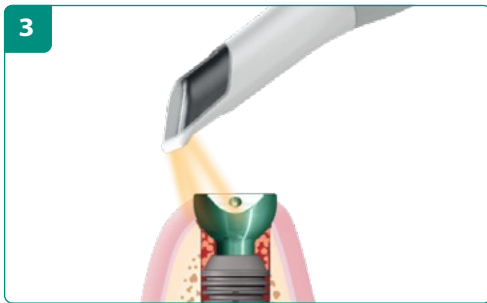
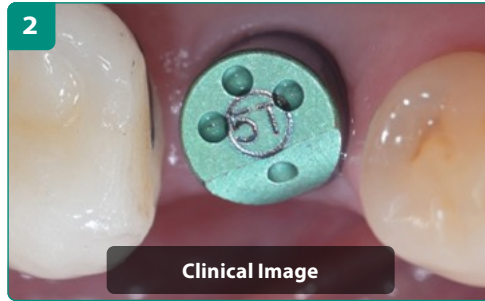


3.0mm Post (Series/Profile-Height)



TEMPORARY ABUTMENTS

SCANNABLE TEMPORARY ABUTMENTS



- Acts as both a temporary abutment and a Digital Scan Post at the same time
- Provides for a fewer number of patient visits
- Digitally-scanned image must include the entire occlusal circumference of the abutment
- Fabricate the prosthesis while the implant is healing
- Choose a stock abutment or Millable Abutment Blank for the final restoration



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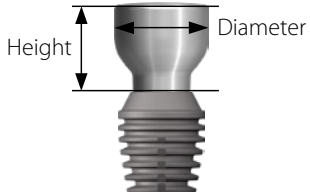
NOTE:

- To avoid the incorrect recording of an implant's axial positioning, be sure the Scannable Temporary Abutment is fully seated in the implant's well by either using a Sulcus Former to remove any tissue which may be impinging on the abutment's hemispherical base, or by using a Scannable Temporary Abutment with a tall shaft.
- Avoid changing any abutment on a newly placed implant, especially a blue 2.5mm Scannable Temporary Abutment (which is more retentive than the 2.0mm and 3.0mm abutments) since it may remove the implant.
- A scanner's software can automatically replace the image of the Scannable Temporary Abutment with that of a Digital Scan Post.

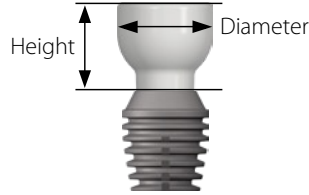
Bicon's Scannable Temporary Abutments provide for an efficient and cost-effective digital recording of an implant's position at the time of its one-stage surgical placement or later.

1. Choose either a standard or tall shaft, color-coded Scannable Temporary Abutment with the same shaft length, diameter, and profile as the intended permanent abutment. The dimensions of Scannable Temporary Abutments are indicated by the number of dimples and black markings on their occlusal surface.
2. Choose a Scannable Temporary Abutment so that 360 degrees of its circumference will be slightly above the gingival crest to facilitate its scanning, but not so high that it would interfere with the transitional prosthesis.
3. The Scannable Temporary Abutment may be placed during the insertion of the implant and scanned immediately or later after the healing of the soft tissues and prior to the integration of the implant. This option provides for the fabrication of a prosthesis while the implant is being integrated, which provides the opportunity of eliminating a patient visit and the anxieties associated with coordinating the scheduling of a patient's prosthetic insertion visit with the completion and arrival of the prosthesis.
4. View of the completed scan.

TEMPORARY ABUTMENTS (TITANIUM AND PEEK)

1


5.0 x 4.5mm (Titanium)

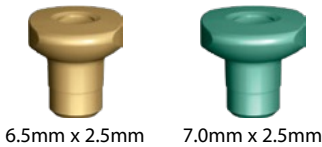
2


5.0 x 4.5mm (PEEK)


 View product information:
bicon.com/ta

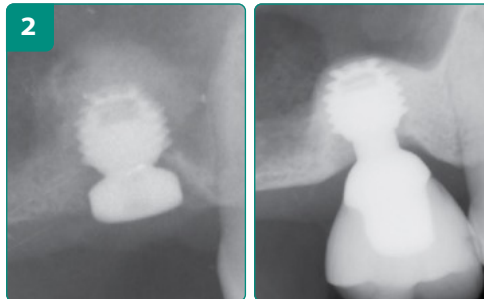
1. Since the introduction of the scannable temporary abutment, the original titanium and PEEK temporary abutments are less popular among clinicians, especially those who are using digital scanning techniques. Except for digital scanning, they provide the same functions.
2. The PEEK (polyetheretherketone) temporary abutment is easily modified intraorally, if necessary.

SINUS LIFT TEMPORARY ABUTMENTS

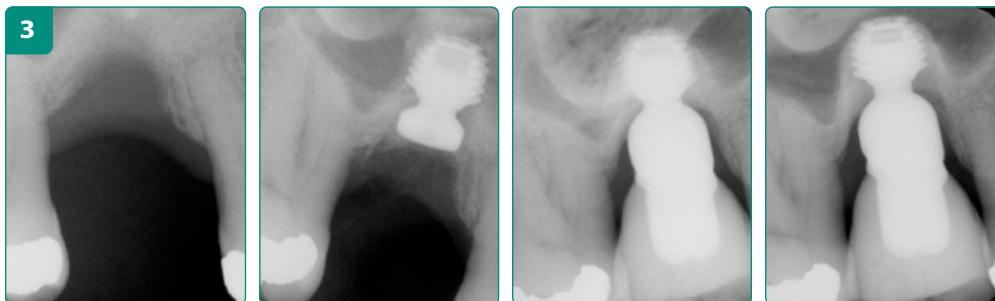
1
3.0mm Post


6.5mm x 2.5mm

7.0mm x 2.5mm

2

 Day of insertion with
 Internal Sinus Lift

14 years post-op

3


Pre-op

Implant placement

Crown insertion

7-year follow up

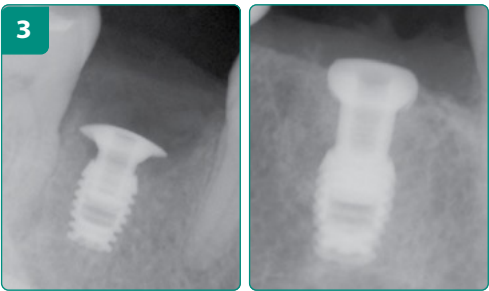
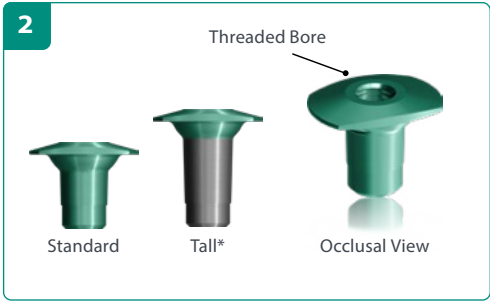
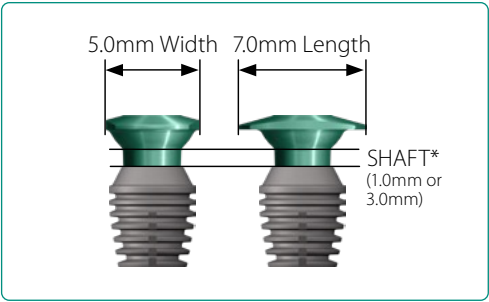
1. The sinus lift abutment was originally designed to prevent an implant from entering the maxillary sinus cavity during the Internal Sinus Lift Technique. Subsequently, it was also used to prevent an implant from falling into bone voids.
2. Sinus lift abutments used to prevent an implant from entering the maxillary sinus or bone voids.
3. Radiographic evidence of the efficacy of the Sinus Lift Temporary Abutment.

Another unmatched clinical capability of Bicon is the internal or vertical elevation of the Schneiderian membrane from within an osteotomy, which we shall refer to as the Bicon Lift, since both the implants and components used are unique to Bicon.


 View product information:
bicon.com/slt

TEMPORARY ABUTMENTS

THIN CRESTAL TEMPORARY ABUTMENTS



Standard Shaft

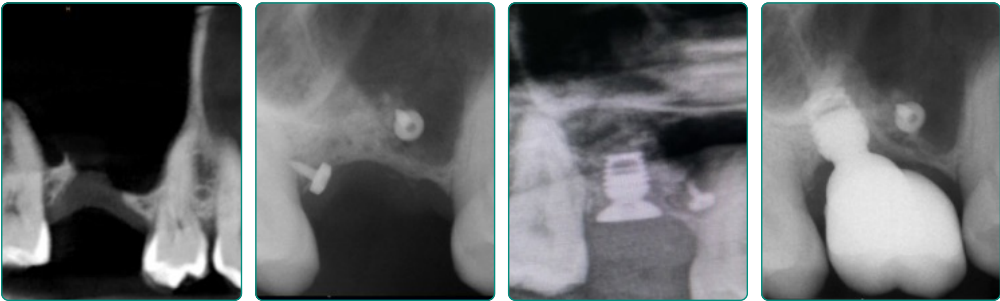
Tall Shaft



View product information:
bicon.com/tcta

1. The Thin Crestal Temporary Abutment was designed as an enhancement to the original sinus lift abutment and it is now the preferred abutment for many clinicians. It has a thinner surface which facilitates placement under the mucosa.
2. Available with standard and tall shafts, it also has a threaded bore which facilitates its placement and removal with its threaded screwdriver. Additionally, this threaded bore can be used with a screw to retain a membrane.
3. Thin Crestal Abutments are used to avoid an implant from falling into maxillary sinus or bone voids.

**Tall shafts are 2.0mm taller than standard shafts and are helpful for deeply-positioned implants often avoiding the need for removing bone over the implant with sulcus formers.*



Pre-op

SynthoGraft® and Bicon Collagen Membrane

5.0 x 5.0mm implant with Thin Crestal Temporary Abutment

5-month follow up of crown in function

Images courtesy of Dr. Peter Chaloupka • Munich, Germany



370-505 Standard Shaft

370-595 Tall Shaft

Thin Crestal Temporary Abutment Removal Tool

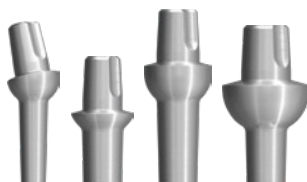
Mesh Retention Screw

Hex Screwdrivers

- 101-505 Thin Crestal Temporary Abutment Removal Tool
- 100-023 Mesh Retention Screw (2)
- 101-024 10mm Hex Screwdriver
- 101-026 20mm Hex Screwdriver



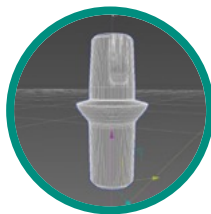
Ideal for all restorations including extra-orally cemented crowns and TRINIA® restorations



Designed with four profiles, 0° and 15° angulations, and standard and tall shafts while maintaining the same prosthetic portion and hemispherical base



Individually labeled indicating their series, shaft length, and profile



Available as part of digital libraries for use with leading CAD/CAM systems



Healing cap to preserve the emergence profile and to provide patient comfort



Color-coded plastic prosthetic sleeves for impression making and temporization procedures

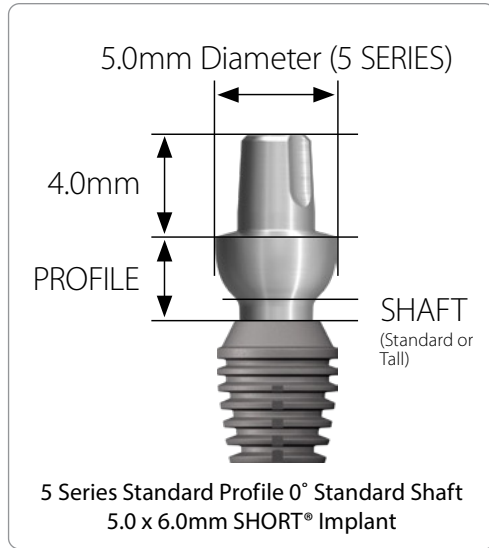


Color-coded titanium transfer dies to facilitate proper die selection



Retentive copings for telescopic restorations with 5 Series Universal Abutments

UNIVERSAL ABUTMENTS



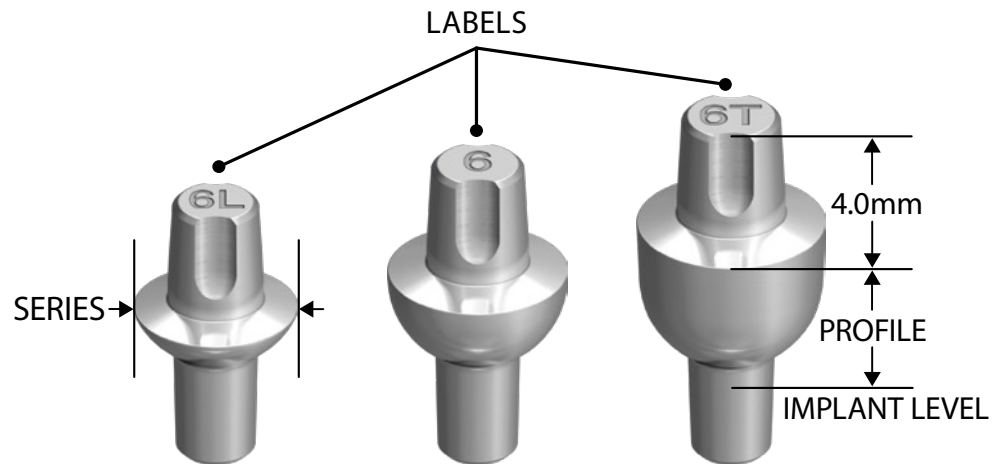
*Tall shafts are 2.0mm taller than standard shafts and are helpful for deeply-positioned implants often avoiding the need for removing bone over the implant with sulcus formers.



View product information:
bicon.com/ua



Download digital libraries here:
bicon.com/digital



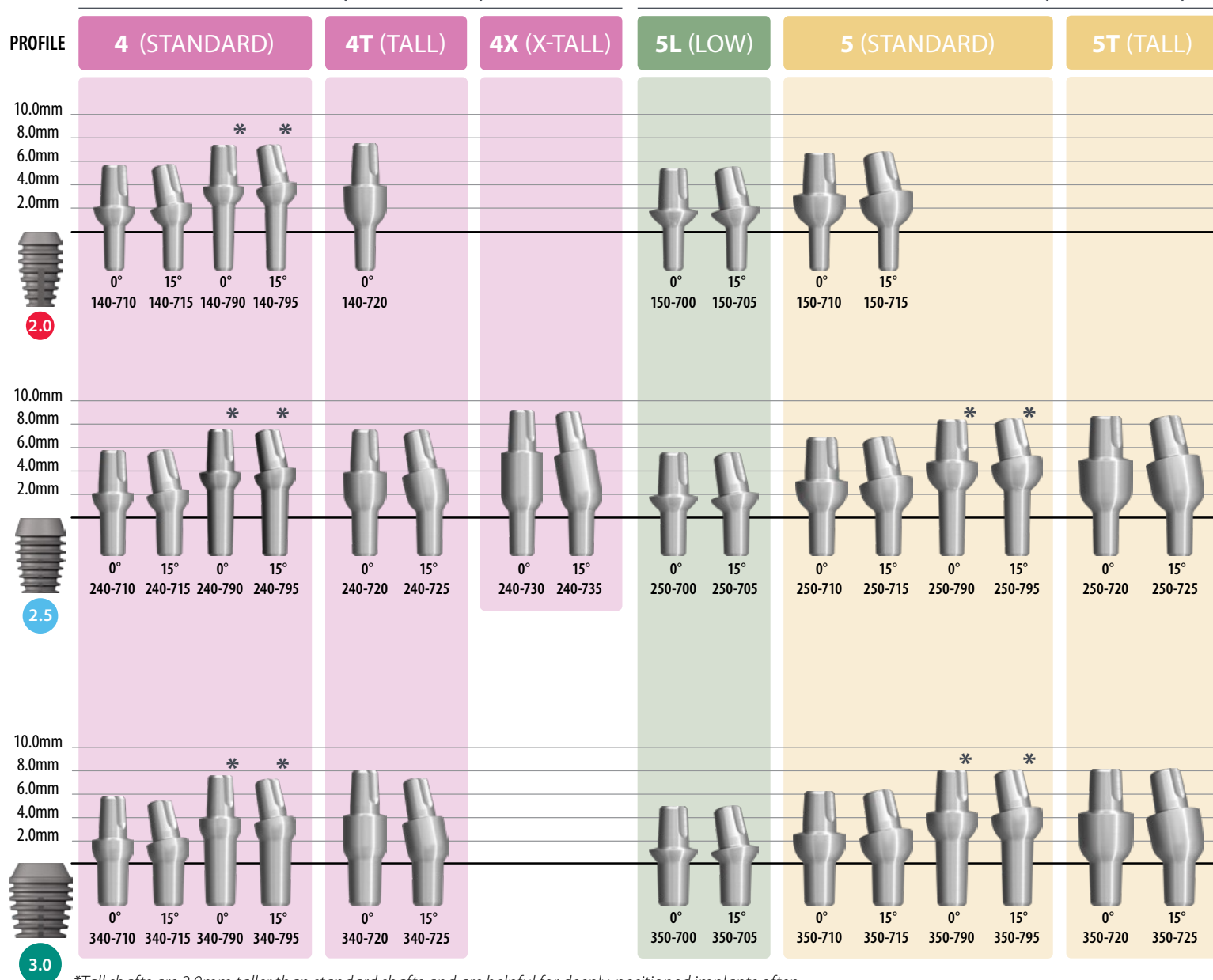
PROSTHETIC COMPONENTS



*Retentive Coping only available for the 5-Series Universal Abutments.

4-SERIES (DIAMETER)

5-SERIES (DIAMETER)



*Tall shafts are 2.0mm taller than standard shafts and are helpful for deeply-positioned implants often avoiding the need for removing bone over the implant with sulcus formers.

UNIVERSAL ABUTMENT PROSTHETIC COMPONENTS

UA Restorative Kits (6-LP Kit Depicted)



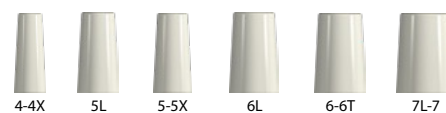
PART NO.	SERIES	PROFILE
100-945	4	SP, TP, XP
100-950	5	LP
100-955	5	SP, TP, XP
100-960	6	LP
100-965	6	SP, TP
100-970	7	LP, SP

Temporization Sleeves



PART NO.	SERIES	PROFILE
100-845	4	SP, TP, XP
100-850	5	LP
100-855	5	SP, TP, XP
100-860	6	LP
100-865	6	SP, TP
100-870	7	LP, SP

Waxing Sleeves



PART NO.	SERIES	PROFILE
100-749	4	SP, TP, XP
100-754	5	LP
100-759	5	SP, TP, XP
100-764	6	LP
100-769	6	SP, TP
100-774	7	LP, SP

NOTE: All part numbers begin with the prefix "260-"

UNIVERSAL ABUTMENTS

5X (X-TALL)



TRINIA Prosthesis with Retentive Copings

for vertical clearance their dome and corresponding abutment may be modified with a carbide bur or alternatively by using a Ring. Additionally, if the angulation of an abutment prevents seating, its height may be shortened to facilitate seating the prosthesis. If retentiveness is decreased over time, simply rotate one of the abutments to increase the divergences among them. Alternatively, change one or more of the retentive copings with a new coping, whose cervical has been crimped with a pair of pliers. The Passive Copings are not retentive.

Four implants for the maxilla and three implants for the mandible is ideal; whereas, five implants increases prosthetic complexity with no functional benefit.

Retentive and Passive Copings as well as Rings are an efficient and cost effective way to achieve retentiveness with 1.5° slightly divergent 5 Series Universal Abutments for full arch TRINIA telescopic prostheses. They are specific to either Low Profile abutments or to Standard, Tall, and Extra-tall Profile abutments.

Their retentiveness is achieved from the cervical third of their bore; therefore, if necessary

UA COPINGS AND RINGS*



PART NO.
105-700
105-705
105-710
105-715
105-720
105-730

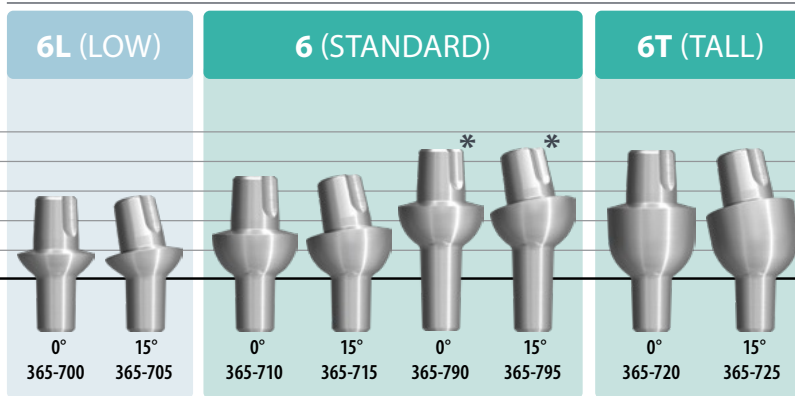
DESCRIPTION
UA5 LP Retentive Copings
UA5 LP Passive Copings
UA5 SP/TP/XP Retentive Copings
UA5 SP/TP/XP Passive Copings
UA5 LP Retentive Ring
UA5 SP/TP/XP Retentive Ring

*Only available for the 5-Series Universal Abutments.

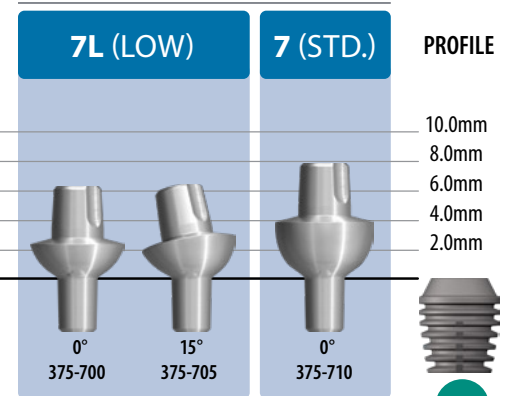


Download digital libraries here:
bicon.com/digital

6-SERIES (DIAMETER)



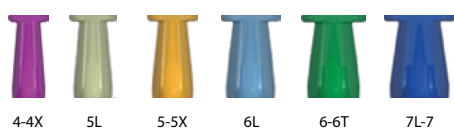
7-SERIES (DIAMETER)



*Tall shafts are 2.0mm taller than standard shafts and are helpful for deeply-positioned implants often avoiding the need for removing bone over the implant with sulcus formers.

UNIVERSAL ABUTMENT PROSTHETIC COMPONENTS

Impression Sleeves



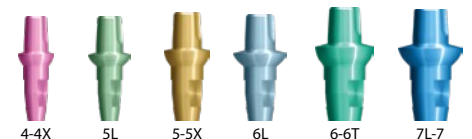
PART NO.	SERIES	PROFILE
100-746	4	SP, TP, XP
100-751	5	LP
100-756	5	SP, TP, XP
100-761	6	LP
100-766	6	SP, TP
100-771	7	LP, SP

Healing Caps



PART NO.	SERIES	PROFILE
100-846	4	SP, TP, XP
100-851	5	LP
100-856	5	SP, TP, XP
100-861	6	LP
100-866	6	SP, TP
100-871	7	LP, SP

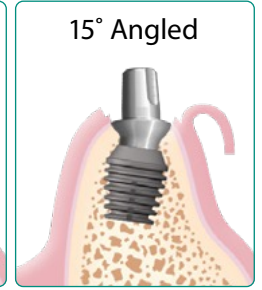
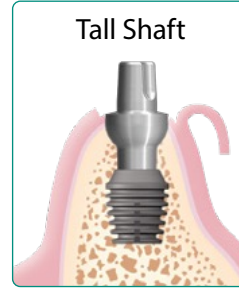
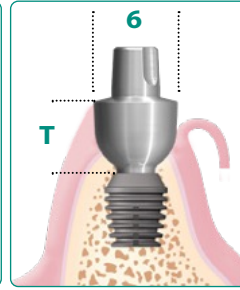
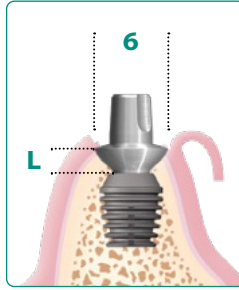
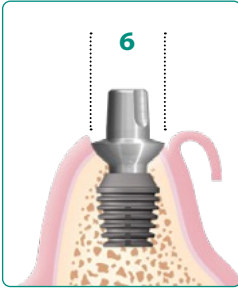
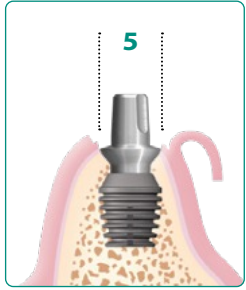
UA Transfer Dies



PART NO.	SERIES	PROFILE
100-745	4	SP, TP, XP
100-750	5	LP
100-755	5	SP, TP, XP
100-760	6	LP
100-765	6	SP, TP
100-770	7	LP, SP

NOTE: All part numbers begin with the prefix "260-"

UNIVERSAL ABUTMENT GEOMETRY

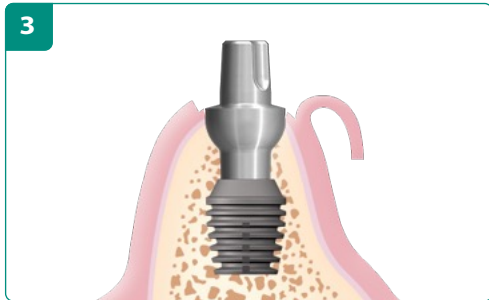
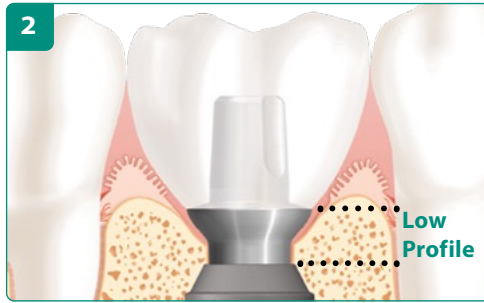
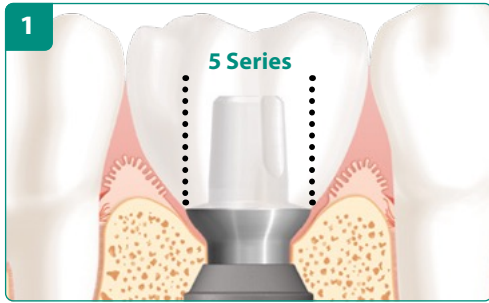


The **SERIES** denotes the diameter of the hemispherical base.

The **PROFILE** denotes the height of the hemispherical base as measured from the top of the implant to the shoulder. 6L indicates low profile.

Tall shaft abutments, guide pins, and scannable temporary abutments are available for deeply-positioned implants. For less than ideally positioned implants, 15° angled abutments are available.

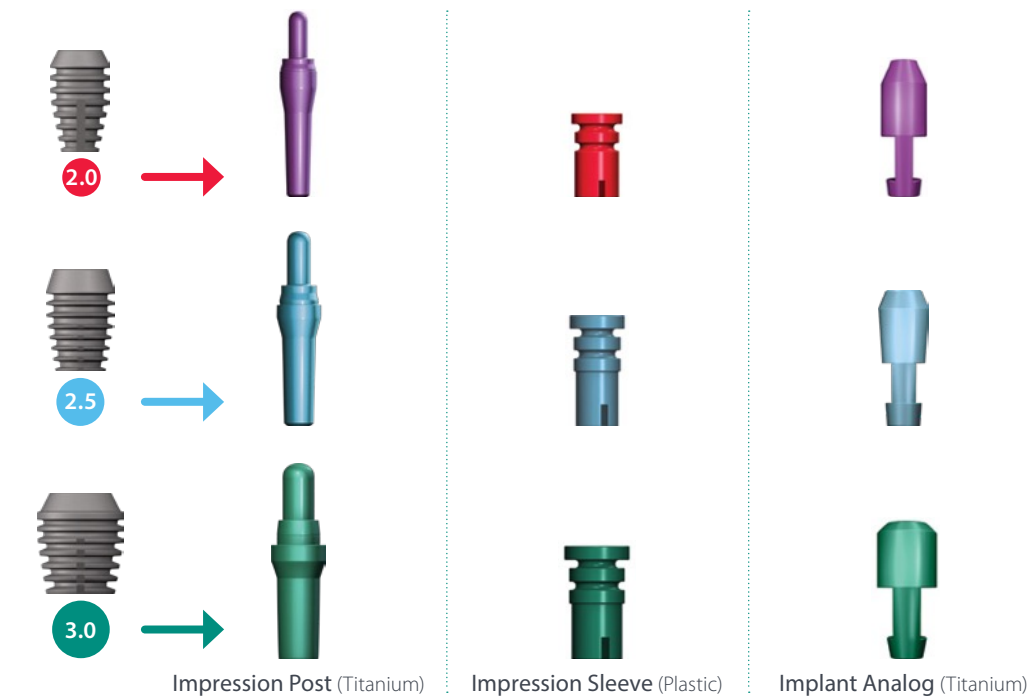
CHOOSING A UNIVERSAL ABUTMENT



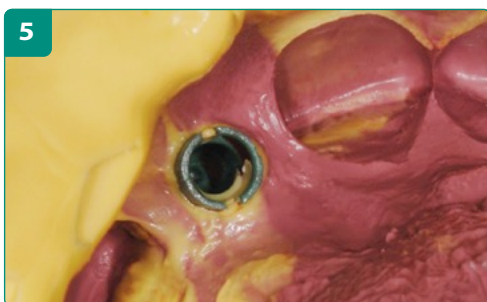
1. Choose the widest abutment that supports the interproximal papillae without encroaching upon them.
2. Choose an abutment profile according to the depth of the implant's gingival sulcus.
3. Choose a tall shaft abutment for deeply positioned implants.
4. Reduce the abutment's facial and/or lingual aspect, if necessary, to avoid the potential of food impaction under the bulbous buccal or lingual contours of a crown.

IMPLANT-LEVEL IMPRESSIONS

CONVENTIONAL IMPLANT-LEVEL IMPRESSION

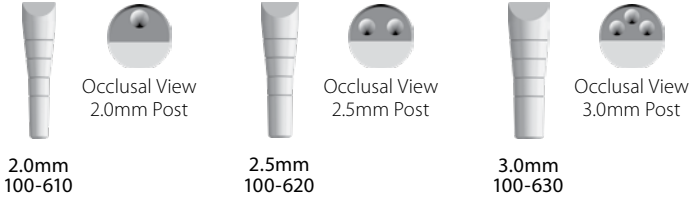


1. Choose an appropriately-sized color-coded titanium impression post corresponding to the diameter of the implant's well.
2. Insert the titanium impression post into the well of the implant with only finger pressure or with a very gentle tap, especially for 2.5mm blue posts otherwise they may be difficult to remove.
3. Snap the appropriate color-coded plastic impression sleeve onto the impression post.
4. Inject impression material around the plastic impression sleeve to make an impression.
5. After removal of the impression, the plastic impression sleeve should be withdrawn within the impression and the titanium post should remain in the implant well. If the titanium post is removed within the impression material, you may not have accurately recorded the axial position of the implant.
6. Remove the titanium impression post from the implant and insert it into an implant analog prior to inserting them as a unit into the plastic sleeve within the impression. Pour a soft tissue model. Then choose an appropriate abutment with either a standard or tall shaft with an appropriate profile height for the fabrication of a prosthesis of the desired material, which is preferably cemented extra-orally to avoid extraneous cement.



DIGITAL IMPLANT-LEVEL IMPRESSION WITH A DIGITAL SCAN POST

DIGITAL SCAN POSTS (PEEK)



DIGITAL SCAN POSTS (Titanium)

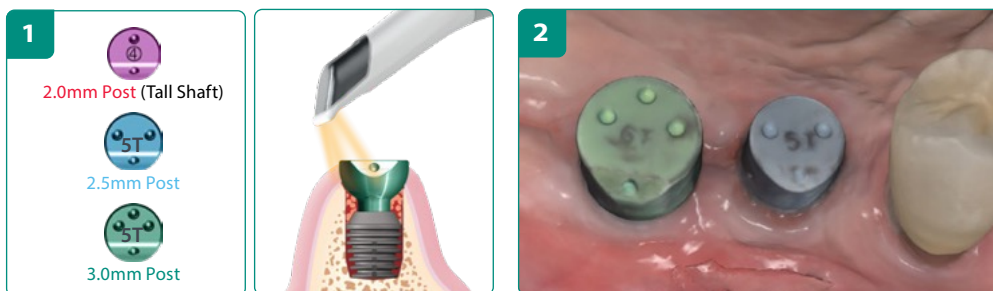


1. White PEEK and color-coded titanium digital scan posts serve the same function of recording the relative position of the implant in the bone. Insert a digital scan post corresponding to the diameter of the implant well and scan it. The dimples designate the post/well diameter. Insert either post with only finger pressure or with a very gentle tap, especially for the 2.5mm posts otherwise it may be difficult to remove.
2. Design and fabricate the final restoration with the CAD/CAM software of your choice.



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bicon.com/digital

DIGITAL IMPLANT-LEVEL IMPRESSION WITH A SCANNABLE TEMPORARY ABUTMENT



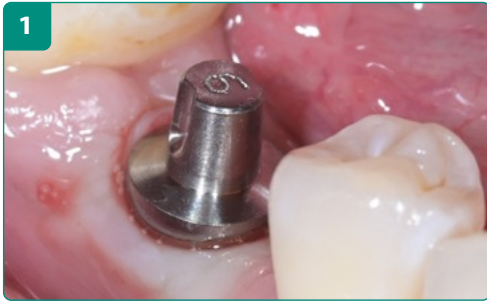
NOTE:

1. To avoid the incorrect recording of an implant's axial positioning, be sure the Scannable Temporary Abutment is fully seated in the implant's well by either using a Sulcus Former to remove any tissue which may be impinging on the abutment's hemispherical base, or by using a Scannable Temporary Abutment with a tall shaft.
2. Avoid changing any abutment on a newly placed implant, especially a blue 2.5mm Scannable Temporary Abutment (which is more retentive than the 2.0mm and 3.0mm abutments) since it may remove the implant.
3. A scanner's software can automatically replace the image of the Scannable Temporary Abutment with that of a Digital Scan Post.

1. Insert the appropriate Scannable Temporary Abutment according to the diameter of the implant well and final abutment and scan it, making sure 360 degrees of its circumference is visible for scanning. The dimples and color designate the post/well diameter and the laser marking designates the abutment diameter and height. A circle around the numeral and letter denotes a tall shaft, which is used for deeply positioned implants.
2. Scanned images provide information for the technician to fabricate prostheses of choice. Sending a radiograph of the implant's position to your technician is helpful.

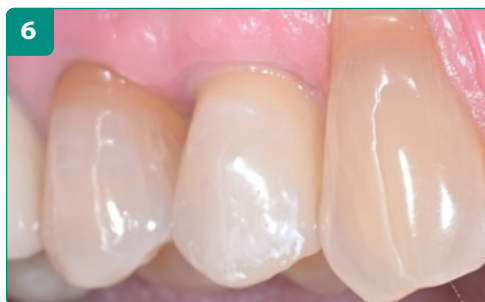
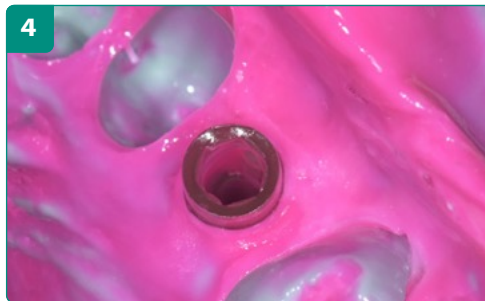
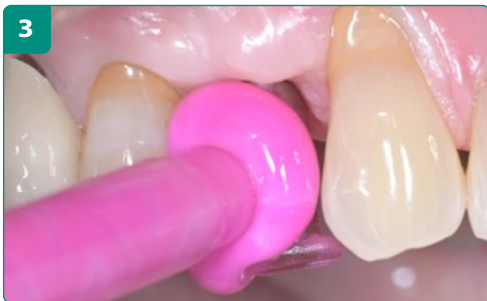
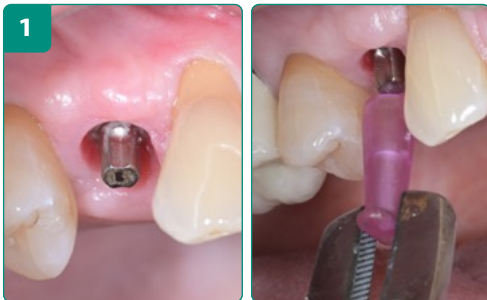
UNIVERSAL ABUTMENTS

DIRECT DIGITAL SCANNING OF UNIVERSAL ABUTMENT



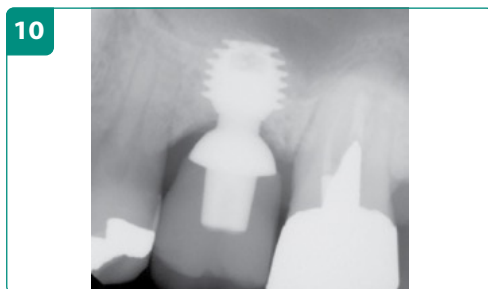
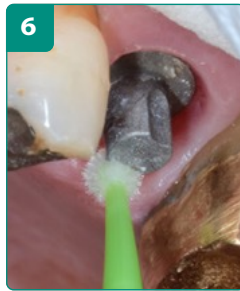
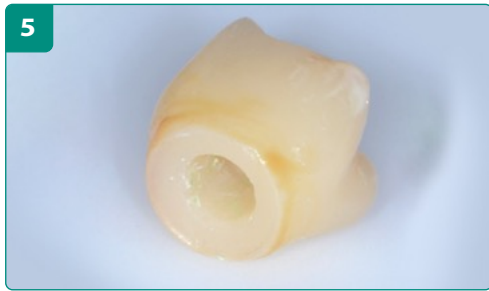
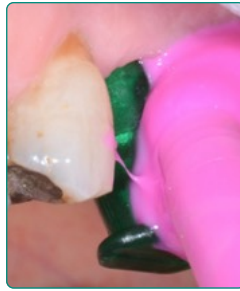
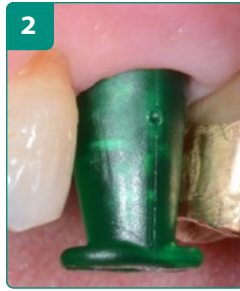
1. Clinical image of 6 Series Universal Abutment with a standard shaft.
2. Image of intraoral scanning.
3. Digital Image of Scanned Universal Abutment.
4. Clinical image of extra-orally cemented crown.

INDIRECT UNIVERSAL ABUTMENT-LEVEL IMPRESSION



1. Definitively seat the abutment with a gentle tapping force. Snap a colored-coded Impression Sleeve corresponding to the unmodified Universal Abutment.
2. View of 4 Series colored-coded Impression Sleeve snapped onto the Universal Abutment.
3. Inject the impression material around the impression sleeve and make an impression.
4. Withdraw the plastic impression sleeve in the impression. Choose an appropriately-sized aluminum transfer die and insert it into the plastic sleeve within the impression, prior to pouring a conventional stone model.
5. Fabricate the desired prosthesis.
6. View of the final prosthesis.

INDIRECT UNIVERSAL ABUTMENT-LEVEL IMPRESSION FOR A CAD/CAM HYBRID CERAMIC CROWN



1. Seated 6 Series Standard Universal Abutment.
2. Attach the corresponding green 6 Series impression sleeve to the abutment. Inject impression material around the impression sleeve.
3. Be sure that the plastic impression sleeve is captured in the impression material.
4. Insert the green transfer die into the plastic sleeve within the impression material prior to pouring a stone model for the fabrication of a hybrid CAD/CAM ceramic crown.
5. CAD/CAM hybrid ceramic crown.
6. Apply metal primer to the 6 Series Universal Abutment prior to cementing the CAD/CAM hybrid ceramic crown.
7. Cement the CAD/CAM hybrid ceramic crown and use dental floss to eliminate extraneous cement.
8. Use articulating paper to confirm occlusal contacts.
9. Buccal view of cemented crown.
10. Post-insertion radiograph.



6-6T Impression Sleeve



6-6T Transfer Die

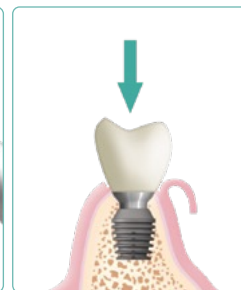
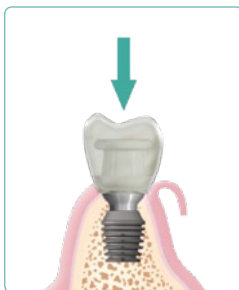
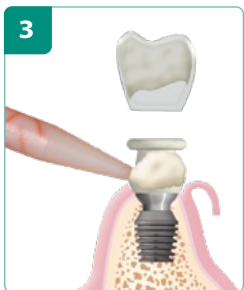
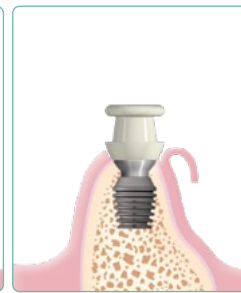
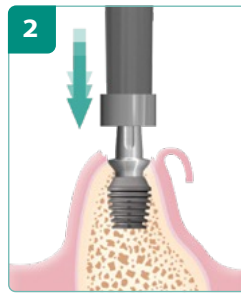
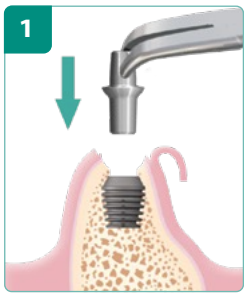
UNIVERSAL ABUTMENTS

UNIVERSAL ABUTMENT HEALING CAPS



1. Healing Cap being inserted onto a Universal Abutment without cement.
2. Healing Cap seated on a Universal Abutment, which efficiently provides a non-irritating smooth surface to the mucosa.

UNIVERSAL ABUTMENT TEMPORIZATION SLEEVE



1. Insert the selected abutment with light finger pressure only. Use a template to confirm appropriateness of the abutment prior to engagement of the locking taper connection.
2. Gently tap on the abutment in the long axis of the post to definitively engage the locking taper, then seat the temporization sleeve onto the abutment prior to trying the vacuum-formed template over the sleeve.
3. Inject acrylic around the temporization sleeve and into the template prior to placing the vacuum-formed template with acrylic to form the transitional prosthesis.
4. After polymerization, remove and polish the transitional prosthesis prior to reinserting it onto the abutment.

PROSTHETIC COMPONENTS



IMPRESSION SLEEVES



TEMPORIZATION SLEEVES



HEALING CAPS



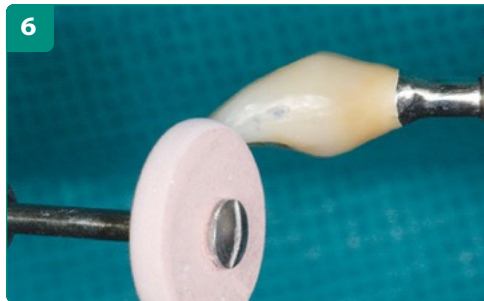
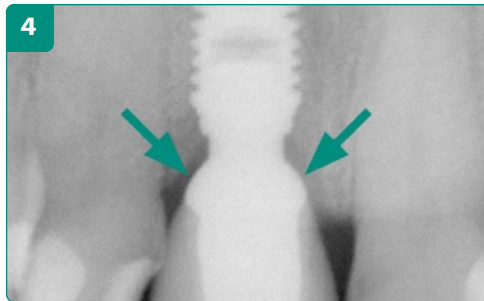
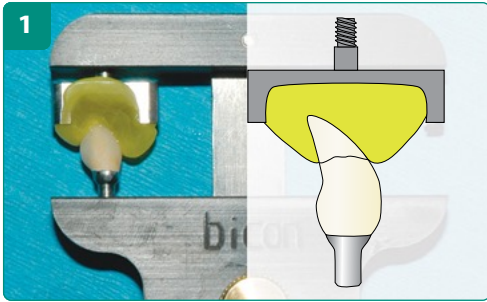
WAXING SLEEVES



RETENTIVE COPING*

*Retentive Coping only available for the 5-Series Universal Abutments.

MAXILLARY ANTERIOR SEATING GUIDE

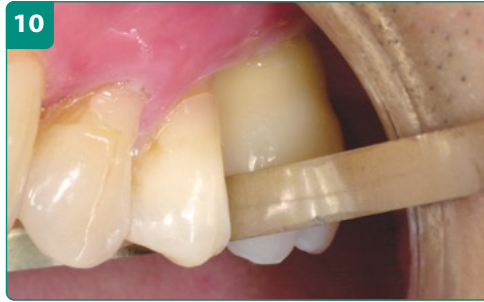
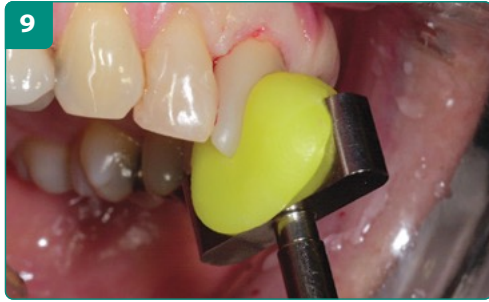


- 1.** Thermoplastic seating jig being fabricated in the Crown Alignment Device so that the seating forces will be directed in the long axis of the abutment post and implant well.
- 2.** Insert the abutment crown with finger pressure for evaluation and removal of any interproximal interferences.
- 3.** Remove any soft or bony tissue interferences by rotating an appropriate Sulcus Former on an appropriate guide pin. A relieving incision is being made to facilitate the seating of a wider hemispherical abutment.
- 4.** Confirm the removal of bony interferences with a radiograph.
- 5.** Align the abutment/crown prior to confirming passive interproximal contacts with dental floss, if necessary, with an incisal orientation jig. When in doubt, always adjust a contact that you think may be too tight, since non-passive interproximal contacts will inhibit the engagement of the abutment's locking taper connection.
- 6.** Adjust excessive contacts until dental floss can be passed through the contact area with only minimal resistance.
- 7.** Clean the abutment post with an alcohol wipe and the implant well with an appropriately-sized cotton-tipped applicator.
- 8.** Insert and align the abutment/crown using an incisal orientation jig when necessary.

(Continued on next page)

SEATING MAXILLARY ANTERIOR ABUTMENT CROWNS

MAXILLARY ANTERIOR SEATING GUIDE (CONTINUED)



9. While gently squeezing the bridge of the patient's nose with your fingers, apply an initial seating tap using a custom seating jig on a threaded straight handle to ensure that the seating forces are being directed in the long axis of the implant.
10. Confirm passive interproximal contacts with dental floss and, if necessary, remove the prosthesis by tapping on the handle of a grasping forceps to adjust any non-passive interproximal contact area. Alternatively, a thin metal finishing strip may be used without having to remove the restoration.
11. Initially establish uniform maximal intercuspation and then adjust any premature contacts including on the facial of the crown by having the patient protrude and retrude their mandible while clenching to mark the premature contacts.
12. Establish uniform contacts initially in maximal intercuspation and then in protrusive and retrusive excursions.
13. Establish uniformly balanced contacts while the patient is clenching in all extreme excursions including retrusive movements of the mandible from an extreme protrusive position, which may indicate the need to adjust the facial aspect of the restoration, since the crown is often too thick.

SEATING COMPONENTS



Crown Alignment Device
101-315



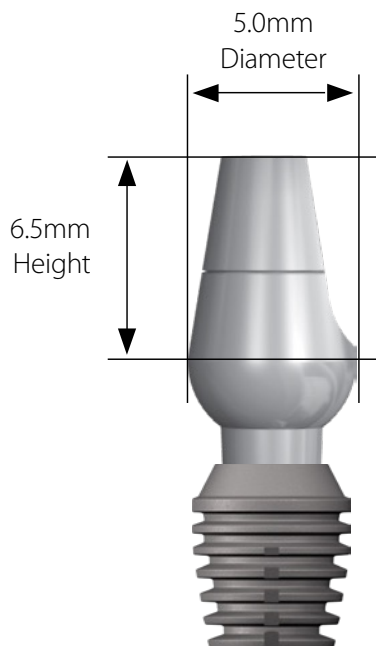
Crown Seating Tip
101-015



Hydroplastic Resin (20g)
103-031



View crown seating video:
bicon.com/seating



5mm Diameter 6.5mm Height 0° Abutment
5.0 x 6.0mm SHORT® Implant

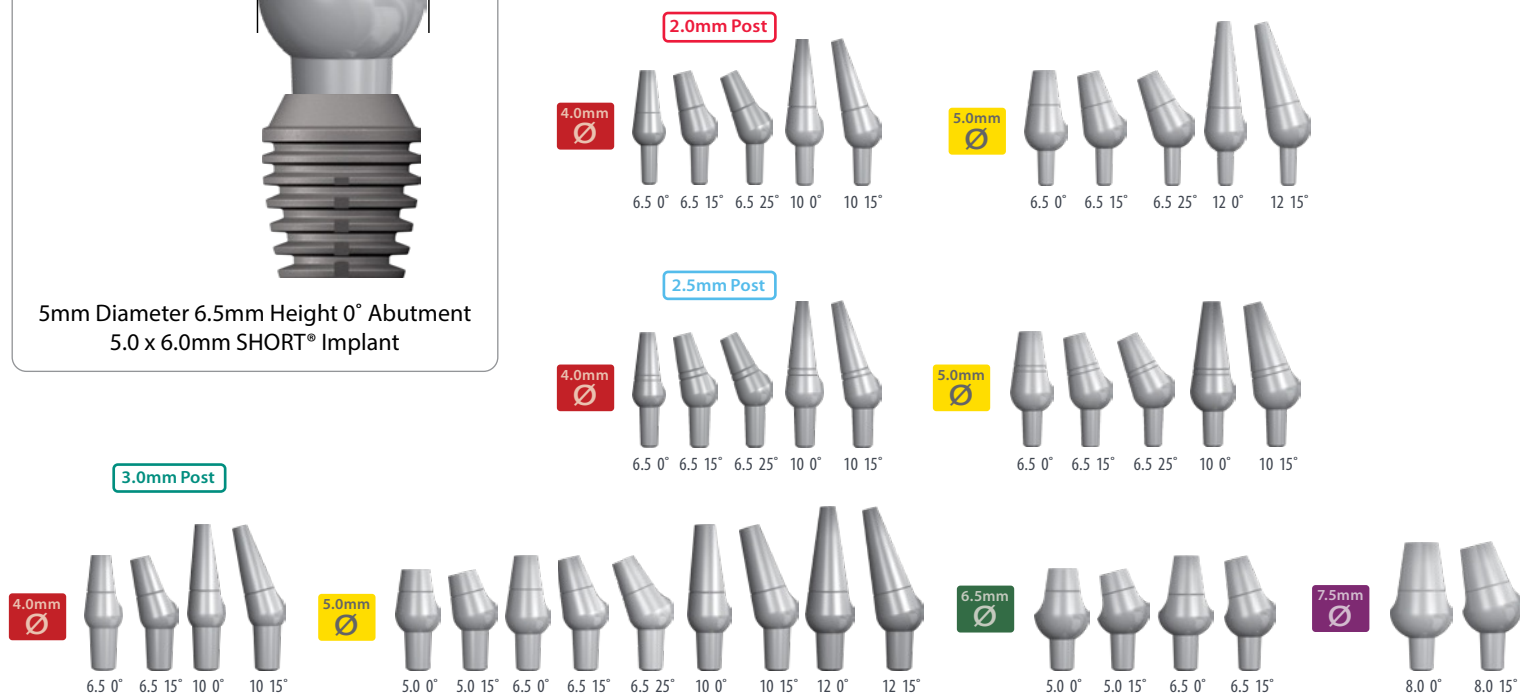
The Non-Shouldered Abutment is the original Bicon abutment and it has been used continuously since 1985. Solid titanium abutments can be shortened with carbide burs. A 5.0mm abutment can retain a cemented crown. They are available with diameters of 4.0, 5.0, 6.5, and 7.5mm, heights of 5.0, 6.5, 8.0, 10.0 and 12.0mm, with angulations of 0, 15, and 25 degrees.

It is essentially the same as an endodontic post and core restoration.



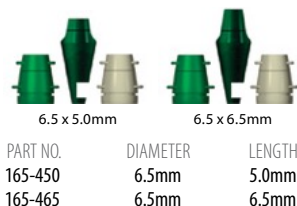
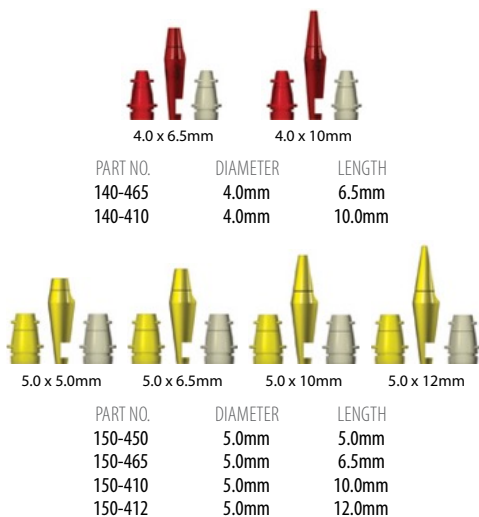
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NON-SHOULDERED ABUTMENT PROSTHETIC COMPONENTS

Restorative and Laboratory Kits



Temporization Sleeves



EMERGENCE CUFFS



NON-SHOULDERED ABUTMENTS

DIRECT ABUTMENT-LEVEL CONVENTIONAL IMPRESSION AND RESTORATION



1. At the time of uncovering place the widest non-shouldered abutment that will support the papillae without encroaching upon them. Allow the soft tissue to heal prior to making a direct impression of the abutment.

2. If necessary, the abutment may be modified intra-orally with irrigation or extra-orally with a #1557 or any carbide bur while it is being held in an abutment prep holder.



3. Inject the impression material around the abutment for a direct impression. Pour a stone model.

4. A try-in of the casting prior to the porcelain application is advised to ensure a passive seating.

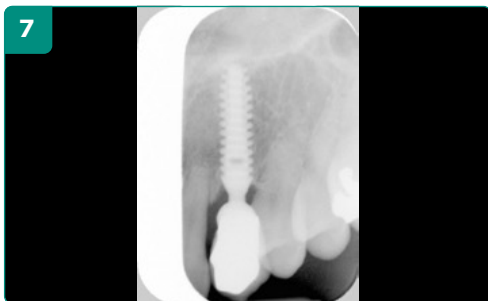


5. Fabricate the crown conventionally and insert the crown with minimal cement.

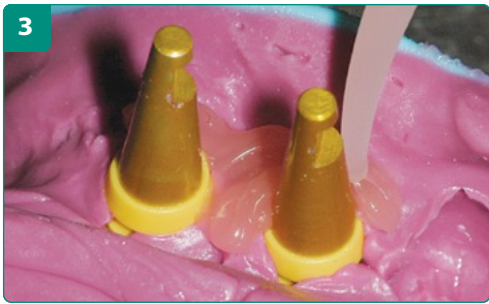
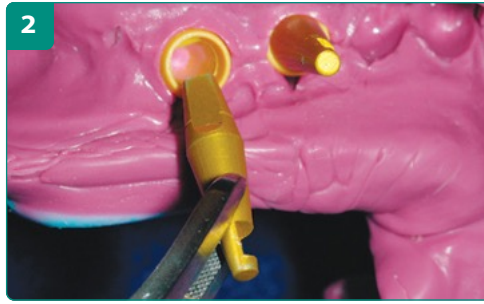
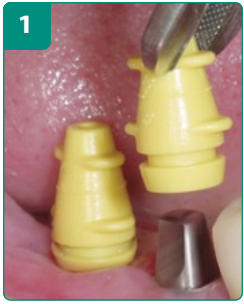
6. Thirty-two year post-insertion clinical view.

7. 11-year post-insertion radiograph.

8. Thirty-two-year post-insertion radiograph.



INDIRECT ABUTMENT-LEVEL IMPRESSION WITH PLASTIC SLEEVE AND CERAMO-METAL RESTORATION



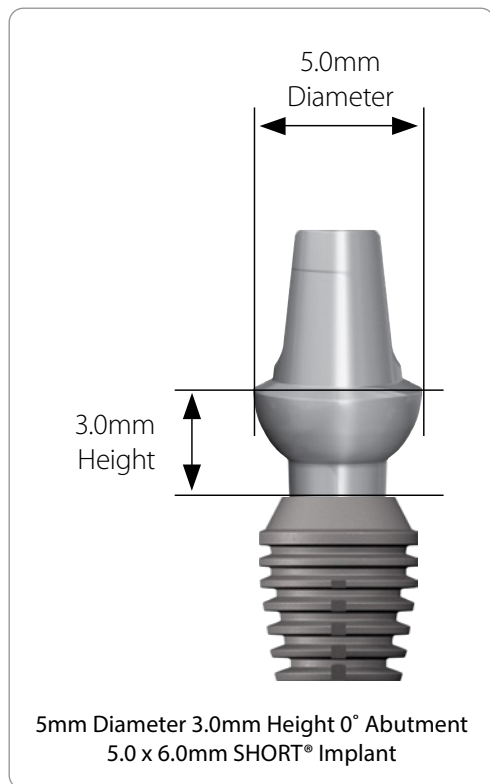
1. After definitively seating the abutments with a gentle tapping force, place the impression sleeves onto the unmodified abutments, then inject impression material around the sleeves to make an impression.
2. Insert the color-coded abutment transfer dies into its corresponding plastic impression sleeves within the impression.
3. Pour a soft tissue or stone model.
4. Snap the appropriate impression sleeves or temporization sleeves onto the color-coded transfer dies and modify as necessary.
5. Incorporate the sleeves into the wax pattern for the fabrication of a metal casting.
6. Try-in metal casting to confirm a passive fit.
7. Finished crowns on the abutment transfer dies.
8. Clinical view of the cemented crowns.

NON-SHOULDERED ABUTMENTS

TRANSITIONAL RESTORATION WITH A TEMPORIZATION SLEEVE

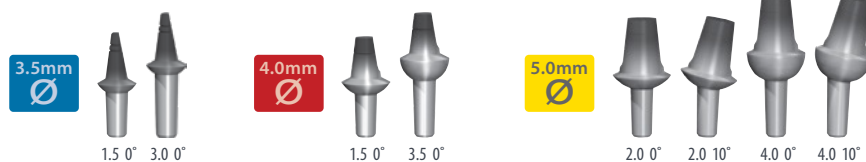


1. Insert the appropriate non-shouldered abutments that support the papillae without encroaching upon them.
2. Tap the abutment in the long axis of the abutment post and implant well.
3. Snap the appropriate temporization sleeves onto their corresponding abutments.
4. Confirm the appropriateness of the vacuum-formed template over the temporization sleeves.
5. Inject transitional crown material around the temporization sleeves.
6. Inject transitional material into the vacuum-formed template, prior to re-inserting it over the temporization sleeves to form a transitional prosthesis.
7. Remove the transitional prosthesis for polishing.
8. Snap the completed transitional prosthesis onto the abutments.

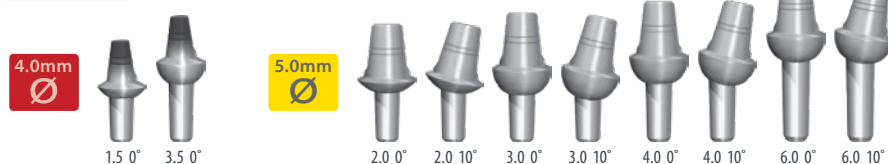


The Shouldered Abutment or Stealth Abutment provides more space for aesthetic material. It also offers the smallest abutment, which is ideal for many mandibular and maxillary lateral incisors. They are available in diameters of 3.5, 4.0, 5.0 and 6.5mm, heights of 1.5, 3.0, 3.5, 4.0, and 6.0mm, with angulations of 0 and 10 degrees.

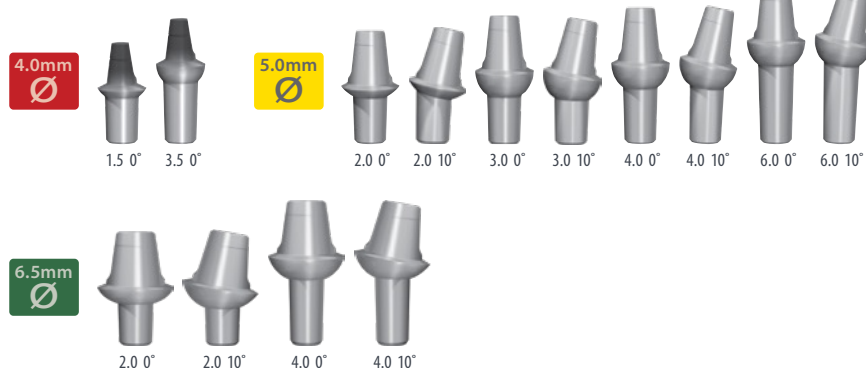
2.0mm Post



2.5mm Post



3.0mm Post



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STEALTH ABUTMENT PROSTHETIC COMPONENTS

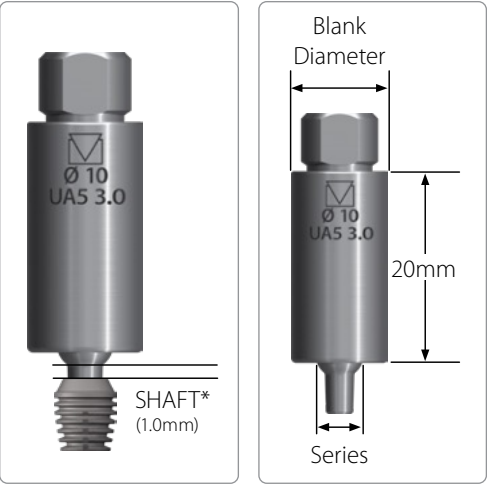
Restorative and Laboratory Kits

3.5mm	4.0mm	5.0mm	6.5mm
PART NO.	DESCRIPTION	HEIGHT	
250-103	3.5mm Tall	10.0mm	
250-104	4.0mm Tall	10.0mm	
250-105	5.0mm Tall	10.0mm	
250-106	6.5mm Tall	10.0mm	

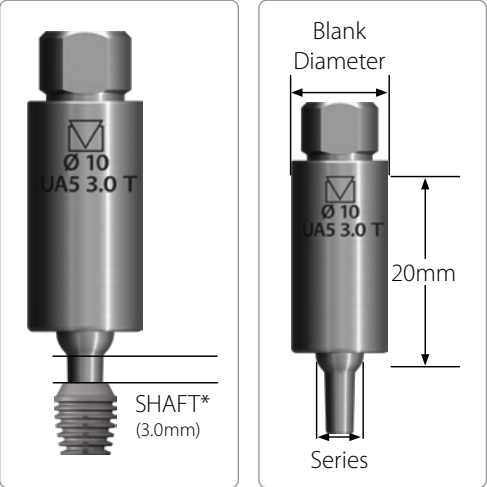
Transfer Dies

3.5mm	4.0mm	5.0mm	6.5mm
PART NO.	DESCRIPTION		
250-183	3.5mm		
250-184	4.0mm		
250-185	5.0mm		
250-186	6.5mm		

MILLABLE ABUTMENT BLANKS

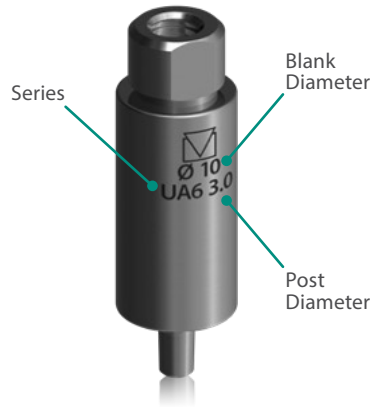


Standard Shaft



Tall Shaft

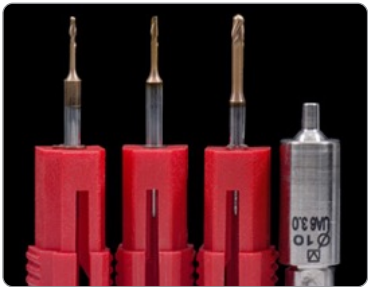
Bicon’s Millable Abutment Blanks provide for custom abutments while ensuring the quality and precision of the Bicon locking taper connection. They allow a clinician or technician to design and mill custom Bicon abutments with optimal gingival contours while ensuring maximum titanium contact with the gingival sulcus, especially for less than ideally positioned implants.



Abutment Holder



Milled Abutment



Milling Guidelines*

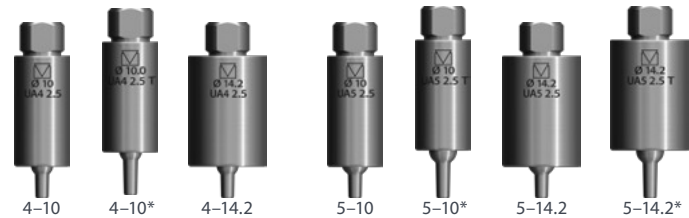
Milling	RPM	Bur Ø
Wet	19,000	2.5mm
Wet	30,000	1.0mm
Wet	35,000	0.8mm

*Based on VHF Milling Machines N4 and R5

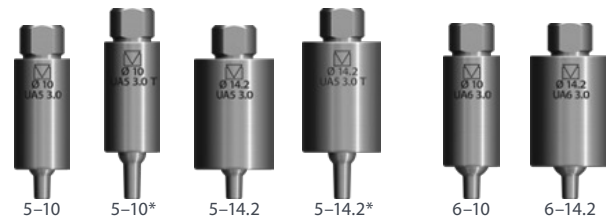
2.0mm Post



2.5mm Post



3.0mm Post

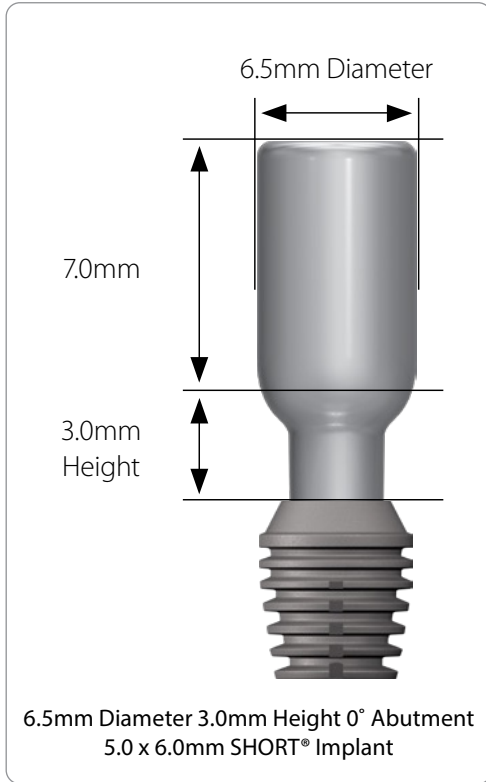


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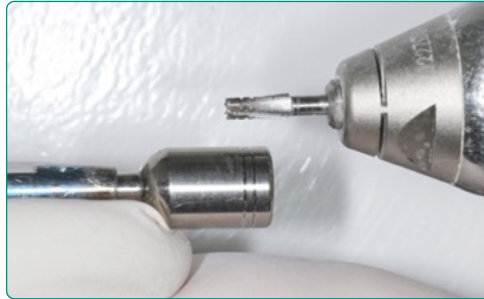
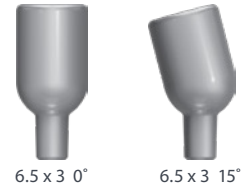
Laboratory Abutments provide the technician a solid titanium abutment that may be manually customized. They are available in diameters of 5.0 or 6.5mm and a height of 3.0mm with angulations of 0 and 15 degrees.



2.5mm Post



3.0mm Post

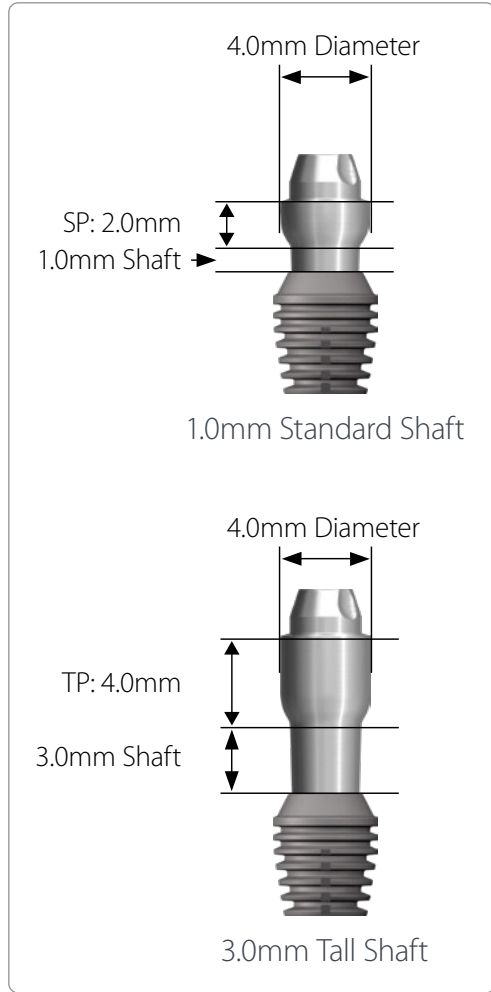


Laboratory Abutment being modified with a bur in an Abutment Prep Holder



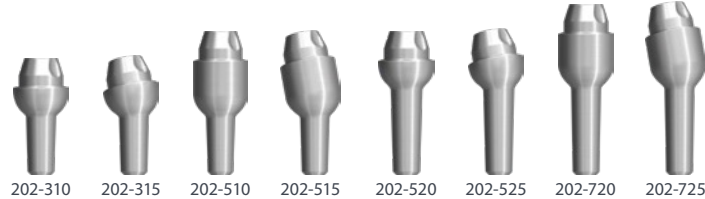
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FIXED-DETACHABLE UNIVERSAL ABUTMENTS

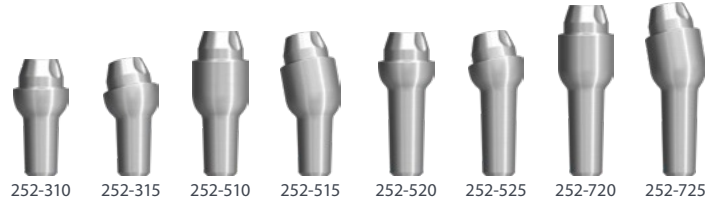


The Fixed-Detachable Universal Abutment is Bicon's second and most popular screw-retained abutment system. Like all of Bicon's abutments, it is friction-retained within the implant's well with a 1.5 degree locking taper connection. Its prosthetic portion is compatible with the prosthetic portion of the Universal Abutment and Transitional Implant. It differs from the Universal Abutment in that it has a threaded bore for the screw retention of a prosthesis. Similar to the original Fixed-Detachable Abutment system, the threaded bore for the prosthetic retention screw is within a titanium cone, thereby preventing any lateral loading of the retention screw. Interestingly, the retention screw has only three threads, which is not only sufficient, but more conveniently confirms the passive and complete seating of a prosthesis. If a clinician desires a longer screw to fasten a prosthesis, it is a clear indicator that the prosthesis is not passively seated. Fixed-Detachable Universal Abutments are available with Standard and Tall Shafts with angulations of 0 and 15 degrees and profiles of 2.0mm and 4.0mm.

2.0mm Post



2.5mm Post



3.0mm Post



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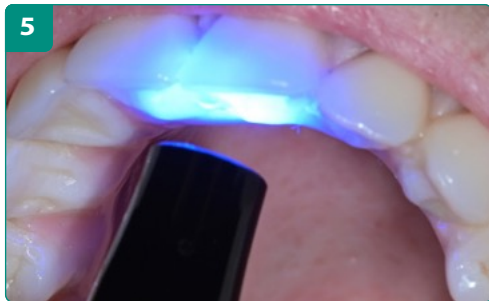
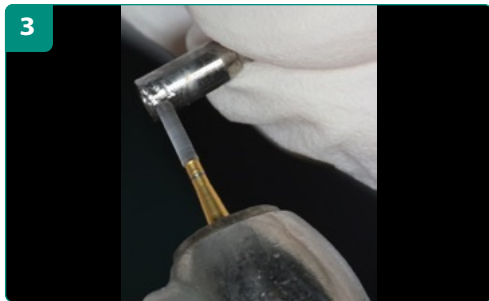


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FIXED-DETACHABLE UNIVERSAL ABUTMENT COMPONENTS

 Transfer Coping  Standard Analog  Final Coping PART NO. 100-135 100-130 100-140 DESCRIPTION Titanium Transfer Coping (2) Titanium Standard Abutment Analog (2) Titanium Final Coping (2)	 5.0mm Hex Coping Screws  10.0mm Hex Coping Screws  Hex Retention Screws  Hex Cover Screws PART NO. 100-016 100-017 100-020 100-021 DESCRIPTION 5.0mm Hex Coping Screws (4) 10.0mm Hex Coping Screws (4) Hex Retention Screws (4) Hex Cover Screws (4)	 Hex Screwdrivers PART NO. 101-024 101-026 DESCRIPTION 10mm Hex Screwdriver 20mm Hex Screwdriver	 Scan Body  Digital Analog  Hex Cap  Scan Body on Abutment PART NO. 100-640 100-049 DESCRIPTION Scan Body (2) Digital Abutment Analog and Cap
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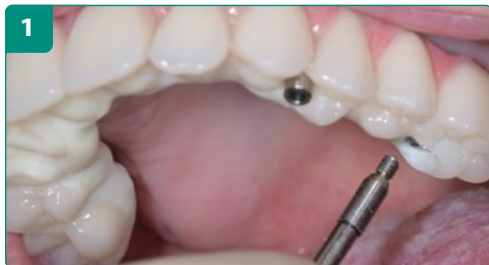
HEX COPING SCREWS FOR FIXED-DETACHABLE UNIVERSAL ABUTMENT COPINGS - CASE ONE



The hex coping screws are available in lengths of 5.0 and 10.0mm. They may be shortened chairside with a carbide bur to provide a functioning screw with the exact length to be just below the occlusal surface of a prosthesis. This feature provides significant time savings for a clinician, since the screw can be readily seen as opposed to being submerged to 2.0–3.0mm within the prosthesis.

1. Occlusal view of TRINIA full arch prosthesis retained by three Fixed-Detachable Universal Abutments, prior to the shortening of the Hex Coping Screws.
2. Hex Retentive Coping Screw being shortened with a carbide bur.
3. Screw being shortened with carbide bur.
4. Shortened coping screw being fastened in Fixed-Detachable Universal Abutment.
5. Flowable composite being light cured.
6. Radiograph of maxillary TRINIA prosthesis retained with three Fixed-Detachable Universal Abutments and a mandibular prosthesis retained with three Retentive Copings on Universal Abutments.

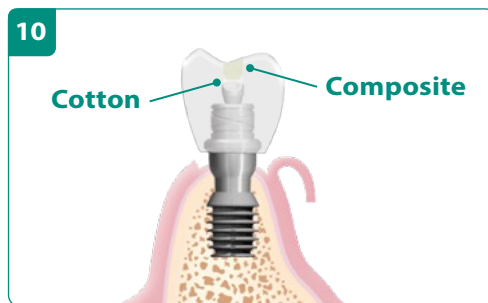
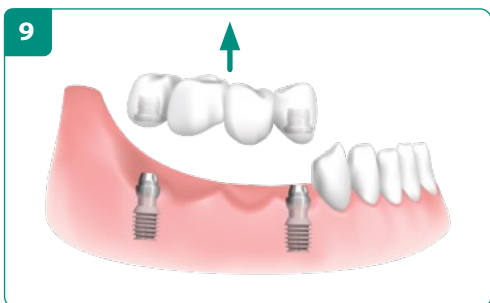
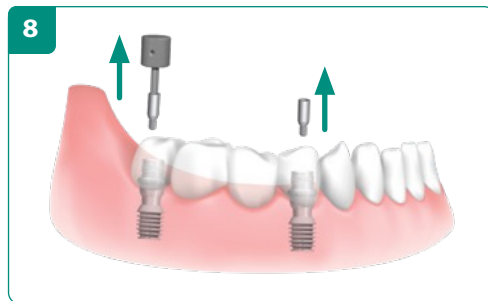
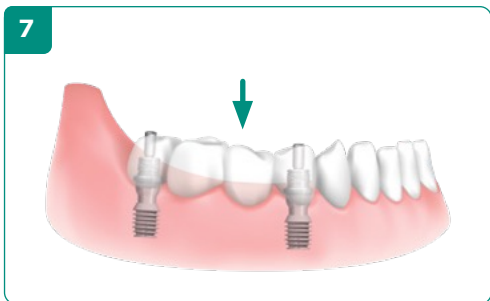
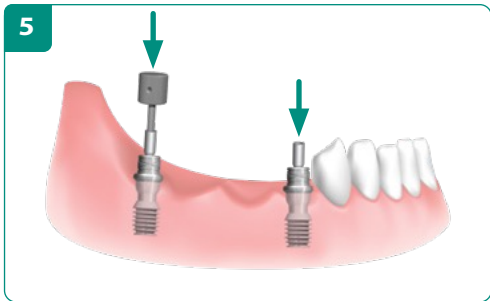
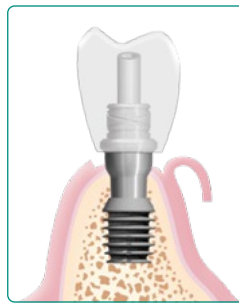
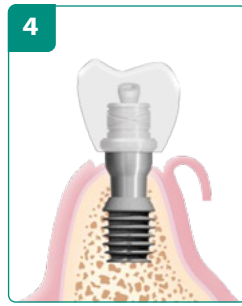
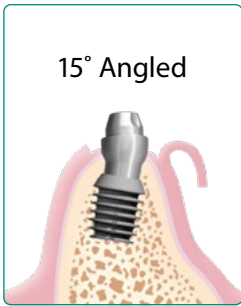
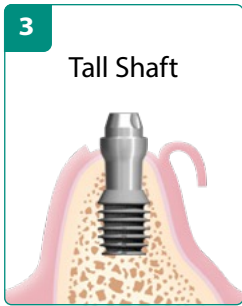
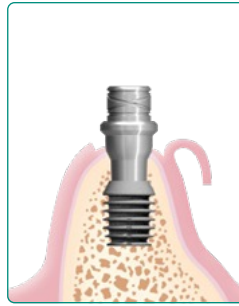
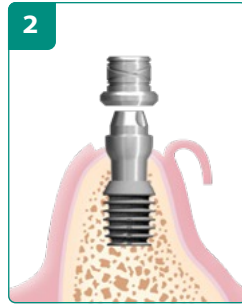
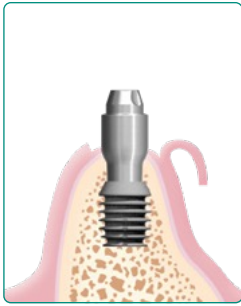
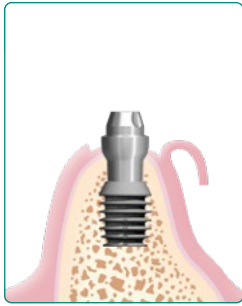
HEX COPING SCREWS FOR FIXED-DETACHABLE UNIVERSAL ABUTMENT COPINGS - CASE TWO



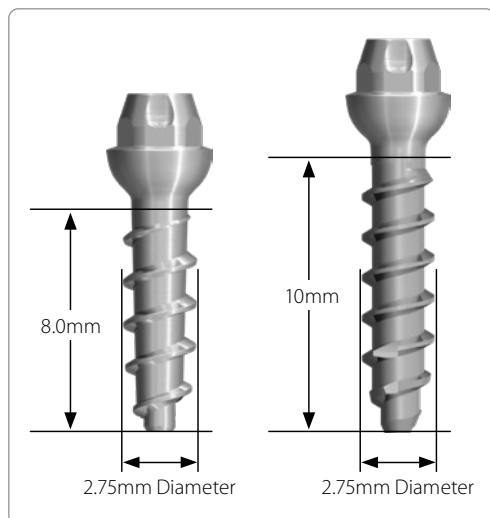
1. 5.0mm Hex Coping Screw being inserted to fasten Final Coping within the prosthesis to the FDU.
2. 5.0mm Hex Coping Screw being fastened to the FDU to secure the coping within the prosthesis.
3. Hex Coping Screw being cut with a #330 carbide bur so the top of the Hex Screw will be just below the occlusal surface, significantly facilitating access to it.
4. Flowable composite being injected around the Hex Screw.

FIXED-DETACHABLE UNIVERSAL ABUTMENTS

TECHNIQUE FOR THE RESTORATION OF A FOUR-UNIT TRINIA BRIDGE

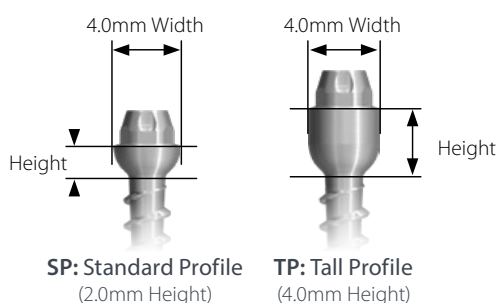


1. Choose a Fixed-Detachable Universal Abutment with its shoulder at or above the gingival crest. For dentures or non-aesthetic areas, a shoulder 5.0mm above the crest is acceptable.
2. Having the shoulder above the gingival crest allows access for the coping to be fitted without interference.
3. For a deeply-placed implant, use an abutment with a tall shaft. For a less than ideally placed implant, angled abutments are available.
4. Three screw lengths are available: Retentive, 5.0mm, and 10mm, which can be cut with a carbide bur. If a 5.0 or 10mm screw is being used, place a layer of Vaseline® on the exterior sides of the screw before cementing the coping.
5. The length of the screw is dictated by the height of the crown on the prosthesis. The screw should sit just below the top of the crown.
6. Fasten the copings with an appropriately cut screw and a Hex Screwdriver.
7. Confirm the fit of the prosthesis
8. Fasten the completed transitional prosthesis onto the Fixed-Detachable Universal Abutment. After placing Vaseline® only on the screws, apply resin cement to bond the copings to the TRINIA.
9. The copings are now permanently cemented into the bores of the prosthesis. Remove any extraneous cement.
10. Refasten the prosthesis using a shortened or non-shortened Hex Coping Screw, so that it can be seen and accessed just below the occlusal surface of the prosthesis. Cover the head of the screw with a small piece of cotton, and then cover with composite material. This will allow for easy access for removal of the screws.

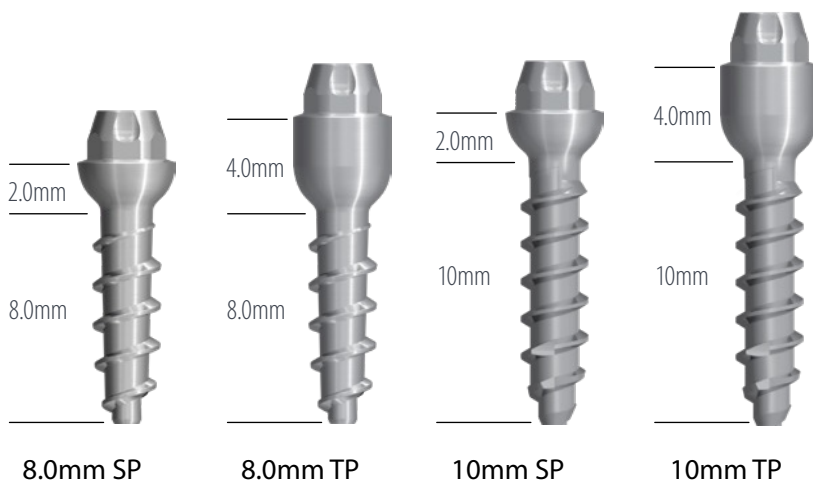


The Fixed-Detachable Universal Abutment (FDUA) Transitional Implants are available in 8.0 and 10.0mm lengths with either a standard 2.0mm or a tall 4.0mm profile. With TRINIA or a wire-reinforced PMMA prosthesis, they can provide for the immediate loading of implants by using intraorally cemented screw-retained copings using the same components as Bicon's Fixed-Detachable Universal Abutments.

- Drill the pilot osteotomy 1.0mm deeper than intended transitional implant, so the implant's hemispherical base can gain stability by resting on the bone
- Provides for a fixed prosthesis while permanent implants are healing
- Passively fitting prosthesis ensured with intraorally cemented screw-retained copings
- Screw-retained copings can be cemented to a variety of materials, such as TRINIA® and PMMA
- Screws and prosthetic components are identical for both the Fixed-Detachable Universal Abutments and FDUA Transitional Implants
- Hex coping screws may be cut with a carbide bur so that their height will be just below the occlusal surface of a prosthesis



View product information:
bicon.com/fdua-ti



FIXED-DETACHABLE UNIVERSAL ABUTMENT AND FDUA TRANSITIONAL IMPLANT COMPONENTS



Transfer Coping



Standard Analog



Final Coping

PART NO.

100-135

100-130

100-140

DESCRIPTION

Titanium Transfer Coping (2)

Titanium Standard Abutment Analog (2)

Titanium Final Coping (2)



5.0mm Hex Coping Screws



10.0mm Hex Coping Screws



Hex Retention Screws



Hex Cover Screws

PART NO.

100-016

100-017

100-020

100-021

DESCRIPTION

5.0mm Hex Coping Screws (4)

10.0mm Hex Coping Screws (4)

Hex Retention Screws (4)

Hex Cover Screws (4)



Hex Screwdrivers

PART NO.

101-024

101-026

DESCRIPTION

10mm Hex Screwdriver

20mm Hex Screwdriver



Scan Body



Digital Analog



Hex Cap



Scan Body on Abutment

PART NO.

100-640

100-049

DESCRIPTION

Scan Body (2)

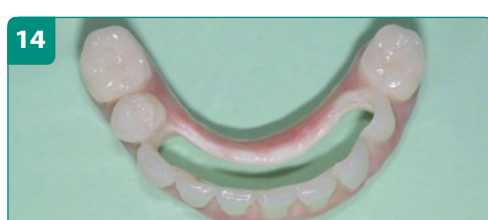
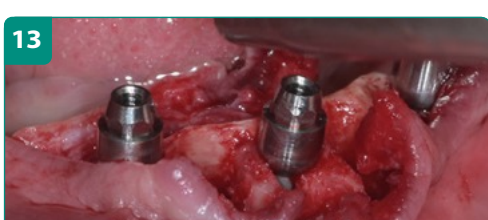
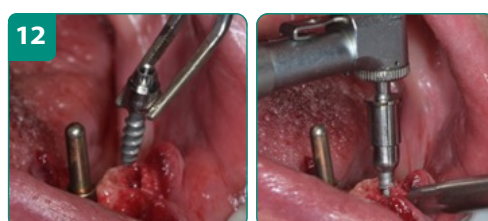
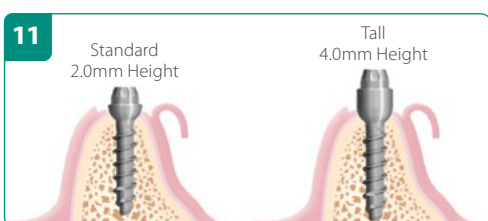
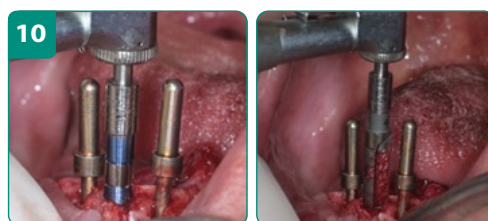
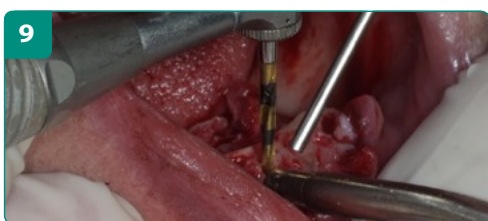
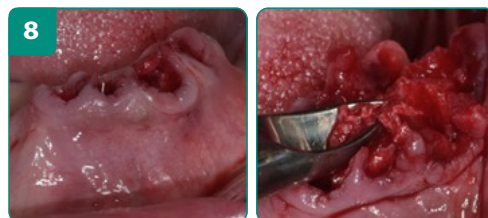
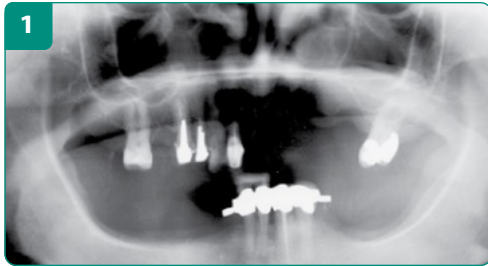
Digital Abutment Analog and Cap



101-904 Transitional Implant Latch Driver

FDUA TRANSITIONAL IMPLANTS AND ABUTMENTS

IMMEDIATE RESTORATION OF THREE FDU TRANSITIONAL AND FOUR PERMANENT IMPLANTS WITH TRINIA AND FIXED-DETACHABLE UNIVERSAL ABUTMENTS

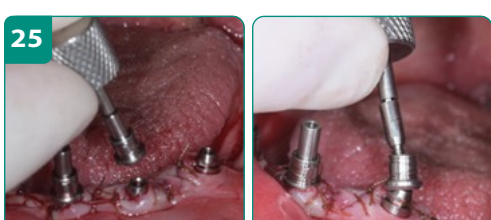
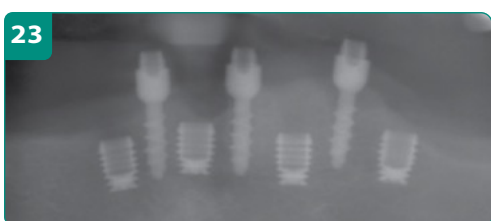
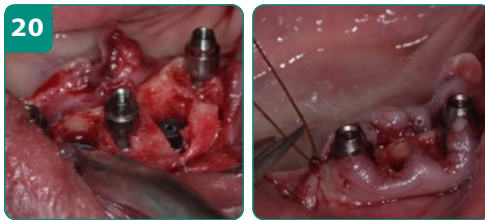
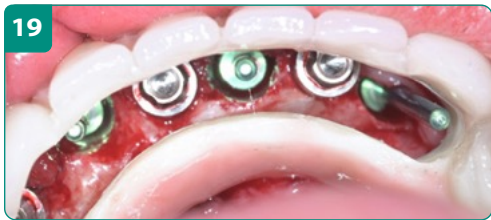
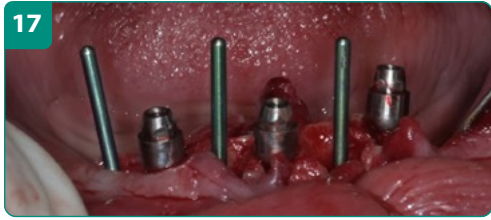
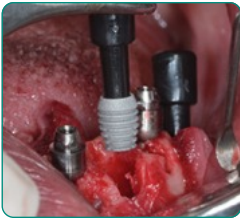
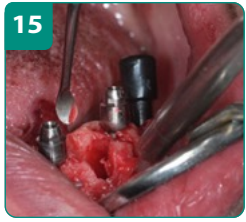


TRINIA and the components of the Fixed-Detachable Universal Abutment can provide an efficient treatment for patients who do not want to have a removable prosthesis.

1. Preoperative radiograph.
2. Preoperative clinical view.
3. Right and left preoperative profile views.
4. Vertical Dimension of Occlusion (VDO) being recorded.
5. A mandibular wax rim with a stylus and a maxillary wax rim with a metal plate for the Gothic arch tracing.
6. Mandibular movements tracing the Gothic arch on a maxillary metal plate.
7. A bite registration being made with a stylus positioned at the apex of the Gothic arch tracing. Wax rims with a bite registration being removed for the articulation of models.
8. Post-extraction views.
9. The initial osteotomy being prepared with a 2.0mm Pilot Drill rotating at 1100 RPM.
10. Blue 3.5mm and gray 4.5mm Hand Reamers attached to a Threaded Instrument Adapter are being rotated at 50 RPM between Paralleling Pins in the Transitional Implant osteotomies.
11. Standard 2.0mm and tall 4.0mm profile FDU Transitional Implants. NOTE: The hemispherical base of the implants is resting on bone.
12. A 2.5 x 8.0mm Fixed-Detachable Transitional Implant is being transported to its osteotomy with cotton pliers and is inserted into the osteotomy with a latch transitional driver.
13. Three fully seated Transitional Implants as evidenced by their hemispherical base resting on alveolar bone.
14. Opening within transitional TRINIA® prosthesis to accommodate screw retained components of Transitional Implants.

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IMMEDIATE RESTORATION OF THREE FDU TRANSITIONAL AND FOUR PERMANENT IMPLANTS WITH TRINIA AND FIXED-DETACHABLE UNIVERSAL ABUTMENTS

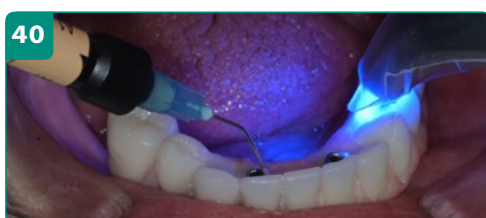


- 15.** A spoon excavator being used to harvest bone from osteotomy. A 4.5mm x 6.0mm SHORT® Implant with a 3.0mm well being transported to the osteotomy with a black Healing Plug.
- 16.** Osteotomy being enlarged with a gray 4.5mm Latch Reamer rotating at 50 RPM without irrigation. A 4.5mm x 6.0mm SHORT® Implant with a 3.0mm well being inserted into the osteotomy with a black Healing Plug.
- 17.** View of three green 3.0mm Guide Pins and three Transitional Implants.
- 18.** Transitional TRINIA® prosthesis being seated over Guide Pins and Transitional Implants.
- 19.** Occlusal view of seated TRINIA® Prosthesis.
- 20.** View of seated permanent SHORT® Implants and Transitional Implants. Surgical site being sutured.
- 21.** Harvested bone being placed over permanent SHORT® Implants adjacent to Transitional Implants.
- 22.** Clinical view of sutured site around prosthetic portion of three Transitional Implants.
- 23.** Radiographic image of four permanent SHORT® Implants and three Transitional Implants.
- 24.** Coping being attached to Transitional Implant with a 5.0mm Hex Coping Screw.
- 25.** Hex Screwdriver attached to a 5.0mm screw transporting coping to Transitional Implant.
- 26.** View of three copings attached to prosthetic portion of Transitional Implants with 5.0mm Hex Coping Screws.
- 27.** TRINIA® prosthesis being seated over Hex Coping Screws attached to Transitional Implants.
- 28.** Occlusal view of seated prosthesis over Transitional Implants.

(Continued on next page)

FDUA TRANSITIONAL IMPLANTS AND ABUTMENTS

IMMEDIATE RESTORATION OF THREE FDUA TRANSITIONAL AND FOUR PERMANENT IMPLANTS WITH TRINIA AND FIXED-DETACHABLE UNIVERSAL ABUTMENTS



29. Vaseline® being applied ONLY to Hex Coping Screws to facilitate their removal after resin cementation of the coping.

30. Resin cement being applied to mechanically attach the copings to the TRINIA® prosthesis.

31. Additional resin cement being injected into the screw-retained TRINIA® prosthesis.

32. Occlusal view of three 5.0mm Hex Coping Screws in the resin cemented TRINIA® prosthesis and screw being removed.

33. Crown removal instrument being used to facilitate the removal of the prosthesis.

34. TRINIA® prosthesis prior to the removal of a resin embedded suture.

35. View of three mechanically cemented copings within TRINIA® prosthesis after the removal of extraneous cement.

36. Occlusal view of TRINIA® prosthesis after removal of extraneous cement.

37. Hex Coping Screw being removed with a Hex Screwdriver to adjust the flange of the prosthesis, which is impinging on the mucosa.

38. Flange adjusted TRINIA® prosthesis being seated.

39. Hex Screwdriver being used to fasten the flange-modified prosthesis.

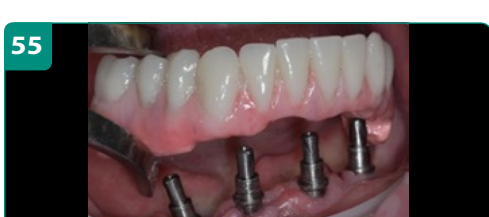
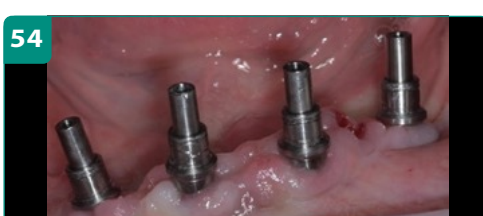
40. Flowable composite being light cured.

41. View of screw-retained transitional TRINIA® prosthesis.

42. Post-insertion panoramic radiograph of four permanent implants and a screw-retained TRINIA prosthesis supported by three FDUA Transitional Implants.

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IMMEDIATE RESTORATION OF THREE FDU TRANSITIONAL AND FOUR PERMANENT IMPLANTS WITH TRINIA AND FIXED-DETACHABLE UNIVERSAL ABUTMENTS

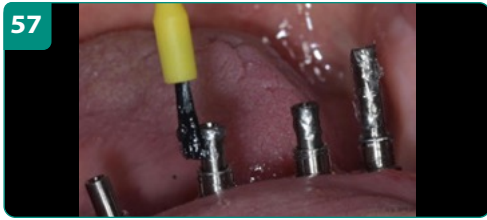


- 43.** Four 3.0mm Guide Pins in the wells of uncovered Bicon SHORT® Implants. Note the three Fixed-Detachable Transitional Implants, six months after their placement.
- 44.** A Fixed-Detachable Universal Abutment (FDUA) being inserted into the 3.0mm well of an uncovered Bicon SHORT® Implant.
- 45.** View of three FDU Transitional Implants and four Fixed-Detachable Universal Abutments prior to making an abutment-level transfer impression.
- 46.** Transfer Coping being fastened to Fixed-Detachable Universal Abutment.
- 47.** Resin cement being applied to Transfer Copings to assure their relative position during the making of a conventional open tray abutment-level transfer impression.
- 48.** Four attached Transfer Copings within conventional impression material.
- 49.** FDU Transitional Implant being removed with a Transitional Implant Latch Driver.
- 50.** View of four Fixed-Detachable Universal Abutments and site of recently removed Fixed-Detachable Transitional Implant seven months after its placement.
- 51.** Permanent TRINIA® prosthesis with four bores for the chairside attachment of four Final Copings.
- 52.** Permanent TRINIA® prosthesis being inserted onto four Fixed-Detachable Universal Abutments.
- 53.** First Final Coping being seated onto Fixed-Detachable Universal Abutment.
- 54.** Four Fixed-Detachable Universal Abutments attached with four 5.0mm Hex Coping Screws.
- 55.** TRINIA® prosthesis being seated onto copings to confirm a path of insertion and a passive seating.
- 56.** Images of MIRATRAY IMPLANT clear plastic tray, which is significantly easier to use.

(Continued on next page)

FDUA TRANSITIONAL IMPLANTS AND ABUTMENTS

IMMEDIATE RESTORATION OF THREE FDU TRANSITIONAL AND FOUR PERMANENT IMPLANTS WITH TRINIA AND FIXED-DETACHABLE UNIVERSAL ABUTMENTS



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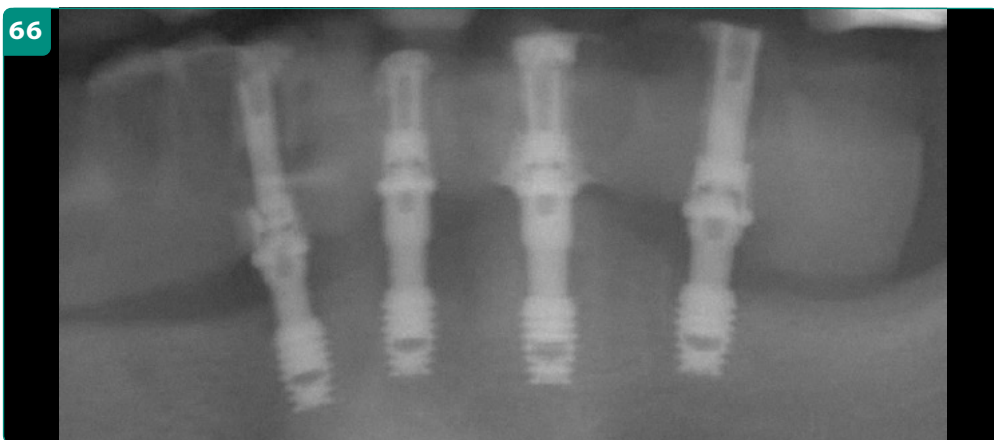
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65



66

57. Vaseline® being applied to the shaft of the screws to facilitate their removal after the resin cementing of the four Fixed-Detachable Universal Abutments.

58. Resin cement being applied to the bores of the TRINIA® prosthesis. TRINIA® prosthesis being inserted onto copings for their cementation to the prosthesis.

59. TRINIA® prosthesis being firmly seated onto copings for their cementation to the prosthesis.

60. Resin cement in the bores of prosthesis being light cured, while the Hex Screwdrivers prevent cement from filling the hex bores of the screws.

61. Four Final Copings cemented within TRINIA® prosthesis, prior to the removal of extraneous cement.

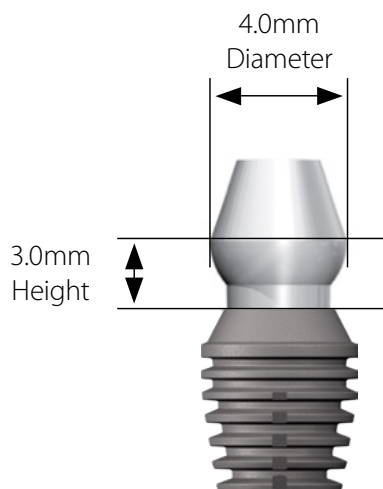
62. TRINIA® prosthesis being fastened to a Fixed-Detachable Universal Abutment with a 10.0mm Hex Coping Screw.

63. Hex Coping Screw being shortened extraorally with a carbide bur to be slightly below the occlusal height of the prosthesis.

64. Hex Coping Screws can be shortened intraorally so that they will be slightly below the occlusal height of the prosthesis.

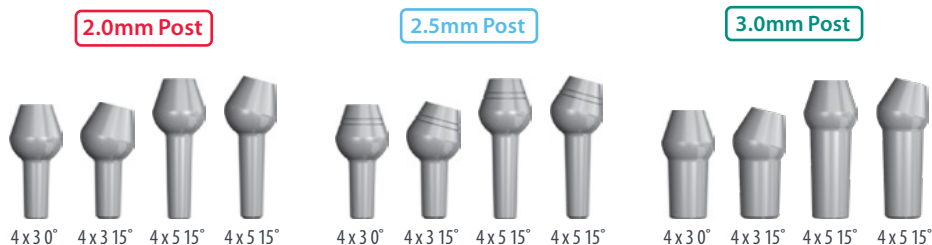
65. Facial view of a permanent mandibular TRINIA® prosthesis.

66. Post-insertion radiograph of a permanent TRINIA prosthesis attached with Fixed-Detachable Universal Abutments and Copings to four Bicon SHORT® Implants.



4.0mm Diameter 3.0mm Height 0° Abutment
5.0 x 6.0mm SHORT® Implant

The Fixed-Detachable Abutment is the original abutment for screw-retained prosthetics. They are available with a 4.0mm diameter and heights of 3.0mm and 5.0mm with angulations of 0 and 15 degrees. It is similar to the Fixed-Detachable Universal Abutment, which is becoming the preferred abutment because its prosthetic components are identical to those of the FDUA Transitional Implant.

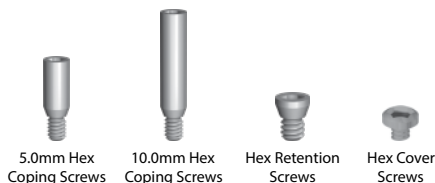


View product information:
bicon.com/fd

FIXED-DETACHABLE COMPONENTS



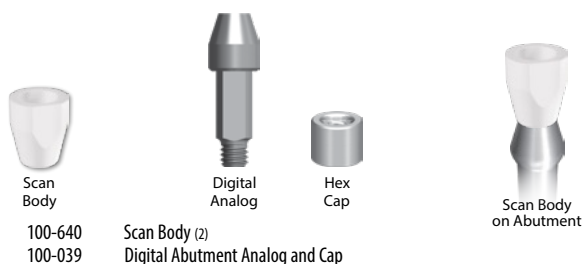
PART NO.	DESCRIPTION
100-005	Plastic Transfer and Castable Coping (4)
100-019	Titanium Transfer Coping (4)
100-006	Titanium Standard Abutment Analog (4)
100-022	Titanium Final Coping (2)



PART NO.	DESCRIPTION
100-016	5.0mm Hex Coping Screws (4)
100-017	10.0mm Hex Coping Screws (4)
100-020	Hex Retention Screws (4)
100-021	Hex Cover Screws (4)



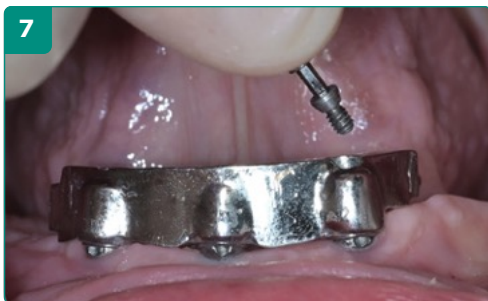
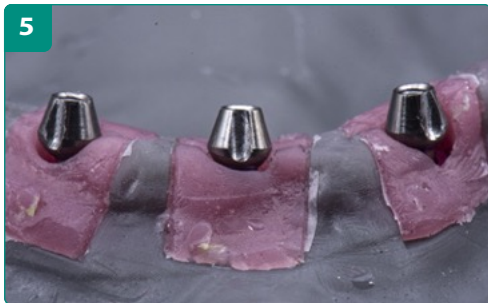
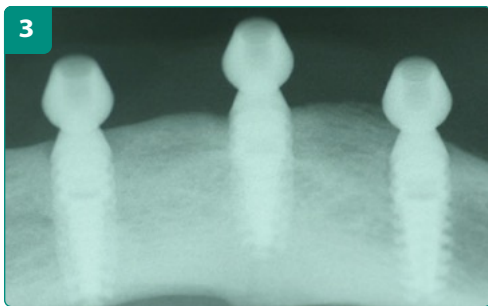
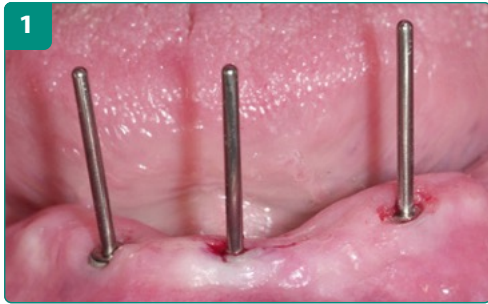
PART NO.	DESCRIPTION
101-024	10mm Hex Screwdriver
101-026	20mm Hex Screwdriver



PART NO.	DESCRIPTION
100-640	Scan Body (2)
100-039	Digital Abutment Analog and Cap

FIXED-DETACHABLE ABUTMENTS

INDIRECT TRANSFER IMPRESSION AND RESTORATION



1. Three standard shaft 2.0mm Guide Pins in the wells of their implants to assess their osseointegration and trajectories.
2. Clinical image of three Fixed-Detachable Abutments.
3. Radiographic image of three Fixed-Detachable Abutments seated in the corresponding implants.
4. Transfer Coping being attached to a Fixed-Detachable Abutment with a 10.0mm Hex Coping Screw for the making of an open tray transfer impression.
5. Three Standard Analogs in a poured soft tissue stone model prior to the fabrication of a cast metal bar framework.
6. Cast metal framework being seated on three Fixed-Detachable Copings.
7. Hex Retention Screw being inserted into the threaded bore of a Fixed-Detachable Abutment to fasten the cast metal framework to the abutments.
8. Facial view of the cast metal bar affixed to three Fixed-Detachable Abutments.

TRINIA PROSTHETIC OPTIONS



TRINIA®

PART NO.	DESCRIPTION	SIZE	COLOR
612-115	TRINIA® Disc	98mm x 15mm	Ivory
612-125	TRINIA® Disc	98mm x 25mm	Ivory
612-215	TRINIA® Disc	98mm x 15mm	Pink
612-225	TRINIA® Disc	98mm x 25mm	Pink



Ivory TRINIA® Disc



Pink TRINIA® Disc



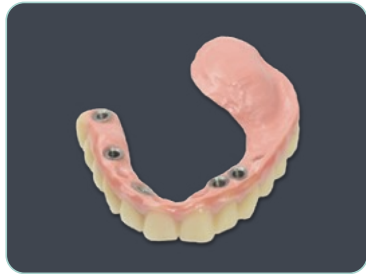
View product information:
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Prosthetic Frameworks



Fixed Prosthesis



Telescopic Obturator



Winged Provisional



Removable Prosthesis



Transitional Bridge



- Three examples of diamond-coated and nano-diamond milling burs
- Milling strategy is specific to machine and burs
- Strategy for PMMA usually works well



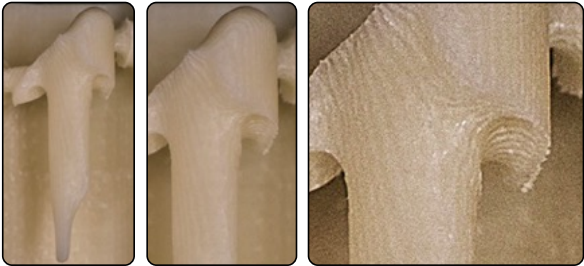
View Lab video here:

bicon.com/lab-video

TRINIA FOR DIGITAL POST AND CORES



Proper Orientation of Fibers



Note the orientation of the TRINIA® fibers comprising the post and core. For post and core designs less than 15mm in length, use TRINIA® EPC. Otherwise, use standard TRINIA® Blocks. *Images courtesy of Dr. Jonas Adrian Helmut Vogler, M.Sc • Gießen, Germany.*

TRINIA® EPC* Blocks

PART NO.	DESCRIPTION	SIZE	COLOR
616-115	TRINIA® EPC Block (2)	40 x 19 x 15mm	Ivory

**For post and core designs greater than 15mm in length.*



TRINIA® Blocks

PART NO.	DESCRIPTION	SIZE	COLOR
613-115	TRINIA® Block* (2)	55 x 19 x 15mm	Ivory
614-115	TRINIA® Block* (2)	40 x 19 x 15mm	Ivory

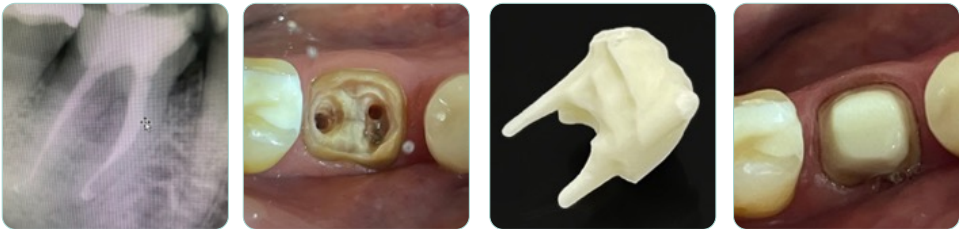
**For post and core designs less than 15mm in length.*



TRINIA offers similar translucency to dentin, which resolves the aesthetic issue of post and core restorations.

NOTE

- Efficient and effective chairside digital fabrication of endodontic post and core restorations
- TRINIA® restorations have a similar modulus of elasticity and translucency to dentin
- The post and core restoration does not have an interface, since it is milled from one material
- If two restorations are milled together, eight post and core restorations can be milled from one block



Images courtesy of Dr. Peter Chaloupka • Munich, Germany



TRINIA ATTRIBUTES

TRINIA is a multi-directional fiber-reinforced composite material that has similar mechanical and aesthetic properties to dentin and bone, making it an excellent material for dental restorations.

1. Modulus of Elasticity

Value: 18 GPa, similar to cortical bone and within the range of dentin's modulus (17.7-29.8 GPa).

Biomimetic Design: This lower modulus compared to zirconia (210 GPa) and CoCr (240 GPa) reduces stress on implants, abutments, and surrounding bone during function.

2. Lightweight and Durable

Composition: TRINIA's fiber-reinforced structure provides a favorable strength-to-weight ratio.

Clinical Success: It exhibits high survival rates (>90%) over 10+ years, with better outcomes than zirconia, which has a higher chipping rate (22.8% in partial dentures, 34.8% in full-arch reconstructions).

3. Optical Properties

Contrast Ratio: 0.8, closely matching dentin (0.65).

Aesthetic Integration: This similarity enhances seamless transitions from implant abutments to aesthetic restorations, making it suitable for digital workflows.

4. Repairability

Fiber-Reinforced Resin Matrix: Allows for easy intra-oral or chairside repairs, unlike monolithic zirconia, which often requires full prosthesis replacement after fractures.

5. Universal Compatibility

Composition: 55% glass fiber, 45% epoxy matrix, facilitating strong bonding with various restorative materials, offering versatility in both laboratory and clinical settings.

6. Long-Term Evidence

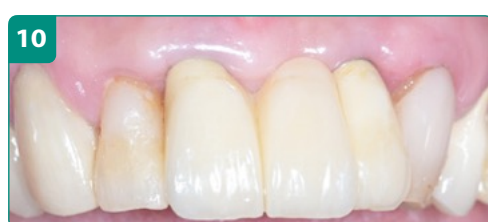
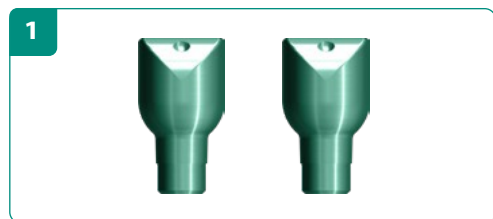
Research: Proven success (≥ 10 years) in fixed dental prostheses and full-arch reconstructions with three or more implants. In contrast, the long-term data for zirconia-based reconstructions is still developing.

In summary, TRINIA provides a more dentin-like behavior and aesthetics than traditional materials like zirconia or CoCr, with benefits like stress reduction, repairability, and long-term evidence, making it a reliable choice for tooth and implant-supported restorations.

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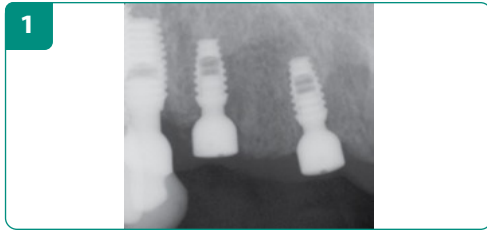
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TRINIA CEMENTED PROSTHESIS IN TWO CLINICAL VISITS



1. Two 5T Scannable Temporary Abutments.
2. Clinical image of two 5T Scannable Temporary Abutments.
3. Digital scan.
4. Prosthesis on two Universal Abutments.
5. Scannable Temporary Abutment being removed from well of its implant.
6. Scannable Temporary Abutment being removed from well of its implant.
7. Abutments in Vaseline®-lined bores of resin seating jig.
8. Abutments being definitively seated in their implant wells.
9. Resin cement being injected into the bore of prosthesis.
10. Clinical view of prosthesis during the patient's second clinical visit.
11. Patient's smile.
12. Post insertion radiograph

TRINIA CEMENTED PROSTHESIS IN TWO CLINICAL VISITS



- 1.** Post insertion radiograph of two one stage implant placements with Scannable Temporary Abutments.
- 2.** Clinical view of two Scannable Temporary Abutments ten days after their insertion.
- 3.** Intraoral digital scanning.
- 4.** Digital intraoral scan.
- 5.** TRINIA prosthesis on two Universal Abutments.
- 6.** Scannable Temporary Abutment being removed from its implant.
- 7.** Prosthesis being used to orient and initially seat abutments into the well of their implants.
- 8.** Prosthesis being inserted onto abutments to evaluate its fit.
- 9.** Interproximal contacts being confirmed with dental floss.
- 10.** Two modified abutments, prior to being definitively seated with a resin jig.
- 11.** Resin jig stabilizing abutments while they are being definitively seated.
- 12.** Resin seating jig being removed.

(Continued on next page)

TRINIA CEMENTED PROSTHESIS IN TWO CLINICAL VISITS

13



14



13. Prosthesis being inserted with indicator paste to reveal any impingement on the soft tissue.

14. Premature contact of the pontic area is revealed.

15



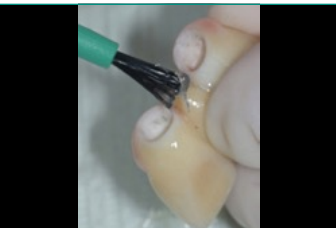
16



15. Crestal relieving incision was made to remove any mucosal interference with the seating of the prosthesis.

16. Prosthesis being seated to confirm.

17



18



17. Vaseline® being applied to facilitate removal of extraneous cement.

18. Resin cement being injected into bore of prosthesis.

19



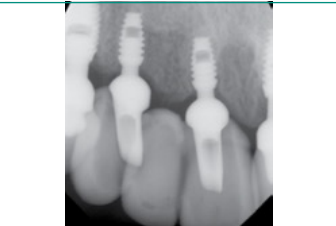
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19. Prosthesis being cemented onto the implant abutments.

20. Occlusal markings on cemented prosthesis.

21



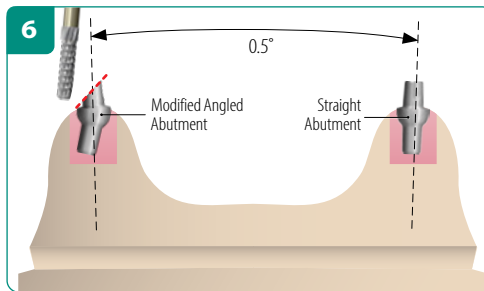
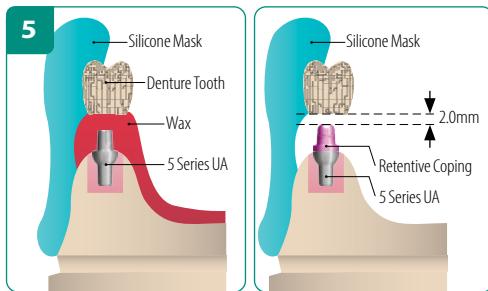
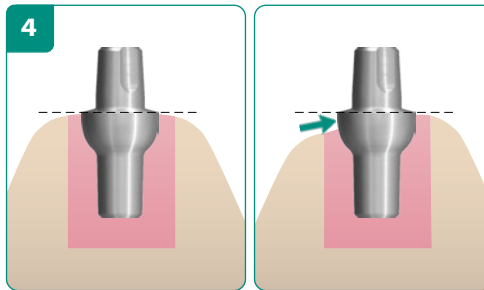
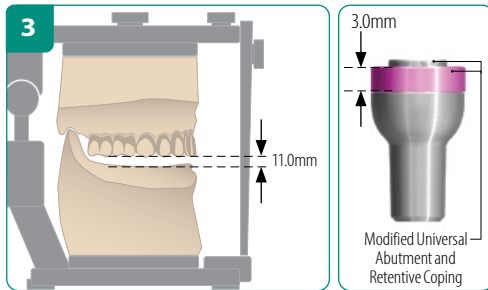
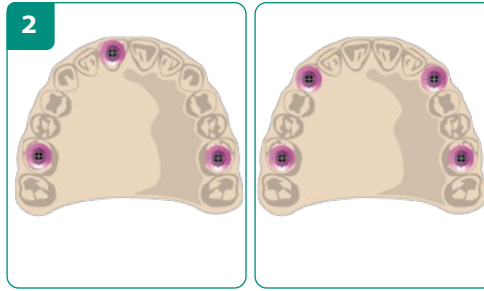
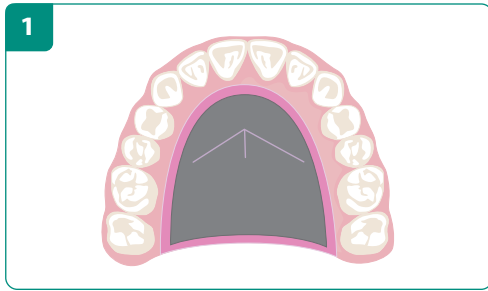
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21. Post insertion radiograph of cemented prosthesis.

22. Patient's smile.

LABORATORY CONSIDERATIONS FOR TRINIA TELESCOPIC RESTORATIONS WITH RETENTIVE COPINGS



1. Confirm the initial occlusal registration with a Gothic Arch tracing prior to the fabrication of an approved diagnostic wax-up for the fabrication of a surgical guide to facilitate the placement of the implants in the middle of the intended tooth.
2. Use three or four appropriately-spaced implants to facilitate the fabrication of the prosthesis; five or more implants unnecessarily complicates the prosthetics. If possible, place some implants while there are still teeth present, which will provide the technician with significant landmarks for fabricating the TRINIA prosthesis.
3. If necessary, open the bite to achieve at least 11.0mm of clearance from ridge to opposing occlusion for sufficient prosthetic space. If the bite (vertical dimension of occlusion or VDO) cannot be opened, then the Universal Abutment (UA) and Retentive Coping can be reduced. The coping can be retentive even as a 3.0mm ring. Alternatively, use a retentive ring. Low profile UAs should NOT be used for full-arch TRINIA prostheses.
4. Standard profile or taller UAs should be used with their shoulder minimally above the soft tissue. In non-aesthetic areas such as sublingual areas, the shoulder can be significantly higher to facilitate cleaning and mucosal health.

UA COPINGS AND RINGS*



PART NO.	DESCRIPTION
105-700	UA5 LP Retentive Copings
105-705	UA5 LP Passive Copings
105-710	UA5 SP/TP/XP Retentive Copings
105-715	UA5 SP/TP/XP Passive Copings
105-720	UA5 LP Retentive Ring
105-730	UA5 SP/TP/XP Retentive Ring

*Only available for the 5-Series Universal Abutments.

SI-TEC®

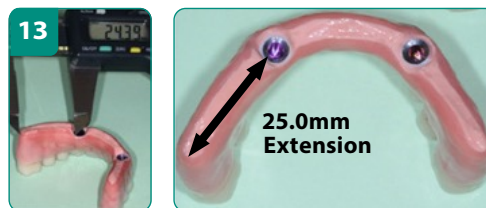
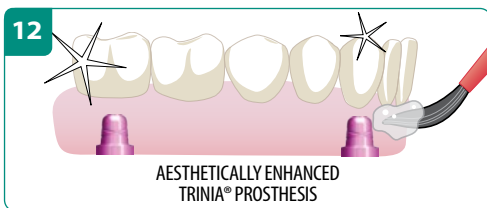
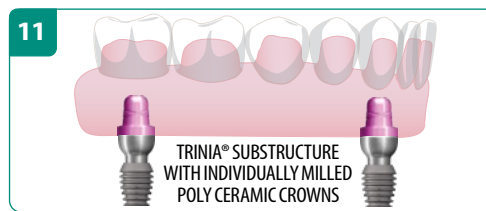
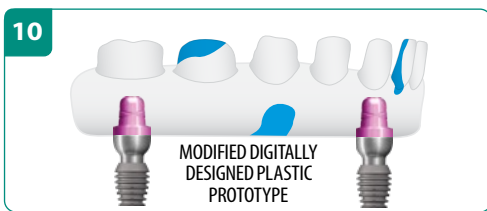
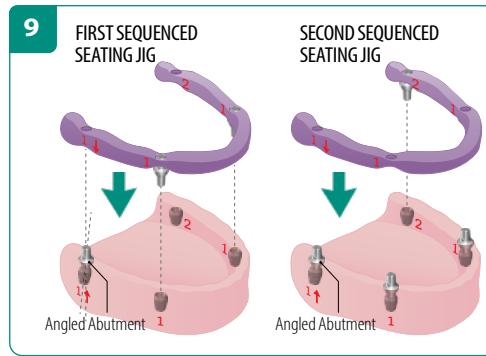
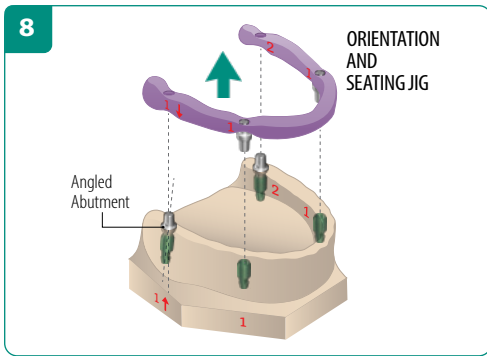
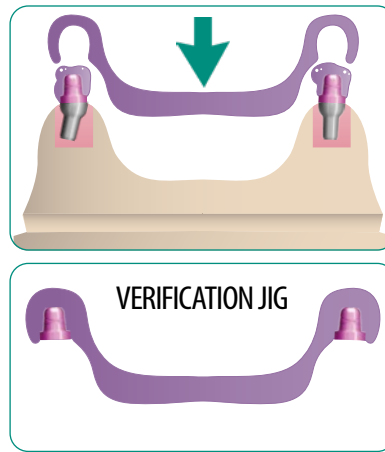
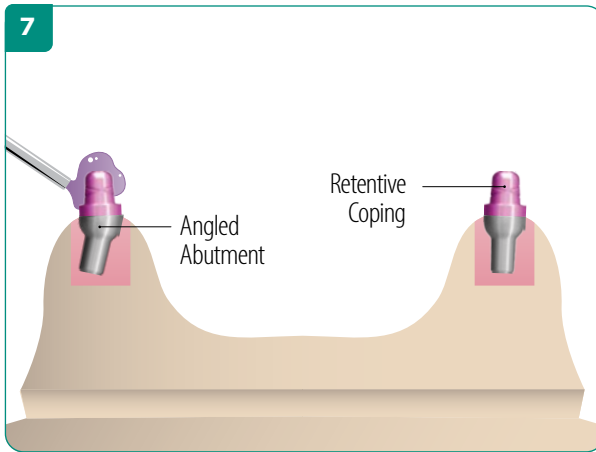


Cast custom metal copings with plastic inserts

5. Fabricate a facial silicone mask of a teeth arrangement to verify there is at least 2.0mm for the essential thickness of TRINIA material over the Retentive Copings for strength. Passive Copings can be used to reduce the retentiveness of a prosthesis.
6. The UAs must have 0.5mm of divergence amongst them at their cervical area to provide for retention. The coronal aspect of a UA may be reduced (note the dotted red line) to facilitate a path of insertion and withdrawal without compromising the retentiveness of the TRINIA prosthesis. Moreover, if the divergence is too great, the custom cast copings with Si-tec® retentive colored inserts.

(Continued on next page)

LABORATORY CONSIDERATIONS FOR TRINIA TELESCOPIC RESTORATIONS WITH RETENTIVE COPINGS



7. Fabricate a light-cured resin verification jig with Retentive Copings to verify that the TRINIA prosthesis will have a path of insertion and withdrawal as well as be retentive.
8. Fabricate one or two light-cured resin orientation and seating jigs. These are appropriately numerically marked coinciding with the numerical markings on the master model to indicate the sequencing for inserting each UA into the corresponding well of the patient's implants.
9. Most often, the abutments are loosely placed into the Vaseline®-lined seating jig for transport and seating into the well of the implants. In certain situations, some angled abutments need to be loosely seated into the implant well and subsequently positioned by placing the jig onto it. An arrow on the model and jig can indicate this need to the clinician.
10. Initially, digitally design and mill an inexpensive plastic substructure to manually and visually evaluate its appropriateness. If necessary, modify it as blue markings indicate prior to scanning it for the fabrication of the permanent TRINIA substructure. The blue color in the graphic shows example modifications.
11. Note the milled TRINIA substructure from the scan of a modified plastic substructure. The prepped teeth design facilitates the fabrication of digitally-milled crowns, which will be cemented onto the TRINIA substructure.
12. The aesthetics of the TRINIA substructure and the milled poly-ceramic crowns can be enhanced by cutting back their facial surface and applying indirect polyceramic materials.
13. With TRINIA, canine implants can provide first molar occlusion as evidenced by the depicted 25.0mm extension.

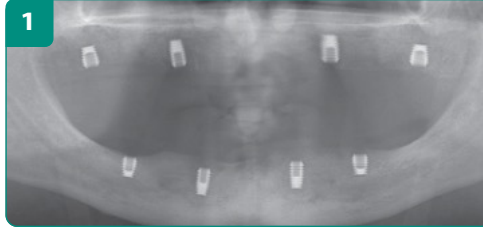


View lab considerations video:
bicon.com/trinia-lab

FULL-ARCH TELESCOPIC TRINIA® RESTORATION



View case study video here:
bicon.com/trinia-case



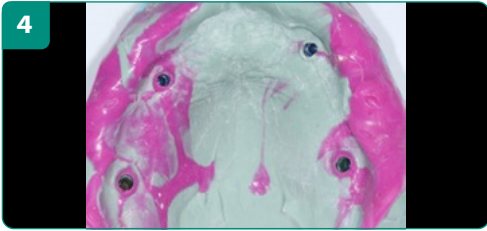
1. Five-month post-operative radiograph of eight Bicon SHORT® Implants.



2. Two blue 2.5mm and two green 3.0mm titanium Impression Posts seated in their respective maxillary implants for the making of a full-arch implant-level transfer impression.



3. Impression material being injected around the maxillary Impression Posts and their corresponding acrylic Impression Sleeves.



4. Maxillary full arch implant-level transfer impression.



5. Two blue 2.5mm and two green 3.0mm titanium Impression Posts seated in their respective mandibular implants for the making of a full arch implant-level transfer impression.



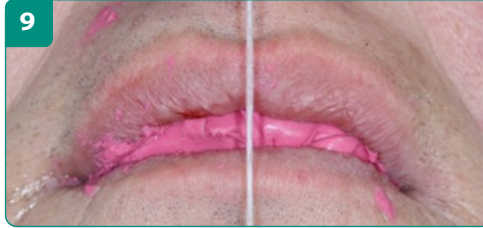
6. Impression material being injected around the mandibular Impression Posts and their corresponding acrylic Impression Sleeves.



7. Mandibular full-arch implant-level transfer impression.



8. Vertical dimension of occlusion (VDO) being recorded.



9. Midline being denoted with dental floss while the occlusal registration is recorded.



10. Two blue and two green acrylic Impression Sleeves captured within the maxillary side of occlusal registration material.



11. Two blue acrylic Impression Sleeves captured within the mandibular side of occlusal registration material.



12. Stone model being poured around two blue and two green Implant Analogs seated in the maxillary full arch implant-level transfer impression.



13. Stone model being poured around two blue and two green Implant Analogs seated in the mandibular full arch implant-level transfer impression.

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FULL-ARCH TELESCOPIC TRINIA® RESTORATION



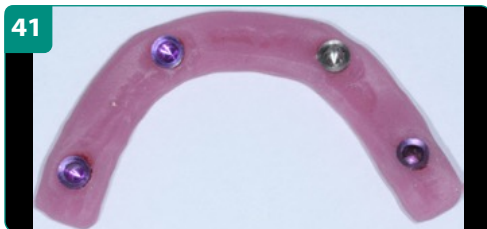
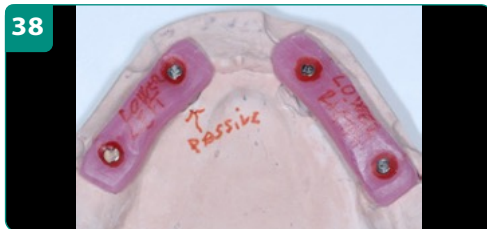
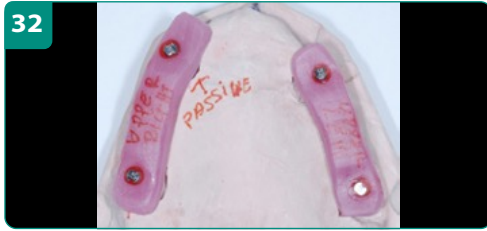
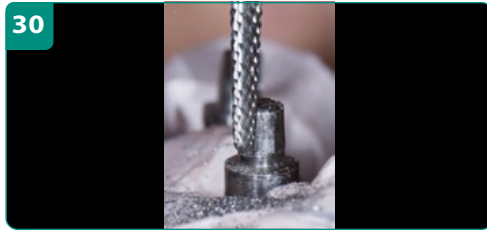
- 14.** Maxillary and mandibular waxed teeth arrangements seated on their stone models.
- 15.** Four titanium Temporary Abutments seated in their maxillary implants.
- 16.** Four maxillary implant sulci.
- 17.** Impression Post being used with an implant to stabilize the waxed teeth arrangement.
- 18.** Four titanium Temporary Abutments seated in their mandibular implants.
- 19.** Four mandibular implant sulci.
- 20.** Impression Post being used with an implant to stabilize the waxed teeth arrangement.
- 21.** Occlusal registration being recorded with the maxillary and mandibular waxed teeth arrangements.
- 22.** Occlusal-side and ridge-side views of maxillary and mandibular substructures milled in a TRINIA® disc.
- 23.** Bonding agent being applied to a TRINIA® substructure prior to its bonding to anterior composite denture teeth using a silicone mask.
- 24.** Maxillary and mandibular TRINIA® substructures with their bonded anterior composite denture teeth in occlusion.
- 25.** Posterior CAD/CAM hybrid ceramic teeth milled in a disc.
- 26.** Occlusal view of the mandibular TRINIA® substructure with bonded anterior composite denture teeth and posterior CAD/CAM hybrid ceramic teeth.
- 27.** Occlusal view of the finished maxillary TRINIA® prosthesis on a stone model.

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View case study video here:
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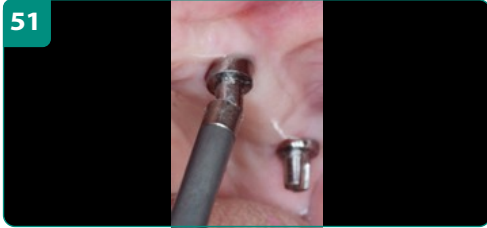
FULL-ARCH TELESCOPIC TRINIA® RESTORATION



- 29.** Occlusal view of the finished mandibular TRINIA® prosthesis on a stone model.
- 30.** 5 Series Tall Profile (5T) Universal Abutment being modified to provide a narrower facial profile.
- 31.** Four 5 Series Universal Abutments in Implant Analogs within a maxillary stone model.
- 32.** Two resin orientation and seating jigs on their 5 Series Universal Abutments on a maxillary stone model.
- 33.** Numerals indicating the sequence for the insertion of the first two maxillary 5 Series Universal Abutments.
- 34.** Numerals indicating the sequence for the insertion of the second two maxillary 5 Series Universal Abutments.
- 35.** Maxillary verification jig with one passive and three retentive Universal Abutment copings.
- 36.** Maxillary verification jig with Universal Abutment copings seated on four 5 Series Universal Abutments on a stone model.
- 37.** Four 5 Series Universal Abutments in Implant Analogs within a mandibular stone model.
- 38.** Two resin orientation and seating jigs on their 5 Series Universal Abutments on a mandibular stone model.
- 39.** Numerals indicating the sequence for the insertion of the first two mandibular 5 Series Universal Abutments.
- 40.** Numerals indicating the sequence for the insertion of the second two mandibular 5 Series Universal Abutments.
- 41.** Mandibular verification jig with one passive and three retentive Universal Abutment copings.
- 42.** Mandibular verification jig with Universal Abutment Copings seated on four 5 Series Universal Abutments on a stone model.

(Continued on next page)

FULL-ARCH TELESCOPIC TRINIA® RESTORATION



43. Left profile view of the finished maxillary TRINIA® prosthesis seated on a stone model with numerals indicating the first sequence for the insertion of the 5 Series Universal Abutments.

44. Right profile view of the finished maxillary TRINIA® prosthesis seated on a stone model with numerals indicating the second sequence for the insertion of the 5 Series Universal Abutments.

45. Facial view of the finished mandibular TRINIA® prosthesis seated on a stone model with numerals indicating the sequence for the insertion of the 5 Series Universal Abutments.

46. Two first-sequenced 5 Series Universal Abutments being transported to their implants in the Vaseline®-lined bores of a numerically marked orientation and seating jig.

47. Orientation and seating jig being tapped with a Standard Seating Tip attached to a Threaded Straight Handle to simultaneously seat the 5 Series Universal Abutments.

48. Red 2.0mm Seating Tip attached to a Threaded Straight Handle being used to seat the anterior 5 Series Universal Abutment while it is positioned in the orientation and seating jig.

49. Red 2.0mm Seating Tip attached to a Threaded Straight Handle being used to seat the posterior 5 Series Universal Abutment while it is positioned in the orientation and seating jig.

50. Crown removal instrument being used to remove the orientation and seating jig from the 5 Series Universal Abutments.

51. Standard Seating Tip attached to a Threaded Straight Handle being used to definitively seat the 5 Series Universal Abutment.

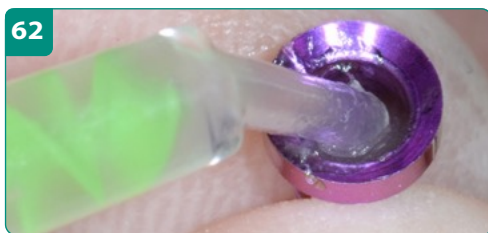
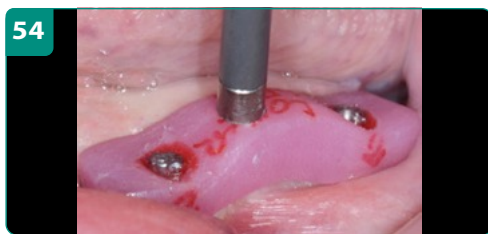
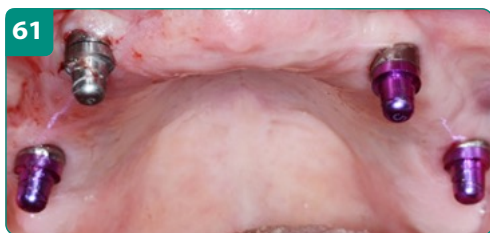
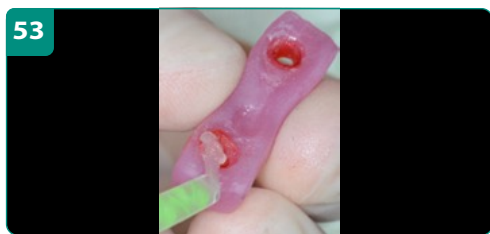
52. Four definitively seated 5 Series Universal Abutments.

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FULL-ARCH TELESCOPIC TRINIA® RESTORATION



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53. Vaseline® being applied to the bore of the orientation and seating jig to facilitate its removal without displacing a 5 Series Universal Abutment.

54. Orientation and seating jig being tapped with a Standard Seating Tip attached to a Threaded Straight Handle to simultaneously seat the 5 Series Universal Abutments.

55. Standard Seating Tip attached to a Threaded Straight Handle being used to seat the anterior 5 Series Universal Abutment while it is positioned in the orientation and seating jig.

56. Standard Seating Tip attached to a Threaded Straight Handle being used to seat the posterior 5 Series Universal Abutment while it is positioned in the orientation and seating jig.

57. Crown removal instrument being used to remove the orientation and seating jig from the 5 Series Universal Abutments.

58. Standard Seating Tip attached to a Threaded Straight Handle being used to definitively seat the 5 Series Universal Abutment.

59. Four definitively seated 5 Series Universal Abutments.

60. Vaseline® being applied to a passive Universal Abutment coping to facilitate its removal from the 5 Series Universal Abutment after its intraoral cementation into a bore of the TRINIA® prosthesis.

61. One passive and three retentive Universal Abutment copings seated on their respective maxillary 5 Series Universal Abutments.

62. Vaseline® being applied to the retentive Universal Abutment coping to facilitate its removal from the 5 Series Universal Abutment after its cementation into a bore of the TRINIA® prosthesis.

63. One passive and three retentive Universal Abutment copings seated on their respective mandibular 5 Series Universal Abutments.

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FULL-ARCH TELESCOPIC TRINIA® RESTORATION

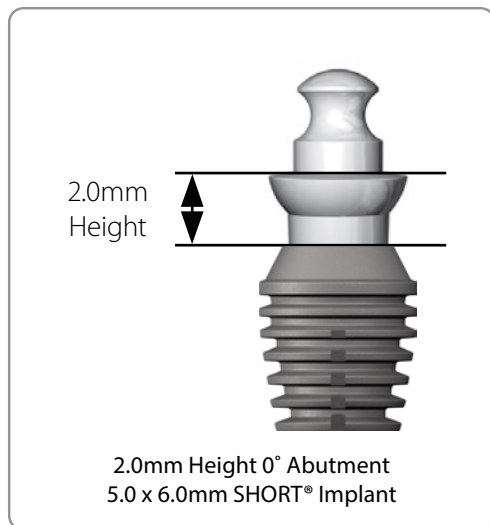


- 64.** Vaseline® being applied to the maxillary prosthesis to facilitate the removal of extraneous resin cement after its intraoral cementation to the Universal Abutment copings.
- 65.** Resin cement being applied to the bores of the maxillary prosthesis.
- 66.** Vaseline® being applied to the mandibular prosthesis to facilitate the removal of extraneous resin cement after its intraoral cementation to the Universal Abutment copings.
- 67.** Resin cement being applied to the bores of the mandibular prosthesis.
- 68.** Cotton rolls being used to apply occlusal pressure during the cementation of the maxillary and mandibular prostheses to their Universal Abutment copings.
- 69.** Ridge-side view of four Universal Abutment copings cemented to the bores of the maxillary prosthesis. Ridge-side view of four Universal Abutment copings cemented to the bores of the mandibular prosthesis.
- 70.** Articulating paper being used to confirm appropriate occlusal contacts.
- 71.** Post-insertion view of the maxillary and mandibular telescopic TRINIA® prostheses in occlusion.
- 72.** Occlusal view of the maxillary telescopic TRINIA® prosthesis.
- 73.** Occlusal view of the mandibular telescopic TRINIA® prosthesis.
- 74.** Facial view of the maxillary telescopic TRINIA® prosthesis.
- 75.** Facial view of the mandibular telescopic TRINIA® prosthesis.
- 76.** Patient's smile with his telescopic TRINIA® prostheses.
- 77.** Post-insertion radiograph of the maxillary and mandibular telescopic TRINIA® prostheses with anterior composite denture teeth and posterior CAD/CAM hybrid ceramic teeth.

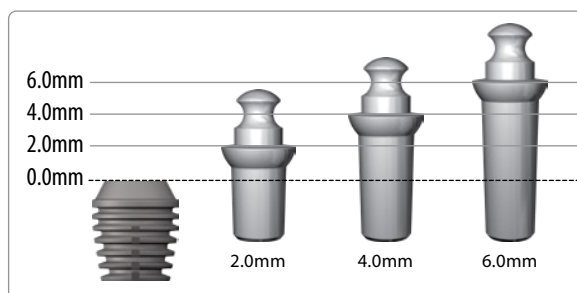


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Bicon implants are ideally placed 2.0mm to 3.0mm or more below the crest of bone; therefore, to accommodate the different depths of an implant below the mucosa, the Brevis Abutment is available in three heights of 2.0mm, 4.0mm, and 6.0mm with angulations of 0 and 15 degrees. The lengths correspond to the height of the abutment's shoulder above the implant. The Brevis Housing is available with rubber O-rings with enhanced retention or light retention.



View product information:
bicon.com/ba

NOTE

- Although the housing may be attached in the laboratory using a black impression cap and a transfer die, the intraoral technique is preferable for most clinicians.
- Use an occlusal registration jig with the opposing arch to prevent inadvertent displacement of the denture during the chairside technique.
- Use the 15° Brevis™ abutment to help achieve parallelism for non-parallel implants.
- The denture should neither rock nor pivot on either the abutments or the housings prior to applying flowable acrylic to mechanically attach the O-ring housings to the denture.
- Use a rubber dam and Vaseline® to prevent acrylic from locking the denture beneath the undercut of the abutments.
- Place acrylic into a syringe for ease of use and greater control.
- It is essential for the patient to clench bilaterally on cotton rolls to ensure proper seating of the housings in the denture.
- Acrylic which is too viscous may displace the housing causing the O-ring to wear prematurely.
- If the denture is too retentive, slightly relieve the inside of the O-ring lumen with a round bur or replace with a Light Retention Rubber O-ring.

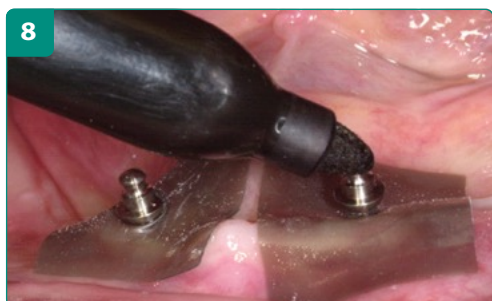
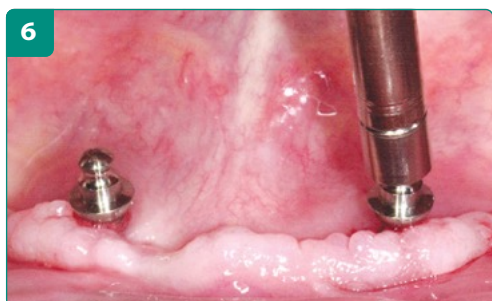
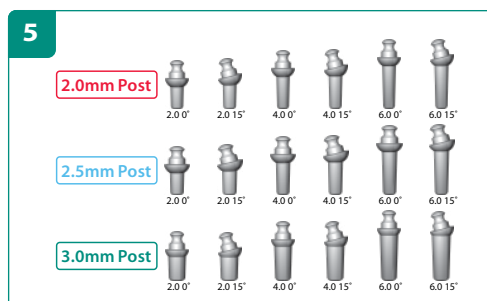
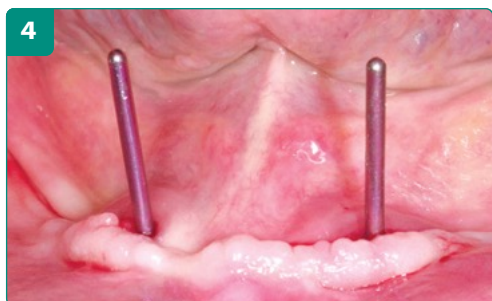
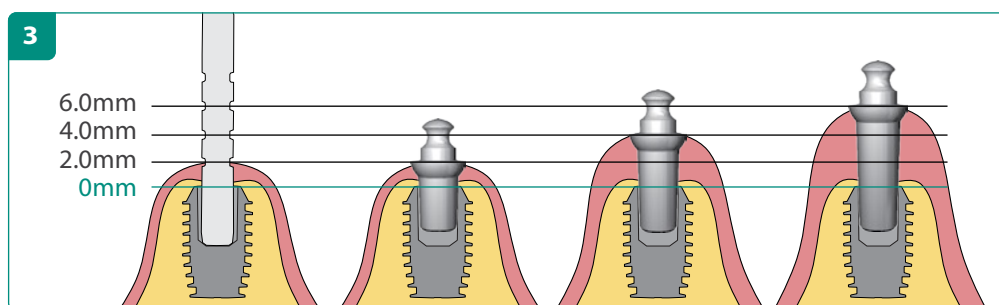
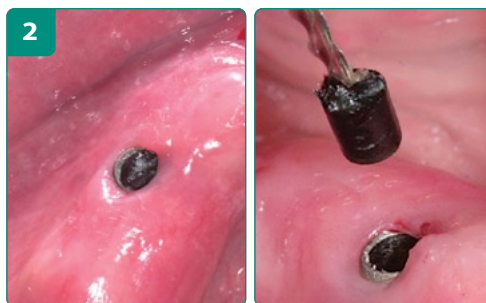


It is paramount that overdentures be completely tissue-borne and only implant-retained. If the acrylic is too viscous or only placed in the denture, it may cause displacement of the housing resulting in a misalignment of the housing and excessive wear of the rubber O-rings.

If the denture is inadvertently locked onto the Brevis™ abutment, it is advisable to tap it off rather than attempting to cut it off. The denture may be notched to facilitate the placement of a tapping instrument. Either the denture will be removed from the abutment or the abutment will be removed from the implant.

BREVIS™ ABUTMENTS

BREVIS™ CHAIRSIDE TECHNIQUE



1. A registration of the denture's occlusal relationship prior to the uncovering of the implants will facilitate that the denture is not inadvertently displaced by the Brevis Abutments or their housing during the mechanical attachment of the housings to the denture.
2. Uncover each implant using a small crestal incision and use the healing plug removal instrument to facilitate the removal of the black healing plug.
3. Use a shoulder depth gauge to facilitate the selection of the abutment height.
4. Place guide pins into the implants to determine their axial inclinations.
5. Brevis™ abutments are available in heights of 2.0, 4.0 and 6.0mm.
6. Rotate a combination of 0° and/or 15° angled abutments to achieve parallelism prior to their being seated with a gentle tap.
7. Place soft wax in the denture to act as a pressure indicator to determine the relative position of the abutments.
8. Alternatively, the top of the abutment may be marked with a felt tip pen to indicate the location of the abutment on the denture.
9. Liberally relieve the denture to accommodate the Brevis™ housings. Confirm clearance for the housings by placing the denture over the housings.

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BREVIS™ CHAIRSIDE TECHNIQUE

10



Brevis Housing

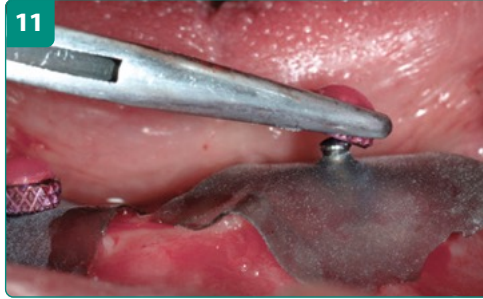


Rubber O-rings
Light Retention



Rubber O-rings
Enhanced Retention

11



10. Brevis housing and Light and Enhanced Rubber O-rings.

11. Prior to seating the housing onto the Brevis Abutment, place a piece of rubber dam onto the abutment's shoulder to prevent acrylic from locking under the abutment.

12. For added security, inject Vaseline® under the rubber dam.

12



13



13. Inject flowable acrylic around the Brevis™ housings and into the relieved portions of the existing denture.

14. Place the denture into the mouth and instruct the patient to clench bilaterally on cotton rolls to ensure proper seating of the denture.

14



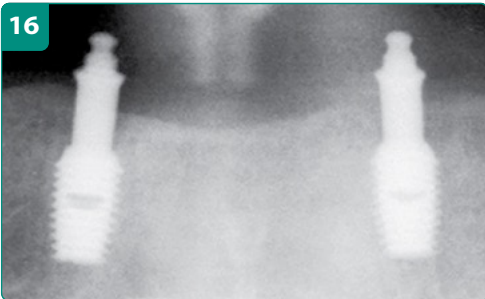
15



15. After removal of the denture with the attached housings, discard the rubber dam and remove any extraneous acrylic.

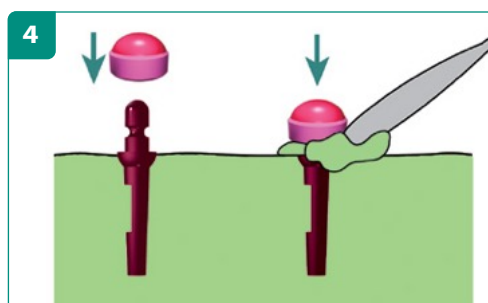
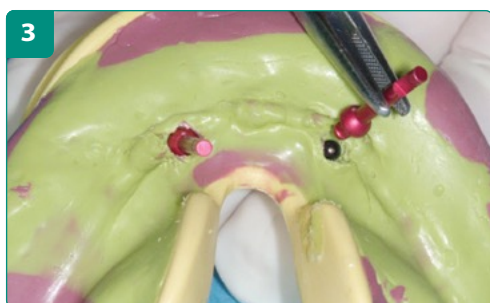
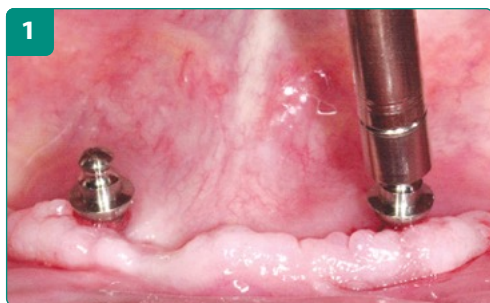
16. Radiograph of two subcrestally positioned Bicon implants with two 6.0mm Brevis Abutments.

16



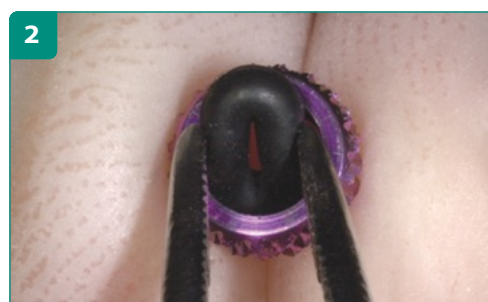
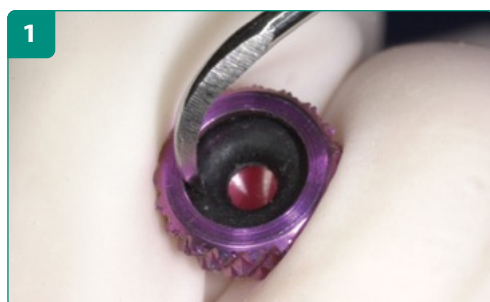
BREVIS™ ABUTMENTS

BREVIS™ INDIRECT TRANSFER TECHNIQUE



1. Choose and gently tap the Brevis™ abutments, whose shoulder will be above the mucosa with either an angularity of 0 or 15 degrees to provide for parallel abutments.
2. Seat the black plastic Impression Caps onto the Brevis abutments and make a conventional pickup impression of the seated Impression Caps.
3. Insert the aluminum transfer dies into the impression caps prior to the pouring of a master stone model.
4. Block out undercuts on the model and proceed to mechanically attach the housing in the denture as described on Pages 60 and 61.

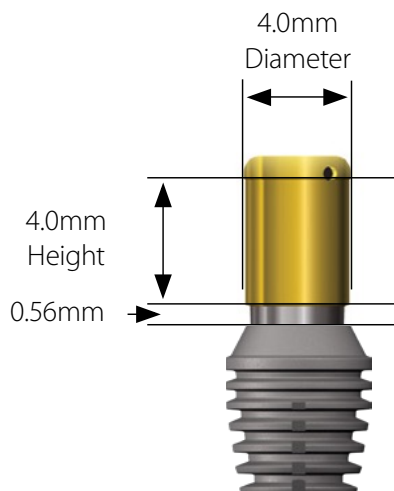
REMOVING/INSERTING RUBBER O-RING INTO BREVIS™ HOUSING



1. Remove a rubber O-ring by inserting a scaler or explorer between the housing and the rubber O-ring to pry the O-ring from the housing.
2. Using cotton pliers, squeeze the O-ring into a figure eight and insert it into the housing.
3. Place the entire O-ring into the retentive groove within the Brevis™ housing.
4. If the O-ring is fully inserted yet not secure in the retention lip of the housing, use an explorer to move the O-ring into place.

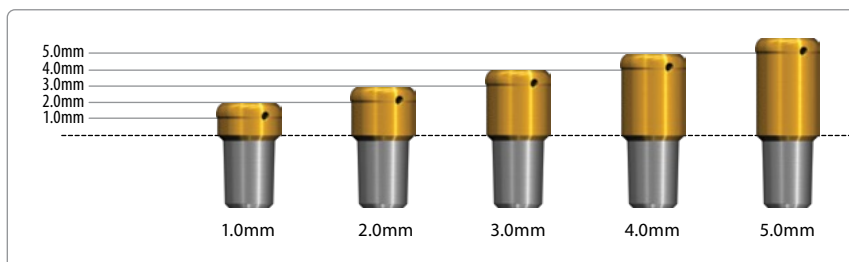
NOTE

- Some cleaning solutions with alcohol may dry rubber O-rings causing them to lose retentiveness.
- An inappropriately aligned housing will result in excessive wear of the rubber O-ring.
- If excessive wear of O-ring is noted, remove and re-align the housing in denture with a sufficiently flowable acrylic injected onto the housing and into the relieved denture.



4.0mm Height Abutment
5.0 x 6.0mm SHORT® Implant

The Overdenture Abutments are available with post diameters of 2.0, 2.5, and 3.0mm and heights of 1.0, 2.0, 3.0, 4.0, and 5.0mm. They are compatible with all LOCATOR® prosthetic components.



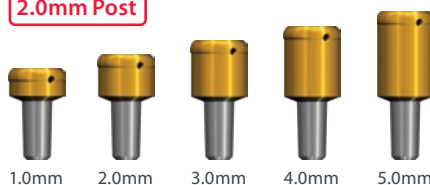
View product information:
bicon.com/oa

NOTE

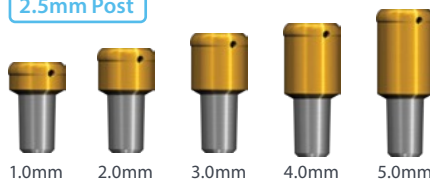
- The LOCATOR® Attachment features a denture component with a skirt that easily locates the mating implant abutment.
- The self-aligning ability of the attachment aids the patient in positioning their prosthesis in a similar manner as a guide plane created by a milled bar.
- The implant retained overdenture can be properly seated without damage to the attachment components. This is especially important for a patient lacking anatomical structures necessary to orient their denture due to a severely resorbed mandibular ridge.

LOCATOR® is a registered trademark of Zest IP Holdings, LLC, and the LOCATOR® implant attachment system is manufactured by Zest Dental Solutions.

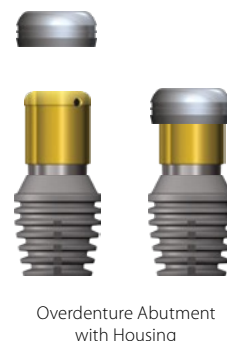
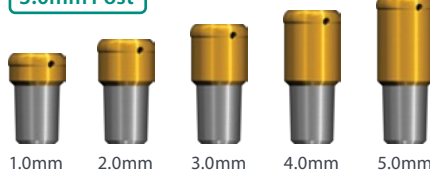
2.0mm Post



2.5mm Post



3.0mm Post



Overdenture Abutment
with Housing

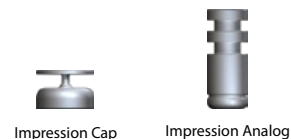
LOCATOR® OVERDENTURE ABUTMENT COMPONENTS



PART NO. 100-519 DESCRIPTION Male Processing Kit (2)



100-521 Extended Range Green Cap (4)
100-525 Extended Range Orange Cap (4)
100-526 Extended Range Red Cap (4)



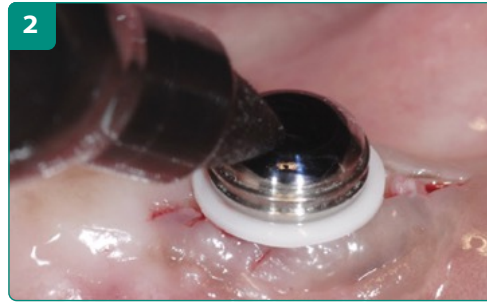
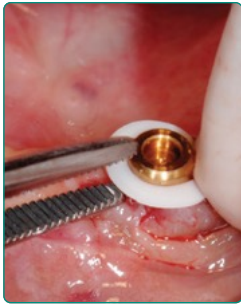
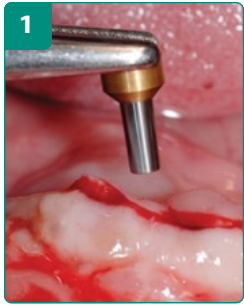
PART NO. 100-524 DESCRIPTION Impression Kit



101-839 Core Tool

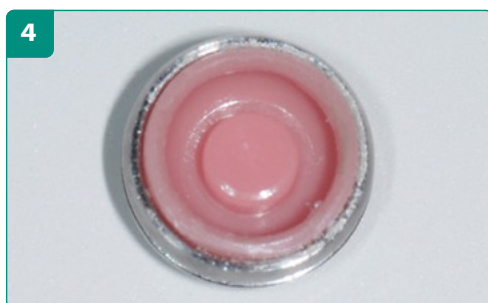
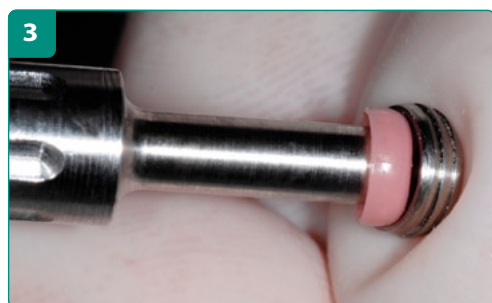
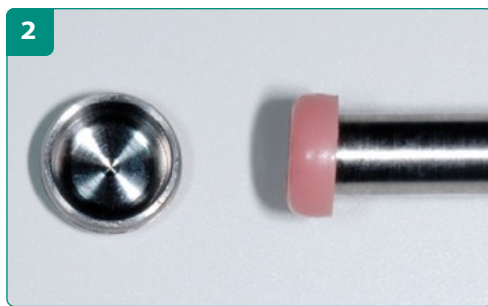
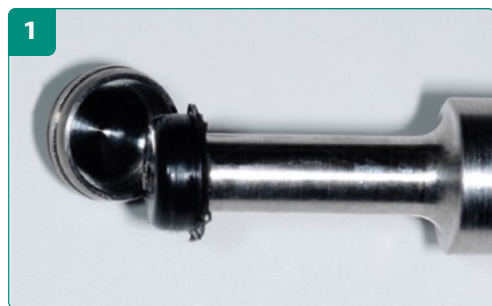
OVERDENTURE ABUTMENTS

OVERDENTURE ABUTMENT CHAIRSIDE TECHNIQUE



1. Insert and gently seat the Overdenture Abutment. Place blackout spacer over the abutment.
2. Mark the housing to indicate its location relative to the denture.
3. Insert the denture.
4. Black ink indicating the housing position.
5. An acrylic bur being used to provide room for the housing.
6. Flowable acrylic is being injected into the denture.
7. Flowable acrylic is being injected around the housing caps.
8. View of the denture after being cleaned and polished.
9. Denture being inserted prior to the patient applying occlusal force while the metal housing caps are being secured into the denture.

OVERDENTURE ABUTMENT HOUSING CAP



1. Remove the processing male from the metal housing cap with the LOCATOR® Core Tool.
2. Use the LOCATOR® Core Tool to hold the pink 1.4 kg (3.0 lb.) retention male.
3. Insert a pink 1.4 kg (3.0 lb.) retention male into the metal housing cap.
4. View of housing cap with its retention male.

LOCATOR® OVERDENTURE ABUTMENT COMPONENTS

2.3 kg (5.0 lb.) Retention Male
1.4 kg (3.0 lb.) Retention Male
0.7 kg (1.5 lb.) Retention Male

Processing Male
Metal Housing Cap
Blockout Spacer

PART NO. 100-519
DESCRIPTION Male Processing Kit (2)

1.4 kg (3.0 lb.) Retention Cap
0.9 kg (2.0 lb.) Retention Cap
0.5 kg (1.0 lb.) Retention Cap

100-521 Extended Range Green Cap (4)
100-525 Extended Range Orange Cap (4)
100-526 Extended Range Red Cap (4)

Impression Cap
Impression Analog

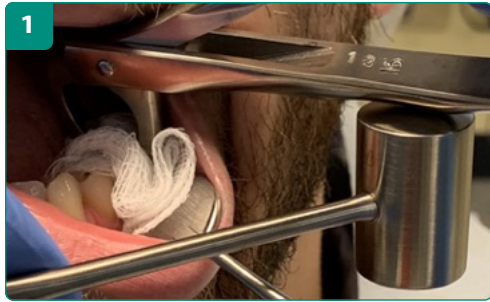
PART NO. 100-524
DESCRIPTION Impression Kit



101-839 Core Tool

ABUTMENT REMOVAL TECHNIQUE

ABUTMENT REMOVAL TECHNIQUE



Abutment Removal Forceps (Upper)
801-055



Abutment Removal Forceps (Lower)
801-056



View abutment removal video:
bicon.com/removal

A significant feature of the Bicon Implant design is the simplicity of its bacterially sealed locking taper abutment connection, which is not only easily inserted or engaged, but also almost always easily removed. This feature is particularly advantageous when a prosthesis is inadvertently locked with extraneous acrylic under the abutment.

Applying a tapping force under the prosthesis results in either the prosthesis being dislodged from the abutments or the abutments being removed from the implants. Unfortunately, the 2.5mm abutments may not be easily removed, especially when they are used in other than singular maxillary anterior sites.

1. It is essential to gain a firm purchase on the hemispherical base of the abutment, preferably with one of the depicted extraction forceps. If it is a recently integrated implant it is prudent not to apply any torque on the abutment dislodged the implant; therefore, after grasping the abutment's hemispherical base, tap the handle of the forceps to apply a removal force in the long axis of the implant.
2. If the implant is well integrated, the abutment may be removed by firmly grasping the abutment's hemispherical base before applying a twisting or turning and removal motion on the forceps.



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DENTAL IMPLANTS