PROSTHETIC PROCEDURES catalogue





TABLE OF CONTENTS

PP- PROSTHETIC PROCEDURES

EL/BL Morse taper locking connection	2
Impression taking	Ę
Open tray transfer procedure	ļ
Close tray transfer procedure	ļ
Planning abutments	Ć
Titanium abutments	7
Titanium base	8
Titanium base with cad/cam technique	Ç
Temporary abutment - Titanium	1(
Zirconia abutment	1(
Close tray technique	1
Surgical procedure	1
Laboratory procedure	1
Screw retained restoration	12
Open tray technique	13
Surgical procedure	13
Laboratory procedure	13
Bar	14
O-ball attachment system	1.5
Anchor abutment system	1 4



PRECISION DENTAL SOLUTIONS

C-Tech Implant is a dynamic company with aggressive growth, producing components and product lines primarily for dental implantology.

INTERNATIONAL PRESENCE

With production and management based in Italy, C-Tech Implant is active in all major world markets and is distributed in over 20 countries.

SCIENTIFIC RESEARCH, ADVANCED TECHNOLOGY, SIMPLIFICATION

C-Tech Implant differentiates itself with attention to research and the application of high technology to its products, all while maintaining a simplicity of insertion and ease of use.

C-Tech Implant incorporates the latest trends in implantology but providing for very practical surgical and prosthetic solutions aimed at offering the practitioner and the patient optimal results.

HIGH QUALITY STANDARDS KEPT WITHIN REACH

C-Tech Implant products are made to the highest standards governing the manufacturing and management of European medical and dental components.

Up to date audits and certifications assure that these standards are vigilantly maintained.

TRAINING & ADVICE

Dental professionals are assisted by the rich knowledge and experience of C-Tech Implant personnel and through C-Tech courses and training sessions.

During these courses the professional is able to learn the latest methods of implant placement and reconstruction.

MISSION STATEMENT

The goal of C-Tech Implant is to provide the highest level of quality for technologically advanced products at reasonable prices in order to allow the dental practitioner to find solutions for the broadest range of patients.

EL/BL MORSE TAPER LOCKING CONNECTION

CONCAVE ESTHETIC CONCEPT

- Non surgical thickening of the peri-implantary tissue
- Facilitating the papilla reconstruction-technique

PLATFORM SWITCHING

- Reduces bone loss
- Better representation of the biological width
- Long term esthetic stability

COLD WELD SEAL

- Hinders bacterial infiltration and consequent bone loss

MORSE LOCKING CONICAL CONNECTION

- Elimination of micro-movements
- Elimination of screw loosenings

INDEXING HEX

- Anti-rotational security

ONE CONNECTION FOR ALL 3 DIAMETERS

- Simplifies the system
- Reduces inventory
- Fase of use

ABUTMENT EXTRACTOR SCREW

The implant/abutment connection of the EL and BL systems is a Morse locking connection. This means that after the abutment has been inserted in the implant or the analog and the internal hex screw has been tightened to 30Ncm and then the screw itself has been loosened it will still be impossible to remove the abutment without the extractor instrument due to the cold welding effect. In order to remove the abutment, the BL-6060 or the BL-6061 needs to be inserted in place of the internal hex screw and turned until it pushes the abutment out.

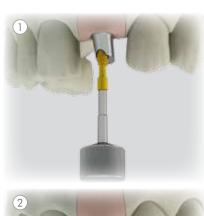


Finger/Ratchet adapter for latch drivers



BL-6061 Prosthetic extractor Latch driver

prosthetic extractor





EL OPEN TRAY IMPRESSION TAKING



EL-4544
Open tray
Impression post includes
the BL-5050L guide screw



BL-5143 Analog



BL-5050L Guide screw for open tray impression post



BL-5050S Short guide screw for open tray impression post

OPEN TRAY TRANSFER PROCEDURE

STEP

Place the impression post accurately into the implant and hand-tighten the guide screw.

STEP 2

Make perforations in the custom-made impression tray (light cured resin) according to the individual situation so that the positioning screw of the impression post protrudes.

STEP 3

Take the impression using an elastomeric impression material (polyvinyl siloxane or polyether rubber).

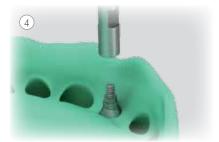
STEP 4

Reposition and fix the analog in the impression using the screw.









EL/BL CLOSED TRAY IMPRESSION TAKING



BL-4546 Peek Impression Cap



EL-4502P EL-5502P EL-4503P EL-5503P EL-4504P EL-5504P EL-4506P EL-5506P

EL PEEK abutments together with the snap on BL-4546 cap function as impression transfers



EL-5502F EL-4502F EL-5503F EL-4503F EL-5504F* EL-4504F* EL-5506F* EL-4506F*

EL Titanium Abutments together with the snap on BL-4546 cap function as impression transfers



BL-5143 Analog



BL-5052HX Short Screw EL-5052HXL Long Screw



BL-4543 Peek Impression Cap



BL-4540 Impression Transfer Post Closed/tray includes impression cap (BL-4543) includes screw



BL-4540L Impression Transfer Post Closed/tray/long includes impression cap (BL-4543) includes screw

STEP 1

Place the impression post accurately into the implant and hand-tighten the guide screw.

STEP 2

Push the impression cap at the top of the impression transfer.

STEP 3

Take the impression using an elastomeric impression material (polyvinyl siloxane or polyether rubber).

STEP 4

Use a standard impression tray.

STFP 5

Mount the impression transfer on the analog using the screw (ref. BL-5052HX - EL-5052HXL).

STEP 6

Reposition the impression transfer in the tray. Push the impression transfer until it is firmly seated into the embedded in transfer cap.

NOTE

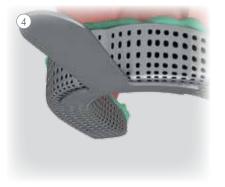
Since the BL and EL implant connections are identical, the transfers of each system are compatible one with the other. The EL transfer differs from the BL transfer in that it can function as an abutment and will lock into the implant whereas the BL transfer will not lock into the implant and thus does not require use of the extractor.

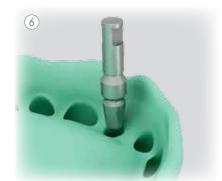










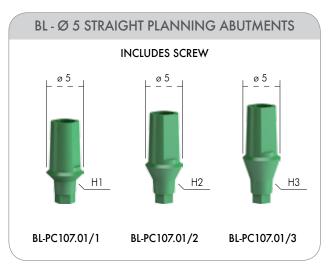


EL/BL PLANNING ABUTMENTS

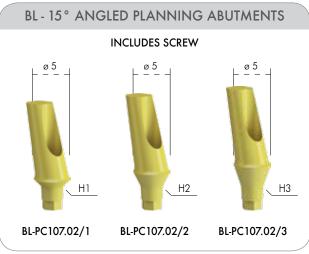
USE: The planning abutments are used to help the practitioner and the technician to test and check which final abutment would be the best fit for the case at hand.

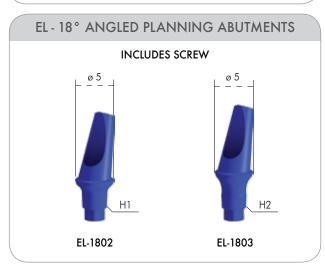
NOTE: All EL and BL angled abutments have the angulation over the flat of the hex.

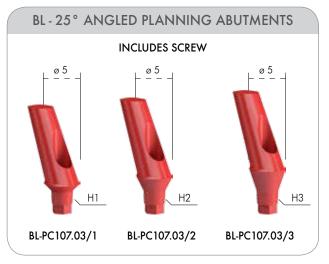






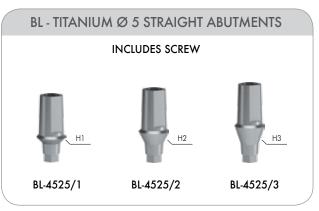


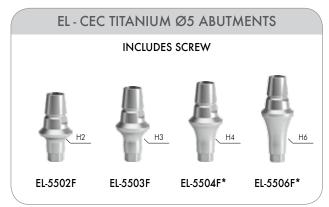




EL/BL TITANIUM ABUTMENTS













NOTE

All angled abutments are over flat of the hex. The last digit on the abutment article number refers to the cuff height, the distance from the point of the abutment's exit from the implant to the shoulder of the abutment.

All EL and BL angled abutments have the angulation over the flat of the hex.





TITANIUM ABUTMENT

STEP 1

Fabricate the master cast including a gingival mask.

STEP 2

Place the PLANNING abutment into the technical lab model in order to plan and choose the appropriate titanium abutment in a cost effective manner.

STFP 3

Place the the titanium abutment into the analog that is embedded in the stone model.

STEP 4

Prepare the titanium abutment, modify as required.

STEP 5

Wax up the prepared abutment.

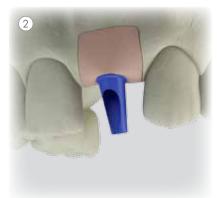
STEP 6

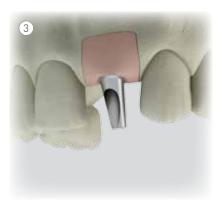
Cast the framework in the conventional manner

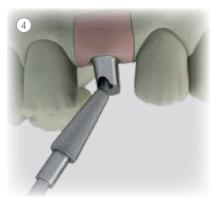
STEP 7 - Check the fit of the of the metal crown onto the prepared abutment. Then sand blast the crown in order to provide a mechanical bond for the veneer.

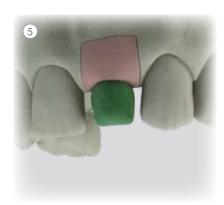
STEP 8 - Veneer the crown.









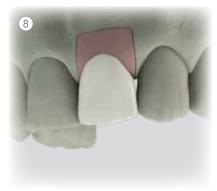




NOTE

Since the BL & EL abutments have an identical connection, they are accordingly compatible one with the other. EL abutments differs from the BL abutments in that they have a concave form at the gingival level and they can also be used as closed transfers when they are used together with the BL-4546 transfer cap.

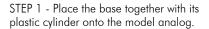






TITANIUM BASE / CASTING CYLINDER

The BL-6045 consists of a titanium base and plastic cylinder which fits over the base. The reason that the base is machined titanium instead of a non-oxidisable alloy is due to the precision required in order to maintain the morse locking fit into the implant. If the base were cast instead of machined it will not have the same precision. Thus the cylinder alone will be cast and prepared and then bonded to the base using a metal cement such as Panavia®.



STEP 2 - Wax up the the cylinder.

STEP 3 - Remove from the titanium base only the waxed up cylinder without the titanium base. The waxed up cylinder will then be placed in the casting oven.

STEP 4 - Casting and divestment. Cast the framework in the conventional manner.

STEP 5 - Verify that the metal crown fits precisely on the customized abutment.

STEP 6 - Sandblast the metal crown in order to create a mechanical bond with the veneer. Veneer the superstructure.

STEP 7 - Cement the superstructure to the abutment.

STEP 8 - Remove superfluous cement.

STEP 9 - Position the abutment in the implant and tighten the screws to 25 Ncm using the hexagonal screwdriver along with the torque ratchet.

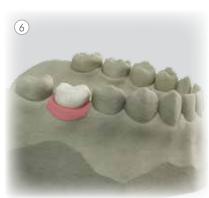




















TITANIUM BASE WITH CAD/CAM TECHNIQUE

STEP 1 - Place the base into the model analog.

STEP 2 - Seat the scan cap over the abutment of the scan base.

STEP 3

Put the scan model in the laser scanner.

STFP 4

Shape the abutment on screen, using the software.

STEP 5

Based on the design data, the customized structure is manufactured by a milling center.

STEP 6

Check the zirconium framework. Veneer the superstructure.

STEP 7

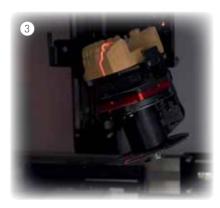
Cement the superstructure to the abutment.

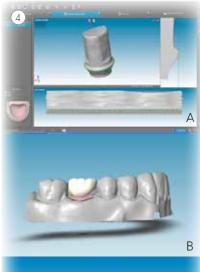
STEP 8

Remove superfluous cement.











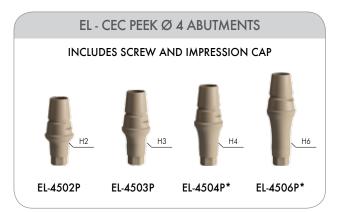






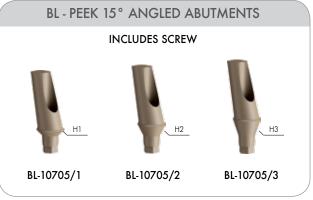


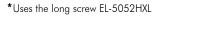
EL/BL TEMPORARY ABUTMENTS - PEEK

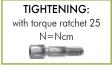












STEP 1 Modelling of the abutment on the implant.

STEP 2 Polish and clean residue from the abutment.

STEP 3 Placement of the restoration.



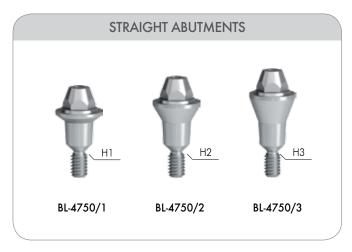


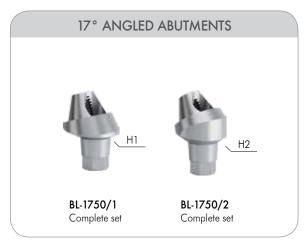


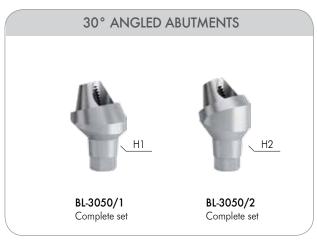


SCREW RETAINED RESTORATION











TIGHTENING:
with torque ratchet 25
N=Ncm

SCREW RETAINED

CLOSE TRAY TECHNIQUE

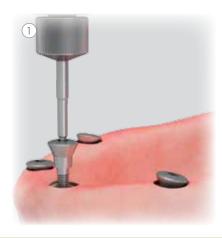




STEP 1 Remove the healing abutments.

STEP 2

Screw the straight abutment into the implant using the torque ratchet (30 Ncm) and the Multi-unit Driver.





SURGICAL PROCEDURE

STEP 1

Screw each closed tray transfer onto the protruding abutments.

STFP 2

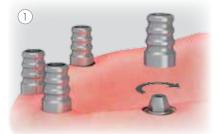
Take the impression using an elastomeric impression material (polyvinyl siloxan or polyether rubber).

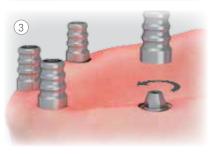
STEP 3

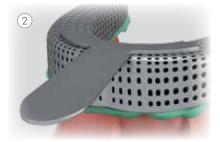
Remove the closed tray transfer from the abutment.

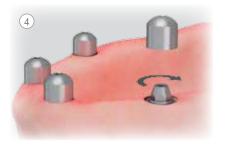
STEP 4

Screw onto the abutments the healing cap screws so as to keep the soft tissue in place until the final prosthesis is completed.









LABORATORY PROCEDURE

STEP 1

Screw the closed tray transfer onto the analog.

STEP 2

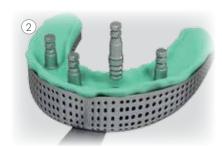
Reposition the transfer into the previously taken impression material being sure that the transfers are properly seated.

STEP 3

Produce master model.







SCREW RETAINED

OPEN TRAY TECHNIQUE

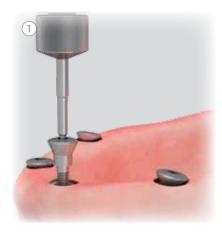




STEP 1 Remove the healing abutments.

STEP 2

Screw the straight abutment into the implant using the torque ratchet (30 Ncm) and the Multi-unit Driver.





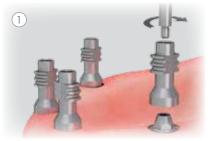
SURGICAL PROCEDURE

STEP 1 - Screw the impression post accurately into the Multi-unit abutments and hand-tighten the guide screw.

STEP 2 - Make perforations in the custommade impression tray (light cured resin) according to the individual situation so that the positioning screw of the impression post protrudes. Take the impression using an elastomeric impression material (polyvinyl siloxane or polyether rubber).

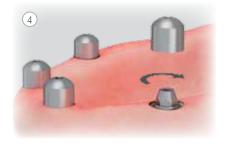
STEP 3 - Unscrew the opened tray transfers from the abutment.

STEP 4 - Screw onto the abutments the healing cap screws so as to keep the soft tissue in place until the final prosthesis is completed.









LABORATORY PROCEDURE

STEP 1

The laboratory will prepare the tray for the clinician by preplanned openings in the tray from which the impression posts will protrude. The tray will in turn be given to the clinician to take the impression.



Reposition and fix the analog in the impression using the screw.

STEP 3

Produce master model.







SCREW RETAINED RESTORATION

STEP 1

Fabricate the stone model including analogs and gingival mask.

STEP 2

Place and screw the castable abutments onto the protruding multi-unit analogs.

STEP 3

Shorten the cylinders down to the height of the occlusal plane.

STEP 4

Remove the gingiva modeling material to permit easy access for submucosal contouring and verification of component seating. Wax-up the bridge framework to appropriate dimensions. The layer of wax must have sufficient thickness to avoid the wrong coefficient of thermal expansion and a negative effect on porcelain firing.

STEP 5

Prepare the wax-up for investing and casting procedures.

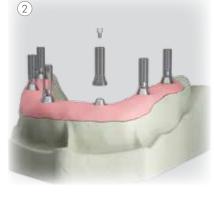
STEP 6

Attach the resulting framework to the models and create final prosthesis.

STEP 7

Passively fit the resulting prosthesis onto the abutments.















BAR



STEP 1

Place the castable Multi-unit abutments on the analogs and tighten the Multi-unit internal screws.

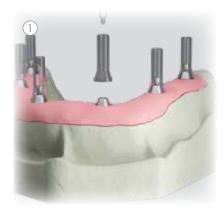
STEP 2

Make height adaptations according to the individual situation.

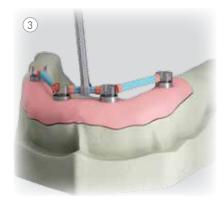
STEP 3

Use a residue-free burn-out plastic to fix the bar segments to the castable abutments.

STEP 4 The yellow clips (027CRG) are fixed into the prosthesis.

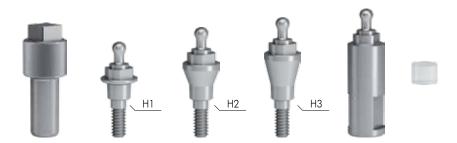








O-BALL ATTACHMENT SYSTEM



STEP 1

Screw the spherical abutments into the implants using the torque ratchet (30 Ncm) and the driver (ref. BL-0600).

STEP 2

Prior to placing the housings over the 0-balls, silicone tubes (ref. MC-3008) will have to be fitted around the necks of the implants or analogs in order to block out the acrylic from prosthesis and prevent the acrylic attaching itself to the analogs or implants.

STEP 3

Burr out the the prosthesis in order make room for the housings. Pour acrylic into the burred out space in order to pick up the housings.

STEP 4

Immediately after filling with acrylic, fit the prosthesis over the housings.

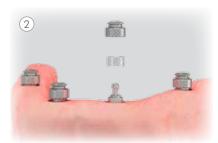
STEP 5

Apply medium occlusal pressure to the prosthesis until the acrylic has hardened and picked the housings.











ANCHOR ABUTMENT SYSTEM

CAPS WITH METAL HOUSING 141CAE 140CEV 140CET 140CER 140CEG: 2 Stainless steel housings 4 Retentive caps 4 Retentive caps 4 Retentive caps 4 Retentive caps violet "strong" (2.7kg) white "standard" (1.8kg) pink "soft" (1.2kg) yellow "extra-soft" (0.6kg) ANCHOR ABUTMENT SYSTEM **COMPLETE SET INCLUDES: COMPLETE SET** 1 Anchor abutment (Ref. 130BL1, 130BL2, 130BL3, 130BL4, 130BL5) 1 Stainless steel housings (Ref.141CAE) 1 Retentive caps - violet "strong" (Ref. 140CEV) 1 Retentive caps - white "standard" (Ref. 140CET) 130BL1 130BL5 130BL2 130BL3 130BL4 1 Retentive caps - pink "soft" (Ref. 140CER) 1 Retentive caps - yellow "extra-soft" (Ref. 140CEG)





ANCHOR ABUTMENT SYSTEM

STEP 1

Choose equator abutments with the appropriate height. The top margin of abumtent should be 1 mm above the gingival line. Use a torque ratchet to fix the abutment at 25Ncm.

STEP 2

Place the 044CAIN impression copings onto the abutments, make sure they are well seated.

STEP 3

Apply impression material on and around impression copings. Make the impression while picking up the copings.

STEP 4

Once the impression is completed, insert the 144AE analogs into the copings that are embedded in the impression material.

STEP 5

Create a gingival mask in order to maintain the optimal emergence profile of the crowns, then cast the stone model.

STEP 6

Once the stone model is complete, seat the 140CEN Processing caps onto the abutment analogs which are protruding from the model.

STEP 7

Fabricate the prosthesis using standard laboratory procedures.

STEP 8

The laboratory returns the final prosthesis to the dentist for the final seating in the patient's mouth.

