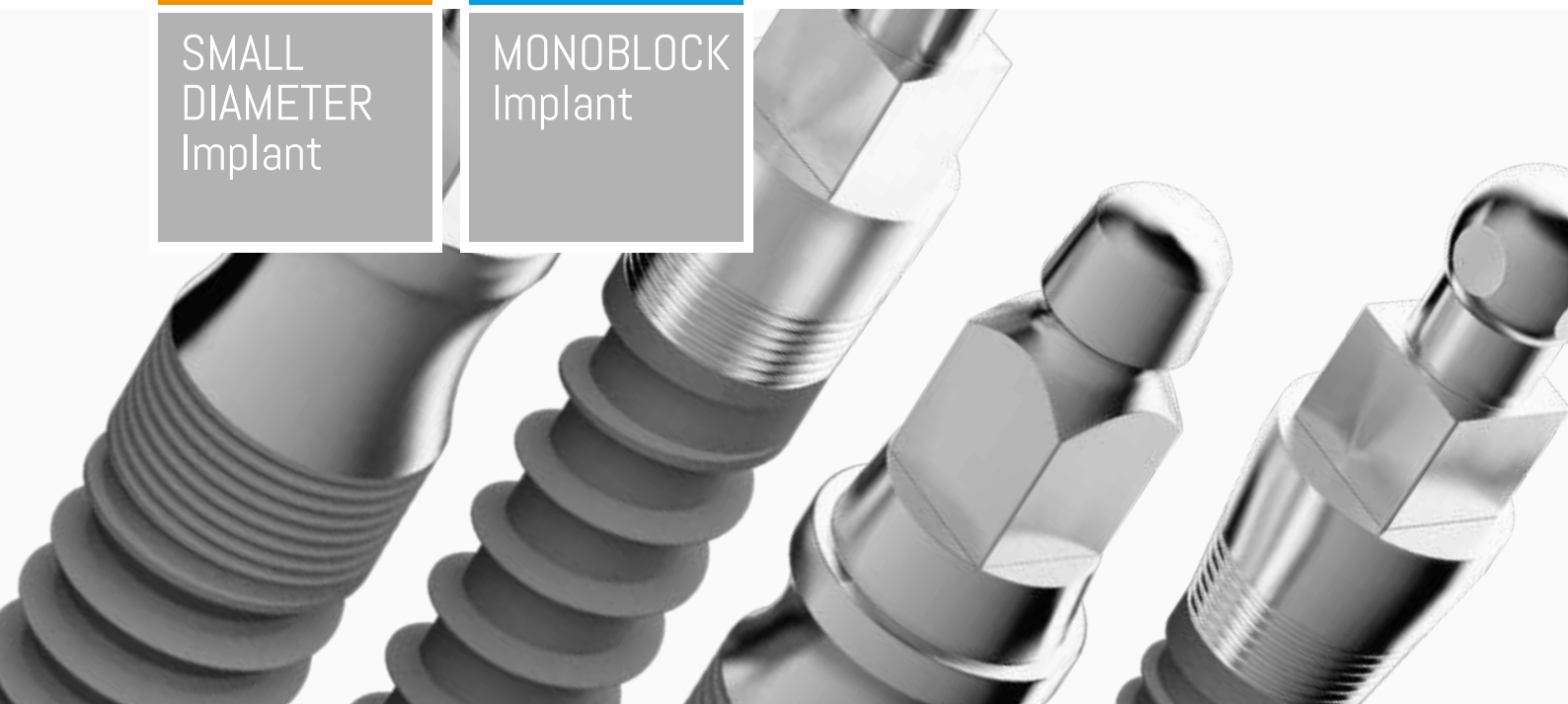


SD

SMALL
DIAMETER
Implant

MB

MONOBLOCK
Implant



C-TECH
IMPLANT

SMALL DIAMETER Implant

| | |
|-------------------------|---------|
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| Dental Implants | page 06 |
| Prosthetic components | page 10 |

MONOBLOCK Implant

| | |
|-------------------------|---------|
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| Dental Implants | page 14 |
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SD/MB Surgical section

| | |
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| Surgical kits | page 21 |
| Surgical protocol | page 24 |
| Site preparation | page 26 |



All of the materials produced by C-TECH follow a validated procedure, which includes surface treatment and packing as well, in conformity with European and international directives EN ISO 13485:2003/AC:207 and 93/42/EEC relative to medical devices.

Dental precision 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 25 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 provides very practical surgical and prosthetic solutions aimed at offering the practitioner and the patient optimal results.

High quality standards

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.



SMALL DIAMETER Implant

Prosthetic choice

Choice between square or o-ball head depending on fixed or removable applications.

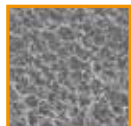
Micro grooving

The lower aspect of the implant collar is endowed with micro grooves to help maintain cortical bone.

Fine threading

The fine thread SD implants are designed to facilitate the placement in hard bone.

SEM 1000x



Passivated surface

The implant surface is blasted with aluminum oxide and then subjected to progressive etching using citric acid. This surface treatment accelerates the osteointegration process by providing a greater and more uniform area of contact

between bone and implant while favoring an immediate implant load.

Implant body

The anatomically shaped implants are produced from medical grade 5 titanium.

Smooth collar

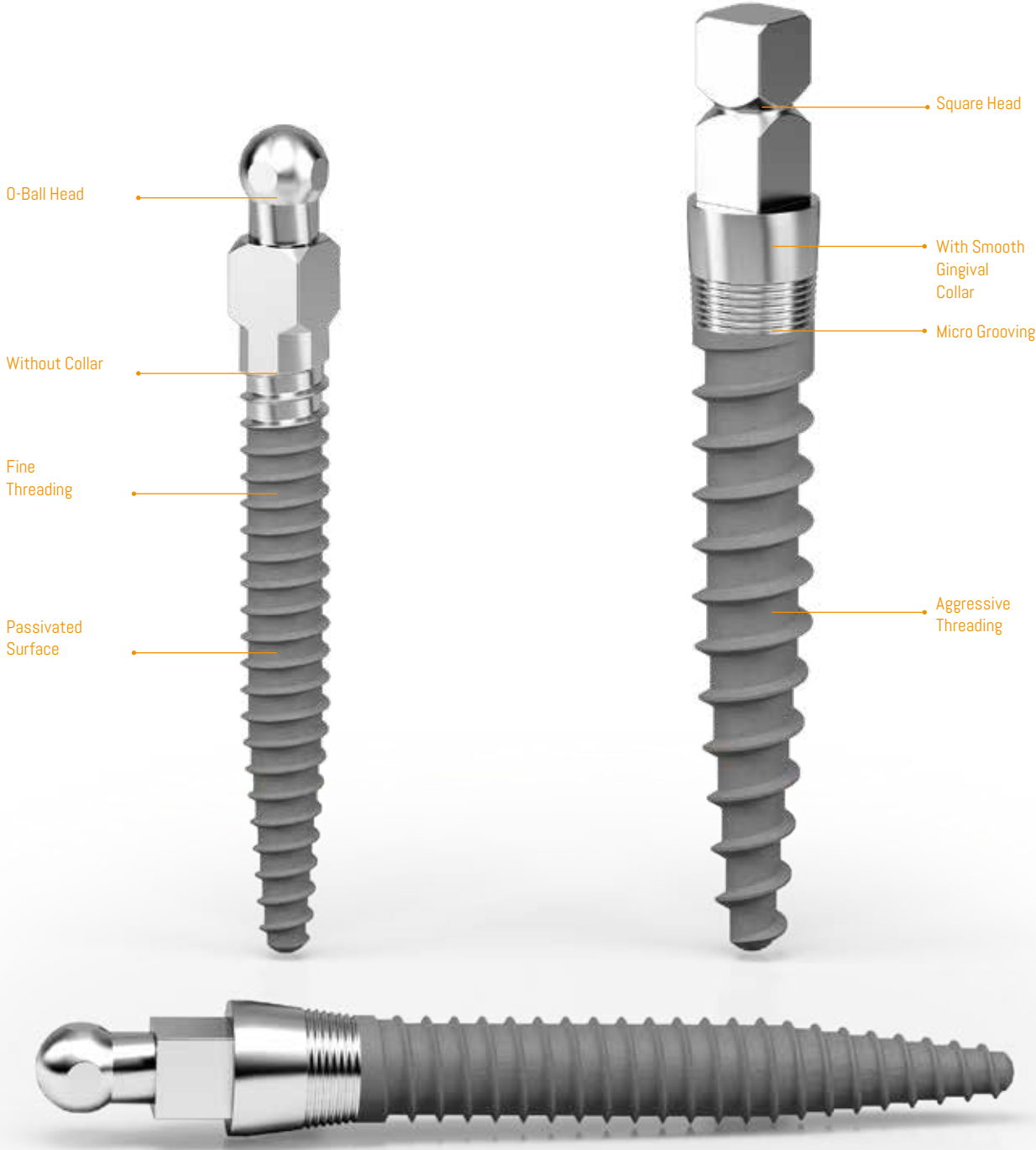
The top aspect of every collared implant is smooth so as to better accommodate soft tissue.

Aggressive threading

The aggressive thread for SD Implants are designed for the added compression and surface area required in soft bone placement.

Collared and non-collared models

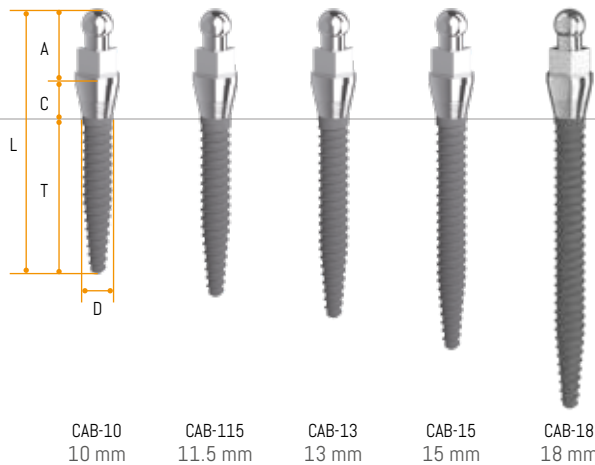
C-tech provides SD models with and without gingival collars, allowing the practitioner to better address cases with differing gingival thicknesses.



Dental Implants

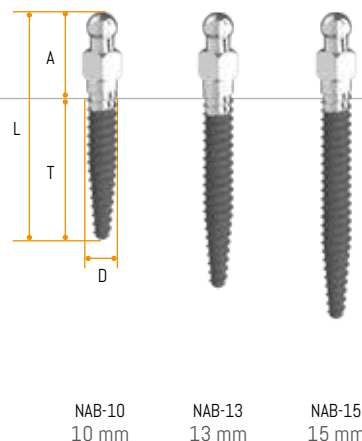
SD Implant ϕ 1.8 fine thread implants

| D | L | T | C | A | item# |
|-----|------|------|-----|-----|---------|
| 1.8 | 16.3 | 10 | 2.5 | 3.8 | CAB-10 |
| | 17.8 | 11.5 | | | CAB-115 |
| | 19.3 | 13 | | | CAB-13 |
| | 21.3 | 15 | | | CAB-15 |
| | 24.3 | 18 | | | CAB-18 |



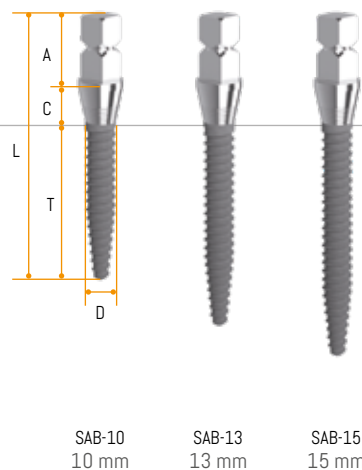
SD Implant ϕ 1.8 fine thread implants

| D | L | T | A | item# |
|-----|------|----|-----|--------|
| 1.8 | 13.9 | 10 | 3.9 | NAB-10 |
| | 16.9 | 13 | | NAB-13 |
| | 18.9 | 15 | | NAB-15 |



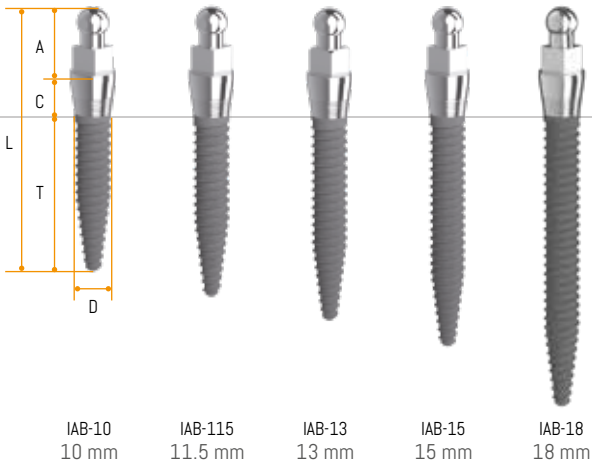
SD Implant ϕ 1.8 fine thread implants

| D | L | T | C | A | item# |
|-----|------|----|-----|-----|--------|
| 1.8 | 16.3 | 10 | 2.5 | 3.8 | SAB-10 |
| | 19.3 | 13 | | | SAB-13 |
| | 21.3 | 15 | | | SAB-15 |



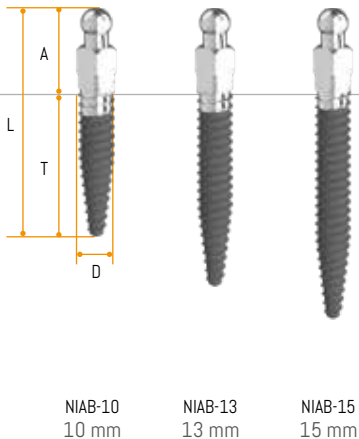
SD Implant ϕ 2.1 fine thread implants

| D | L | T | C | A | item# |
|-----|------|------|-----|-----|---------|
| 2.1 | 16.3 | 10 | 2.5 | 3.8 | IAB-10 |
| | 17.8 | 11.5 | | | IAB-115 |
| | 19.3 | 13 | | | IAB-13 |
| | 21.3 | 15 | | | IAB-15 |
| | 24.3 | 18 | | | IAB-18 |



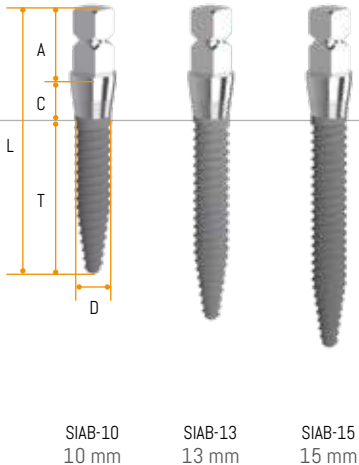
SD Implant ϕ 2.1 fine thread implants

| D | L | T | A | item# |
|-----|------|----|-----|---------|
| 2.1 | 13.9 | 10 | 3.9 | NIAB-10 |
| | 16.9 | 13 | | NIAB-13 |
| | 18.9 | 15 | | NIAB-15 |



SD Implant ϕ 2.1 fine thread implants

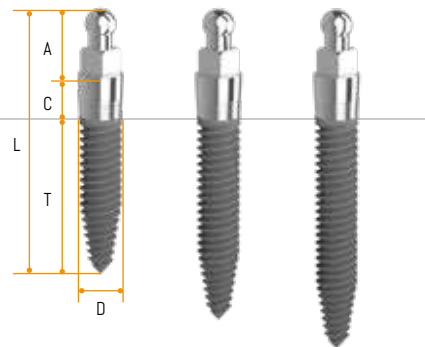
| D | L | T | C | A | item# |
|-----|------|----|-----|-----|---------|
| 2.1 | 16.3 | 10 | 2.5 | 3.8 | SIAB-10 |
| | 19.3 | 13 | | | SIAB-13 |
| | 21.3 | 15 | | | SIAB-15 |



Dental Implant

SD Implant \varnothing 2.5 fine thread implants

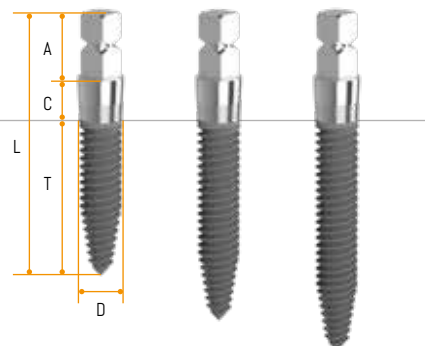
| D | L | T | C | A | item# |
|-----|------|----|-----|-----|----------|
| 2.5 | 16.3 | 10 | 2.5 | 3.8 | MC/25/10 |
| | 19.3 | 13 | | | MC/25/13 |
| | 21.3 | 15 | | | MC/25/15 |



MC/25/10 10 mm MC/25/13 13 mm MC/25/15 15 mm

SD Implant \varnothing 2.5 fine thread implants

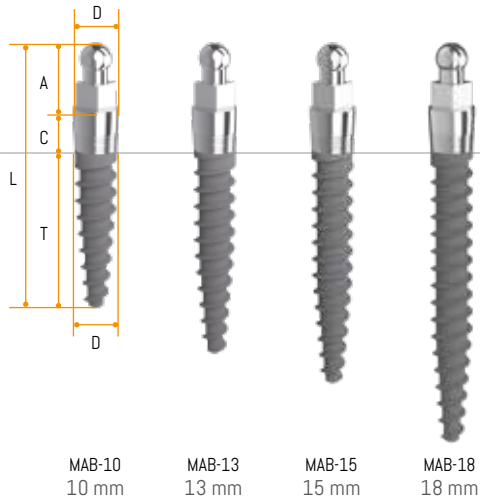
| D | L | T | C | A | item# |
|-----|------|----|-----|-----|-----------|
| 2.5 | 16.3 | 10 | 2.5 | 3.8 | MCA/25/10 |
| | 19.3 | 13 | | | MCA/25/13 |
| | 21.3 | 15 | | | MCA/25/15 |



MCA/25/10 10 mm MCA/25/13 13 mm MCA/25/15 15 mm

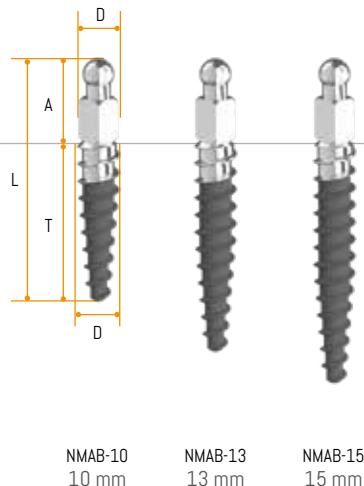
SD Implant $\varnothing 24$ aggressive thread implants

| D | L | T | C | A | item# |
|----|------|----|-----|-----|--------|
| 24 | 16.3 | 10 | 2.5 | 3.8 | MAB-10 |
| | 19.3 | 13 | | | MAB-13 |
| | 21.3 | 15 | | | MAB-15 |
| | 24.3 | 18 | | | MAB-18 |



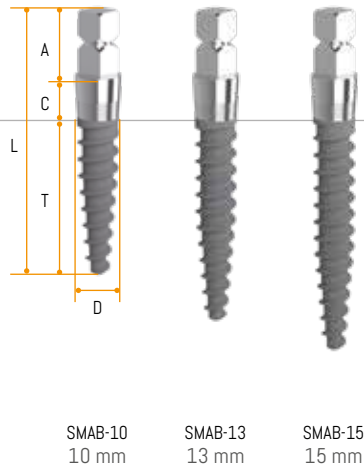
SD Implant $\varnothing 24$ aggressive thread implants

| D | L | T | A | item# |
|----|------|----|-----|---------|
| 24 | 13.9 | 10 | 3.9 | NMAB-10 |
| | 16.9 | 13 | | NMAB-13 |
| | 18.9 | 15 | | NMAB-15 |



SD Implant $\varnothing 24$ aggressive thread implants

| D | L | T | C | A | item# |
|----|------|----|-----|-----|---------|
| 24 | 16.3 | 10 | 2.5 | 3.8 | SMAB-10 |
| | 19.3 | 13 | | | SMAB-13 |
| | 21.3 | 15 | | | SMAB-15 |



Prosthetic components

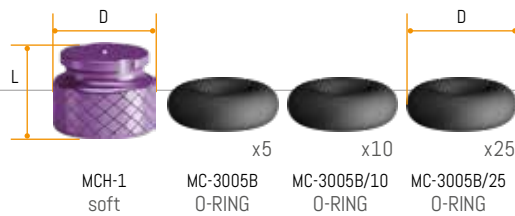
Soft retention caps

| D | L | O-Ring | D |
|-----|-----|--------|----|
| 4.7 | 3.5 | | 44 |

Material: Titanium grade 5

Material: FDA Buna

Available in single packages: MCH-1
Available in packages of 4 caps: MCH-1/4



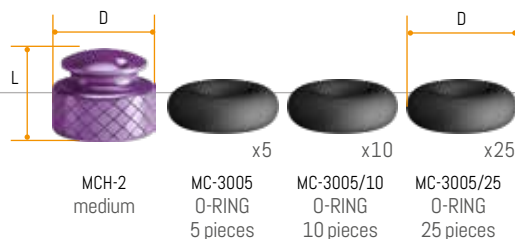
Medium retention caps

| D | L | O-Ring | D |
|-----|-----|--------|-----|
| 4.3 | 3.1 | | 3.8 |

Material: Titanium grade 5

Material: FDA Buna

Available in single packages: MCH-2
Available in packages of 4 caps: MCH-2/4



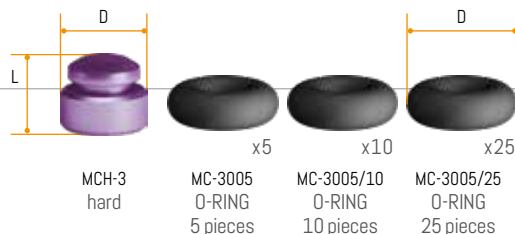
Hard retention caps

| D | L | O-Ring | D |
|---|-----|--------|-----|
| 4 | 3.1 | | 3.8 |

Material: Titanium grade 5

Material: FDA Buna

Available in single packages: MCH-3
Available in packages of 4 caps: MCH-3/4



Straight abutment

Only for O-ball heads implants

| D | L |
|-----|----|
| 4.3 | 94 |

Material: Titanium grade 5

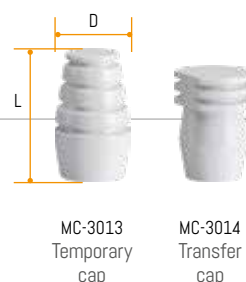


O-ball temporary and transfer caps

For O-ball and square head implants

| D | L | item# |
|-----|----|---------|
| 4.0 | 7 | MC-3013 |
| 4.5 | 64 | MC-3014 |

Material: POM



Castable cap for square head and O-ball

| D | L |
|---|---|
| 4 | 6 |

Material: Plexiglass

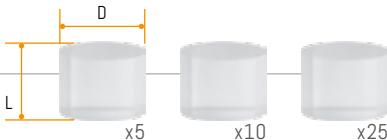


MC-3006

PVC protection

| D | L |
|-----|---|
| 3.5 | 4 |

Material: PVC



MC-3008
5 pieces

MC-3008/10
10 pieces

MC-3008/25
25 pieces

Collared analog

| D | L |
|-----|------|
| 2.6 | 15.8 |

Material: Titanium grade 5

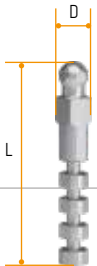


MC-3007

Non collared analog

| D | L |
|-----|------|
| 2.0 | 15.8 |

Material: Titanium grade 5



MC-3012

Collared square head analog

| D | L |
|-----|------|
| 2.6 | 15.8 |

Material: Titanium grade 5



MCA-1007

MONOBLOCK Implant

The C-Tech MB, Mono Block Implant, provides 2 different prosthetic options as well as 2 different main body designs to meet the differing requirements of bone and soft tissue encountered in the maxilla and the mandible.

Prosthetic Options

Choice between square or O-ball head depending on fixed or removable applications.

Support for Fixed Reconstructions

A tapered head with a 4,8mm height above the 3,1mm platform offers an optimal base and structure for the fixed reconstruction.

Gingival Collar

MAN-OB/MAN-TAP smooth collar provides the platform switching height to accommodate the average mandibular gingival tissue.

Mandibular Cortical Maintenance

Augmented MAN-OB/MAN-TAP micro grooving for the increased cortical height of the mandibular bone.

Low Profile Threading

Low profile threading offers surface area yet with the reduced resistance necessary for placement in the D1/D2 bone that can be encountered in the mandible.

Surface Topography

Blasted and acid etched main body surface.

Mandibular Apex

Sharp apex to facilitate advancement in D1/D2 bone.

System Compatibility

Choice of tapered and O-ball head prosthetics. O-ball head is compatible with SD, GL, BL and EL O-ball attachments

Augmented Gingival Collar

MAX-OB/MAX-TAP smooth collar platform switching fits the thicker maxillary gingival tissue

Maxilla Type Bone Micro Grooving

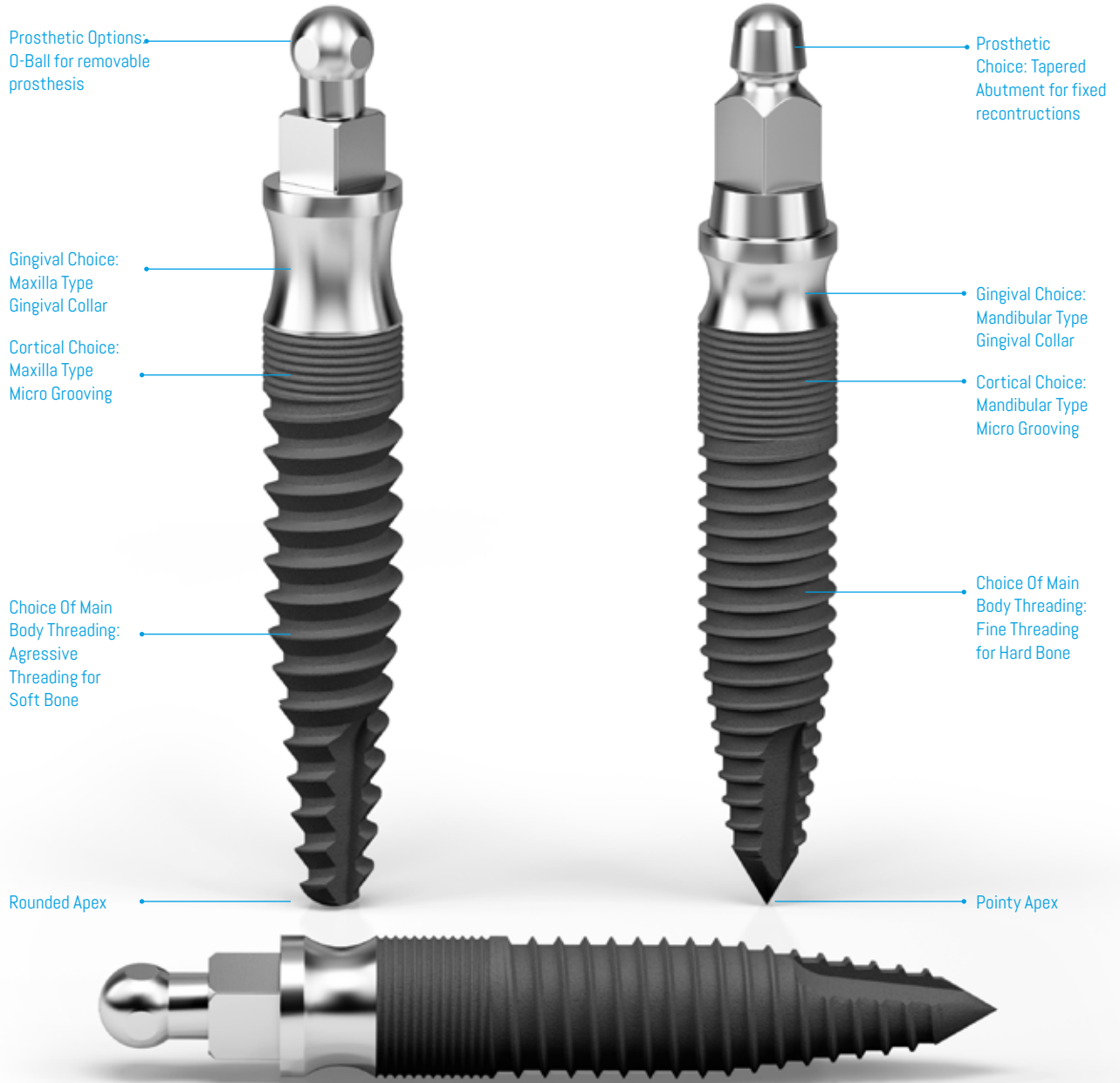
MAX-OB/MAX-TAP micro grooving accommodates the thinner cortical bone that is encountered in the maxilla.

Aggressive Main Body Threading

MAX-OB/MAX-TAP main body threading, aggressive reverse buttress threads deliver the surface area and stability required by softer maxillary bone

Maxilla Type Apex

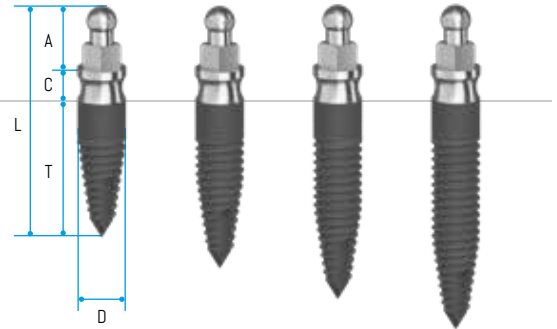
Rounded tip is ideal for the maxilla so as to prevent the possible perforation of the sinus.



Dental Implants

MANOB

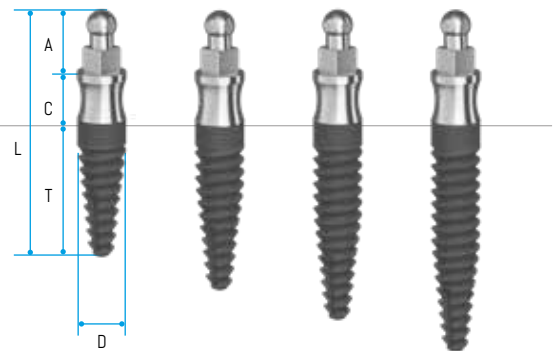
| D | L | T | C | A | item# |
|---|------|----|-----|-----|----------|
| 3 | 14.3 | 9 | 1.5 | 3.8 | MANOB-09 |
| | 16.3 | 11 | | | MANOB-11 |
| | 18.3 | 13 | | | MANOB-13 |
| | 20.3 | 15 | | | MANOB-15 |



MANOB-09 9 mm MANOB-11 11 mm MANOB-13 13 mm MANOB-15 15 mm

MAXOB

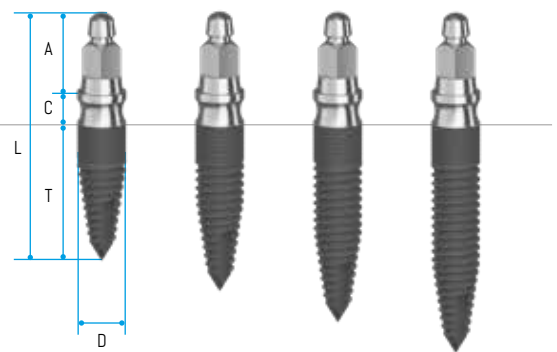
| D | L | T | C | A | item# |
|---|------|----|-----|-----|----------|
| 3 | 15.3 | 9 | 2.5 | 3.8 | MAXOB-09 |
| | 17.3 | 11 | | | MAXOB-11 |
| | 19.3 | 13 | | | MAXOB-13 |
| | 21.3 | 15 | | | MAXOB-15 |



MAXOB-09 9 mm MAXOB-11 11 mm MAXOB-13 13 mm MAXOB-15 15 mm

MANTAP

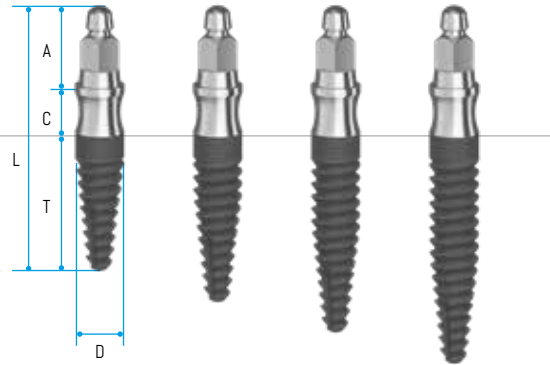
| D | L | T | C | A | item# |
|---|------|----|-----|-----|-----------|
| 3 | 15.3 | 9 | 1.5 | 4.8 | MANTAP-09 |
| | 17.3 | 11 | | | MANTAP-11 |
| | 19.3 | 13 | | | MANTAP-13 |
| | 21.3 | 15 | | | MANTAP-15 |



MANTAP-09 9 mm MANTAP-11 11 mm MANTAP-13 13 mm MANTAP-15 15 mm

MAXTAP

| D | L | T | C | A | item# |
|---|------|----|-----|-----|-----------|
| 3 | 16.3 | 9 | 2.5 | 4.8 | MAXTAP-09 |
| | 18.3 | 11 | | | MAXTAP-11 |
| | 20.3 | 13 | | | MAXTAP-13 |
| | 22.3 | 15 | | | MAXTAP-15 |



MAXTAP-09
9 mm

MAXTAP-11
11 mm

MAXTAP-13
13 mm

MAXTAP-15
15 mm

Prosthetic components

Soft retention caps

| | | | |
|-----|-----|--------|----|
| D | L | O-Ring | D |
| 4.7 | 3.5 | | 44 |

Material: Titanium grade 5

Material: FDA Buna

Available in single packages: MCH-1
 Available in packages of 4 caps: MCH-1/4



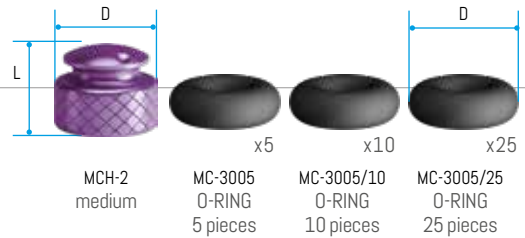
Medium retention caps

| | | | |
|-----|-----|--------|-----|
| D | L | O-Ring | D |
| 4.3 | 3.1 | | 3.8 |

Material: Titanium grade 5

Material: FDA Buna

Available in single packages: MCH-2
 Available in packages of 4 caps: MCH-2/4



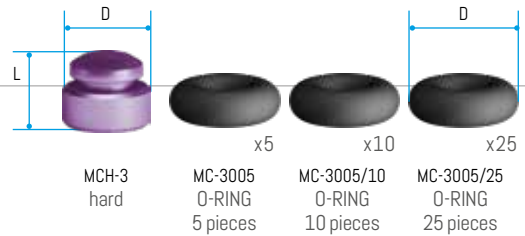
Hard retention caps

| | | | |
|---|-----|--------|-----|
| D | L | O-Ring | D |
| 4 | 3.1 | | 3.8 |

Material: Titanium grade 5

Material: FDA Buna

Available in single packages: MCH-3
 Available in packages of 4 caps: MCH-3/4



Straight abutment

Only for O-ball heads implants

| | |
|-----|----|
| D | L |
| 4.3 | 94 |

Material: Titanium grade 5

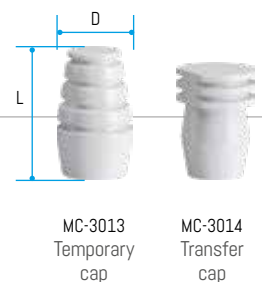


O-ball temporary and transfer caps

For O-ball and square head implants

| | | |
|-----|----|---------|
| D | L | item# |
| 4.0 | 7 | MC-3013 |
| 4.5 | 64 | MC-3014 |

Material: POM



Castable cap for square head and O-ball

| D | L |
|---|---|
| 4 | 6 |

Material: Plexiglass

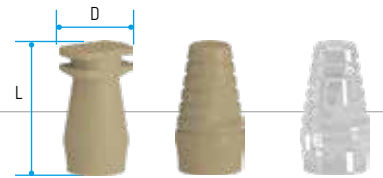


MC-3006

Tapered head caps Only for tapered head implants

| D | L | item# |
|---|---|---------|
| 3 | 7 | MB-3013 |
| | | MB-3014 |
| | | MB-3006 |

Material: MB-3013 - PEEK
 MB-3014 - PEEK
 MB-3006 - CPMMA



MB-3013
Tapered
impression cap

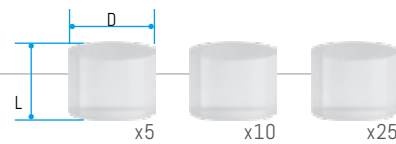
MB-3014
Tapered
temp cap

MB-3006
Tapered waxing
coping

PVC protection

| D | L |
|-----|---|
| 3.5 | 4 |

Material: PVC



MC-3008
5 pieces

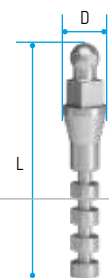
MC-3008/10
10 pieces

MC-3008/25
25 pieces

Collared O-ball analog

| D | L |
|-----|------|
| 2.6 | 15.8 |

Material: Titanium grade 5



MC-3007

Tapered analog

| D | L |
|-----|-------|
| 3.1 | 17.85 |

Material: Titanium grade 5



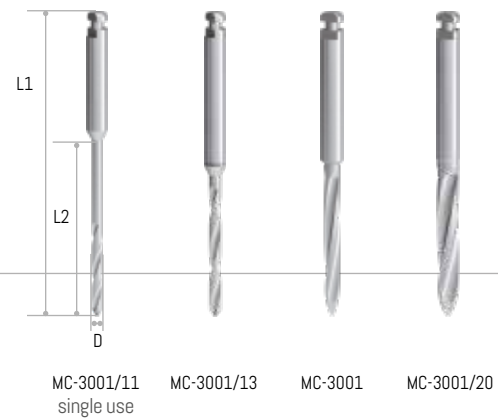
MB-ANALOG

Instruments

SD Drills

| D | L1 | L2 | item# |
|-----|------|------|------------|
| 1.1 | 33.3 | 14.3 | MC-3001/11 |
| 1.3 | | | MC-3001/13 |
| 1.5 | | 17.5 | MC-3001 |
| 2.0 | | | MC-3001/20 |

Material: Stainless steel



SB/MB Butterfly driver

| D | L |
|-----|---|
| 8.5 | 7 |

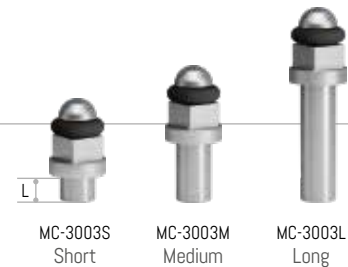
Material: Stainless steel



SD/MB Adapters

| L | item# |
|----|----------|
| 4 | MC-3003S |
| 8 | MC-3003M |
| 12 | MC-3003L |

Material: Stainless steel



SD/MB Finger adapter

| D | L |
|----|-----|
| 12 | 8.6 |

Material: Stainless steel



SD/MB Locator drill

| L1 | L2 | D |
|----|----|-----|
| 29 | 15 | 2.1 |

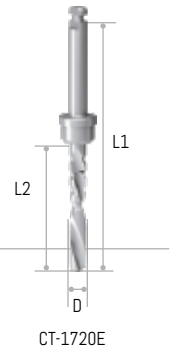
Material: Stainless steel



MB Initial drill

| L1 | L2 | D |
|------|------|-----|
| 35.2 | 17.2 | 2.3 |

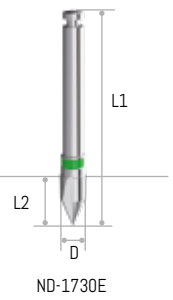
Material: Stainless steel



MB Counter bore Ø 3.0

| L1 | L2 | D |
|----|----|---|
| 26 | 6 | 3 |

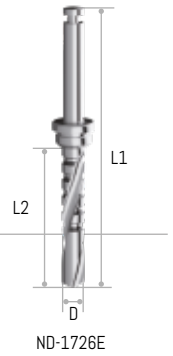
Material: Stainless steel



MB Main drill

| L1 | L2 | D |
|------|------|-----|
| 36.7 | 17.2 | 2.6 |

Material: Stainless steel



MB Drill Extender

| L |
|----|
| 25 |

Material: Stainless steel



MB Tissue punch

| L |
|-----|
| 2.8 |

Material: Stainless steel



Instrumentation

SD/MB Bone calipers



MC-3015

SD/MB Torque wrench up to 50Ncm



CT-8010

Torque Wrench PEEK

Material: Stainless steel and PEEK



CT-8010PEEK

SD/MB Ratchet without torque



MC-00376

SD/MB Hand driver

Material: Stainless steel



EL-3016

SD/MB O-ring tool

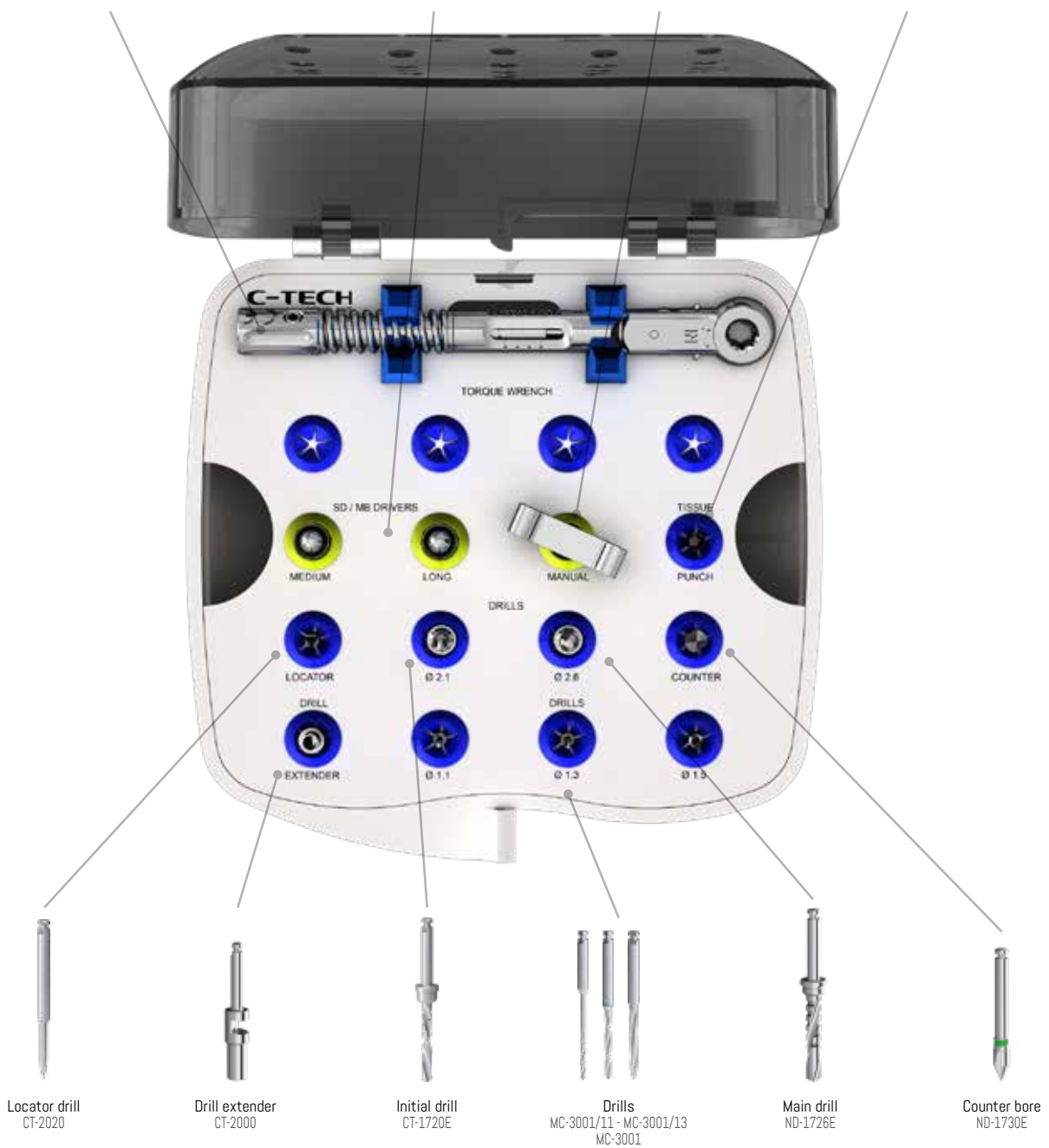
Material: Stainless steel



MC-3018

SD/MB Kit

SURKIT05



SD Kit

MC-00075SC



Torque wrench
CT-8010



Butterfly driver
MC-3002



Drills*
MC-3001/11 - MC-3001/13
MC-3001 - MC-3001/20



Adapters
MC-3003S
MC-3003L

* Each surgical kit is equipped with 2 drills; customers can chose drills between \varnothing 1.1 , 1.3, 1.5, 2.0. Customers should communicate the choice of the drills at the moment of the order.

ND/MB Kit

SURKIT06



Surgical Protocol

Case planning

Following evaluation of the patient and the corresponding panoramic radiographs, the type and number of implants and planned placement sites are established. There should be a minimum of 4 implants for mandibular cases and a minimum of 6 for maxilla cases. The implant planning transparency is used to establish the implant length. A minimum of 5mm between each implant needs to be maintained to allow space for the housings. In mandibular cases the implants should be placed starting with a minimum of 5mm anterior of the mental foramen. Following implant site planning the sites are transferred to the gingiva and marked with sterile marker or bleeding points.

Pilot site drilling and initial insertion

The drill is placed over the sites and lightly pumped up and down till the cortical plate is perforated. The drill should provide sterile irrigation. Unless the crestal bone is sharp or defective there will be no need to raise flap or incision. In the case of average hardness of the bone, then the drill depth should be approximately 1/3 the length of the implant. In the case of hard bone then the depth should be extended to 2/3 of the length of the implant.

The implant is removed from the sterile vial and the tip of the implant is placed into the drilled site, using the implant mount cap as initial driver. The implant is driven into the bone exerting downward pressure and clockwise motions. Once the bone has been engaged the resistance will become too great to proceed further, it is now time to disengage the cap from the implant and proceed to the next instrument.

Continuing the insertion with the butterfly driver

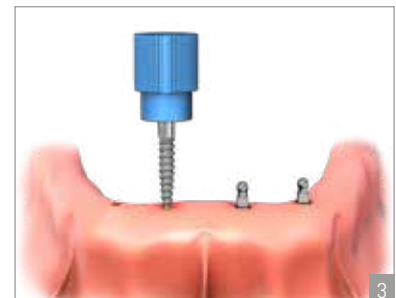
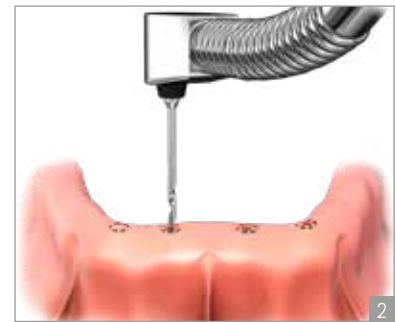
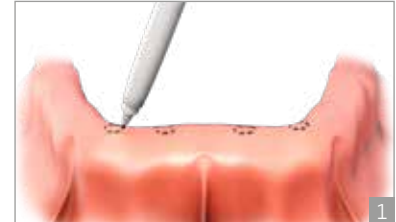
Following the initial insertion one will use the butterfly driver, which allows for applying more torque. It should be possible to seat the implant completely with this instrument but should the implant not be completely seated and further advancement is not possible due to resistance, one will then require the ratchet or torque ratchet for final seating.

Final implant seating

Final seating is accomplished through use of the torque ratchet. The torque ratchet should be set to 35 Ncm. The ratchet adapter is inserted into the opening at the end of the ratchet with the female aspect of the adapter protruding. The adapter is then fitted over the top of the implant, engaging the square part beneath the O-ball.

A finger should be placed over the end of the ratchet in order to stabilize the insertion and prevent lever action on the end of the implant. The ratchet is moved in quarter turn increments, pausing in between each turn, thus allowing the bone to expand.

The implant is considered primarily stable once 35 Ncm has been achieved. The implant is completely seated once the O-ball and the square part beneath are the only parts protruding from the gingiva. If primary stability has been achieved prior to achieving final seating, then the torque setting should be raised to 50 Ncm, the point at which a fracture can occur. Should the resistance be too much to achieve final seating, then the implant should be slowly backed out and the pilot drill should be used to deepen the osteotome site.



Prosthetic Protocol

Following proper prosthetic protocol is essential to case success

The base of the denture is relieved in order to freely accommodate the heads of the implants and the housings seated on the o-balls. The denture should be relieved until the housings no longer come into contact with the ceiling of the denture base. The denture should be cleaned thoroughly of all acrylic powder residue.

Take the PVC tubing and, using a scalpel or scissors, cut off 1.5mm lengths corresponding to the quantity of set implants.

Slip the cut lengths of tubing around the necks of the implant heads and into the gingiva but below the implant O-ball.

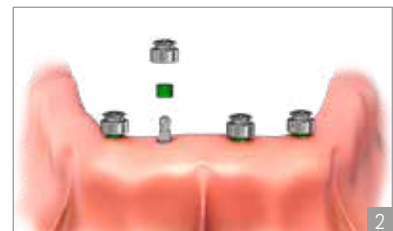
Fit the housings over all O-ball heads, the tubing should not obstruct the full seating of the housings over the O-balls.

Using cold curing acrylic, apply small amounts to the tops of the housings and fill the hollowed trough of the denture base with the acrylic.

Set the denture over the housings in the patient's mouth.

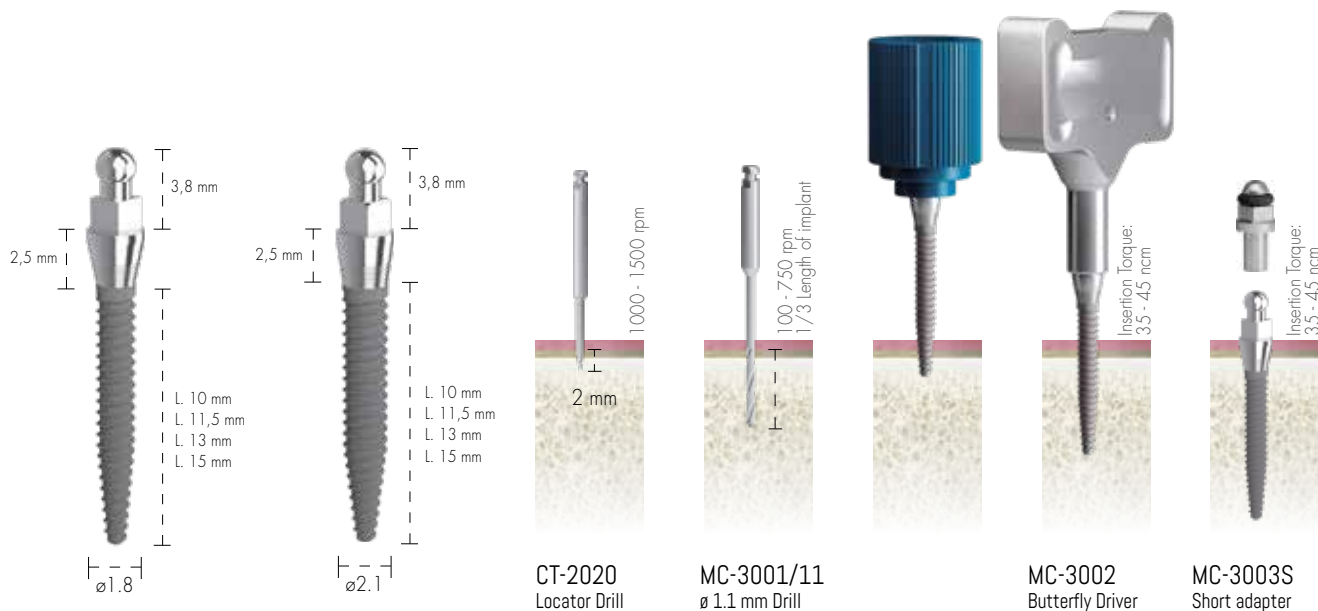
Have the patient bite down on the denture in a normal occlusion with normal pressure.

The acrylic will require approx 8 minutes to set, after which the denture is removed and excess acrylic is trimmed and polished away.

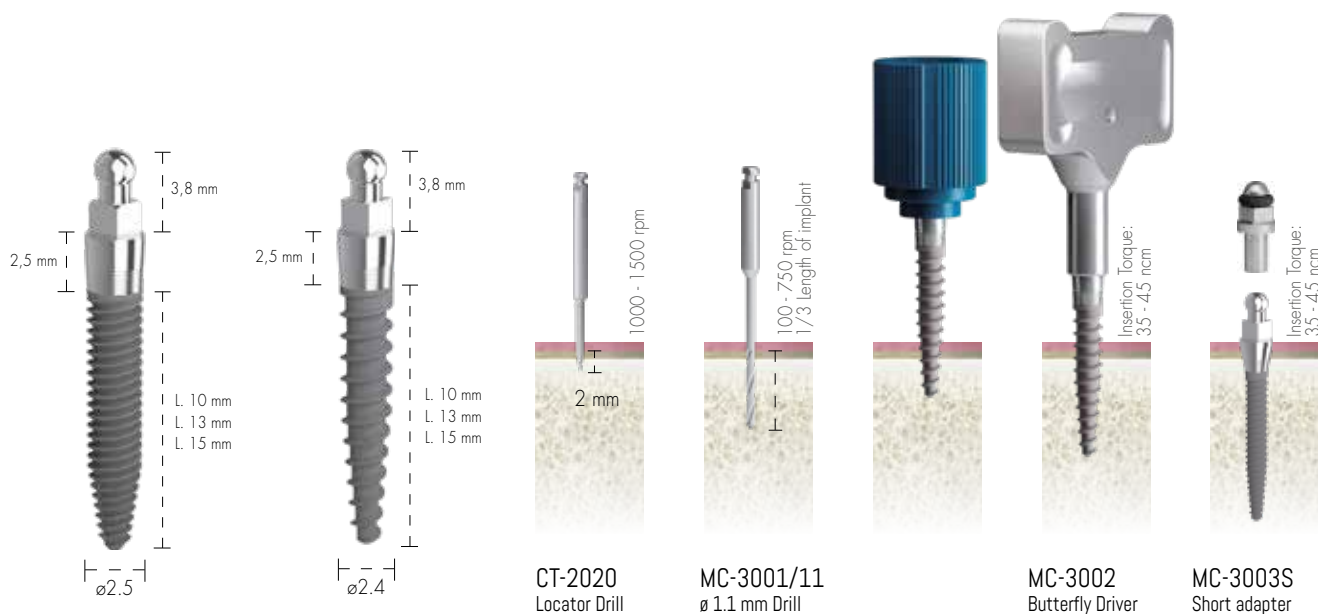


Site preparation

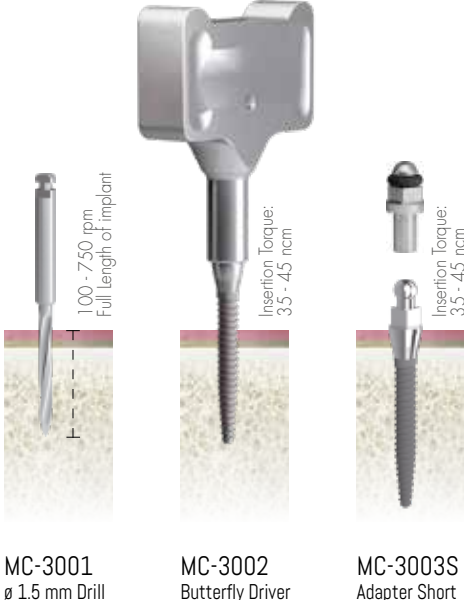
Ø1.8 - Ø 2.1 CAB/NAB/SAB/IAB/NIAB/SIAB



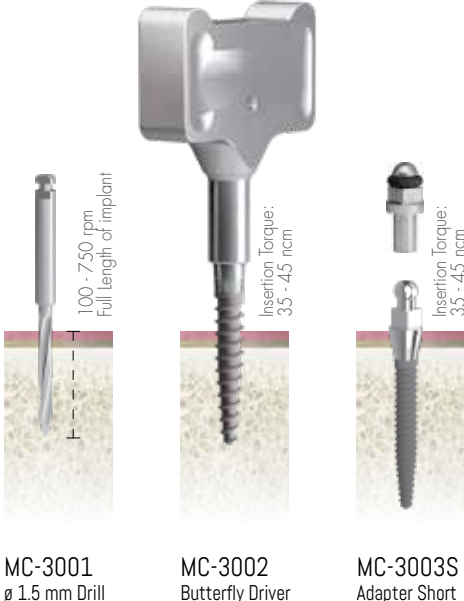
Ø2.5 - Ø 2.4 MC-25/MCA-25/MAB/NMAB/SMAB



D1 ADDITIONAL STEPS

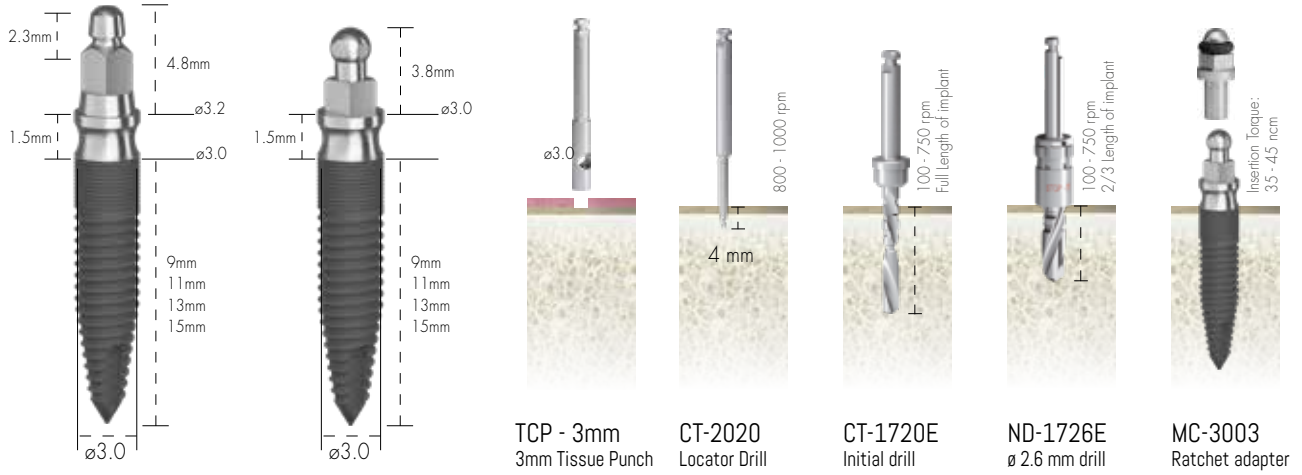


D1/D2 ADDITIONAL STEPS

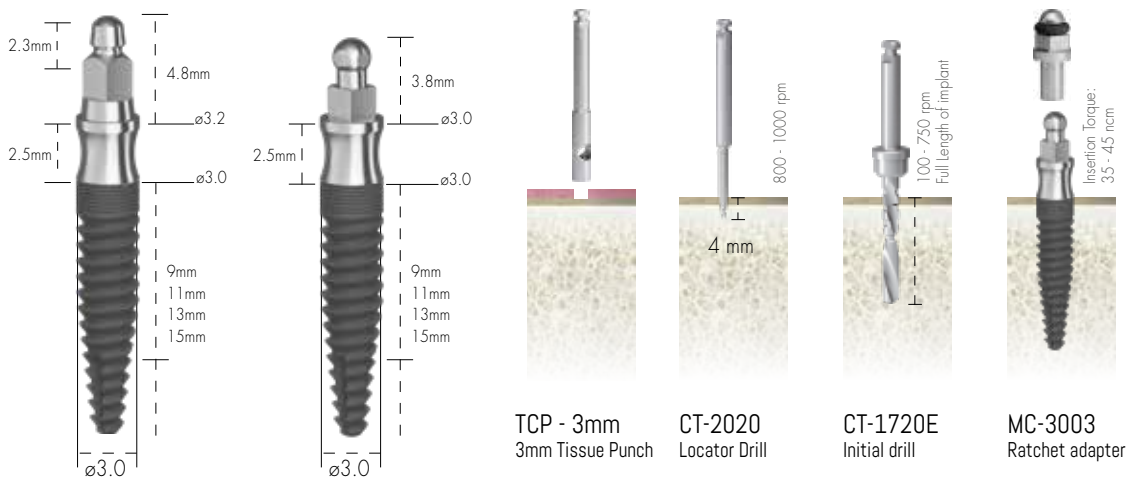


Site preparation

MAN - TAPER / MAN - O-BALL FOR DENSITY D1/D2



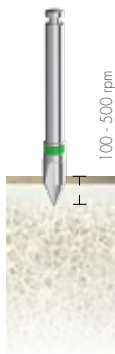
MAX - TAPER / MAX - O-BALL FOR DENSITY D2/D3



D1/D2 Additional steps



ND-1726E
ø 2.6 mm drill

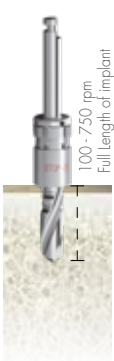


CT-1730E
ø 3 mm
Counter Bore



MC-3003
Ratchet adapter

D1/D2 Additional steps



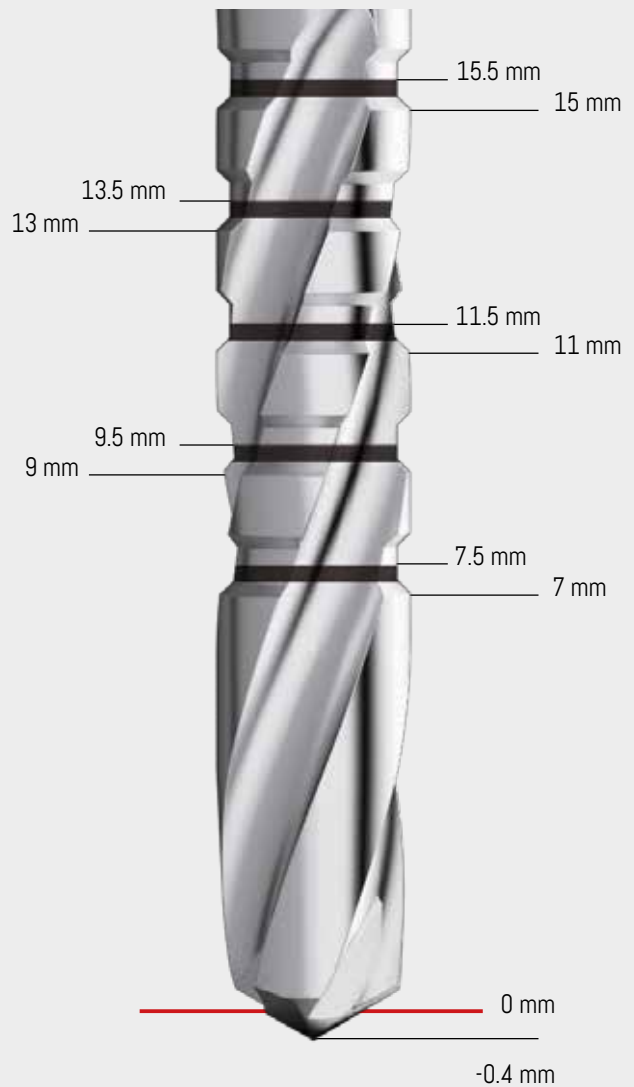
ND-1726E
ø 2.6 mm drill



MC-3003
Ratchet adapter

Explanation of Drill Marking

- The drill markings do not include the point of the drill.
- The point of the drill is 0.4 mm long, thus the drill marking of 7 mm is actually 7.4 mm from the very tip to the bottom of the first black line.
- The implant should be set approximately 1 mm sub crestally, thus for a 13 mm implant, one should drill to the 14 mm. The use of metal stop is recommended.



English version



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C-TECH
CENTURY IMPLANT TECHNOLOGIES

Via Cesare Battisti n. 2 - 40123, Bologna - ITALY - Tel. +39 051 6661817 - Fax +39 051 6667071
www.c-tech-implant.com - info@c-tech-implant.com

Go to
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