

SD

SMALL DIAMETER
implant



C-TECH
IMPLANT

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SD - SMALL DIAMETER IMPLANT

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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.



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 provides 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.



SD

SMALL DIAMETER implant



PROSTHETIC CHOICE

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



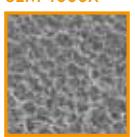
MICRO GROOVING

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

FINE THREAD IMPLANTS

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.

The treatment provides for a uniform surface with progressive trabeculation to be achieved.

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 THREAD IMPLANTS

The aggressive thread 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.



DOUBLE HELIX THREADING

The revolutionary double threads, unique in their nature, allow for ease of insertion and optimal primary stability. This advantage simplifies the work of the oral surgeon and reduces considerably the time of insertion.

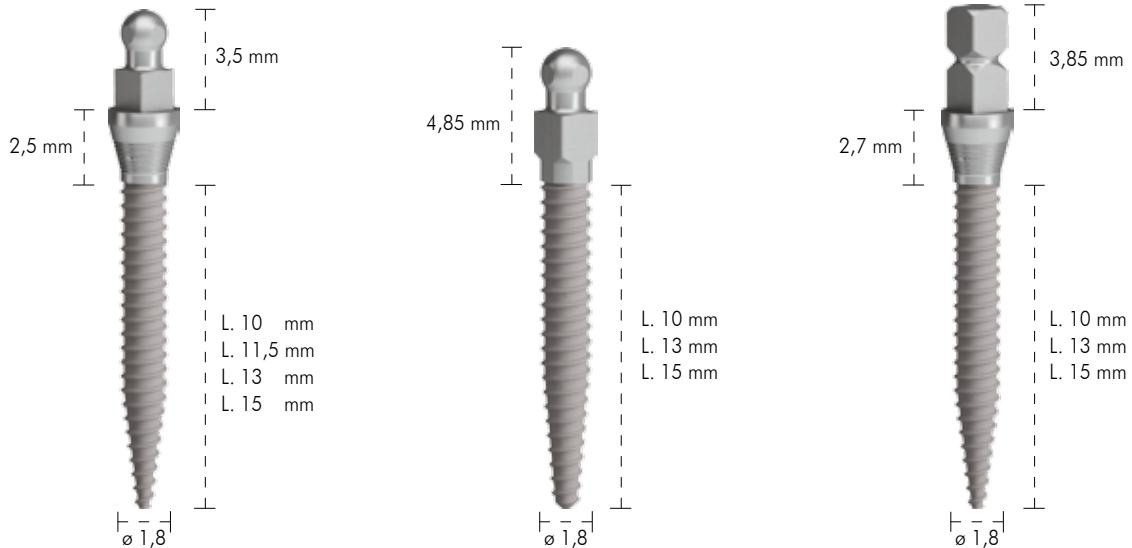
The thread has a particular 90° degrees beveled profile: whose shape, angle and depth are specifically conceived to increase contact surface with the bone.

It reduces the invasive process and improves at the same time the osseointegration.



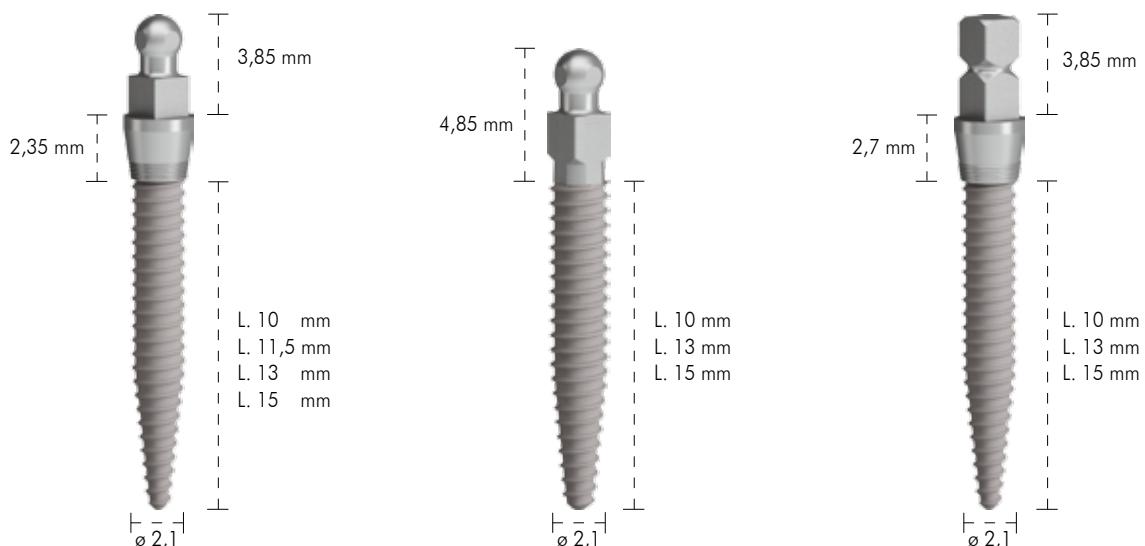
SMALL DIAMETER IMPLANTS

Ø1.8 FINE THREAD IMPLANTS



Ref.	Description	H	Ref.	Description	H	Ref.	Description	H
CAB-10	0-Ball collared	10 mm	NAB-10	0-Ball non collared	10mm	SAB-10	Square collared	10mm
CAB-11,5	0-Ball collared	11,5 mm	NAB-13	0-Ball non collared	13mm	SAB-13	Square collared	13mm
CAB-13	0-Ball collared	13 mm	NAB-15	0-Ball non collared	15mm	SAB-15	Square collared	15mm
CAB-15	0-Ball collared	15 mm						

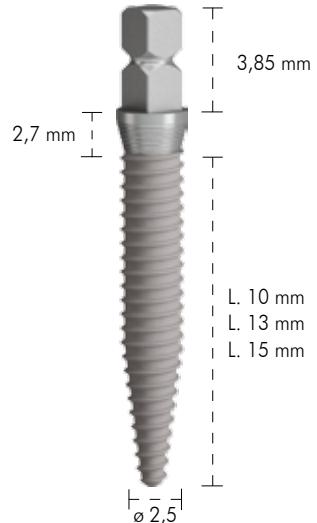
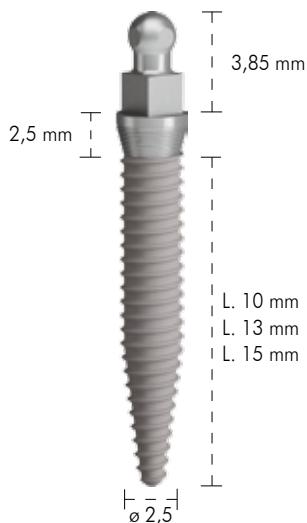
Ø2.1 FINE THREAD IMPLANTS



Ref.	Description	H	Ref.	Description	H	Ref.	Description	H
IAB-10	0-Ball collared	10 mm	NIAB-10	0-Ball non collared	10mm	SIAB-10	Square collared	10mm
IAB-11,5	0-Ball collared	11,5 mm	NIAB-13	0-Ball non collared	13mm	SIAB-13	Square collared	13mm
IAB-13	0-Ball collared	13 mm	NIAB-15	0-Ball non collared	15mm	SIAB-15	Square collared	15mm
IAB-15	0-Ball collared	15 mm						

SMALL DIAMETER IMPLANTS

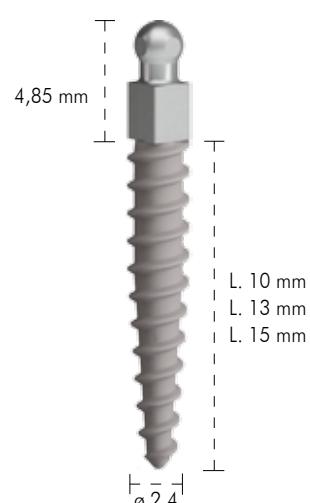
Ø2.5 FINE THREAD IMPLANTS



Ref.	Description	H
MC/25/10	O-Ball collared	10mm
MC/25/13	O-Ball collared	13mm
MC/25/15	O-Ball collared	15mm

Ref.	Description	H
MCA/25/10	Square collared	10mm
MCA/25/13	Square collared	13mm
MCA/25/15	Square collared	15mm

Ø2.4 AGGRESSIVE THREAD IMPLANTS



Ref.	Description	H
MAB-10	O-Ball collared	10mm
MAB-13	O-Ball collared	13mm
MAB-15	O-Ball collared	15mm

Ref.	Description	H
NMAB-10	O-Ball non collared	10mm
NMAB-13	O-Ball non collared	13mm
NMAB-15	O-Ball non collared	15mm

Ref.	Description	H
SMAB-10	Square collared	10mm
SMAB-13	Square collared	13mm
SMAB-15	Square collared	15mm

PROSTHETIC COMPONENTS

CAPS



MCH-1
Soft Retention



MCH-2
Medium Retention



MCH-3
Hard Retention



MC-3005B
O-ring (5 pieces)

MC-3005B/10
O-ring (10 pieces)

MC-3005B/25
O-ring (25 pieces)

MC-3005
O-ring (5 pieces)

MC-3005/10
O-ring (10 pieces)

MC-3005/25
O-ring (25 pieces)

STRAIGHT ABUTMENT



MC-3010

O-BALL CAPS



MC-3013
Temp Cap



MC-3014
Transfer Cap

SQUARE HEAD CAPS



MC-3006
Castable

PVC PROTECTION



MC-3008

ANALOG



MC-3007
Collared Analog



MC-3012
Non collared Analog



MCA-1007
Collared Square Head Analog

SURGICAL KIT

BUTTERFLY DRIVER



Ref. MC-3002

INSTRUMENT CASSETTE

MC-00075SC



DRILLS



MC-3001/11
1.1 Drill



MC-3001/13
1.3 Drill



MC-3001
1.5 Drill



MC-3001/20
2.0 Drill

BONE CALIPERS

MC-3015



ADAPTERS



MC-3003S
Short



MC-3003M
Medium



MC-3003L
Long

RATCHET NO TORQUE



Ref. MC-00376

TORQUE RATCHET



Ref. CT-8010

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 $\frac{3}{4}$ 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.

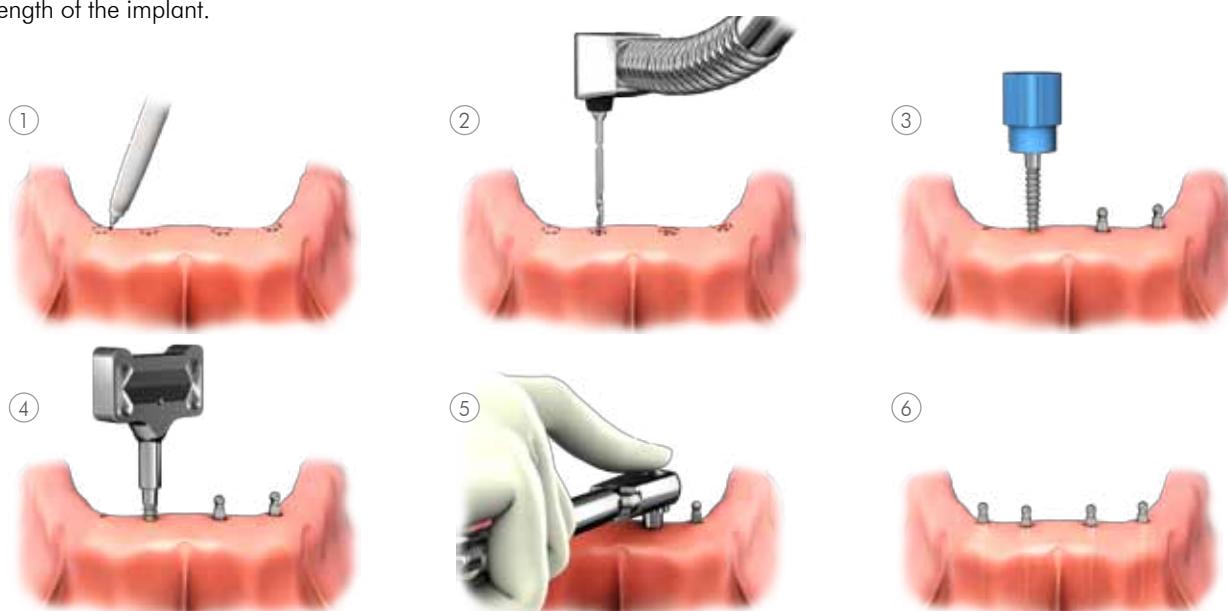
FINAL IMPLANT SEATING

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.



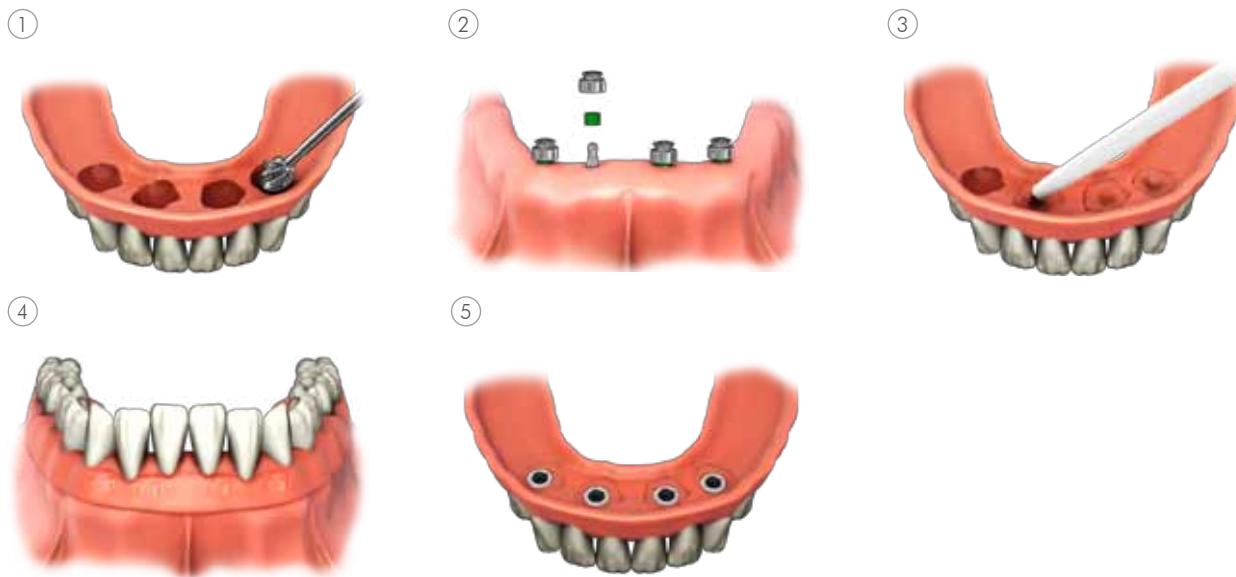
PROSTHETIC PROTOCOL

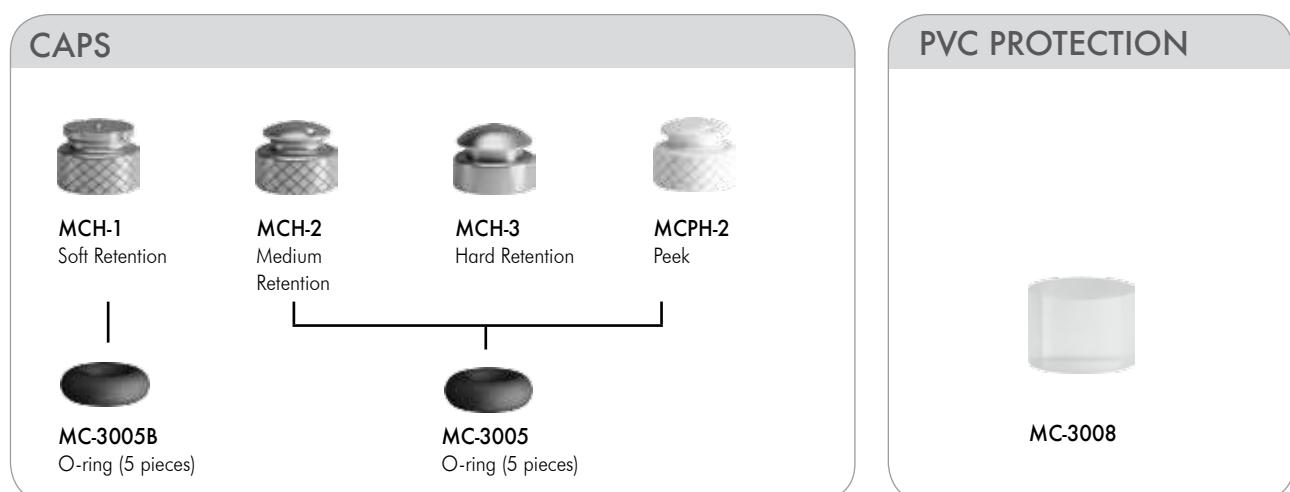
FOLLOWING PROPER PROSTHETIC PROTOCOL IS ESSENTIAL TO CASE SUCCESS

- 1) 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.
- 2) 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.
- 3) 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.

- 4) 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.
- 5) The acrylic will require approx 8 minutes to set, after which the denture is removed and excess acrylic is trimmed and polished away.







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