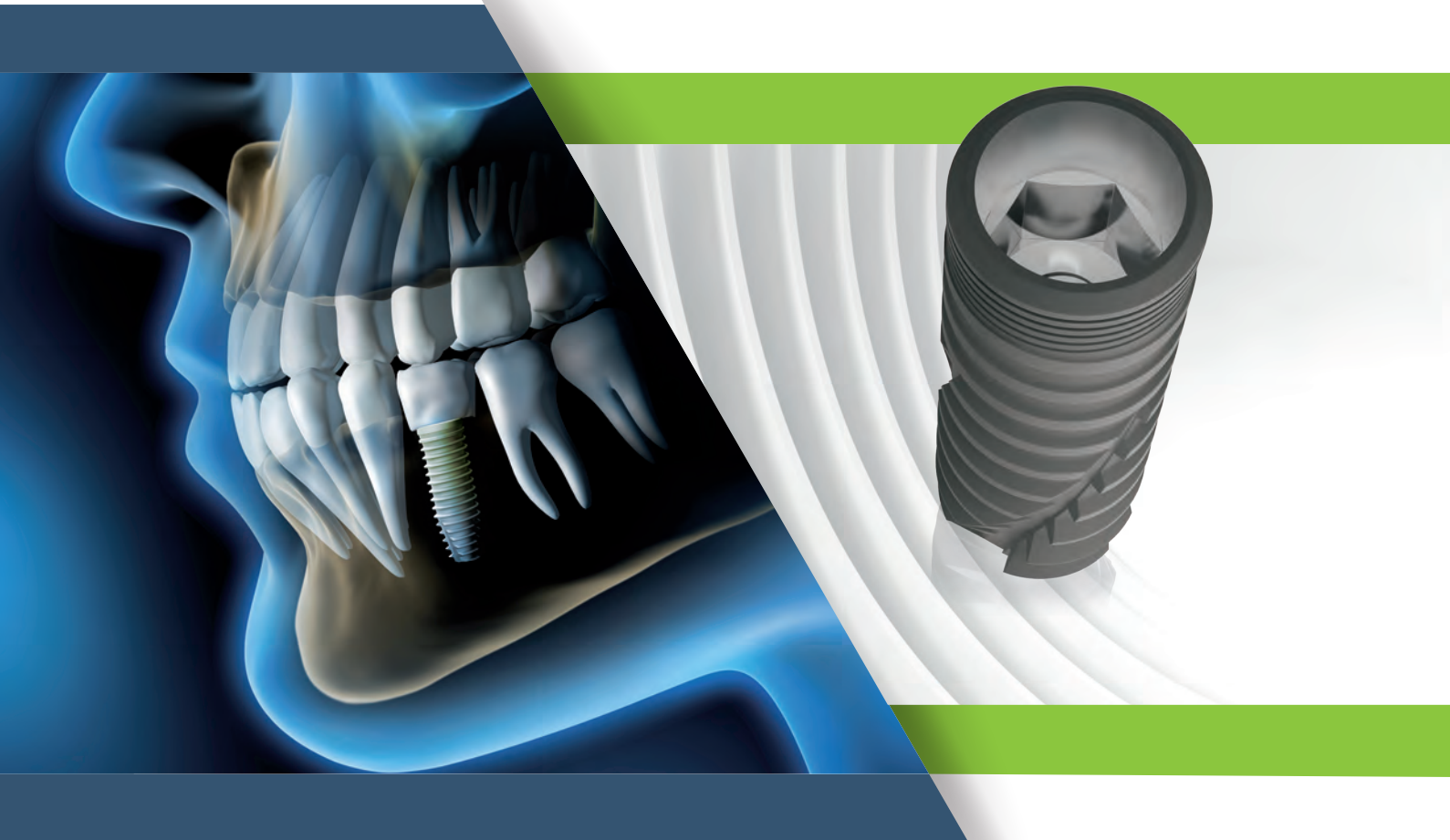


matrix™  
Implant system



**ConEx™**  
connection

# since 1987

**We have been designing and developing new solutions, striving towards making each phase of dentistry and prosthetics processes a little simpler and reproducible.** The most valuable asset of our company is human being, the set of people who daily act, operate and work together, sharing the same objectives and the same satisfaction and pride in offering our clients a high quality service.

Our primary objective is to **DISPENSE KNOWLEDGE.** We are strong of over 30 years of Know-how developed in the sectors in which we operate, through clear, rapid and efficient communication. **Guaranteeing** to our clients a top quality service to win their confidence and keep it in the long term, allowing them to obtain the maximum professional advantage and therefore economic advantage.

**WE VALUE YOUR SKILLS**



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### **CREDIBILITY**

We personally meet our clients face to face daily, to earn their trust, esteem and respect.



### **RELIABILITY**

Through consistency we put what we declare into action.



### **TRASPARENCY**

Due to conduct and procedures known and shared by all, as well as constant and comprehensive communication, we supply objective and verifiable information to allow our clients and users to choose in a free and independent way.

**WE VALUE  
YOUR SKILLS**



### PROVIDING

“Clever tools” so that the operator is able to act with efficiency, speed and without constraints on the quality of the product or service.



### SERVICE

Focused on disclosing the procedures of use of the various products and sharing strategies aimed at involving the final user (patient).



### ILLUSTRATING

The most suitable techniques in order to make the various working phases simpler and more ergonomic.



### OFFERING

Detailed merchandise information relating to the characteristics of the materials used.



### TRADITION

#### Between past...

We have been working on the design of high-tech implant-prosthetic devices for over thirty years.



### INNOVATION

#### ....and future

With the changeover from “analogue” to “digital” dentistry, our task is to make complex procedures simple and understandable.

**Innovation while maintaining structural characteristics:**  
this was the basis for our development of the ConEx™ conometric connection. An internal cone conicity 5° and at a depth of 1.7 mm provides optimal stability of prosthetic posts. The anti-rotational component is provided by the 2.3 mm hexagon included on Matrix implant lines has been a flagship element of our products for 30 years.



SAFETY AND  
RELIABILITY  
SINCE 1994

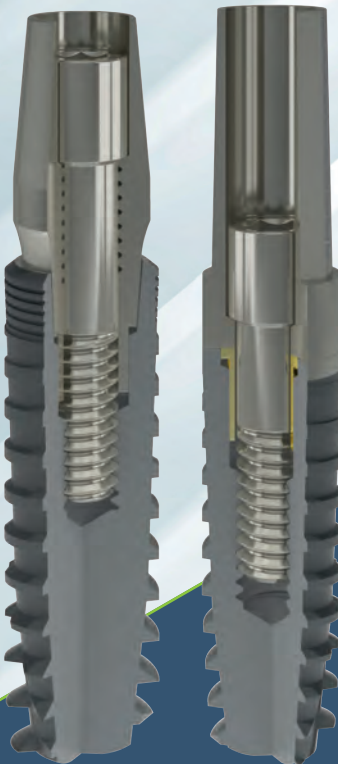
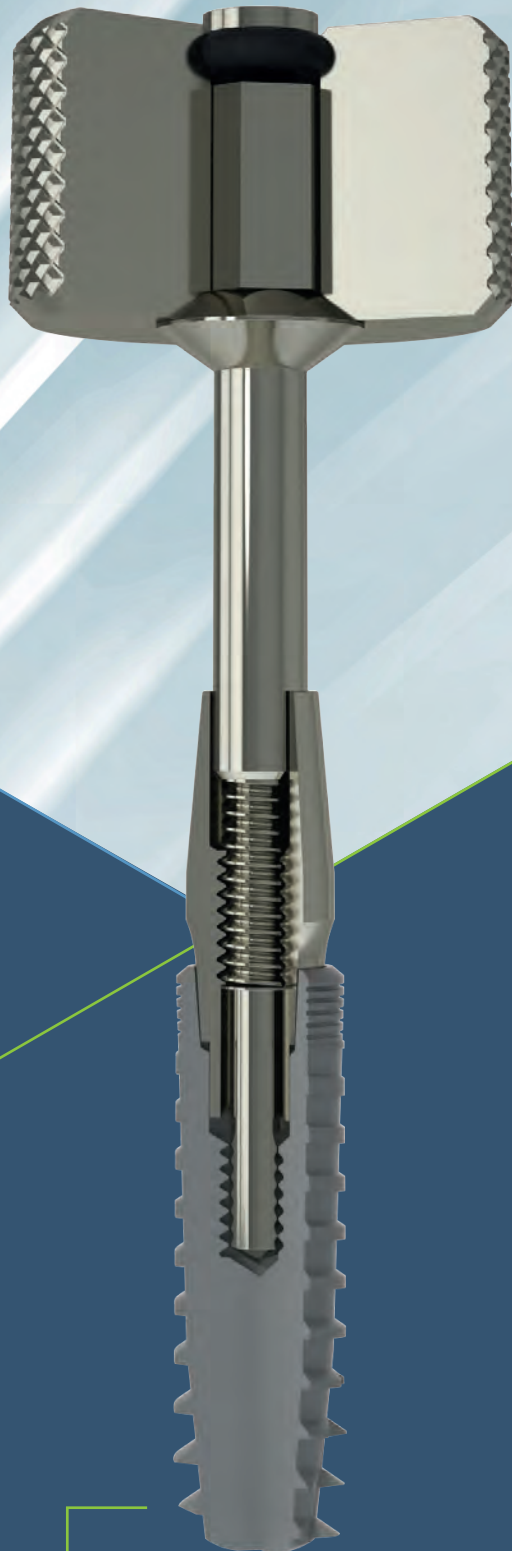
## ConEx™ conometric connection

**Innovation while maintaining structural characteristics\*:** this was the basis for our development of the ConEx™ conometric connection. An internal cone at 5° and at a depth of 1.7 mm provides optimal stability of prosthetic posts. The anti-rotational component is provided by the 2.3 mm hexagon included on Matrix™ implant lines has been a flagship element of our products.

### **Industry 4.0:**

We have entered the 4th industrial revolution, leading us into entirely optimised and interconnected production. The prosthetic components created for the ConEx™ conometric connection are allowing us to maximise the potential of tapered prostheses to a level of precision not seen before. With the ConEx™ conometric connection implant we wanted to make the entire system even more simple and ergonomic. The close coupling between the abutment and fixture creates a single body. If removal is necessary, use the EE/EEC extractor. All prosthetic abutments have an internal thread at the level of the taper. By winding the extractor you create an upward force in the non-threaded part of the extractor, which allows it to be removed.

\*The method of conical coupling between two metal pieces of male and female conical shape is called Morse taper. The main feature is that the angle of the truncated cone must not exceed 5°. It was proposed by Stephen A. Morse in 1864.



Comparison between ConEx™ connection ("ConEx™" implant Ø3.3 mm) and InthEx™ ("Th Thunder" implant Ø3.3 mm)

- Internal Morse taper 1.7 mm depth, conicity 5°
  - Anti-rotational hexagon
  - 1.8 mm wide activation screw
  - Prosthetic columns with optimal stability
- 
- Intimate contact with the prosthetic part
  - The fixing screw acts exclusively as an activation component for the locking taper coupling
  - Optimal soft tissue management at the crestal bone level in the peri-implant area
  - Once the cone has been activated, removal of the prosthetic column is only possible using the special extractor (fig.1)

Fig.1  
"R ConEx™" Ø3.3 mm ConEx™  
conometric connection with extractor

## MATRIX™ IMPLANT SURFACE

# SLA® Sand-blasted, Large grit, Acid-attacked

The surface treatments provide a preliminary sanding process with large grain sand and acid etching 'Sand-blasted, Large grit, Acid-attacked' SLA®.

\* SLA® is a registered trademark by the Institut Strauman AG Switzerland

Figures 1 and 2 show images of the threaded part of the implant (at low magnification) and highlight the good homogeneity of the treatment.

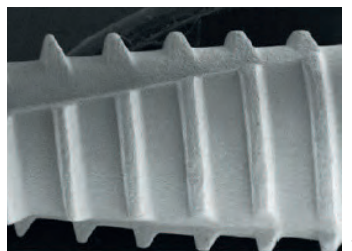
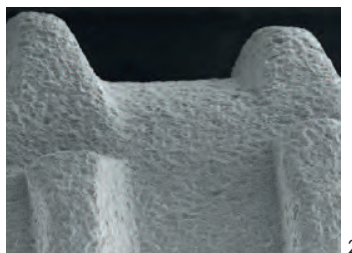


Figure 2 allows to observe major cavities formed due to the sanding process.



Figures 3 and 4 refer to the results of the tests on experimental samples indicating the absence of toxic effects, in compliance with the indications of the standard EN ISO 10993-5 1999.

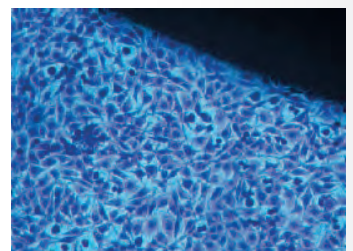
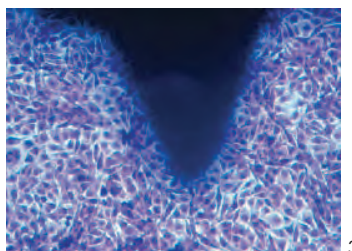
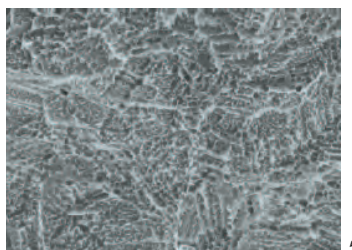


Figure 5 highlights the details of the roughness imparted by the treatment.



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# “BIO”- Prosthesis implant

PROSTHESIS IMPLANT SEEN FROM  
ANOTHER PERSPECTIVE.

The prosthetic components in the cervical area follow a taper.

The design of the transmucosal approach allows optimum adaptation of the soft tissues, eliminating the risk of peri-implantitis almost completely.





The background features a white top section with a large, faint, concentric circle pattern on the left. Below this, a diagonal band of bright green and a dark blue section are visible. The dark blue area contains several faint, overlapping geometric patterns, including concentric circles and gear-like shapes. The text is positioned in the white area.

MaTrix™ Implant system  
\_ConEx™ connection

## “R ConEx™” conical implant

*Versatile and reliable*



“R” implant has been used successfully for more than 10 years in the standard version and then in the “Aesthetic” version. The widest used of all types we produce, this particular external design is simple and extremely versatile, making it adaptable to numerous types of clinical situation.

### CHARACTERISTICS:

- Full Space SLA® treatment on all the vertical surface of the implant
- Large bone-implant contact surface areas also in the crestal region
- Internal Morse taper 1.7 mm depth, conicity 5°
- Anti-rotational hexagon
- Hexagon 1.8 mm depth and 2.3 mm wide
- 1.8 mm wide activation screw
- Prosthetic columns with optimal stability

### Available heights and diameters:

- Ø 3.8 mm - L 8 - 10 - 12 mm
- Ø 4.5 mm - L 8 - 10 - 12 mm
- Ø 5.2 mm - L 8 - 10 - 12 mm

## “CF ConEx™” conical implant

*Simple, fast, precise*



Type “CF” implant is the perfect synthesis between ease of insertion and positioning precision. This feature is very useful, especially in cases where the operation is performed using a “guided software” surgery technique. With this technique, the implant maintains its trajectory during insertion, even in the event of simultaneous cortical and medullary bone impacts in the vertical direction. The form is cylindrical with a regular coil in the cervical and central portion. The apical portion is tapered (conical), to make it easier for the practitioner to insert, which therefore makes it self-centring.

### CHARACTERISTICS:

- Maximum congruence between implant site and implant surface
- Maximum primary stability with minimal surgical trauma
- Internal Morse taper 1.7 mm depth, conicity 5°
- Anti-rotational hexagon
- Hexagon 1.8 mm depth and 2.3 mm wide
- 1.8 mm wide activation screw
- Prosthetic columns with optimal stability

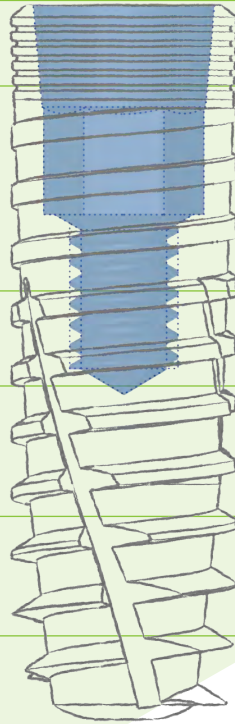
### Available heights and diameters:

- » Ø 3,8 mm - L. 8 - 10 - 12 - 14 mm
- » Ø 4,5 mm - L. 8 - 10 - 12 - 14 mm
- » Ø 5,2 mm - L. 8 - 10 - 12 mm

Fully sanded and treated surface

Spirals with regular pitch

The truncated-conical body facilitates insertion making the implants 'self-centring'

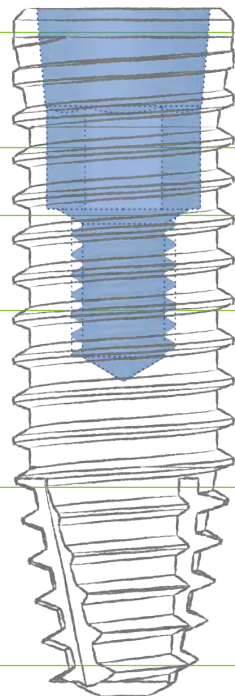


- Same surgical components (conical drills) used for the type "R Thunder", "CF", "R", "R aesthetic", "F", "S" and "SL"
- Same surgical instruments
- Use of all the prosthetic components already present in the MaTriX™ implant system (see following pages).

Fully sanded and treated surface

Spirals with regular pitch

The apical part (self-centring) facilitates bicortical anchoring to obtain a high primary stability in cases of reduced bone density



Detail of the self-centring part



- Same surgical components (conical drills) used for the type "R Thunder", "CF", "R", "R aesthetic", "F", "S" and "SL"
- Same surgical instruments
- Use of all the prosthetic components already present in the MaTriX™ implant system (see following pages).



MaTrix™ Implant system  
\_ConEx™ components



## For digital dentistry

### Advantages:

- Accurate digital acquisition of implant positioning through scanbody
- Abutment design using specific software
- Realisation of meso-structure or abutment crown by a meso block
- Adhesive connection with sintered structure or crown or abutment



Intraoral scanbody (screw included)

Laboratory scan abutment (screw included)

Intraoral scanbody for straight conical abutment (screw included)

Laboratory scan abutment for straight conical abutment (screw included)

Abutment for bonding, "EPT I" series (H 1.5 - 3 - 5 mm)\* (screw included)



Antirotational calcinable cape for abutment, "E\_TB" series



Flat conical abutment, "EMCF" series (H 1.5 - 3 - 5 mm)\*



Activation screw for flat conical abutment, "EMCF" series (H. 1.5 - 3 - 5 mm)\*



Cape for flat conical abutment, "EMCF" series (screw included)

\*H = transmucosal height of the abutments must be communicated when the accessories are ordered (capes, screws)



## Healing cap



Straight healing abutment, "EPG\_D" series (H 2 - 3 - 5 - 7 mm)

## For dental impression



Transfer for impression, "ETK" series  
**For pick up technique**



Laboratory analogue, "EA" series



Transfer for impression, "ETI E" series



Laboratory analogue for series "EA E"

## For cemented prostheses



Straight abutment, "E\_D A" series (H 1.5 - 3 - 5 mm)\*



Abutment tilted by 15° or 25°, "E15 H\_A" and "E25 H\_A" (H 1.5 - 3 - 5 mm)\*



Co.Cr.Mo. overcasting abutment, "EUCLA C" series

## For screw retained prostheses for single elements



Abutment for bonding, "EPT I" series (H 1.5 - 3 - 5 mm)\*



Co.Cr.Mo. overcasting abutment, "EUCLA C" series

\*H = transmucosal height of the abutments must be communicated when the accessories are ordered (capes, screws)

## For screw retained prostheses for multiple elements



Flat conical abutment, "EMCF" series (H 1.5 - 3 - 5 mm)\*



Activation screw for flat conical abutment, "EMCF" series (H. 1.5 - 3 - 5 mm)\*



Healing cap for flat conical abutment, "EMCF" series



Transfer for impression for flat conical abutment, "EMCF" series



Laboratory analogue for flat conical abutments, "EMCF" series



Titanium cape for flat conical abutment, "EMCF" series (screw included)



Calcinable cape for flat conical abutment, "EMCF" series (screw included)



Prosthetic screw "12VPC EMCF\_" series for capes for flat conical abutment (H 1.5 - 3 - 5 mm)\*

Internal Hexagon

\*H = transmucosal height of the abutments must be communicated when the accessories are ordered (capes, screws)

## For tapered prostheses



Straight abutment  
"E\_D A" series  
(H 1.5 - 3 - 5 mm)\*

Angled abutment  
15° or 25°,  
"E15 H\_A" and  
"E25 H\_A" series  
(H 1.5 - 3 - 5 mm)\*

Rotational and  
anti-rotational  
titanium cape,  
"ECP\_" series

POM cape  
"ECP E"  
"ECP EA"  
series

PEEK cape  
"ECP EP"  
series

## For removable prostheses



Titanium ball attachment  
Nitrided ball  $\varnothing$  1.8 mm  
"E18AS" series  
(H 1 - 3 - 5 mm)

Accessories ball attachments,  
"18AS" series:

- steel box
- retentive elastic capes
- protective disk

\*H = transmucosal height of the abutments must be communicated when the accessories are ordered (capes, screws)

## For screw retained prostheses for multiple elements



Conical abutment "EMC" series complete with screw 12VPC-EMC (H 1 - 3 mm) \*



Straight healing abutment for "MC" series conical abutments complete with screw 12VPC-S



Impression transfer for "EMC" series abutments complete with 12VTC-M screw



Laboratory analog for conical abutments "MC" series AMCI



Complete titanium coping for conical abutment series "MC" screw 12VPC-S ICP - ICP S - ICP TB



Castable coping for conical abutments "MC" series complete with 12VPC-S screw ICP C - 12VPC-S short prosthetic screw for copings



1 - CC12 - Contra-angle wrench with hexagon  
2 - CK12 - CK12L Insert with hexagon  
3 - CMP12 - CMP12L - CMP12XL Manual key

\*H = transmucosal height of the abutments must be communicated when the accessories are ordered (capes, screws)

## For syncrystallized/welded prostheses

**FICS™** | FIXING  
INTRAORAL  
CONTINUING  
SOLDERING

**FICS™** is a BioService patent that allows you to rigidly fix different implants among them by using pre-formed titanium rods, with bonding or welding technique (direct or not direct).



Bonding



Welding



CMFT SA titanium cape  
for flat conical abutment,  
"EMCF" series



CMFT SA45 titanium cape (tilted  
by 45°) for flat conical abutment,  
"EMCF" series

### **FICS™ Kit for ConEx Connection**

It is available a Kit that includes:

- n.2 titanium rods  $\varnothing$  1.5 mm and lenght 150 mm
- n.2 titanium rods  $\varnothing$  2 mm and lenght 150 mm
- n.3 FICS CMFT SA capes (prosthetic screws not included)
- n.3 FICS CMFT SA45 capes (prosthetic screws not included)

## Closure cap



Closure cap  
"ET" series

## Prosthetic screws



Prosthetic screws  
"12VPC H\_" series for  
prosthetic abutments  
(H 1.5 - 3 - 5 mm)\*

## Instruments devoted to ConEx connection



Conetrangle keys for  
implant positioning

- short CI23CX
- long CI23LX



Extractor for manual  
key for prosthetic  
abutments

- short ECME C
- long ECME



Extractor for manual  
handle for prosthetic  
abutments

- short EE C
- long EE



Parallelism indicator  
for conometric  
columns

\*H = transmucosal height of the abutments must be communicated when the accessories are ordered (capes, screws)

## Prosthetic and activation screw for ConEx connection KIT MES (MaTriX Easy Screw) - KIT MES CX



9 Prosthetic screws for angled canal (3pcs H 1.5 mm, 3pcs H 3 mm, 3pcs H 5mm)  
18VPC CX\_

1 Contra-angle wrench for MES system  
CC18

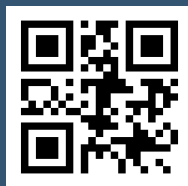
1 Handle manual for key from contra-angle CC18  
CMP18

\*H = transmucosal height of the abutments must be communicated when the accessories are ordered (capes, screws)

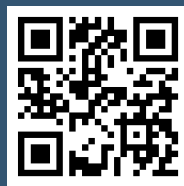


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Product



Rev. 02/2021



Linea implantare MaTriX

| [www.bioservicesrl.it](http://www.bioservicesrl.it)

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