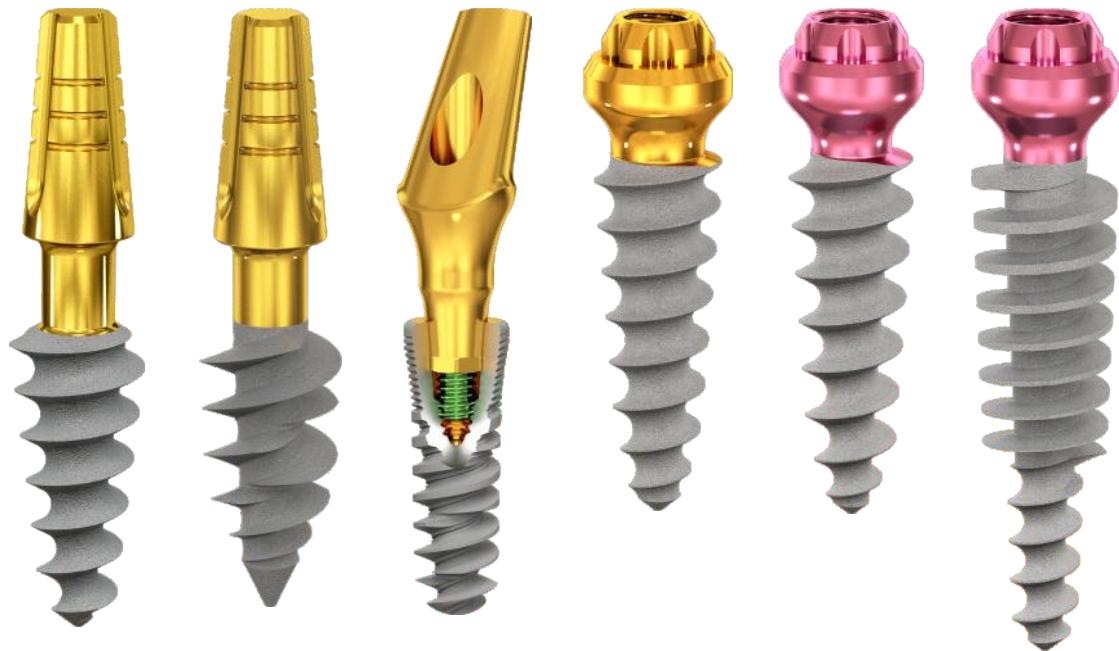


# ROOTT

open implant system

by **TRATE**



## System overview



*“The only one-piece implant  
with no organic contaminants  
or inorganic residues.”*

"Quality assessment of dental implants by SEM and EDX analysis.

A comparison of five one-piece implants"

Dr. Dirk U. Duddeck, CleanImplant Foundation.

ZWP 3/2016, p. 12-18.



High quality and safety standards

We operate a quality management system based on EN ISO 13485:2016.

The company's products are certified in compliance with the provisions  
European Directive 93/42/EEC.

# Created for dentists by dentists

The ROOTT Implant System is developed and constantly upgrading by TRATE AG in close cooperation with members of Open Dental Community.

The ROOTTCONCEPT has dispensed with the overcomplicated treatment procedures recommended by implant manufacturers who are limited by their products on the market.

The ROOTT philosophy is to create the ideal artificial tooth which organically integrates with existing biological structures in the simplest way.

Class leading surface purity (ZWP 3/2016, p. 12-18).



## Innovations and development

The system development aims to reflect the collective view of independent dental practitioners throughout the world thus TRATE AG closely cooperate with the Open Dental Community NPO (Luxembourg). This approach avoids reliance on individual opinions and makes dentists free to select the method most suited to the patient.

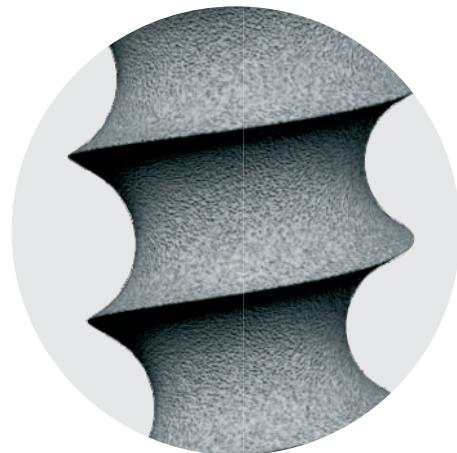


## COMPRESSIVE implants

The COMPRESSIVE implant is a one-piece implant with compressive threads. It is used for multiple unit restorations with immediate loading in the upper and lower jaws with adequate bone tissue. It can be used in combination with basal implants and allows flap and flapless placement. Abutment direction can be adjusted up to 15° relative to the implant axis.



- Special compressive threads
- Immediate loading
- Adjustable abutment slope angle
- In accordance with FILO concept  
can be combined with Basal implants  
in pterygoid area for total rehabilitation



*"The FILO Concept is based in three principles: Flapless surgery, Immediate Loading, and use of one-piece implants. Compressive is a multi-purpose implant and Basal is reserved to Pterygoid Area when it is necessary."*

## Clinical case



Dr. Alvaro Bastida  
Spain

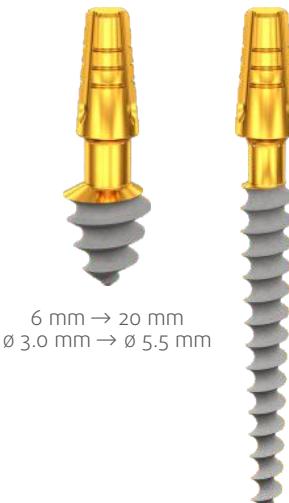


*More clinical cases at Open Dental Community Group on Facebook*

**TRATE**

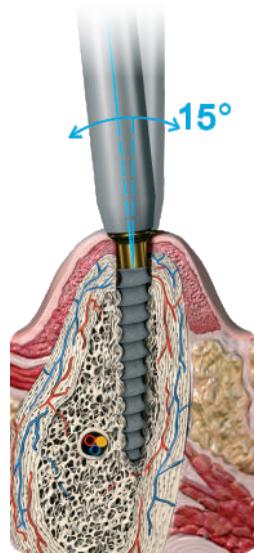
## Wide range of sizes

From short and wide to thin and long



## Bendable neck

Depending on the length of the implant the abutment can be bent up to 15 degrees, as long as the implant is placed with high primary stability



## Variety of prosthetic solutions

From cemented fixation and burn-out angulated caps to telescopic caps with screwed retention and CAD-CAM solutions on multiunit platforms.

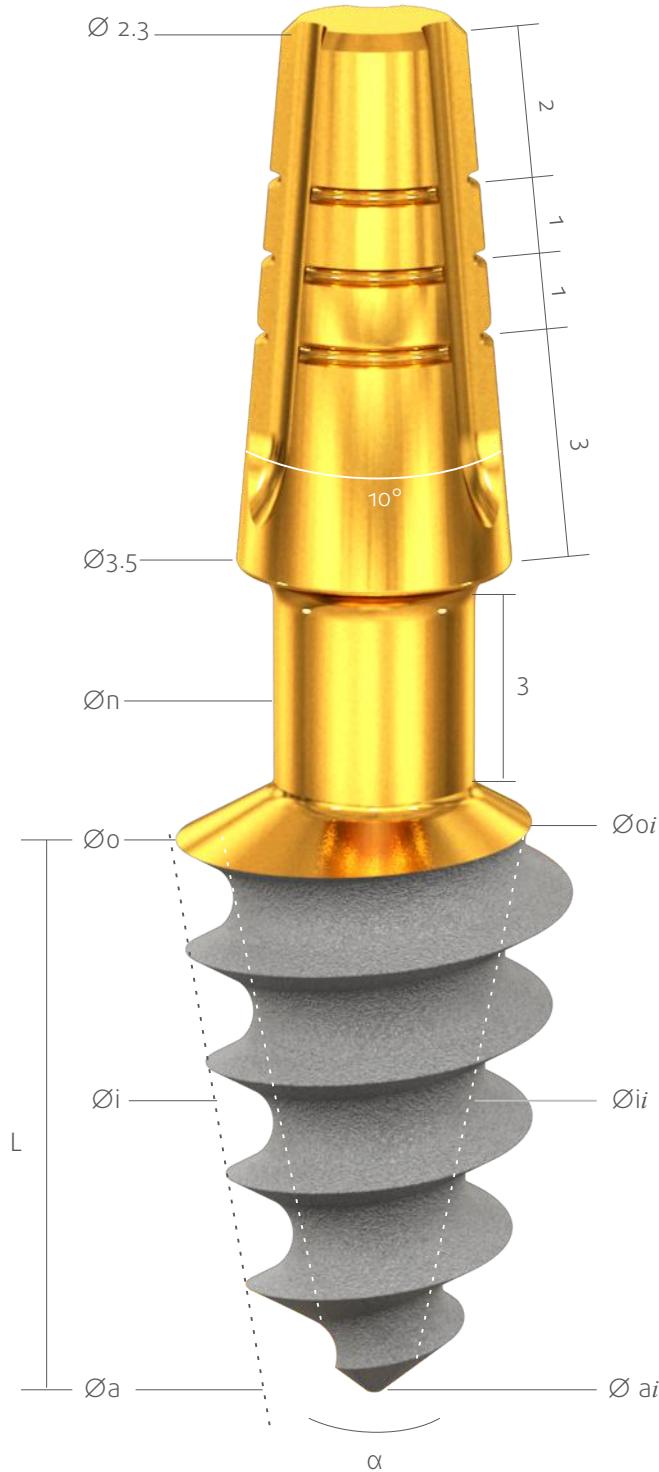


## Universal set

Tooth socket preparation with bone volume saving drills and Compressive Screws allows to match your sterile implant perfectly.



# Compressive implants



o - occlusal diameter (mm); i - intraosseous diameter (mm); a - apical diameter (mm); n - neck diameter;  
 $\alpha$  - total internal angle ( $^\circ$ ); s - intraosseous square area ( $\text{mm}^2$ ); *i* = internal.

	$\varnothing 3.0$ $0i\ 2.05$ $n\ 2.05$	$\varnothing 3.5$ $0i\ 2.46$ $n\ 2.05$	$\varnothing 4.0$ $0i\ 2.95$ $n\ 2.05$	$\varnothing 4.5$ $0i\ 3.05$ $n\ 2.35$	$\varnothing 5.0$ $0i\ 3.55$ $n\ 2.35$	$\varnothing 5.5$ $0i\ 4.04$ $n\ 2.55$
L 6 mm	C3006 2.4   1.4 1.9   0.9 43   12	C3506 2.6   1.6 1.9   0.9 49   18	C4006 3.1   2.0 2.4   1.2 59   23	C4506 3.5   2.1 2.9   1.4 73   22	C5006 3.9   2.4 3.2   1.7 82   27	C5506 4.2   2.7 3.3   1.8 88   33
L 8 mm	C3008 2.4   1.4 1.9   0.9 58   9	C3508 2.6   1.6 1.9   0.9 65   13	C4008 3.1   2.0 2.4   1.2 82   27	C4508 3.6   2.2 2.9   1.4 100   16	C5008 4.0   2.5 3.2   1.8 112   20	C5508 4.2   2.7 3.3   1.8 121   24
L 10 mm	C3010 2.4   1.4 1.9   0.9 73   7	C3510 2.6   1.6 1.9   0.9 82   10	C4010 2.9   1.8 1.9   0.8 92   13	C4510 3.4   1.9 2.4   1.0 117   13	C5010 3.7   2.2 2.6   1.2 131   16	C5510 3.8   2.4 2.5   1.0 139   19
L 12 mm	C3012 2.3   1.3 1.7   0.7 86   6	C3512 2.6   1.6 1.8   0.8 97   8	C4012 2.8   1.8 1.8   0.8 109   11	C4512 3.3   1.9 2.4   0.9 140   10	C5012 3.8   2.4 2.8   1.4 163   13	C5512 4.0   2.5 2.5   1.1 167   15
L 14 mm	C3014 2.4   1.3 1.9   0.7 99   5	C3514 2.6   1.5 1.8   0.7 111   7	C4014 2.9   1.8 1.8   0.8 128   9	C4514 3.3   1.9 2.3   0.9 162   9	C5014 3.6   2.2 2.4   0.9 179   11	C5514 3.8   2.3 2.3   0.8 191   13
L 16 mm	C3016 2.4   1.4 1.7   0.8 118   4	C3516 2.6   1.6 1.8   0.8 128   6	C4016 2.9   1.8 1.8   0.8 146   8	C4516 3.3   1.9 2.3   0.8 84   8		
L 18 mm	C3018 2.4   1.3 1.7   0.7 128   4	C3518 2.7   1.7 1.8   0.8 146   5	C4018 2.9   1.8 1.8   0.8 164   7	C4518 3.3   1.9 2.2   0.8 206   7		
L 20 mm	C3020 2.4   1.3 1.7   0.7 143   4	C3520 2.6   1.6 1.8   0.7 161   5	C4020 2.9   1.8 1.8   0.7 180   6	C4520 3.3   1.9 2.2   0.8 230   6		

$\varnothing i$  |  $\varnothing ii$   
 $\varnothing a$  |  $\varnothing ai$   
 $S$  |  $\alpha$

# Compressive implants with short neck

COMPRESSIVE  


- Bendable 
- Gingiva H<1 mm 
- Sinus area 

COMPRESSIVE S  


-  Bendable
-  Gingiva H<1 mm
-  Sinus area

3 mm

1.5 mm



L 6 mm

C4006S



L 8 mm

C4008S



L 10 mm

C4010S



$\varnothing$  4.0

C4506S



C4508S



C4510S



$\varnothing$  4.5



## BASAL implants

BASAL implants are used to create multiple unit restorations in the upper and lower jaws. Can be placed in extraction sockets and in healed bone. The structural characteristics allow placement in height and width deficient bones. Can be placed with flap or flapless technique. Can be used to bypass the mandibular nerve, and for engagement of the cortical bone at the fusion of the pterygoid with the maxilla. Can be used in combination with compressive implants. Can be adjusted up to 15° relative to the implant axis.



- Ideal for resorbed ridges
- Immediate loading
- Placement in the socket of an extracted tooth
- Excellent protection from inflammation around the implant
- Abutment adjustment angle up to 15°



### Clinical case



Dr. Ducko Aurel  
*Slovakia*

[More clinical cases at Open Dental Community Group on Facebook](#)

## Wide range of sizes

From short and wide to thin and long



8 mm → 26 mm  
Ø 3.5 mm → Ø 10.5 mm



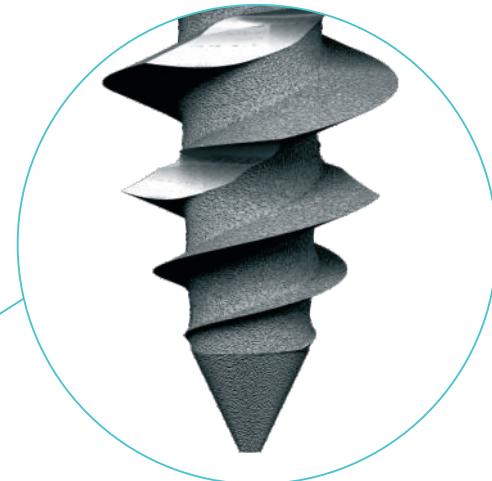
## Long polished bendable neck

Depending on the length of the implant the abutment can be bent up to 15° as long as the implant is placed in sound bone

Polished surface protects from accumulation of bacteria at the cervical part of the implant

## Different surfaces

Polished, sandblasted and anodized



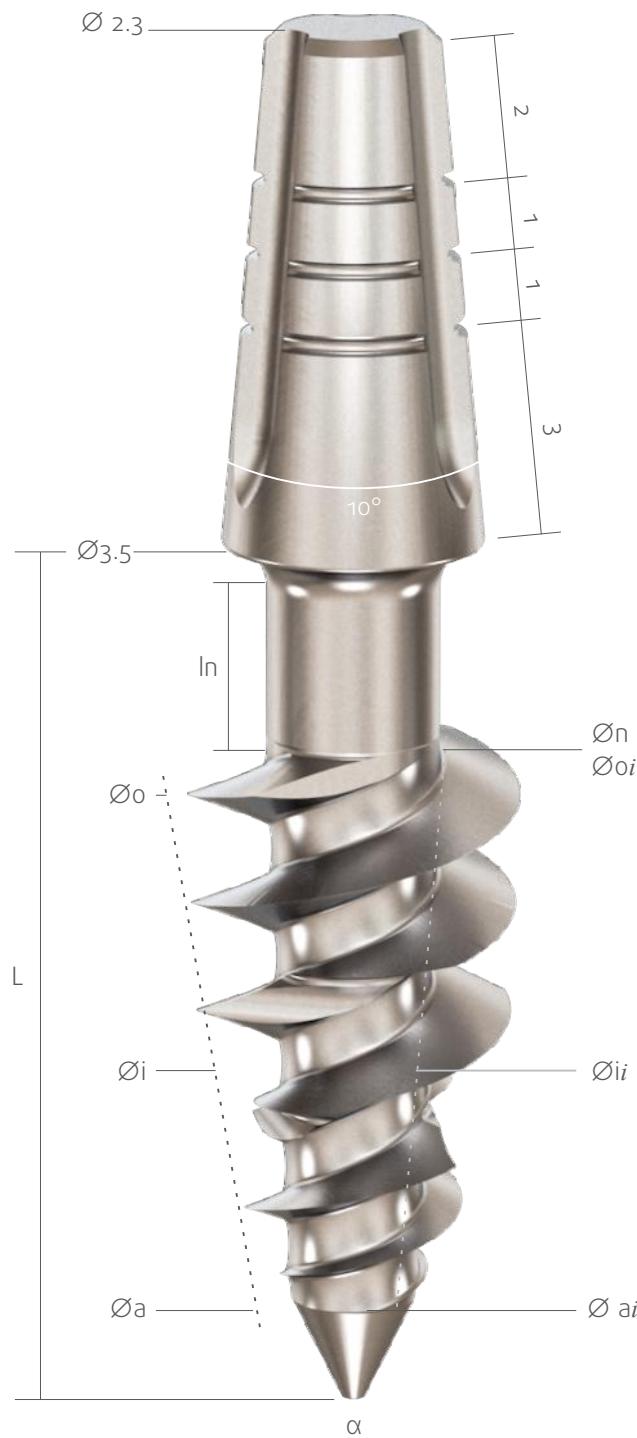
New Basal SS –  
Super Safe implant

## Smart instrument sets

Universal set consisting of 12 drills to use with any implants type or size of Roott open implant system.



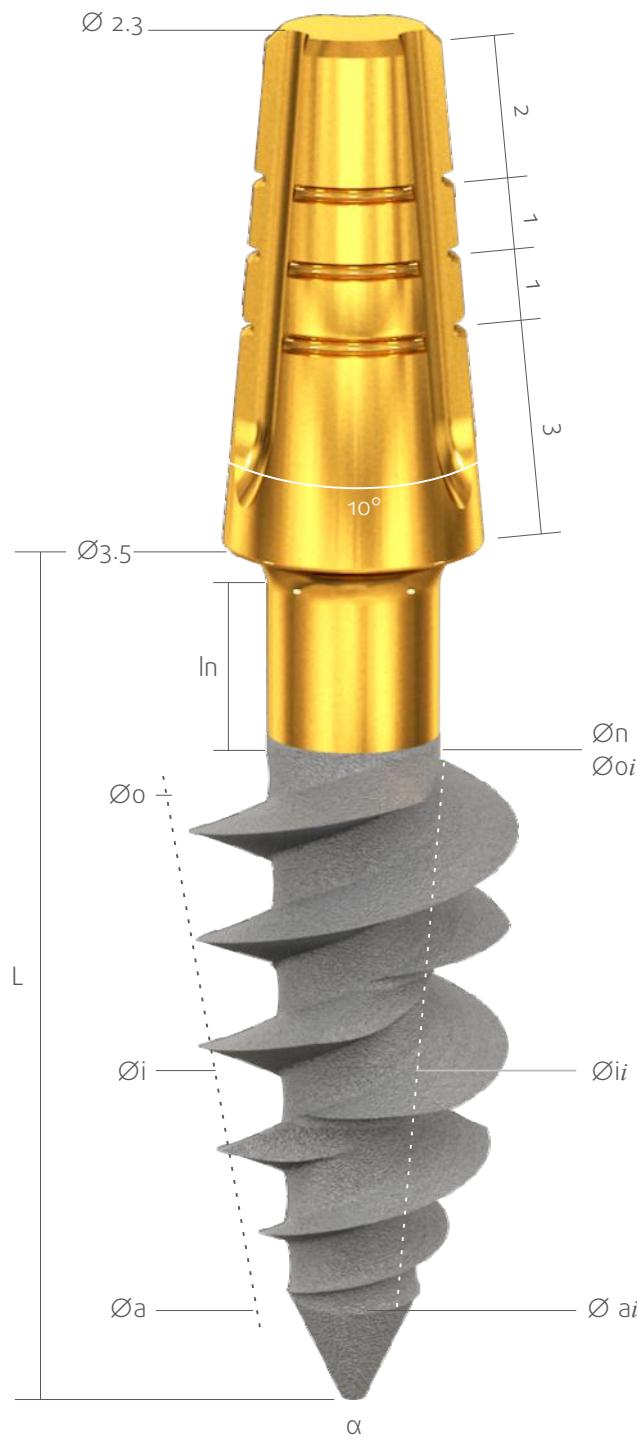
# Basal implants



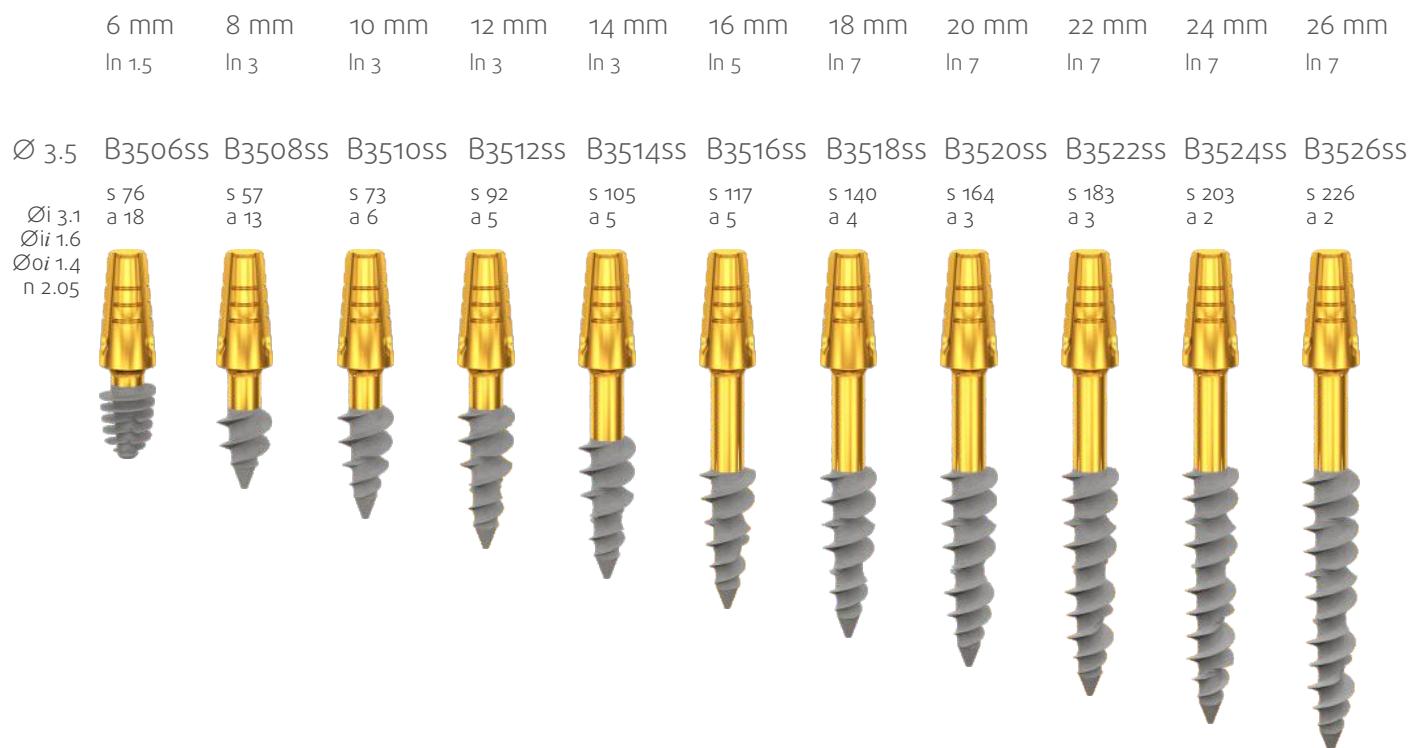
$o$  - occlusal diameter (mm);  $i$  - intraosseous diameter (mm);  $a$  - apical diameter (mm);  $n$  - neck diameter;  
 $\alpha$  - total internal angle ( $^\circ$ );  $s$  - intraosseous square area ( $\text{mm}^2$ );  $i$  = internal.

	6 mm ln 1.5	8 mm ln 3	10 mm ln 3	12 mm ln 3	14 mm ln 3	16 mm ln 5	18 mm ln 7	20 mm ln 7	22 mm ln 7	24 mm ln 7	26 mm ln 7
$\varnothing 3.5$	B3506	B3508	B3510	B3512	B3514	B3516	B3518	B3520	B3522	B3524	B3526
$\varnothing i 3.1$	S 76 a 18	S 57 a 13	S 73 a 6	S 92 a 5	S 105 a 5	S 117 a 5	S 140 a 4	S 164 a 3	S 183 a 3	S 203 a 2	S 226 a 2
$\varnothing ii 1.6$											
$\varnothing oi 1.4$ n 2.05											
$\varnothing 4.5$	B4508	B4510	B4512	B4514	B4516	B4518	B4520	B4522	B4524	B4526	
$\varnothing i 4.2$	S 82 a 13	S 105 a 6	S 137 a 5	S 151 a 5	S 166 a 5	S 201 a 4	S 239 a 3	S 268 a 3	S 299 a 2	S 325 a 2	
$\varnothing ii 2.0$											
$\varnothing oi 1.7$ n 2.35											
$\varnothing 5.5$	B5508	B5510	B5512	B5514							
$\varnothing i 4.3$	S 108 a 10	S 115 a 9	S 147 a 7	S 170 a 6							
$\varnothing ii 2.1$											
$\varnothing oi 1.4$ n 2.35											

# Sandblasted basal implants



$o$  - occlusal diameter (mm);  $i$  - intraosseous diameter (mm);  $a$  - apical diameter (mm);  $n$  - neck diameter;  
 $\alpha$  - total internal angle ( $^\circ$ );  $s$  - intraosseous square area ( $\text{mm}^2$ );  $i$  = internal.

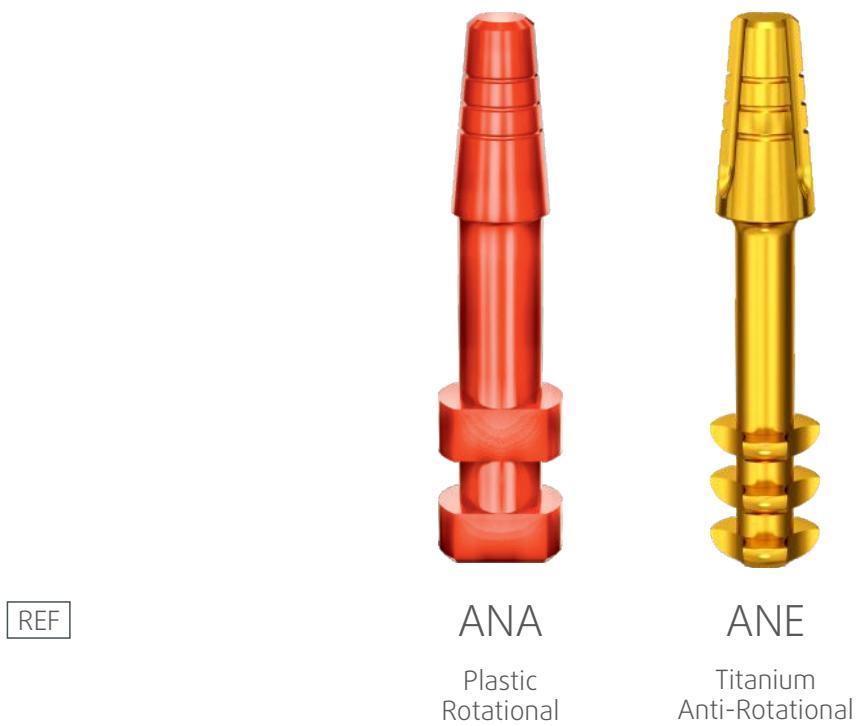


# External platform

## Transfers



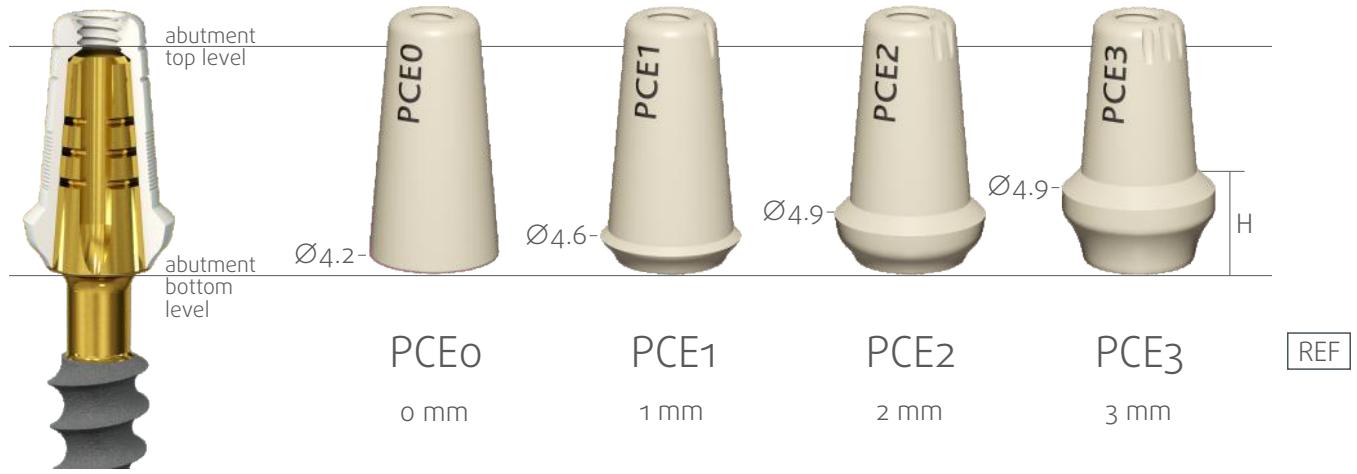
## Analogues



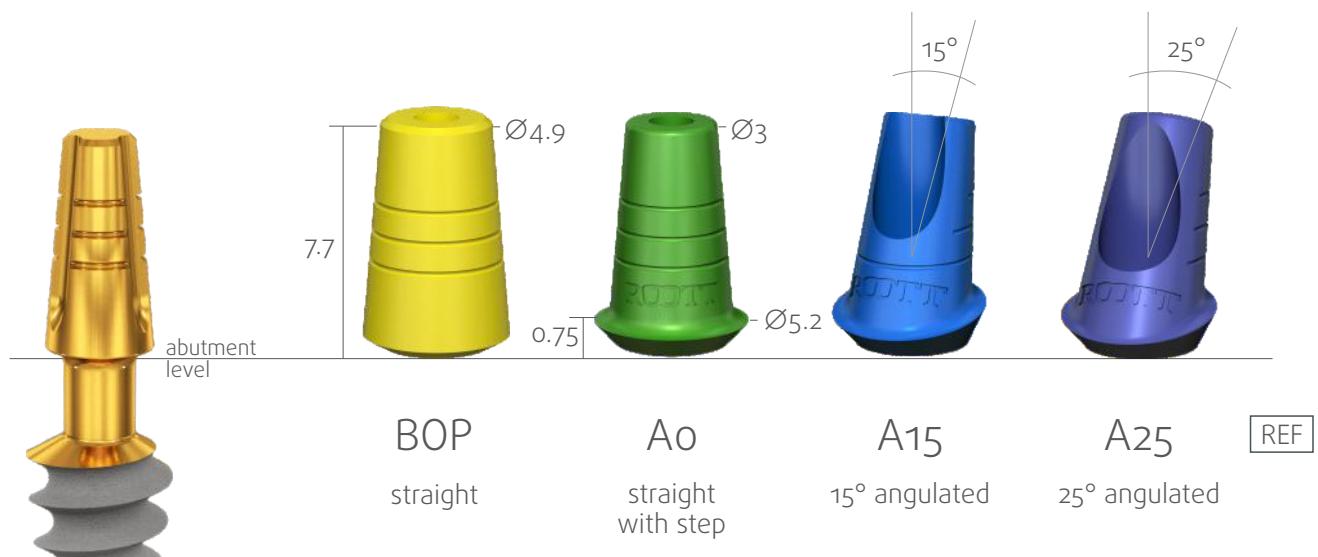
# Titanium caps



## PEEK caps



## Burnout parts



## Titanium caps for two-piece implants



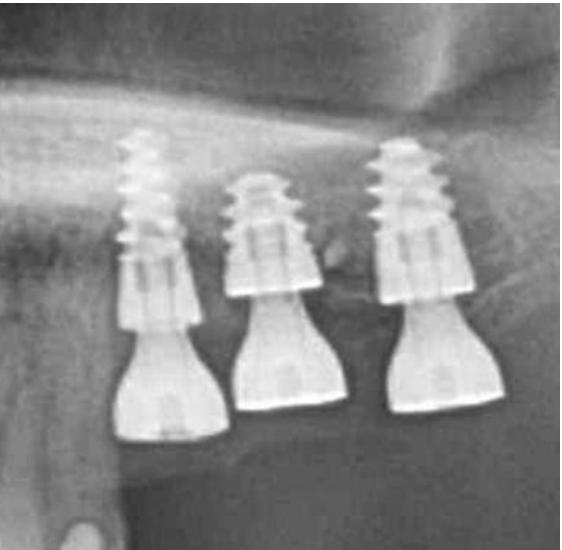
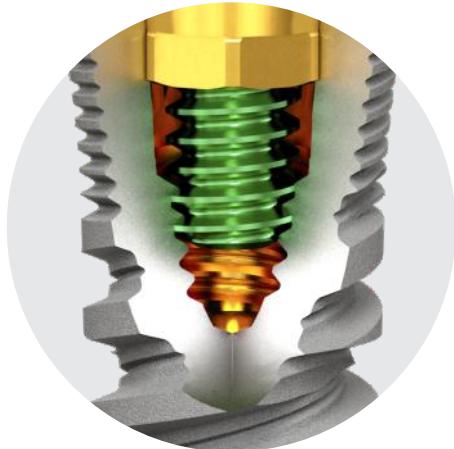


## ROOTFORM implants

Two-component Rootform implant with combined thread and reliable tapered connection is intended for single and multiple restorations with immediate and delayed loading in the upper and lower jaws in all types of bone tissue. Implant can be placed by flap or flapless approach with subcrestal position of the implants. Implant placement is also possible immediately following tooth extraction, as long as sufficient bone tissue is available.



- High primary stability in all bone types
- Active self-tapping thread
- Reliable implant-abutment connection



Clinical  
case



Dr. Mohamad  
El Moheb  
*France*

*More clinical cases at Open Dental Community Group on Facebook*

## Wide range of sizes

From short and wide to thin and long



6 mm → 16 mm  
Ø 3.0 mm → Ø 5.5 mm

## Highly stable and secure connection

Precision cone and internal hex, connection accurate +/- 0.007 mm

## Multifunctional part CRE

Made from Ti6Al4V. Can be used as:

- Carrier for implant insertion (up to 40 N/cm)
- Abutment for immediate loading
- Base for individual gingiva former
- Transfer for open/close tray



## Universal instrument set



# Two-piece implants

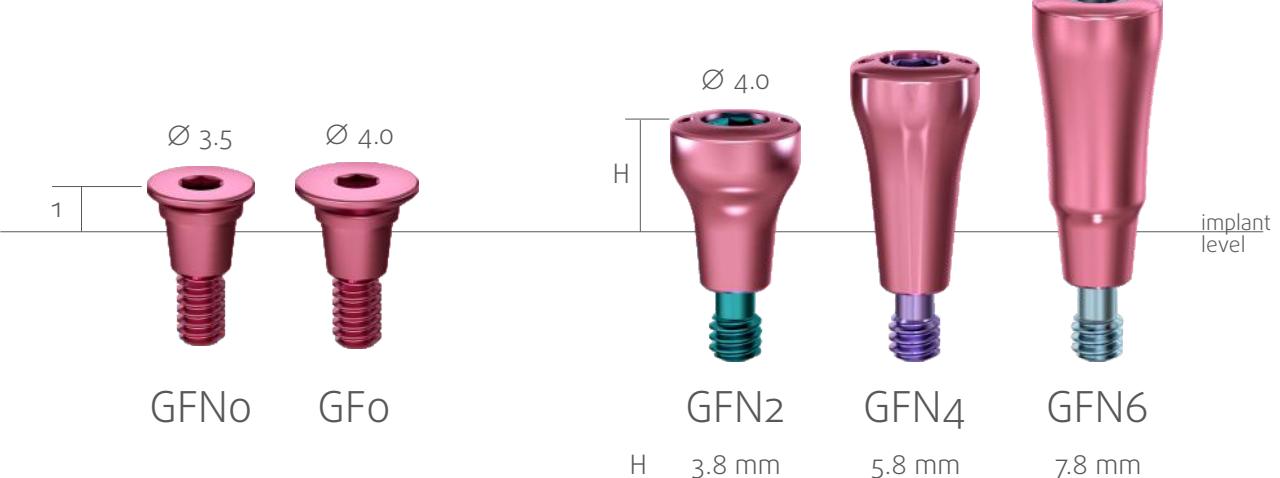


$\phi$  - occlusal diameter (mm);  $i$  - intraosseous diameter (mm);  $a$  - apical diameter (mm);  
 $\alpha$  - total internal angle ( $^{\circ}$ );  $s$  - intraosseous square area ( $\text{mm}^2$ );  $i$  = internal.

$\varnothing$ 3.0	$\varnothing$ 3.5	$\varnothing$ 3.8	$\varnothing$ 4.2	$\varnothing$ 4.8	$\varnothing$ 5.5	
R3506 TiGr23	R3806	R4206	R4806	R5506	L 6 mm	
$\varnothing_i$   $\varnothing_{ai}$ $\varnothing_a$   $\varnothing_{aai}$ S   $\alpha$	3.5   3.3 3.4   1.8 85   24	3.8   3.4 3.7   1.6 95   28	4.2   3.6 4.1   1.9 106   26.5	4.2   3.8 4.1   1.7 114   29	4.9   4.5 4.8   2.4 137   29	
R3508	R3808	4208	R4808	R5508	L 8 mm	
	3.5   3.3 3.4   1.7 111   20	3.8   3.4 3.7   1.3 128   21.2	3.6   3.2 3.5   1.2 125   21.2	4.2   3.8 4.1   1.7 147   23.6	4.9   4.5 4.8   2.3 177   23.6	
R3010	R3510	R3810	R4210	R4810	R5510	L 10 mm
3.0   2.5 2.8   1.4 114   14	3.5   3.2 3.3   0.8 137   21	3.8   3.4 3.6   1.2 159   15.4	3.6   3.2 3.4   1.2 182   15.4	4.2   3.8 4.0   1.6 182   17	4.9   4.5 4.7   2.3 220   17	
R3012	R3512	R3812	R4212	R4812	R5512	L 12 mm
3.0   2.5 2.7   1.4 137   9.8	3.4   3.2 3.3   0.7 164   16.6	3.7   3.4 3.6   1.2 190   12.2	3.5   3.2 3.4   1.1 182   12.2	4.1   3.8 4.0   1.5 217   13.6	4.9   4.5 4.7   2.2 263   13.6	
R3014	R3514	R3814	R4214	R4814	R5514	L 14 mm
3.0   2.5 2.5   1.4 159   7.5	3.4   3.2 3.2   0.7 188   13.8	3.7   3.4 3.5   1.1 221   10.2	3.5   3.2 3.3   1.1 209   9.8	4.1   3.8 3.9   1.4 249   11.4	4.8   4.5 4.6   2.1 304   11.4	
R3016	R3516	R3816	R4216	R4816	R5516	L 16 mm
2.9   2.4 2.4   1.4 178   6	3.3   3.2 3.1   0.6 215   12	3.6   3.4 3.4   1.0 249   9	3.4   3.2 3.1   0.8 234   9.8	4.0   3.8 3.8   1.4 285   9.8	4.7   4.5 4.5   2.1 346   9.8	

# Gingiva formers

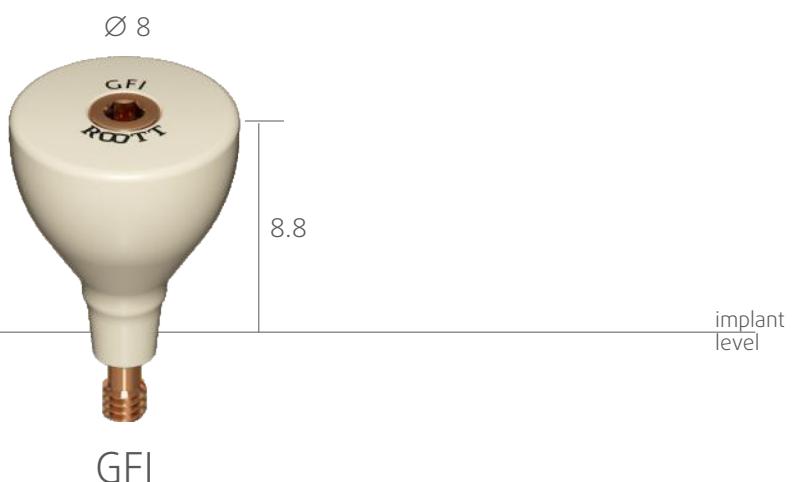
Bone build-up



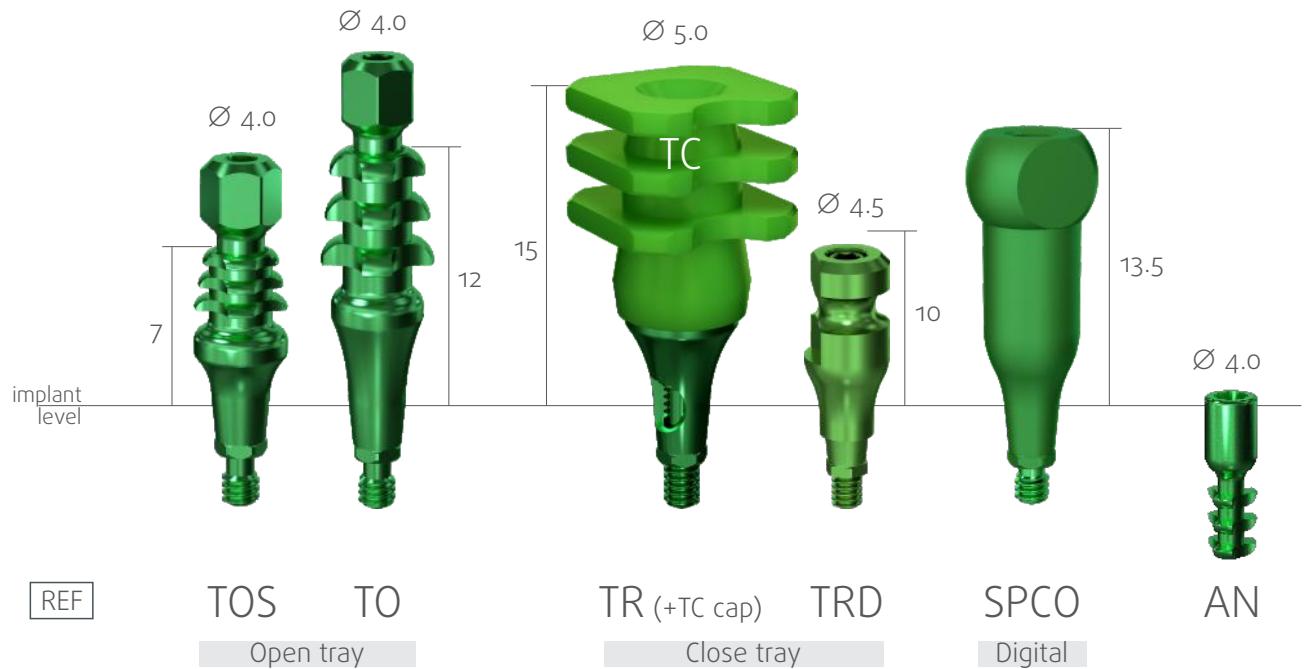
Regular



Individual  
(PEEK)



# Transfers & implant analogs



# Abutments

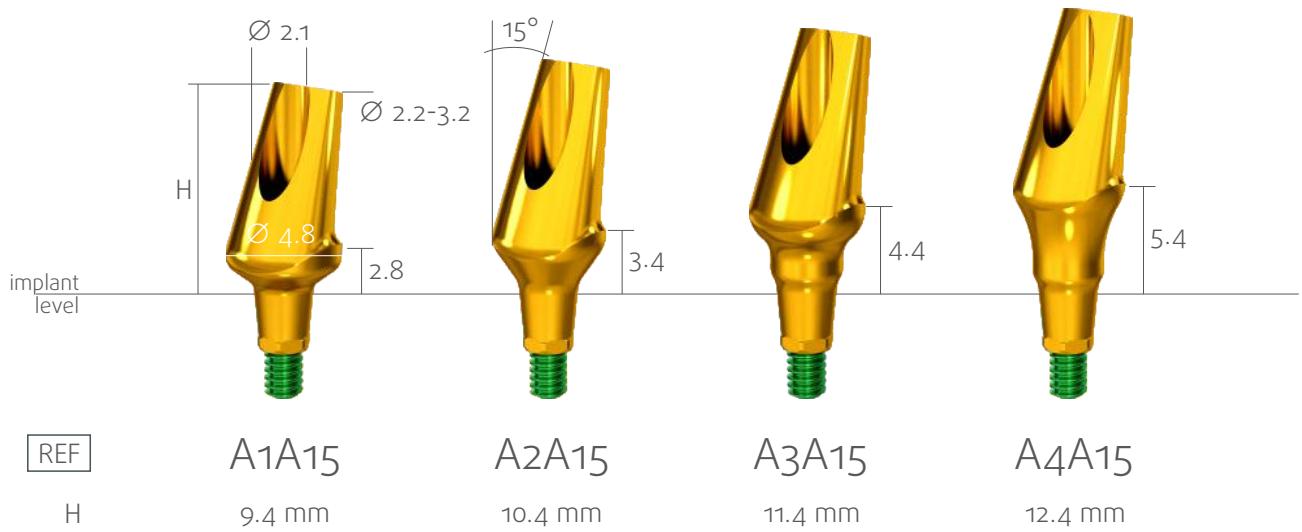
Straight abutments  
for conometric prosthetic solutions



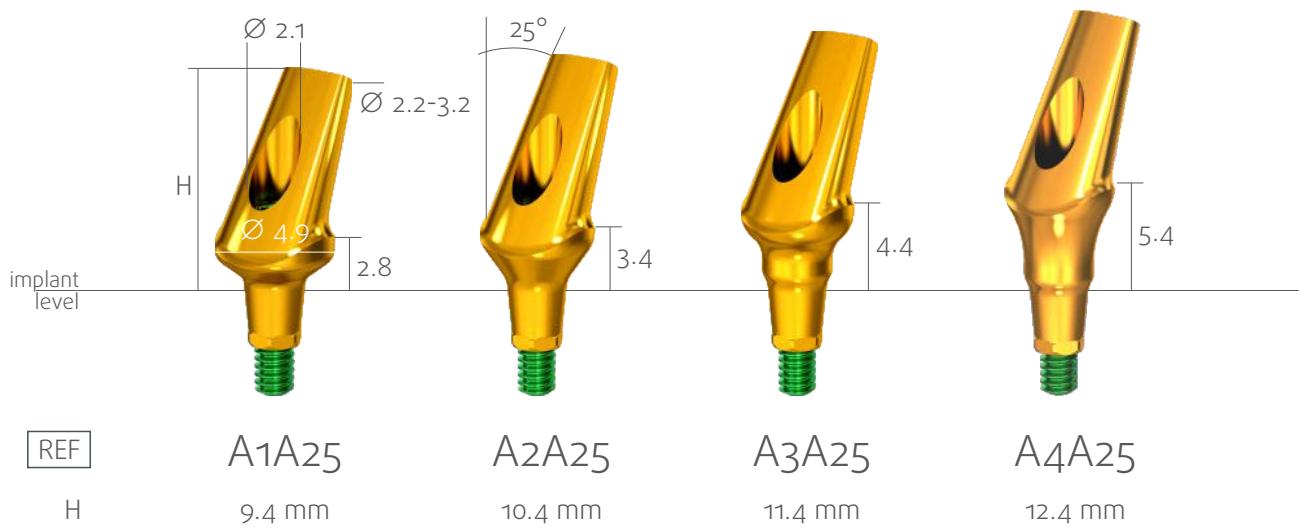
Straight anatomical abutments



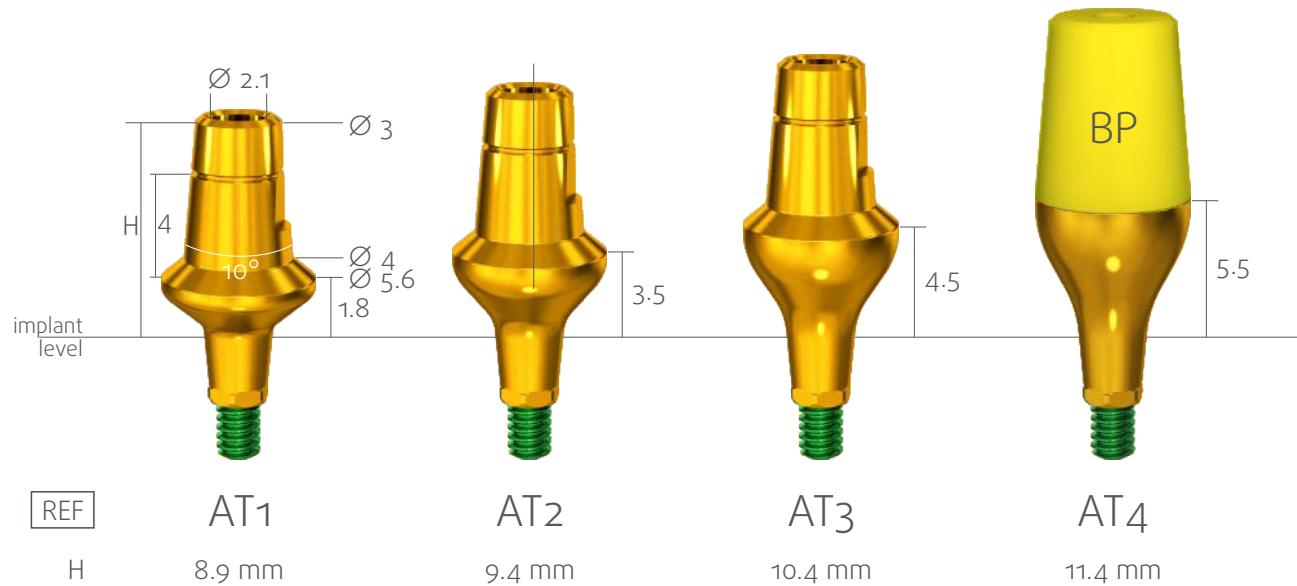
## 15° angulated anatomical abutments



## 25° angulated anatomical abutments



## Transgingival abutments



BP – free burn out part with each transgingival abutment

## How it works

Place BP cap  
on AT abutment

Adjust height  
by cutting

Use wax for modelling  
future crown

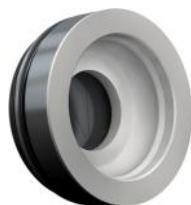
Fix crown to  
AT abutment



# Attachments



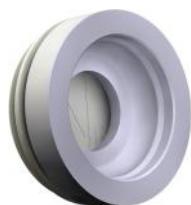
# Matrix housing



REF

2010.701

Titanium matrix housing  
with PEEK insert



2010.702

PEEK matrix housing  
with PEEK insert



2010.703

Titanium matrix housing  
with attachment option



2010.721

Model analog



REF

2010.722

Forming/fixing matrix



2010.723

Processing spacer



2010.724

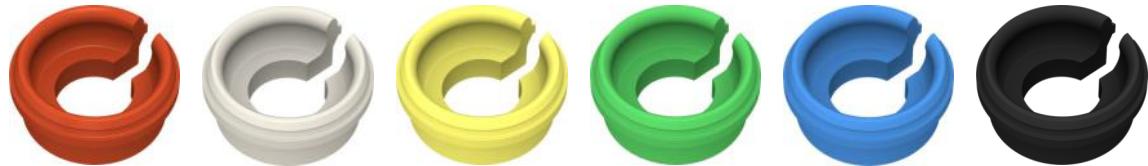
Mounting collar



2010.725

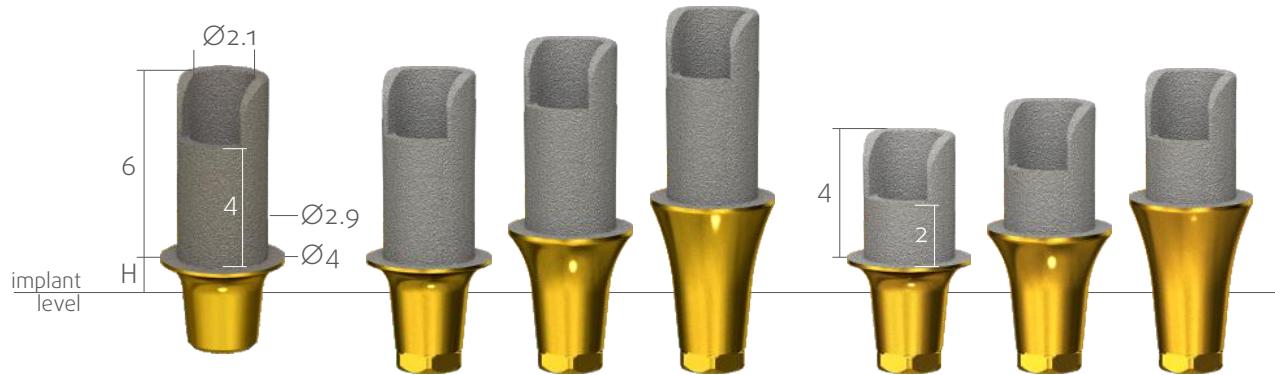
Mounting insert

## Retention inserts



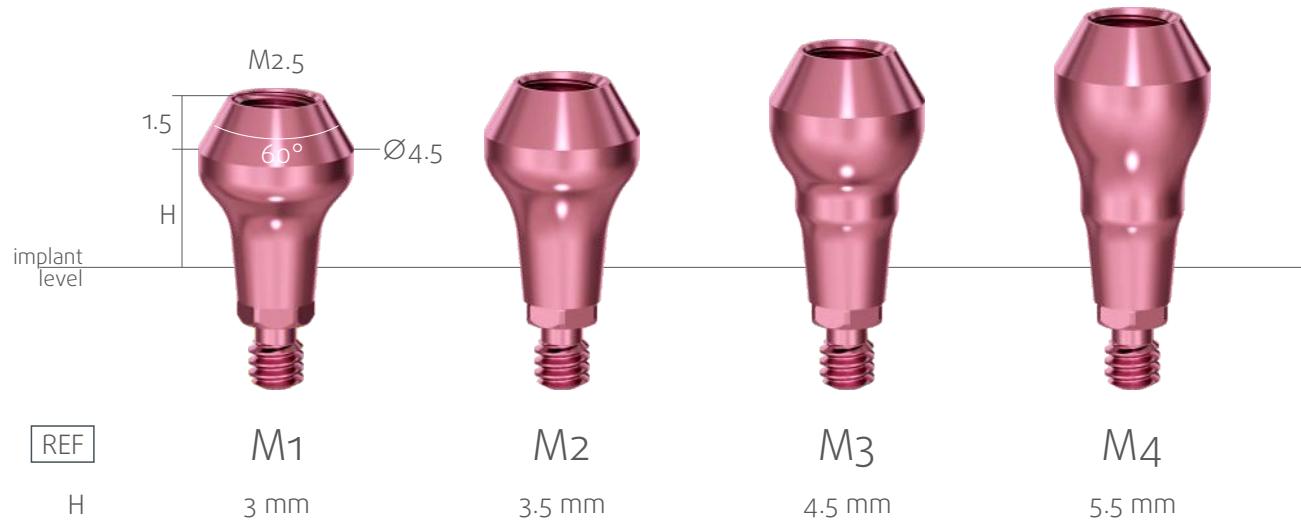
<b>REF</b>	2010.710	2010.711	2010.712	2010.713	2010.714	2010.715
	Extra-light 0.3 kg	Light 0.75 kg	Medium 1.2 kg	Strong 1.65 kg	Extra-strong 2.1 kg	Ultra-strong 2.55 kg

## CAD-CAM platforms



<b>REF</b>	PCOR	PCO1	PCO2	PCO3	PCO1s	PCO2s	PCO3s
H	1.5 mm	1.5 mm	2.5 mm	3.5 mm	1.5 mm	2.5 mm	3.5 mm

# Regular multi-unit abutment



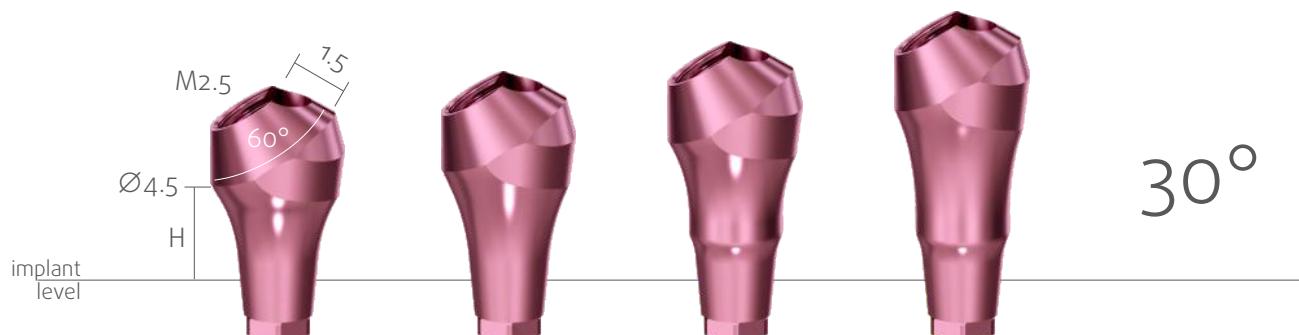
# Small multi-unit abutment



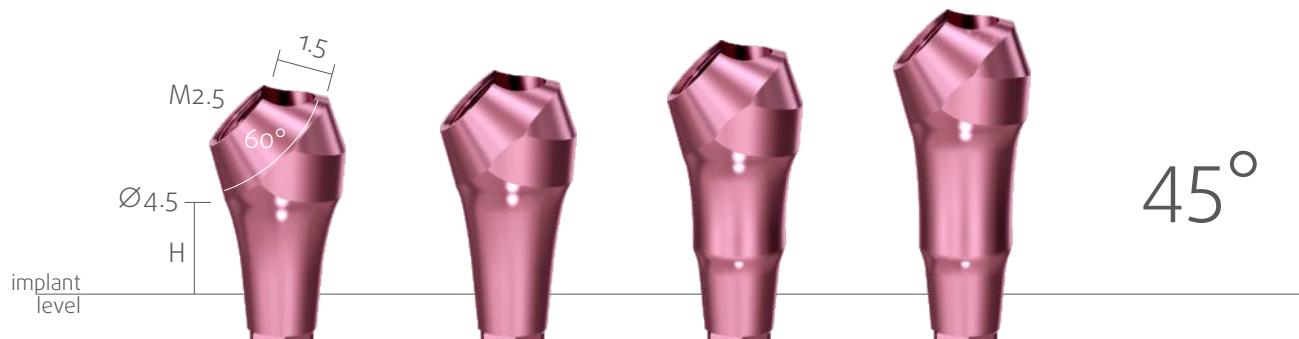
# Angulated multi-unit abutment



[REF]	M1A15	M2A15	M3A15	M4A15
H	3 mm	3.5 mm	4.5 mm	5.5 mm



[REF]	M1A30	M2A30	M3A30	M4A30
H	3 mm	3.5 mm	4.5 mm	5.5 mm



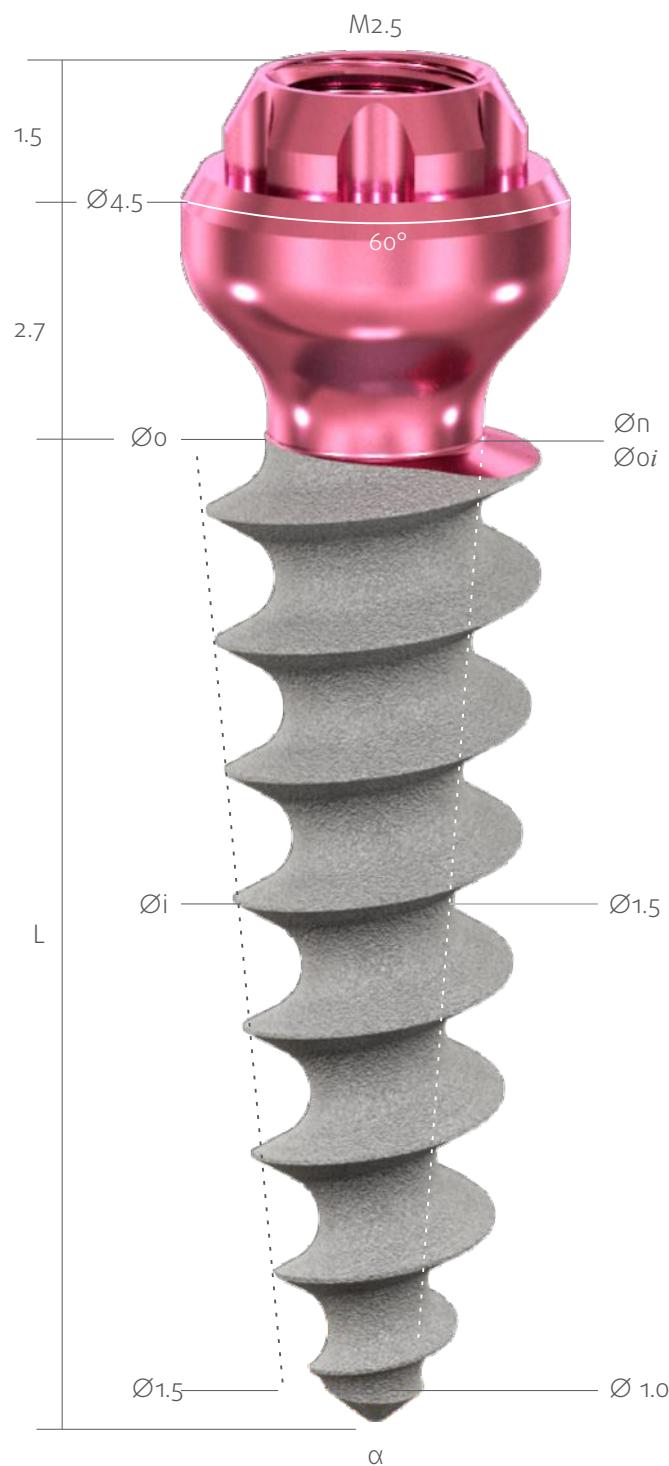
[REF]	M1A45	M2A45	M3A45	M4A45
H	3 mm	3.5 mm	4.5 mm	5.5 mm



One platform  
Multi-unit



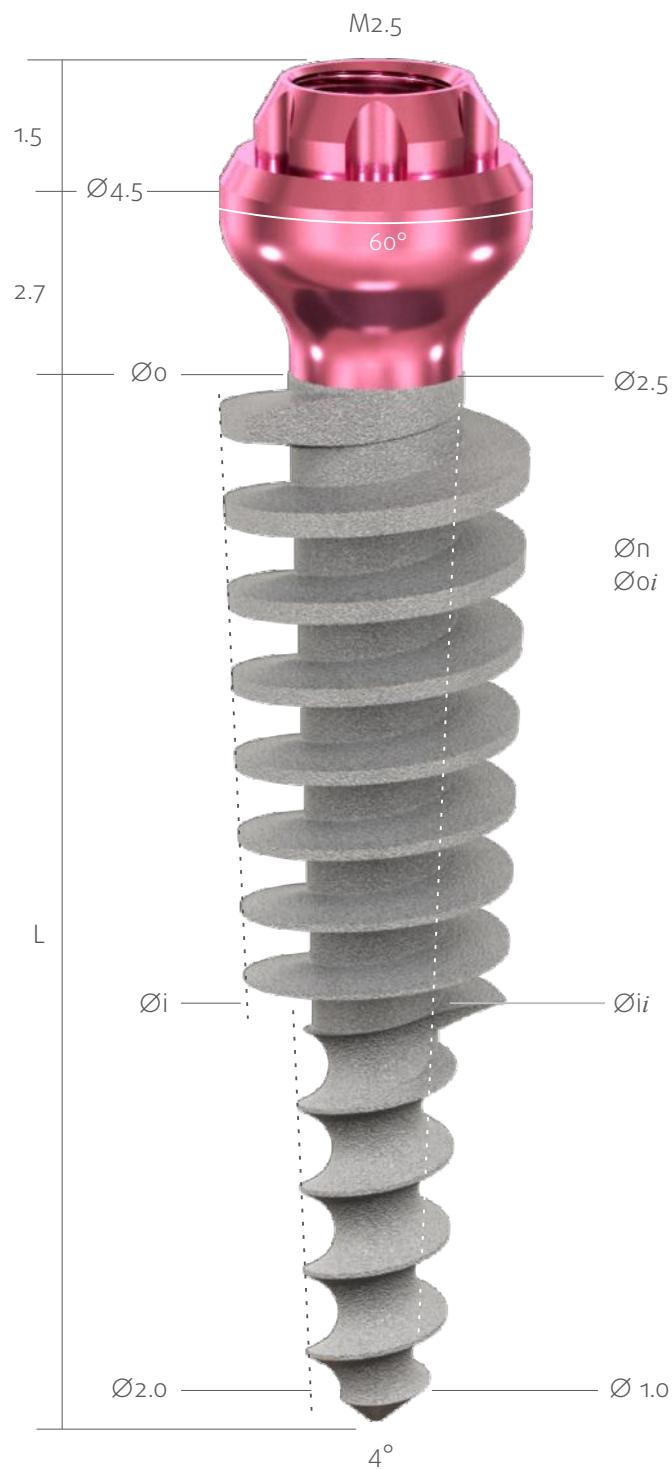
# Compressive M implants



o - occlusal diameter (mm); i - intraosseous diameter (mm); a - apical diameter (mm); n - neck diameter;  
α - total internal angle (°); s - intraosseous square area (mm<sup>2</sup>); i = internal.

	6 mm	8 mm	10 mm	12 mm	14 mm	16 mm	18 mm	20 mm
$\varnothing 3.0$		C3008m	C3010m	C3012m	C3014m	C3016m	C3018m	C3020m
$\varnothing i 2.5$ n 2.05	s 62 a 8	s 79 a 6	s 95 a 5	s 112 a 4	s 128 a 4	s 145 a 3	s 161 a 3	
$\varnothing 3.5$	C3506m	C3508m	C3510m	C3512m	C3514m	C3516m	C3518m	C3520m
$\varnothing i 2.8$ n 2.05	s 54 a 15	s 72 a 11	s 91 a 9	s 109 a 7	s 127 a 6	s 146 a 6	s 163 a 5	s 182 a 5
$\varnothing 4.0$	C4006m	C4008m	C4010m	C4012m	C4014m	C4016m		
$\varnothing i 3.3$ n 2.55	s 63 a 15	s 86 a 11	s 108 a 9	s 130 a 7	s 152 a 6	s 174 a 6		
$\varnothing 5.0$	C5006m	C5008m	C5010m	C5012m	C5014m			
$\varnothing i 4.3$ n 2.55	s 82 a 15	s 111 a 11	s 141 a 9	s 170 a 7	s 200 a 6			

# Compressive MP implants

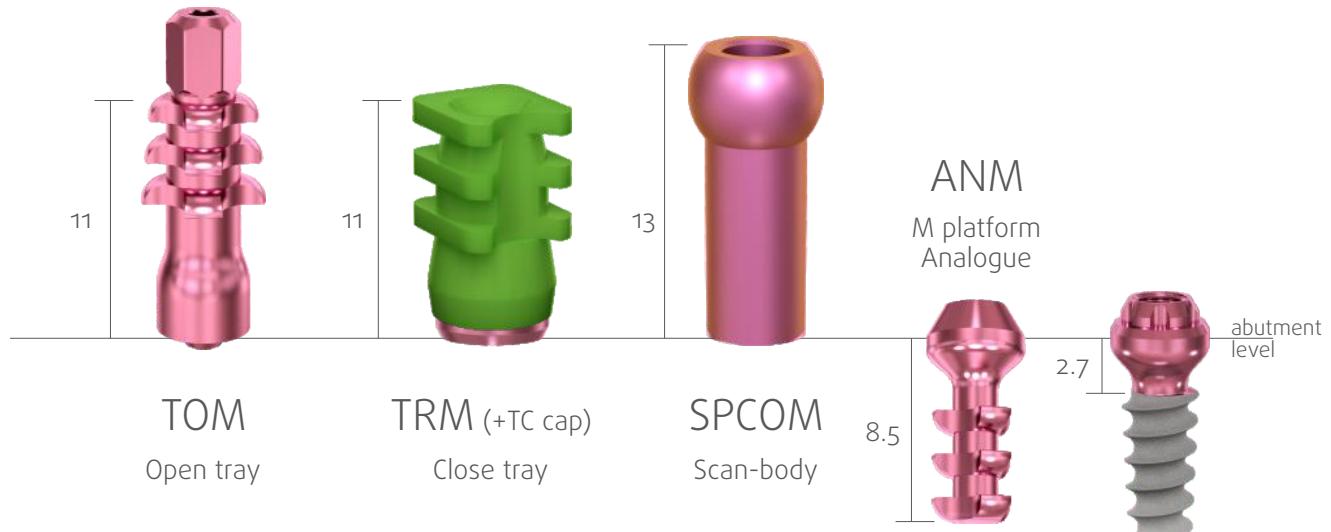


$\text{o}$  - occlusal diameter (mm);  $\text{i}$  - intraosseous diameter (mm);  $\text{a}$  - apical diameter (mm);  $\text{n}$  - neck diameter;  
 $\alpha$  - total internal angle ( $^\circ$ );  $s$  - intraosseous square area ( $\text{mm}^2$ );  $i$  = internal.

	16 mm	18 mm	20 mm	22 mm	24 mm	26 mm
$\varnothing$ 3.5	C3516mp i 2.8 ii 1.7 S 175	C3518mp i 2.7 ii 1.7 S 175	C3520mp i 2.5 ii 1.5 S 198	C3522mp i 2.6 ii 1.5 S 220	C3524mp i 2.6 ii 1.5 S 248	C3526mp i 2.6 ii 1.5 S 297
						
$\varnothing$ 4.5	C4516mp i 3.9 ii 1.8 S 256	C4518mp i 3.7 ii 1.7 S 293	C4520mp i 3.6 ii 1.5 S 332	C4522mp i 3.4 ii 1.4 S 369	C4524mp i 3.3 ii 1.2 S 402	C4526mp i 3.3 ii 1.3 S 443
						



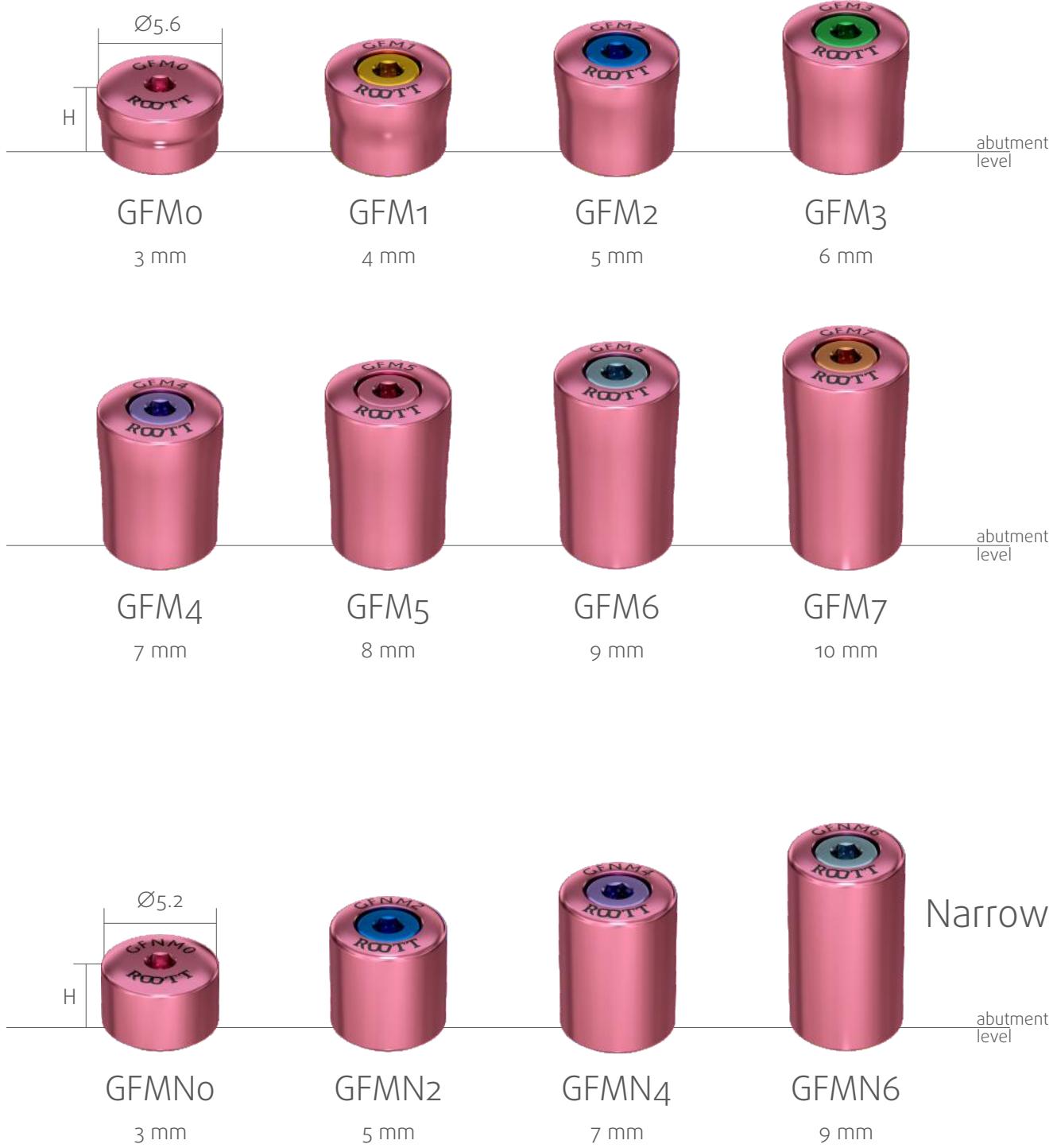
## Transfers & analogue



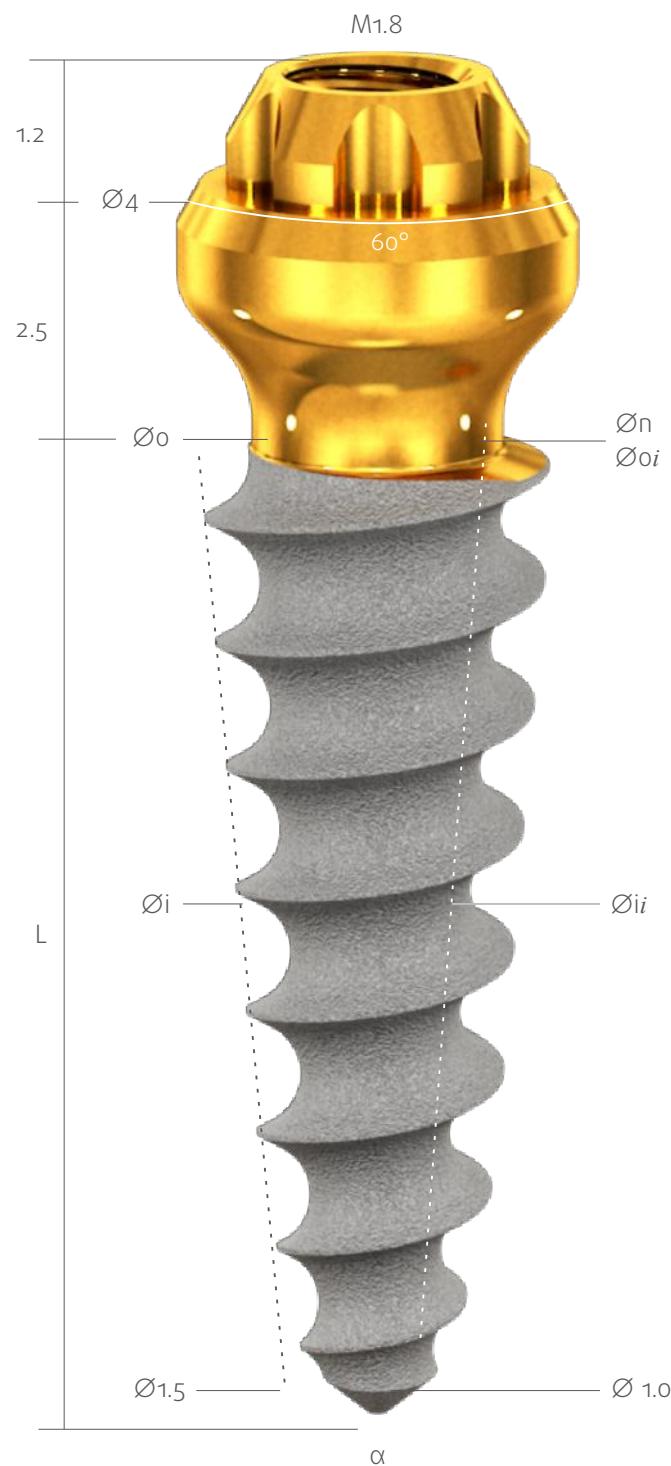
## Platforms & abutments



# Gingiva formers



# Compressive MS implants



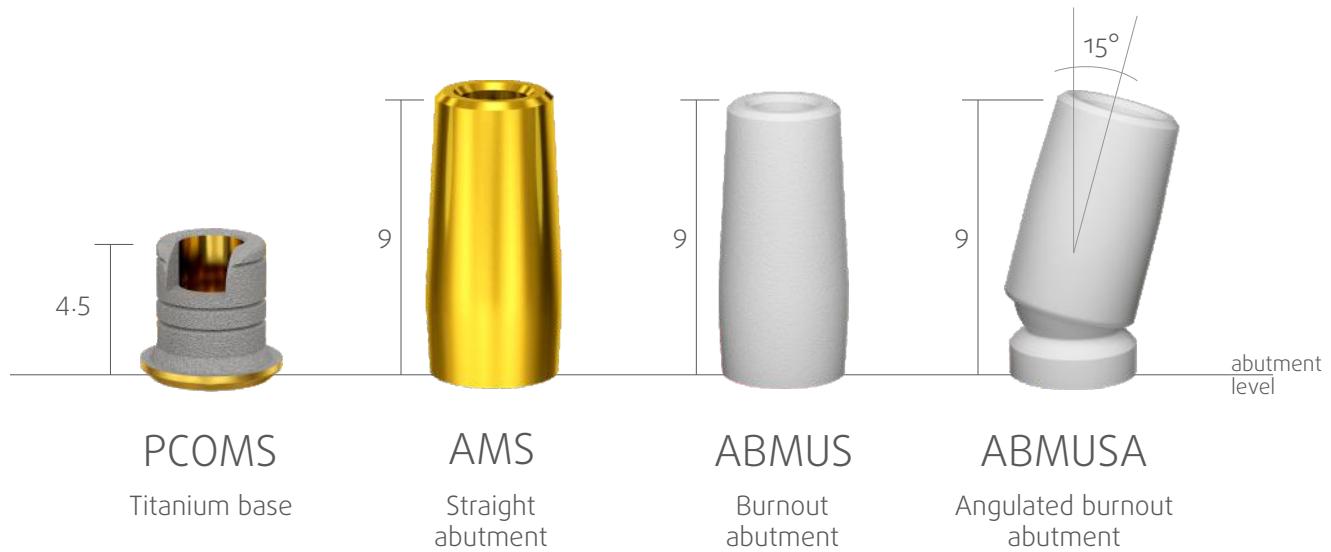
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 $\alpha$  - total internal angle ( $^\circ$ );  $s$  - intraosseous square area ( $\text{mm}^2$ );  $i = \text{internal}$ .

	6 mm	8 mm	10 mm	12 mm	14 mm	16 mm
$\emptyset 3.0$		C3008ms	C3010ms	C3012ms	C3014ms	C3016ms
$\emptyset i\ 2.5$		s 63 a 8	s 79 a 6	s 95 a 5	s 112 a 4	s 128 a 4
$\emptyset ii\ 1.5$						
n 2.05						
						
$\emptyset 3.5$	C3506ms	C3508ms	C3510ms	C3512ms	C3514ms	C3516ms
$\emptyset i\ 2.8$	s 54 a 15	s 72 a 11	s 91 a 9	s 109 a 7	s 127 a 6	s 146 a 5
$\emptyset ii\ 1.8$						
n 2.55						
						

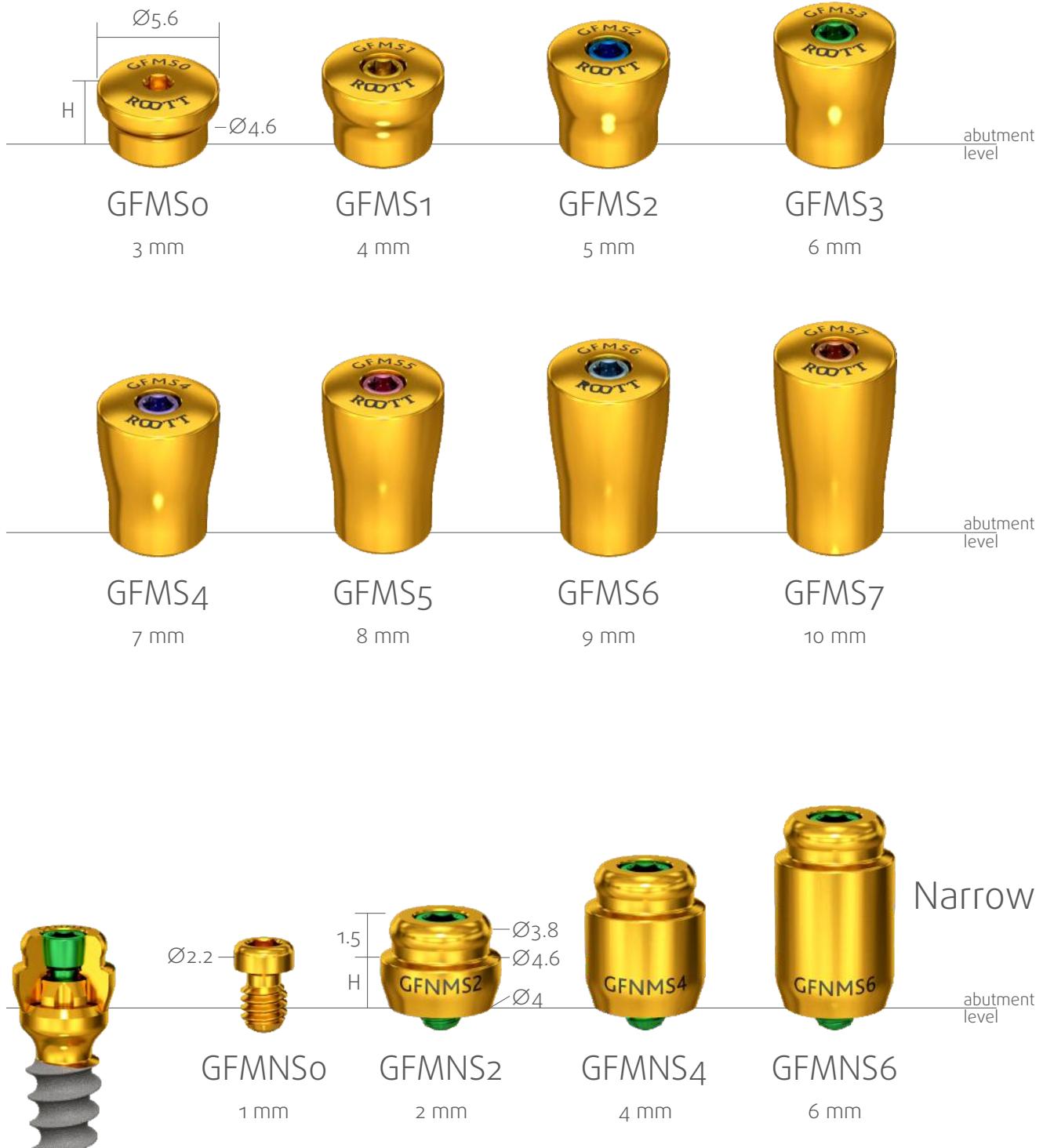
## Transfers & analogue



## Platforms & abutments



# Gingiva formers



# TOOLS



## Rootform drills

### Pilot drills



DB2020

6-16 mm



D2020

2-16 mm

### Form drills



D25XX

2-16 mm



D43XX

2-16 mm



D28XX

2-16 mm



D46XX

2-16 mm



D32XX

2-16 mm



D50XX

2-16 mm



D36XX

2-16 mm



D53XX

2-16 mm



D40XX

2-16 mm



D5506

6 mm



## Compressive drills



DC30XX

6-20 mm



DC45XX

6-20 mm



DC35XX

6-20 mm



DC50XX

6-14 mm



DC40XX

6-20 mm

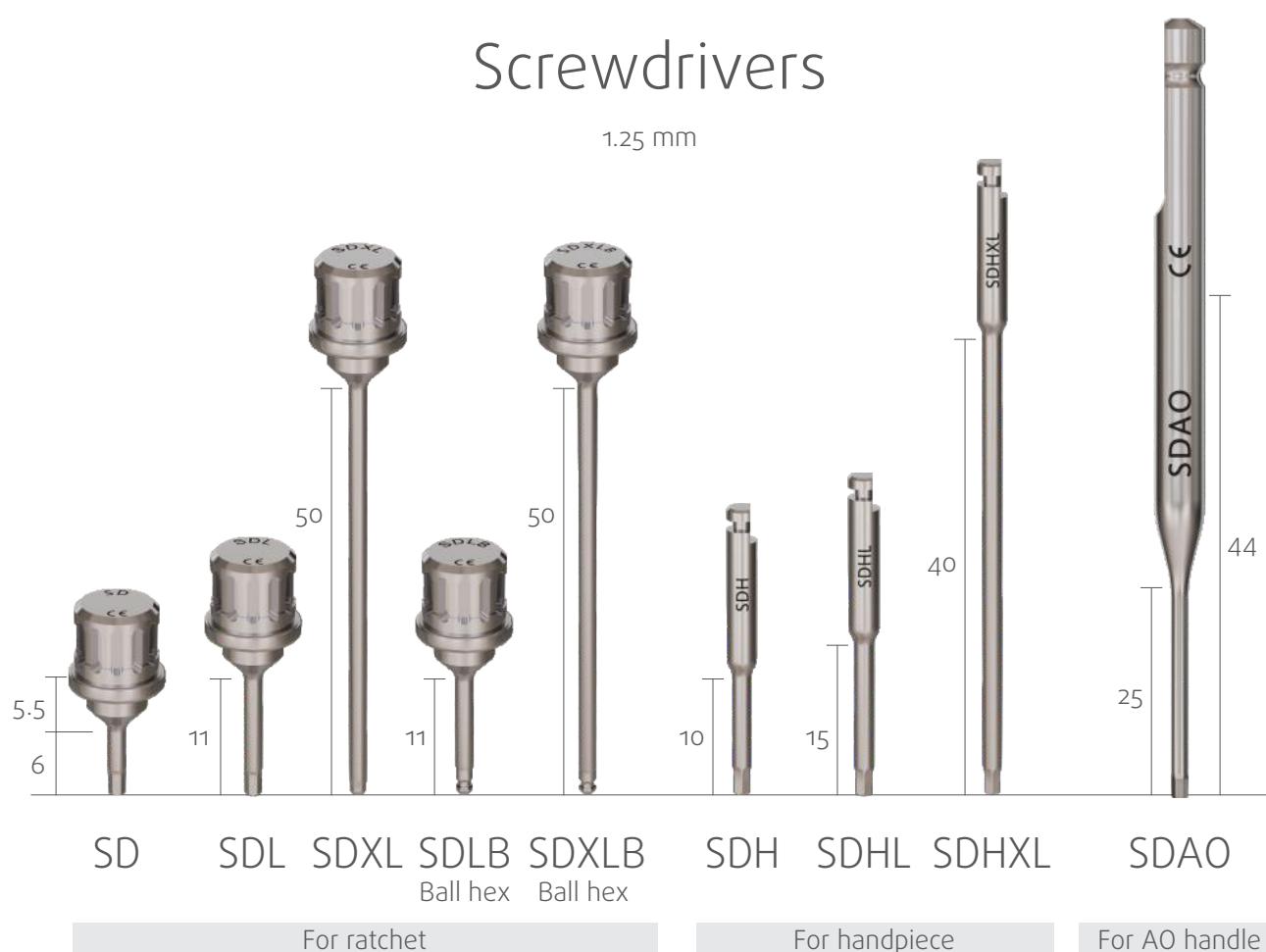


DC55XX

6-14 mm

# Screwdrivers

1.25 mm



Screw  
removal



SR

Parallel  
pin



P2

Extension  
tool



ET

## Insertion tools



### Internal platform

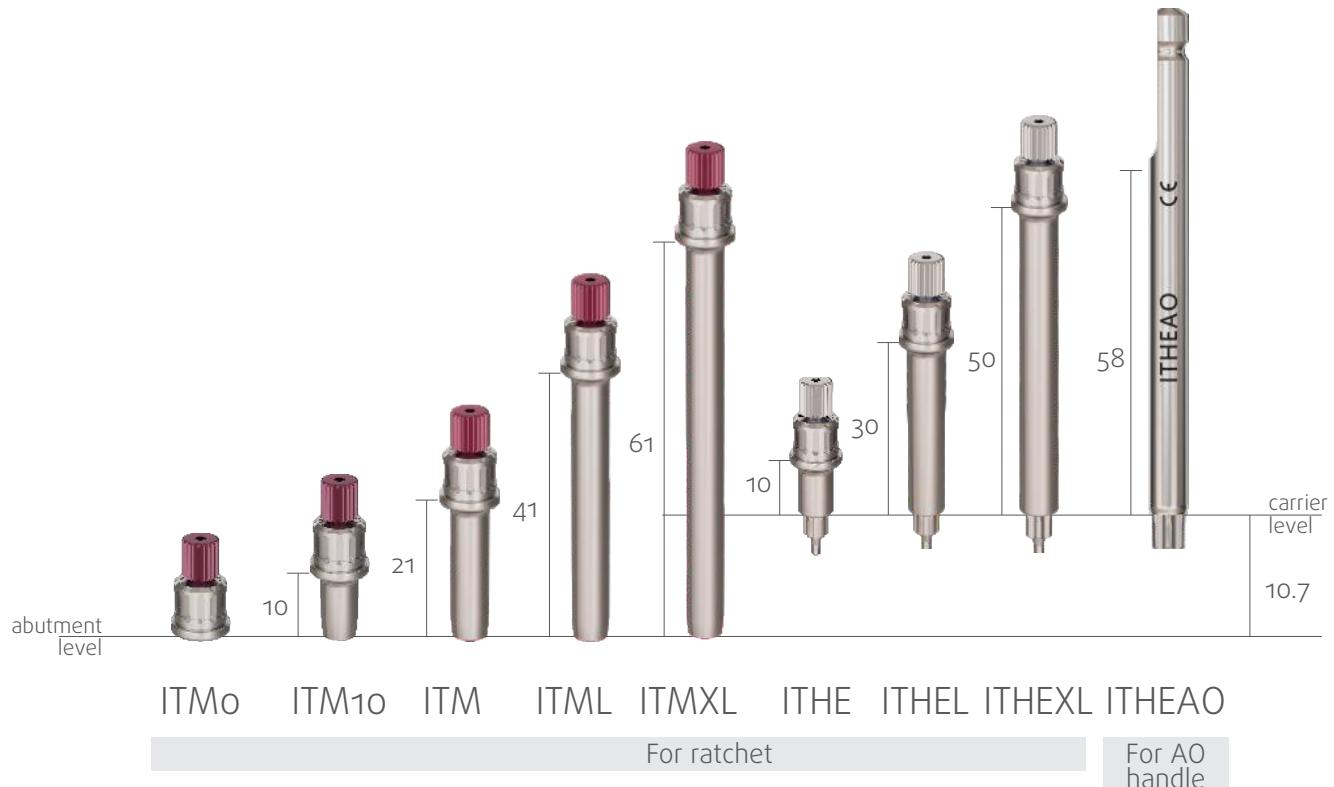


### External platform

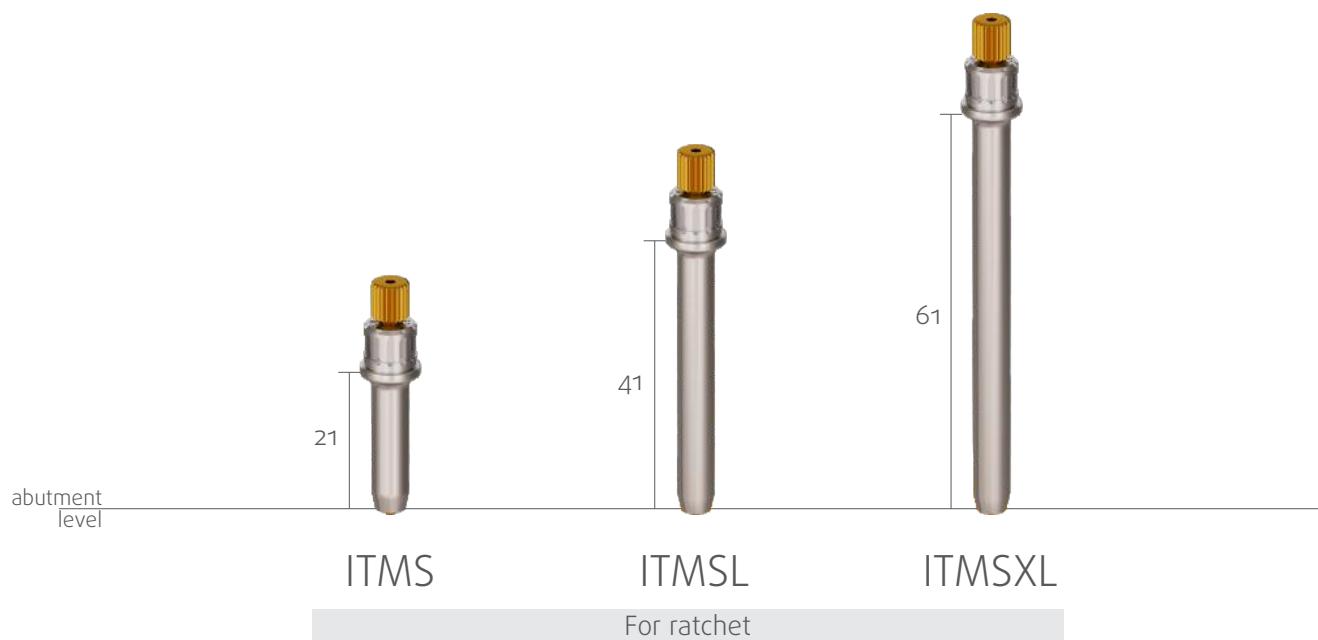




## M platform



## MS platform



# Universal instrument set TRS-S



Insertion tools

ITE      ITEL      IT      ITL      ITHE



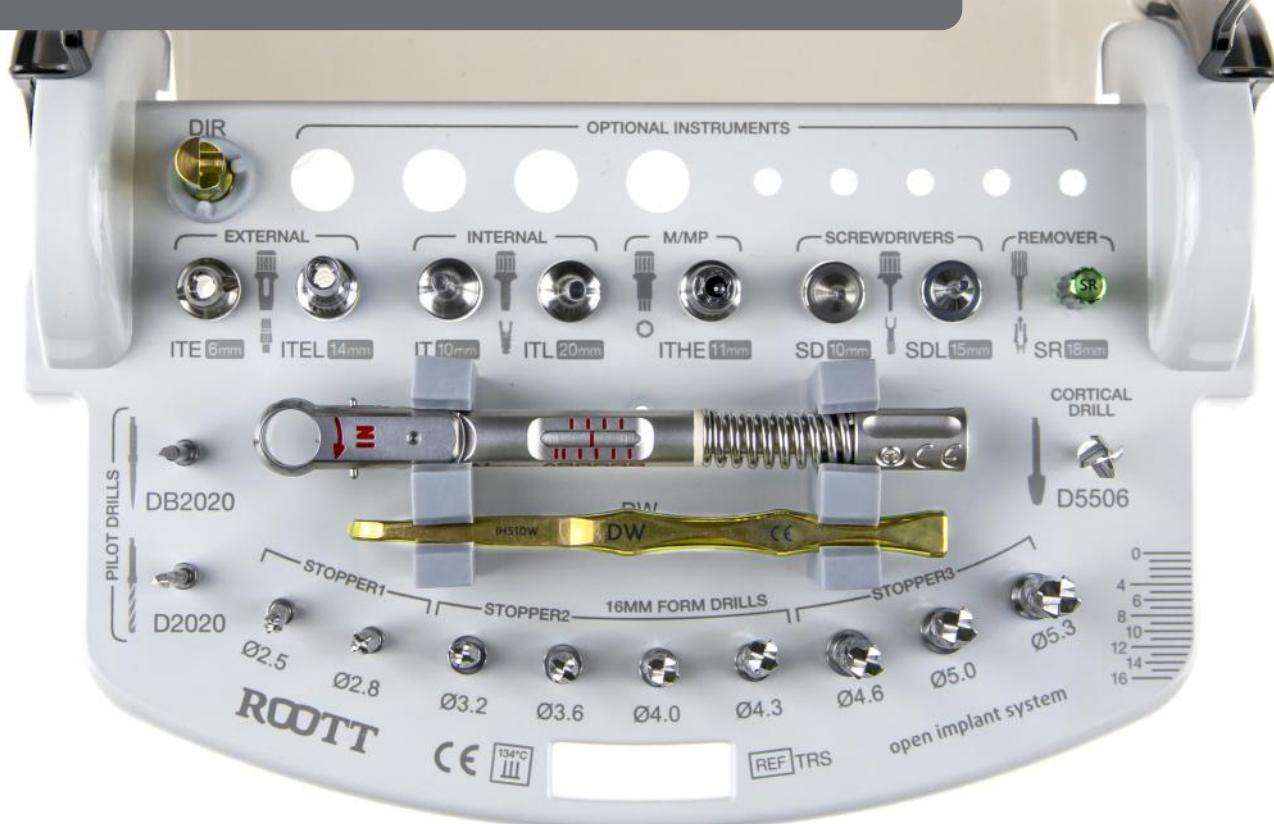
Hex drivers

SD      SDL



Removal tool





Pilot drills



DB2020



D2020

Form drills



D2516



D4316



D2816



D4616



D3216



D5016



D3616



D5316



D4016



D5506

Torque wrench TW50



Direct wrench DW



Direction indicator DIR



# Upcoming events

ADF

27-30 November 2019  
Paris

Association Dentaire  
Française Exhibition

Stand 4Lo8

AEEDC

4-6 February 2020  
Dubai

UAE International Dental Conference  
& Arab Dental Exhibition

Stand 6F01

IDEM

24-26 April 2020  
Singapore

International Dental  
Exhibition and Meeting

Stand 6G21

# Regular courses

Bone growth over implant

by Dr. Mohamad El Moheb

January 24-25, Paris

Cortically Fixed @ Once

by Henri Diederich DDS

May 11-13, London

Conometric solutions

by Dr. Dainius Karpavicius

January 24-25, Kaunas, Lithuania

# Start kits

Try unique features at affordable price



## – TRY3 –

20 dental implant parts  
including 3 implants

## – TRY10 –

46 dental implant parts  
including 10 implants

## – ROOTT –

119 parts including 22 implants  
and instrument set

**ROOTT**  
open implant system  
by **TRATE**

TRATE AG  
Seestrasse 58  
8806 Bäch  
Switzerland

t +41 44 202 1919  
f +41 44 202 1920  
[info@rate.com](mailto:info@rate.com)  
[rate.com](http://rate.com)

 Open Dental  
Community