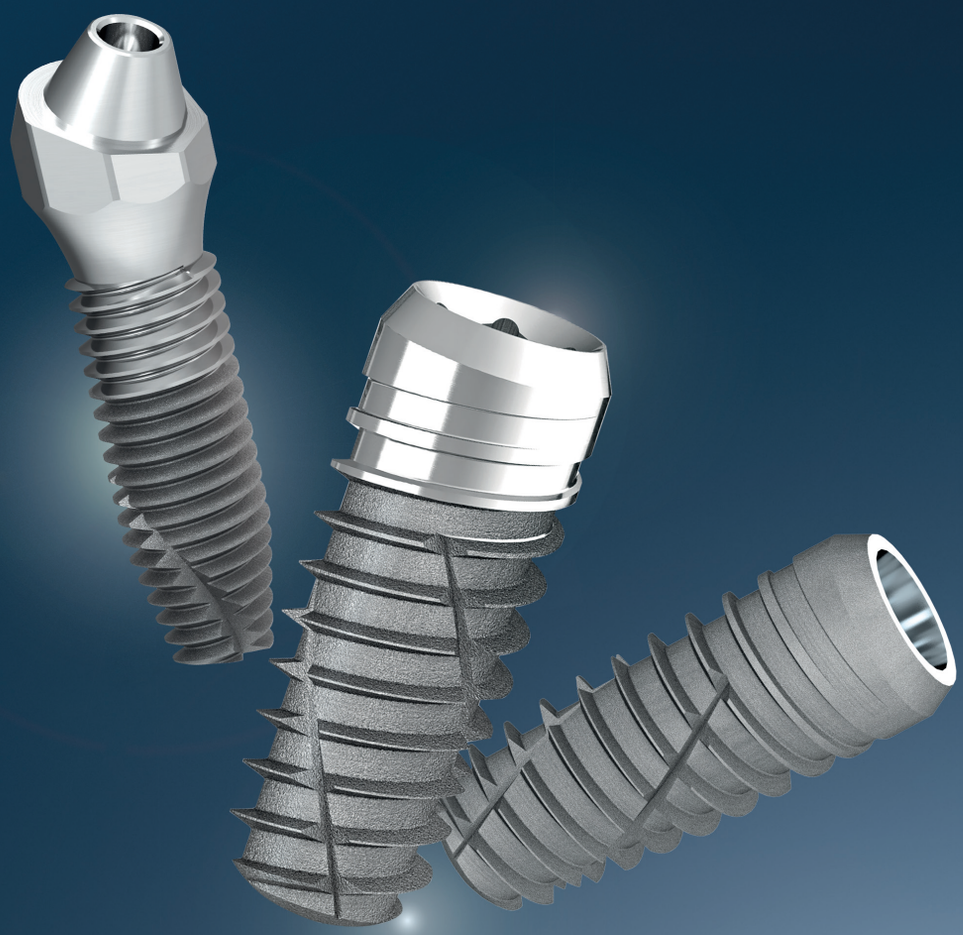
iRES

COMPLETE SOLUTION
FOR ORAL SURGERY



IMPLANT SYSTEM
PROSTHETIC PARTS
TRADITIONAL AND GUIDED SURGERY

2026

DISTRIBUTED BY

AL THANAYA
PHARMACEUTICALS LLC

INTERNATIONAL
RELIABLE
EFFICIENT
SAFE

Reliable results and a short time frame: these indispensable elements of modern oral surgery have been the aim of iRES from the very beginning.
This can be observed also in implant lines, designed to offer **maximum simplicity and versatility**.

Thanks to the synergy with top-level **opinion leaders**, such as Prof. Massimo Simion, iRES is one of the first companies to develop **hybrid surface implants**, an additional option that clinicians can adopt for periodontal patients.

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BONE LEVEL IMPLANTS

VOLUTION SVB

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HANDY HNDC

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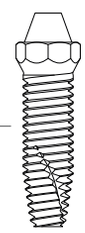
TISSUE LEVEL IMPLANTS

iMAXMUA NHSM

ONE PIECE **ø 3.3 - 3.7 - 4.1**



Dental implants are made of titanium for medical use in compliance with current regulations.

VOLUTION SVB

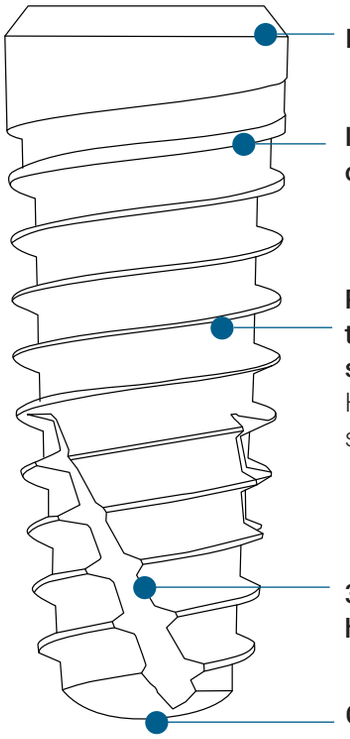
INTERNAL HEX

2.1 - **Ø 3.3**

2.5 - **Ø 3.7-4.1-4.7-5.2**

LARGE DOUBLE THREAD IMPLANT

FOR BETTER INSERTION FACILITY



Platform switching

Implant with ogival design

Pronounced threads with sharp profile. Higher primary stability

3 apical cuts helicoidal

Conical apex with rounded tip

Machined surface on **1/3** of the length

SVB-HYHA

HYBRID IMPLANT

1 mm machined neck

SVB-C

NECK MACHINED IMPLANT

Full surface treatment

SVB

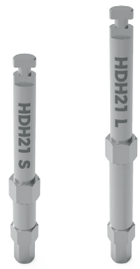
INTEGRAL IMPLANT

ø	heights (mm)						implant thread (mm)	connection	platform (mm)	hex (mm)	thread
3,3		8	10	11,5	13	16	large double thread 0.9	internal hex	3.2	2.1	1/72
3.7		8	10	11.5	13	16	large double thread 0.9	internal hex	3.5	2.5	1/72
4.1	6.5	8	10	11.5	13	16					
4.7	6.5	8	10	11.5	13	16					
5.2	6.5	8	10	11.5	13						

DRIVERS 2.1

H	*cod.*
25	HDH21S
30	HDH21L

Material: Surgical steel



DRIVERS 2.5

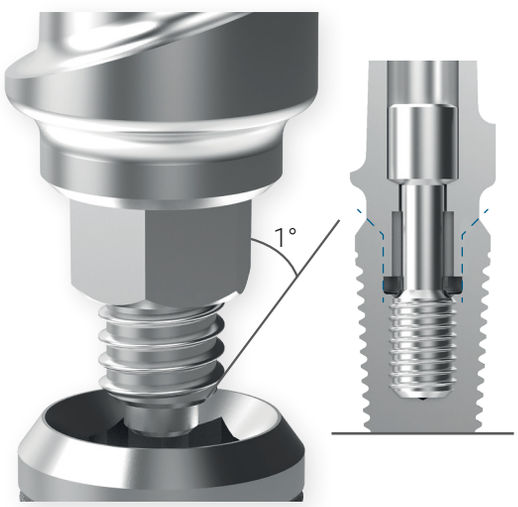
H	*code*
25	HDH25S
30	HDH25L

Material: Surgical steel

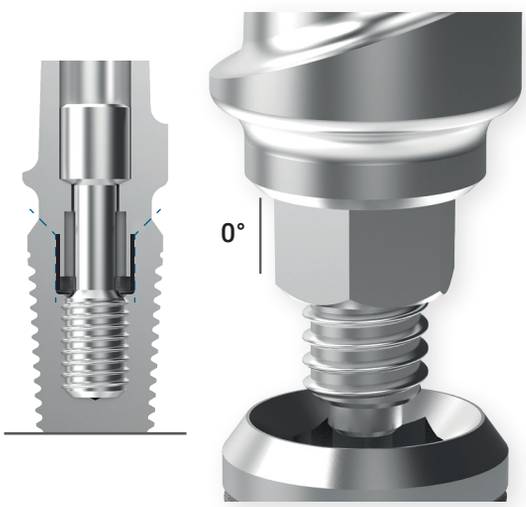
IMPLANT CONNECTION

Prosthetic components with Friction Fit connection have been developed for **SVB** implant systems with internal hex connection.
This connection ensures a “cold fusion” between implant and abutment if the retaining screw has been tightened at 30 Ncm. It eliminates micro movements and reduces bacterial infiltration between implant and abutment.

FRICTION FIT
connection with 1° angle
on the abutment



WITHOUT FRICTION FIT
with straight abutment wall



MANAGEMENT OF SOFT TISSUES

The following configurations are available for improved soft tissue management.

STRAIGHT PROFILE

S-SHAPED

CONCAVE PROFILE

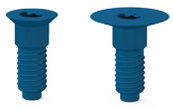
45° PROFILE

SURGICAL SCREWS

Material: Ti-6Al-4V

ø	*thread*	***HEX 2.1***	***HEX 2.5***
3.5	1/72	S1BNCS	S1BCS
5	1/72	S1BNCSL	S1BCSL

Available as spare parts. S1BNCS provided with the implant



PROSTHETIC SCREWS

Material: Ti-6Al-4V

HEX 2.1/2.5
S1BRS1

For abutments thread 1/72

HEX 2.1/2.5
S1BRS2

For comp MUA thread 1/72

HEX 2.1/2.5
S1BDTRS

Long for transfer thread 1/72

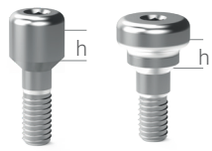
HEX 2.1/2.5
S1BRS1T6

Prosthetic screws torx

HEALING SCREWS

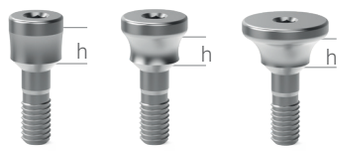
Material: Ti-6Al-4V

ø	*H*	***HEX 2.1***	***HEX 2.5***
3.5	3	S1BN3530HC	S1B3530HC
3.5	4.5	S1BN3545HC	S1B3545HC
3.5	6	S1BN3560HC	S1B3560HC
5	3		S1B5030HC
5	4.5		S1B5045HC
5	6		S1B5060HC



ø	*H*	***HEX 2.1***	***HEX 2.5***
3.5	1	S1BN3510HCC	
3.5	3	S1BN3530HCC	S1B3530HCC
3.5	4.5	S1BN3545HCC	S1B3545HCC
3.5	6	S1BN3560HCC	S1B3560HCC
5	3		S1B5030HCC
5	4.5		S1B5045HCC
5	6		S1B5060HCC
6	3		S1B6030HCC
6	4,.5		S1B6045HCC

Flaring profile



ANALOG

Material: Ti-6Al-4V

HEX 2.1	***HEX 2.5***
S1BNIA	S1BIA

INDIRECT IMPRESSION TRANSFER

Material: Ti-6Al-4V • Screw included: S1BRS1

ø	*HEX 2.1*	*HEX 2.5*
3.5	S1BN135ITC	S1B135ITC
5		S1B150ITC

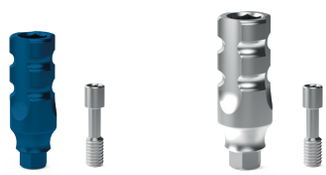
Indirect transfer cap included

HEX 2.1/2.5
ITC

POM-C indirect transfer cap

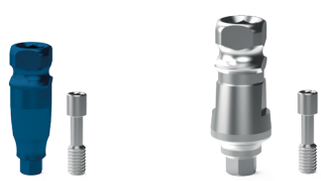
ø	*HEX 2.1*	*HEX 2.5*
3.5	S1BN1M35	
5		S1B1M50

Multifunction abutment with flared profile



ø	*HEX 2.1*	*HEX 2.5*
3.5	S1BN1A35	
5		S1B1A50

Multifunction abutment



S1BN1A35 - S1BN1M35 - S1B1A50 and S1B1M50 may also be used as direct impression transfers, with the additional purchase of the specific screw S1BDTRS

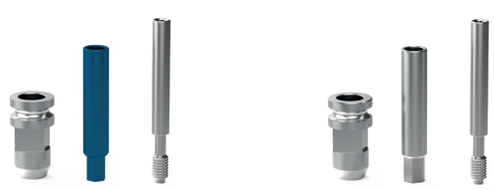
DIRECT IMPRESSION TRANSFER

Material: Ti-6Al-4V • Screw included: S1BDTRS

ø	*HEX 2.1*	*HEX 2.5*
3.5	S1BNDT35	S1BDT35
5		S1BDT50

ø	*HEX 2.1*	*HEX 2.5*
5	S1BNDT403	S1BDT503

3-components for disparallel systems



S1BN1A35 and S1BN1M35, S1B1A50 and S1B1M50 may also be used as direct impression transfers, with the additional purchase of the specific screw S1BDTRS

TEMPORARY STRAIGHT ABUTMENTS

Material: Ti-6Al-4V • Screw included: S1BRS1

ø	***HEX 2.1***	***HEX 2.5***
3.5	S1BN135P	
4		S1B140P

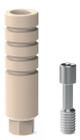
Not rotating


ø	***HEX 2.1***	***HEX 2.5***
3.5	S1BN135PR	
4		S1B140PR

Rotating


Material: PEEK • Screw included: S1BRS1

ø	***HEX 2.1***	***HEX 2.5***
3.5	S1BN135PP	
4		S1B140PP

DEFINITIVE STRAIGHT ABUTMENTS

Material: Ti-6Al-4V • Screw included: S1BRS1

ø	***HEX 2.1***	***HEX 2.5***
3.5	S1BN135FF	S1B135F
5		S1B150F

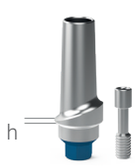
Friction Fit


ø	***HEX 2.1***	***HEX 2.5***
4.5		S1B145FS
5.5		S1B155FS

Friction Fit without emergence profile

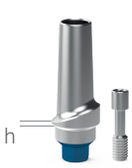
ø	*H*	***HEX 2.1***	***HEX 2.5***
4	1	S1BN1140	
4	3	S1BN1340	
4.5	1		S1B1145
4.5	3		S1B1345

Anatomic without Friction Fit



ø	*H*	***HEX 2.1***	***HEX 2.5***
4.5	1	S1BN1140F	S1B1145F
4.5	3	S1BN1340F	S1B1345F

Anatomic with Friction Fit



HEX 2.1	***HEX 2.5***
S1BN1TS	S1B1TS

Abutment for welded technique


ANGLED ABUTMENTS

Material: Ti-6Al-4V • Screw included: S1BRS1

ø		HEX 2.1	HEX 2.5
4.5	20°		S1B250F

Friction Fit

ø		HEX 2.1	HEX 2.5
4.5	20°		S1B245FS

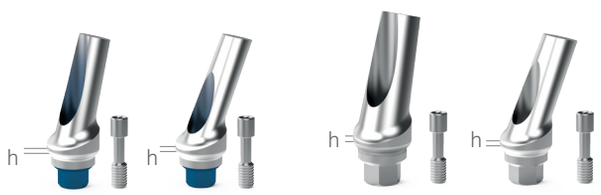
Friction Fit without emergence

ANATOMIC DEFINITIVE ANGLED ABUTMENTS

Material: Ti-6Al-4V • Screw included: S1BRS1

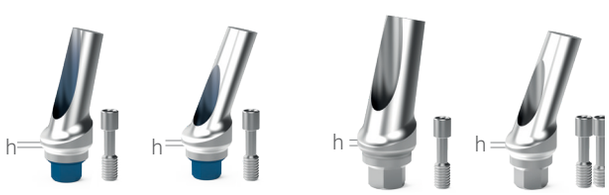
ø			HEX 2.1	HEX 2.5
4.5	15°	1	S1BN211540	
4.5	15°	3	S1BN231540	
4.5	25°	1	S1BN212540	
4.5	25°	3	S1BN232540	
4	15°	1		S1B211545
4	15°	3		S1B231545
4	25°	1		S1B212545
4	25°	3		S1B232545

Without Friction Fit



ø			HEX 2.1	HEX 2.5
4.5	15°	1	S1BN211540F	
4.5	15°	3	S1BN231540F	
4.5	25°	1	S1BN212540F	
4.5	25°	3	S1BN232540F	
4	15°	1		S1B211545F
4	15°	3		S1B231545F
4	25°	1		S1B212545F
4	25°	3		S1B232545F

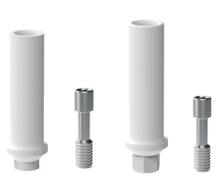
Friction Fit

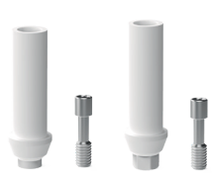


CASTABLE ABUTMENT

Material: POM-C • Screw included: S1BRS1

ø		HEX 2.1	HEX 2.5
3.5	rotating	S1BN3PCR35	
3.5	not rotating	S1BN3PC35	
4.5	rotating		S1B3PCR45
4.5	not rotating		S1B3PC45





HEX 2.1	HEX 2.5
S1BN3PTC45	S1B3PTC45

Material base: TI-6I-4V

STICKING BASES *Digital libraries available*

Material: Ti-6Al-4V • Screw included: S1BRS1

ø	*HEX 2.1*	*HEX 2.5*
3.5	S1BN135F	
4.5		S1B140F

Friction Fit with emergence profile

ø	*HEX 2.1*	*HEX 2.5*
3.5	S1BN135FS	
4.5		S1B140FS

Friction Fit without emergence profile

ø	*HEX 2.1*	*HEX 2.5*
3.5	S1BN135R	
4.5		S1B140R

Rotating with emergence profile

ø	*HEX 2.1*	*HEX 2.5*
3.5	S1BN135RS	
4.5		S1B140RS

Rotating without emergence profile

MUA ABUTMENTS

Material: Ti-6Al-4V

H	*HEX 2.1*	*HEX 2.5*
1	S1BN41	S1B41
2	S1BN42	S1B42
3	S1BN43	S1B43
4	S1BN44	S1B44
5	S1BN45	S1B45
6	S1BN46	S1B46

Tighten with HDH20 driver
Mounter included

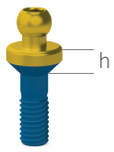
H		*HEX 2.1*	*HEX 2.5*
0/2	18°	S1BN518	S1B518
0/2	30°	S1BN532	S1B532
2/4	30°		S1B534

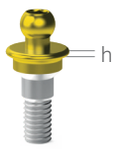
Mounter and S1BRS2 screw included

BALL ABUTMENTS

Material: Ti-6Al-4V • CAH and CAT included

H	***HEX 2.1***	***HEX 2.5***
1	S1BN61	S1B61
2	S1BN62	S1B62
3	S1BN63	S1B63
4	S1BN64	S1B64
5	S1BN65	S1B65





TIN Treatment on the gold part. Tighten with MDS or MDL screwdriver

HEX 2.1/2.5
CAH
CALT

Containment ring and Nylon containment cap

IRETOR

H	***HEX 2.1***	***HEX 2.5***
0	S1BN80	S1B80
1	S1BN81	S1B81
2.5	S1BN825	S1B825
3.5	S1BN835	S1B835
4.5	S1BN845	S1B845
6.5	S1BN865	S1B865

Tighten with 8393 screwdriver. TIN Treatment on the gold part. Ring and cap not included.

COMPONENTS FOR DIGITAL FLOW

Implant libraries available on the site https://www.en.ires.dental/media-kit/

DIGITAL ANALOG

Materia: Ti-6Al-4V

HEX 2.1	***HEX 2.5***
S1BNDIA	S1BDIA

SCAN ABUTMENT

Material: Ti-6Al-4V • Screw included: S1BRS1

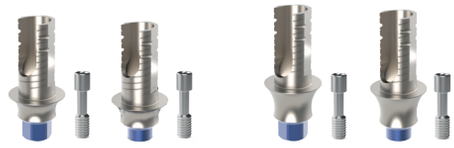
	HEX 2.1	***HEX 2.5***
standard	S1BNSA	S1BSA
long	S1BNSAL	S1BSAL

T-BASE

Material: Ti-6Al-4V • Screw included: S1BRS1

ø	*sholder*	*cuff*		***HEX 2.1***
3.7	0.4	0.8	non rotating	S1BN11DCTB
3.7	0.4	0.8	rotating	S1BN11DCTBR
3.7	0.4	1.8	non rotating	S1BN12DCTB
3.7	0.4	1.8	rotating	S1BN12DCTBR
3.7	0.4	2.8	non rotating	S1BN14DCTB
3.7	0.4	2.8	rotating	S1BN14DCTBR

4.5	0.8	1.8	non rotating	S1BN12DCTB50
4.5	0.8	1.8	rotating	S1BN12DCTB50R
4.5	0.8	2.8	non rotating	S1BN14DCTB50
4.5	0.8	2.8	rotating	S1BN14DCTB50R



	non rotating	S1BN1DTB
	rotating	S1BN1DTBR
CEREC	non rotating	S1BN1DTBC
CEREC	rotating	S1BN1DTBCR

T-BASE

Material: Ti-6Al-4V • Screw included: S1BRS1

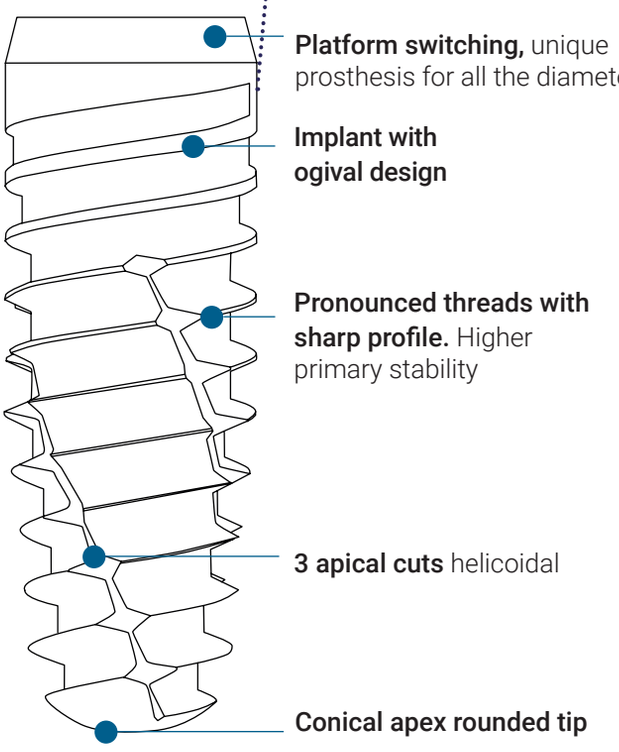
ø	*sholder*	*cuff*		***HEX 2.5***
3.4	0.4	0	non rotating	S1B00DCTB
3.4	0.4	0	rotating	S1B00DCTBR
3.7	0.4	0.5	non rotating	S1B11DCTB
3.7	0.4	0.5	rotating	S1B11DCTBR
3.7	0.4	1.8	non rotating	S1B12DCTB
3.7	0.4	1.8	rotating	S1B12DCTBR
3.7	0.5	0.2	non rotating	S1B1DTB
3.7	0.5	0.2	rotating	S1B1DTBR
4.5	0.8	1.8	not rotating	S1B12DCTB50
4.5	0.8	1.8	rotating	S1B12DCTBR50
5.7	1.2	1.8	non rotating	S1B14DCTBR
5.7	1.2	1.8	rotating	S1B14DCTB
5.7	1.2	2.8	non rotating	S1B14DCTB50
5.7	1.2	2.8	rotating	S1B14DCTBR50

		HEX 2.5
CEREC	non rotating	S1B1DTBC
CEREC	rotating	S1B1DTBCR

HEX 2.1/2.5
On request S1BRS1T6

HANDY HNDC

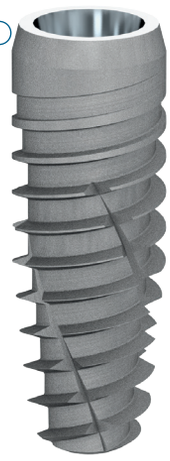
CONICAL CONNECTION 2.1
Ø 3.3-3.7-4.1-4.7-5.2



Full surface treatment

HANDY HNDC

HNDC
INTEGRAL IMPLANT



ø	heights (mm)						implant thread (mm)	connection	platform (mm)	hex (mm)	thread
3.3			10	11.5	13	16	large double thread 0.9	internal hexagon with morse tapering	Narrow	2.1	1/72
3.7	6.5	8	10	11.5	13	16					
4.1	6.5	8	10	11.5	13	16					
4.7	6.5	8	10	11.5	13	16					
5.2	6.5	8	10	11.5							

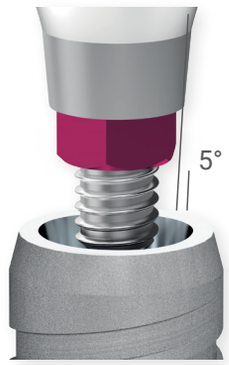
DRIVERS

H	*code*
25	HDH21S
30	HDH21L

Material: Surgical steel

IMPLANT CONNECTION

The conical connection has a 5° angle on the abutment and on the implant, and an emergence profile for the mucous attack. The cone-morse connection creates fissures (1µm) smaller than bacteria, absorbs vibration and chewing stress with the result that it eliminates the unscrewing of the screws.



CONOMETRICS, 5° angle on the implant and on the abutment

MANAGEMENT OF SOFT TISSUES

The following configurations are available for improved soft tissue management.

CONCAVE PROFILE

SURGICAL SCREW

Material: Ti-6Al-4V

code
NHSICNCS

Provided with the implant
Available as spare parts

PROSTHETIC SCREWS

Material: Ti-6Al-4V

code
S1BRS1

For abutment thread 1/72

code
S1BRS2

For MUA thread 1/72

code
S1BDTRS

Long for transfer thread 1/72

code
S1BRS1T6

Torx screw for prosthesis

HEALING SCREWS

Material: Ti-6Al-4V • Screw included: S1BRS1

ø	H	code
4	3	NHSICN4030HC
4	4.5	NHSICN4045HC
4	6	NHSICN4060HC

ANALOG

Material: Ti-6Al-4V

ø	code
4	NHSICNIA

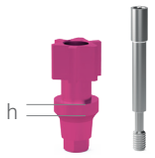
ø	code
4	NHSICNIAS

Short analog for guided surgery

DIRECT TRANSFER IMPRESSION

Material: Ti-6Al-4V • Screw included: S1BDTRS

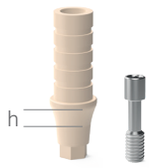
ø	H	code
4	1	NHSICNDT140
4	2	NHSICNDT240
4	4	NHSICNDT440



PEEK TEMPORARY ABUTMENTS

Material: PEEK • Screw included: S1BRS1

ø	H	code
4	1	NHSICN1140PP
4	2	NHSICN1240PP
4	4	NHSICN1440PP

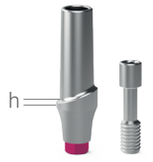


STRAIGHT ABUTMENTS

Material: Ti-6Al-4V • Screw included: S1BRS1

ø	H	code
4	1	NHSICN1140
4	2	NHSICN1240
4	4	NHSICN1440

Not rotating



STICKING BASES*

Materiale: Ti-6Al-4V • Screw included: S1BRS1

ø	H	code
4	1	NHSICN1140SB
4	2	NHSICN1240SB
4	4	NHSICN1440SB

Not rotating

ø	H	code
4	1	NHSICN1140RSB
4	2	NHSICN1240RSB
4	4	NHSICN1440RSB

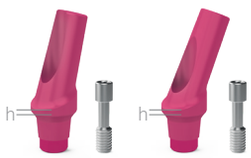
Rotating

**while stock lasts*

ANGLED ABUTMENTS

Material: Ti-6Al-4V • Screw included: S1BRS1

ø		H	code
4	15°	1	NHSICN211540
4	15°	2	NHSICN221540
4	15°	4	NHSICN241540
4	25°	1	NHSICN212540
4	25°	2	NHSICN222540
4	25°	4	NHSICN242540



MUA ABUTMENTS **Components page 38-39**

Material: Ti-6Al-4V

ø	H	code
4	1	NHSICN41
4	2	NHSICN42
4	4	NHSICN44

Tighten with HDH20 driver
Mounter included

ø		H	code
4.1	18°	0/2	NHSICN518
4.1	30°	0/2	NHSICN532
4.1	30°	2/4	NHSICN534

Mounter and S1BRS2 screw included

BALL ABUTMENTS *Material: TI-6Al-4V • CAH e CAT inclusi*

ø	H	code
4	1	NHSICN61
4	2	NHSICN62
4	4	NHSICN64

TIN Treatment on the gold part
Tighten with MDS or MDL screwdriver

code
CAH

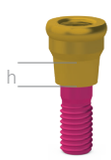
Containment ring

code
CALT

Nylon containment cap

IRETOR

H	code
0	NHSICN80
1	NHSICN81
2	NHSICN825
3	NHSICN835
4	NHSICN845
6	NHSICN865



Tighten with 8393 screwdriver
TIN Treatment on the gold part
Ring and cap not included

COMPONENTS FOR DIGITAL FLOW

Implant libraries available on the site https://www.en.ires.dental/media-kit/

DIGITAL ANALOG

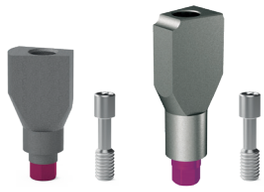
Material: Ti-6Al-4V

code
NHSICNDIA

SCAN ABUTMENT

Material: Ti-6Al-4V • Screw abutment: S1BRS1

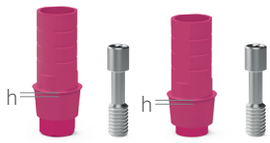
	code
standard	NHSICNSA
long	NHSICNSAL



T-BASE

Material: Ti-6Al-4V • Screw abutment: S1BRS1

	H	*code*
not rotating	1	NHSICN11DTB
not rotating	2	NHSICN12DTB
not rotating	4	NHSICN14DTB
rotating	1	NHSICN11DTBR
rotating	2	NHSICN12DTBR
rotating	4	NHSICN14DTBR



	code
On request	S1BRS1T6

LINK

Material: Ti-6Al-4V

ø	*H*	*code*
3.5	3	NHSICNL1
3.5	4	NHSICNL2
3.5	5	NHSICNL3

ø	*H*	*code*
4.1	3	NHSICNL4
4.1	4	NHSICNL5
4.1	5	NHSICNL6
4.1	6	NHSICNL7

PRE-MILLED

Material: Ti-6Al-4V

ø	*H*	*code*
14	1	NHSICNPM14

iRETOR
ACCESSORIES

ANALOG

Material: Inox

Qty	*code*
2	144ATP

TRANSFER

Material: Inox - PA

Qty	*code*
2	044CAIP

INSERTION TOOL

code
488EIP

CONTAINER IN TITANIUM

Material: Ti-6Al-4V

Qty	*code*
2	141CTP

CAP FOR LAB USE

Material: PA

Qty	*code*
4	143CPN

PARALLELE CAPS

Material: PA

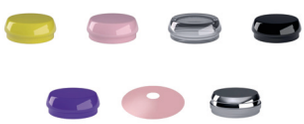
Qty	*pin*	*Kg*	*cod*
4	extra soft	0.7	142CPPG
4	soft	0.9	142CPPR
4	standard	1.5	142CPPT
4	strong	1.8	142CPPV

SET

Material: Ti-6Al-4V - PA - EVA

code	*€*
192CPC	*39*

Set of copings with pins



DISPARALLEL CAPS

Material: PA

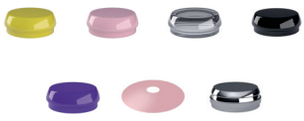
Qty	*pin*	*Kg*	*cod*
4	extra soft	0.6	143CPG
4	soft	0.8	143CPR
4	standard	1	143CPT
4	strong	1.5	143CPV

SET

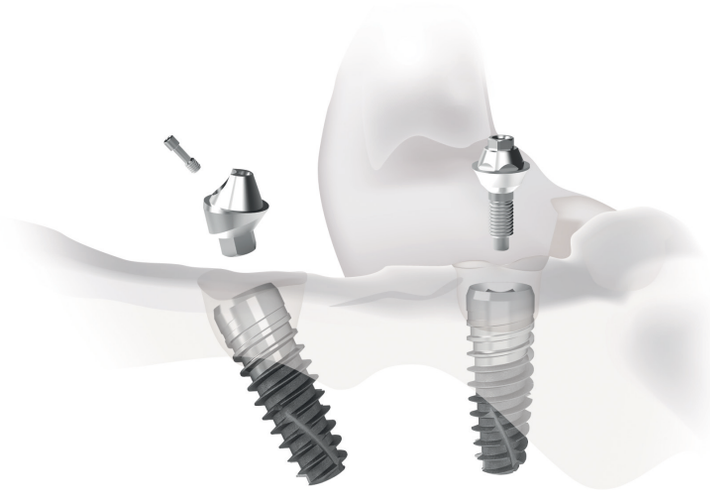
Material: Ti-6Al-4V - PA - EVA

code	*€*
192CPS	*39*

Set of copings without pins



MUA
COMPONENTS



RETAINING SCREWS

Material: Ti-6Al-4V

code
S1BRS3

For abutment thread 1.4

code
S1BDTRSA

Long retaining screw for MUA transfer thread 1.4

HEALING CAPS

Screw included: S1BRS3

code
S1BHCSRA

Material: TI-6Al-4V

code
S1BHCSRAA

Material: POM-C

ANALOG

Material: Ti-6Al-4V

code
S1BIASRA

TRANSFER

Material: Ti-6Al-4V • Screw included: S1BRS3

code
S1BITCSRA

Indirect impression transfer

Material: Ti-6Al-4V • Screw included: S1BDTRSA

code
S1BDTCSRA

Direct impression transfer.
With long screw

ABUTMENT

Material: Ti-6Al-4V • Screw includeda: S1BRS3

code
S1BPTTA

Temporary straight abutments

code
S1BTTA

Definitive straight abutments

code
S1BPCC

Castable abutments
Materiale: POM

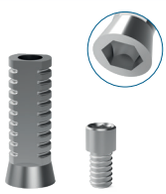
code
S1BTS

Abutments for welded technique

THREADED

Material: Ti-6Al-4V • Screw included: S1BRS3

code
S1BTTAE



Threaded not rotating

code
S1BTTAFB

Threaded abutment for bar

COMPONENTS FOR DIGITAL FLOW

Implant libraries available on the site https://www.en.ires.dental/media-kit/

DIGITAL ANALOG

Material: Ti-6Al-4V

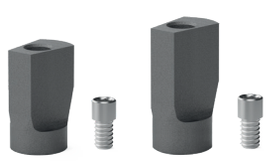
code
S1BDIASRA

SCAN ABUTMENT

Material: Ti-6Al-4V

	code
standard	S1BSAA
long	S1BSAAL

Screw included: S1BRS3



T-BASE

Material: Ti-6Al-4V • Screw included: S1BRS3

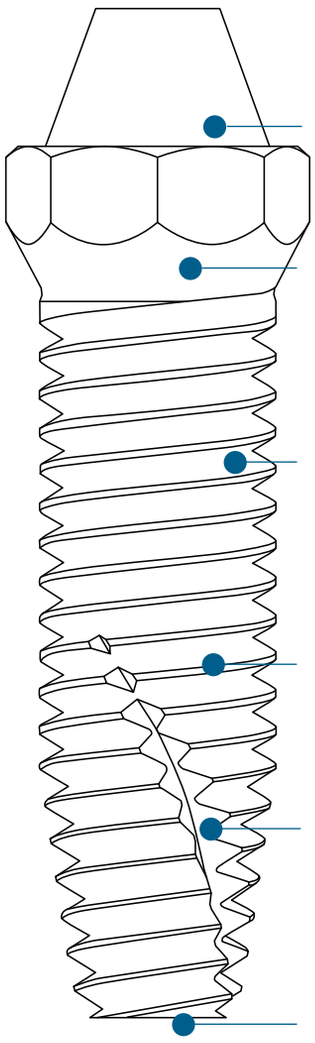
code
S1BTTADTB

Rotating

iMAXMUA NHSM

ONE PIECE
PLATFORM 4.3
Ø 3.3-3.7-4.1

ONE PIECE FOR IMMEDIATE LOADING



Hole for retaining screw
Retention screw Increased diameter for high biomechanical safety

Machined neck

Cylindrical body

Single sharp thread at **60°** along the entire body of the implant for better force distribution, ensuring optimal stability, with a total pitch of **1.2 mm**.

3 apical helicoidal cuts

Conical flat tip apex

iMAXMUA NHSM HYHA

NHSM00-HYHA
HYBRID IMPLANT 0°

Mounter NHSMM included

iMAXMUA NHSM HYHA 18

NHSM18-HYHA
HYBRID IMPLANT 18°

iMAXMUA NHSM HYHA 30

NHSM30-HYHA
HYBRID IMPLANT 30°

ø		heights (mm)					
3.3	0°	4.5	6	8	10	11.5	13
3.7	0°	4.5	6	8	10	11.5	13
4.1	0°	4.5	6	8	10	11.5	13

thread (mm)	connection	platform
double	one piece	4.3

ø			heights (mm)			thread
3,7	18°	30°	11.5	13	16	double
4,1	18°	30°	11.5	13	16	double

connection	platform
one piece	4.3

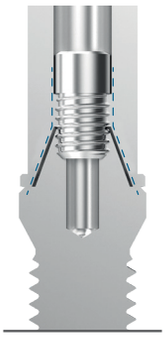
DRIVERS

code
NHSMHDH

Implant driver
Material: Surgical steel

IMPLANT CONNECTION

There is no connection between implant and abutment in **NHSM ONEPIECE** system and this allows to **completely eliminate bacterial infiltration**. OnePiece connection is suitable for immediate loading



ONE PIECE
No connection between implant and abutment

RETAINING SCREWS

Material: Ti-6Al-4V

code
NHSMRS1

For abutment thread 1/72

code
NHSMDTRS

Long for transfer thread 1/72

HEALING CAPS

Screw included: NHSMRS1

code
NHSMHCSRA

Material: TI-6Al-4V

code
NHSMHCSRAA

Material: POM-C

ANALOGO

Material: Ti-6Al-4V

code
NHSMIASRA

IMPRESSION TRANSFER

Material: Ti-6Al-4V

code
NHSMITCSRA

Indirect
Screw included: NHSMRS1

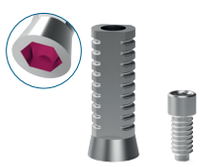
code
NHSMDTCSRA

Direct
Screw included: NHSMDTRS

THREADED

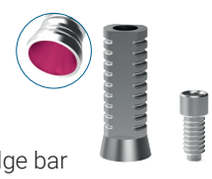
Material: Ti-6Al-4V • Screw included: NHSMRS1

code
NHSMTTAE



Not rotating

code
NHSMTTAFB



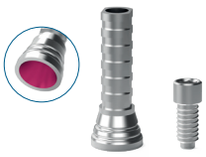
MUA threaded abutment for fast bridge bar

ABUTMENT

Material: Ti-6Al-4V • Screw included: NHSMRS1

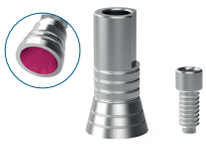
code
NHSMPTTA

Temporary straight abutments



code
NHSMTTA

Definitive straight abutments

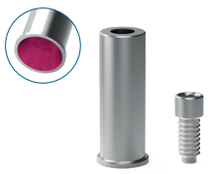


code
NHSMPCC

Castable abutment

code
NHSMTS

Abutments for welded technique



COMPONENTS FOR DIGITAL FLOW

Implant libraries available on the site https://www.en.ires.dental/media-kit/

DIGITAL ANALOG

Material: Ti-6Al-4V

code
NHSMDIASRA

SCAN ABUTMENT

Material: Ti-6Al-4V

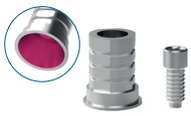
code
NHSMSAA

Screw included: NHSMRS1

T-BASE

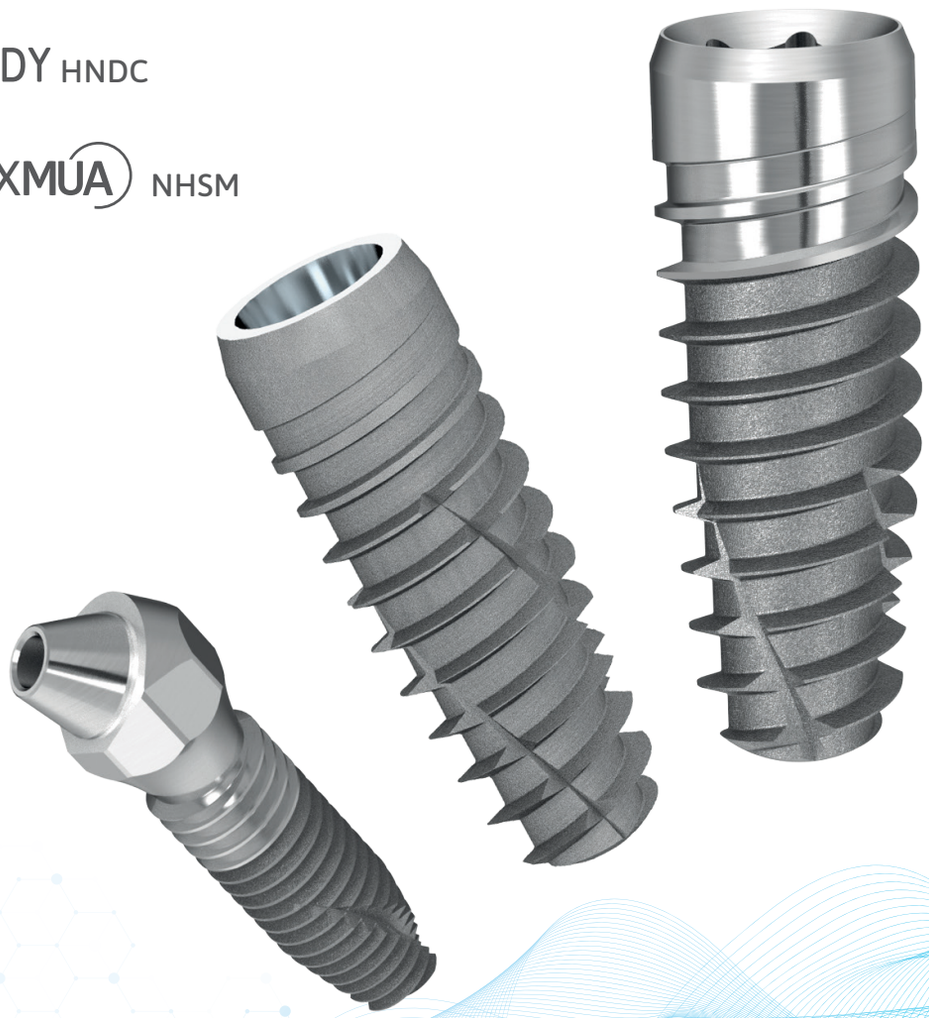
Material: Ti-6Al-4V • Screw included: NHSMRS1

code
NHSMTTADTB



iRES

- VOLUTION SVB
- HANDY HNDC
- iMAXMUA NHSM



IMPLANT
SYSTEMS

SURFACE TREATMENT

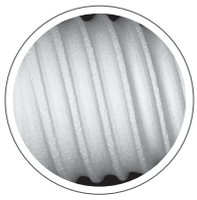
There is a relevant scientific literature* on how surface roughness characteristics influence cell behaviour.
Compared to a smooth surface, topographical patterns smaller in size than a fibroblast cell (micro and nano topography) orient the arrangement of the cells and stimulate osteoblastic and platelet activity, accelerating the production of extracellular matrix and bone regeneration, and therefore the osseointegration of the dental implant.
The three **fundamentals of surface treatment of dental implants** from a biological point of view are:

1. **control of surface topography** to stimulate cellular response in an osteogenic direction;
2. **control of the chemical composition of the surface** to promote cell colonization;
3. **control of biological contamination** from adherent endotoxins so as not to interfere with the natural inflammatory response.

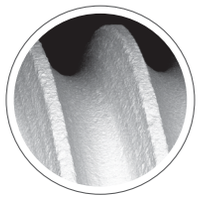
For the surface treatment a sand-blasting process was used followed by a double acid attack. In the images, increasing the magnification, it can be seen how the macroscopic aspects of the screw (spire, cutting SLA surface treatment edge) are not affected by the treatment and that the surface is free from processing residue. The dual-beam roughness typical of SLA treatment can be clearly observed, which contains large cavities due to large grit blasting on which is superimposed the microroughness due to treatment with acids. The micro-roughness illustrated in the figures highlights the typical three-dimensional topography, which gives these surfaces "sponge-like" characteristics that are the basis of their excellent clinical performance In fact, the very short peakto-peak distance, about 1 micrometer, stimulates both the activity of osteogenic
cells and the capillary penetration of the blood in the surface structure, offering very favorable characteristics to stimulate bone regeneration, as described in many articles on this topic. This unique combination of longrange roughness (large grit sand-blasting) and shortrange (acid etching) is a substrate favorable to cell regrowth that adequately promotes cell differentiation.
The level of roughness is Ra 1.42 ± 0.12.

HYHA HYBRID IMPLANT

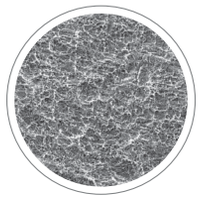
Partial surface treatment on the body implant with hyaluronic acid. Cold plasma decontamination*



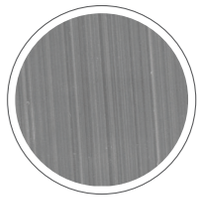
MAG 52 X
WD 11.5 mm
EHT 20.00 kV
Signal A CZ BSD



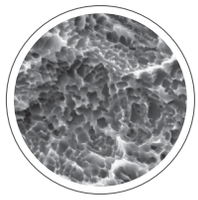
MAG 200 X
WD 11.0 mm
EHT 20.00 kV
Signal A CZ BSD



MAG 1.50 K X
WD 11.5 mm
EHT 20.00 kV
Signal A SE1



Sa 0,50 µm
overall mean value on a measuring area of 30x30 µm
cold plasma decontamination



Sa 1,90 µm
overall mean value on a measuring area of 30x30 µm
sand-blasting, double etching, cold plasma decontamination

C NECK MACHINED

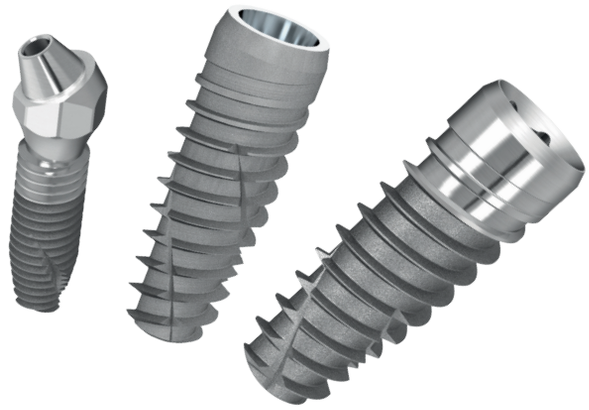
Surface treatment on the body implant

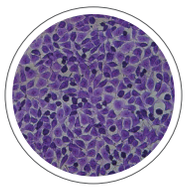
** Valutazione della composizione chimica superficiale, della morfologia, della citotossicità e dell'adesione cellulare su impianti dentali. G. Cascardo, C. Cassinelli. Doctor OS 2005 Nov-Dic; 16 (9): 1091. Valutazione comparativa del trattamento di superficie in 5 sistemi implantari. M. Biasotto, M. Cadenaro et al. Università degli studi di Trieste. Quintessence International, Anno 18 – Maggio/Giugno 2002. RAPPORTO ISTISAN 01/15 – Valutazione del trattamento superficiale sulle prestazioni meccaniche a fatica di impianti in titanio plasma-sprayed e titanio sabbiato e mordenzato. Rossella Bedini, Gior-gio de Angelis, Marco Tallarico, Rosario Iealpi, Umberto Romeo, Giuseppe di Cintio 2001, 33 p. RAPPORTO ISTISAN 08/32 – Valutazione microtomografica dell'area di possibile contatto osseo di sei tipologie diverse di impianti dentali. Rossella Bedini, Raffaella Pec-ci, Fabio Di Carlo, Alessandro Quaranta, Francesca Rizzo, Manlio Quaranta, G. Heimke, W. Schulte, B. d'Hoedt, P. Griss, C.M. Büsing, D. Stock. The influence of fine surface structures on the osseo-integration of implants. The International Journal of Artificial Organs 1982; 5(3): 207-212. Guy, M.J. McQuade, M.J. Scheidt, J.C. McPherson III, J.A. Rossmann, T.E. Van Dyke. In vitro attachment of human gingival fibroblasts to endosse-ous implant materials. Journal of Periodontology 1993 Jun; 64(6): 542-546.*

CYTOTOXICITY TEST

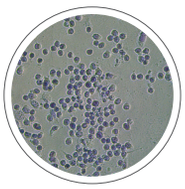
EN ISO 10993-5: 2009
Biological Evaluation of Medical Devices
In Vitro Cytotoxicity Testing

After treatment and decontamination, the implants proved to be perfectly cytocompatible, that is devoid of cytotoxic effects against L929 fibroblasts. In all wells, the cells always showed density and morphology fully comparable with those of the negative control.
The fibroblasts proliferate homogeneously in contact with the implants as the Material does not release any cytotoxic element. Moreover, multinucleated giantcells were never shown in significantly higher number than the negative control, indicating the absence of effects of an inflammatory type.

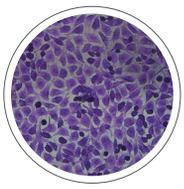




negative control



positive control



examined control

COLD PLASMA DECONTAMINATION

After the surface treatment, the implants are cleaned to remove processing residues by washing them with solvents and then subjecting them to a process of surface decontamination with cold plasma (Argon). The partially ionized Argon atoms (inert gas) act as an additional atomic sand-blasting that promotes the removal of organic contaminants and activates the ionization of surface atoms of titanium, improving the wettability of the implant. The treatment conditions adopted on shape1 implants offer the best characteristics considered important, according to the state of current knowledge*, in the processes of implant healing, both in terms of surface morphology and in terms of chemical composition (surface cleaning).
Plasma cleaning, packaging in a controlled environment, the absolute respect of "clean" procedures, quality control tests of during the manufacturing process, play a fundamental role in the control of adherent endotoxins (biological cleaning), the main agent of immunological response to implant surfaces.

** Valutazione del rapporto tra costo e qualità della pulizia superficiale di alcuni sistemi implantari in commercio Marco Morra, Clara Cassinelli, Giovanna Cascardo, Daniele Bollati, Nobil Bio Ricerche srl Via Valcastellana 26, 14037, Portacomaro (AT)*
M. Morra, C.Cassinelli, Evaluation of Surface Contamination of Titanium Dental Implants by Lu-Sem: Comparation with XPS Mesurements Surface and Interface Analysts, Vol. 25, 983-984 (1997).

STERILIZATION & PACKAGING

To preserve its integrity, the dental implant is housed in a vertical position inside a titanium cylinder anchored, by means of the closing cap, to the respective vial made of borosilicate glass for pharmaceutical use, complying with the European Pharmacopoeia in force. This vial really ensures the neutrality of the primary packaging due to the absence of release of contaminants during the sterilization phase. It is inserted in a blister of transparent polyglass sealed with heat-sealing lacquerbased Tyvek and packed in a cardboard box that also contains the instructions for use and the labels for the patient records, on which are printed the data that allow product traceability (code and batch number). All the product packaging Materials have been tested, approved and certified. Implants are supplied sterile, in a pack that allows their stability to be guaranteed for 5 years.
The sterilization process is performed with gamma rays respecting the standards in force by qualified suppliers who use automated, safe and reliable systems, with continuous microbiological monitoring of the process.

SURGICAL KIT

ONE SURGICAL KIT
FOR ALL THE IMPLANT SYSTEMS

The purpose of surgical trays is to store the instruments used to insert dental implants. The kit can be carried, sterilized and kept in a horizontal position with the lid closed. All the instruments must be cleaned and sterilized before the first use.

The surgical kit and instruments are not sterile at the time of delivery.
The standard kits contain connectors for internal hexagon: connectors for other connections are available upon request

CSK SURGICAL KIT

code
CSK

code	*description*
DE	drill extender
LD	lance drill
D20M	pilot drill ø 2.0
D2024M	drill ø 2.0|2.4 mm
CSD33	countersink ø 3.3
D2428M	drill ø 2.4|2.8 mm
CSD37	countersink ø 3.7
D2833M	drill ø 2.8|3.3 mm
CSD41	countersink ø 4.1
D3338M	drill ø 3.3|3.8 mm
CSD47	countersink ø 4.7
D3844M	drill ø 3.8|4.4 mm
CSD52	countersink ø 5.2
D4448M	drill ø 4.4|4.8 mm
DS43341M	stop 4.5
DS63341M	stop 6.5
DS83341M	stop 8
DS103341M	stop 10
DS113341M	stop 11.5
DS133341M	stop 13
TWA4	complete ratchet
THDDS	short contra-angle screwdriver for hexagon 1.25 mm
THDDL	long contra-angle screwdriver for hexagon 1.25 mm
HDH21S	connectors short for internal hex 2.1
HDH21L	connectors long for internal hex 2.1
HDH25S	connectors short for internal hex 2.5
HDH25L	connectors long for internal hex 2.5
PP	parallel pin 0°

SMALL SURGICAL KIT

COMPLETE

code
Ergo Kit Complete

code	*description*
LD	lance drill
D20M	pilot drill ø 2.0
D2024M	drill ø 2.0|2.4 mm
CSD33	countersink ø 3.3
D2428M	drill ø 2.4|2.8 mm
CSD37	countersink ø 3.7
D2833M	drill ø 2.8|3.3 mm
CSD41	countersink ø 4.1
D3338M	drill ø 3.3|3.8 mm
CSD47	countersink ø 4.7
D3844M	drill ø 3.8|4.4 mm
CSD52	countersink ø 5.2
D4448M	drill ø 4.4|4.8 mm
THDDL	connectors long for internal hex 2.1
HDH21L	connectors long for internal hex 2.5
HDH25L	complete ratchet
DE	drill extender
TAPXXX33*	tap ø 3.3
TAPXXX37*	tap ø 3.7
TAPXXX41*	tap ø 4.1
TAPXXX47*	tap ø 4.7
TAPXXX52*	tap ø 5.2
PP	parallel pin 0°
THDDS	short contra-angle screwdriver for hexagon 1.25 mm
HDH21S	long contra-angle screwdriver for hexagon 1.25 mm
HDH25S	connectors short for internal hex 2.1
MDS	connectors short for internal hex 2.5
MDL	short manual screwdriver for hexagon 1.25 mm
MDLAA	long manual screwdriver for hexagon 1.25 mm
TWA4	manual screwdriver for angled torx
DS43341M	stop 4.5
DS63341M	stop 6.5
DS83341M	stop 8
DS103341M	stop 10
DS113341M	stop 11.5
DS133341M	stop 13

*choice of Shapeone or iMAX

BASIC

code
Ergo Kit Basic

code	*description*
LD	lance drill
D20M	pilot drill ø 2.0
D2024M	drill ø 2.0|2.4 mm
CSD33	countersink ø 3.3
D2428M	drill ø 2.4|2.8 mm
CSD37	countersink ø 3.7
D2833M	drill ø 2.8|3.3 mm
CSD41	countersink ø 4.1
D3338M	drill ø 3.3|3.8 mm
CSD47	countersink ø 4.7
D3844M	drill ø 3.8|4.4 mm
CSD52	countersink ø 5.2
D4448M	drill ø 4.4|4.8 mm
THDDL	long contra-angle screwdriver for hexagon 1.25 mm
HDH21L	connectors long for internal hex 2.1
HDH25L	connectors long for internal hex 2.5
TWA4	complete ratchet

PROSTHETIC KIT

PSK PROSTHETIC KIT

code
PSK

code	*description*
MDXS	extra short manual screwdriver for hexagon 1.25 mm
MDS	short screwdriver hex 1.25 mm
MDL	long screwdriver hex 1.25 mm
MDLAA	angled torx hand screwdriver
TRT	removal tool for abutments
MTRT	manual abutment extractor
HDH20	Implant driver for straight MUA
HDH25M	connector for Shape Mini
THDDS	short prosthetic screwdriver hex 1.25
THDDL	long prosthetic screwdriver hex 1.25
THDDAL	angled torx contra-angle screwdriver
TWA4	ratchet wrench

PROCEDURE FOR KIT MANAGEMENT

CLEANING

1. Dismantle all the compound parts.
2. Rinse abundantly with cold or lukewarm water for 2-5 minutes.
3. Leave the instruments for 10 minutes in an ultrasonic cleaner with a neutral pH enzymatic detergent diluted in water according to the product instructions.
4. Wash the instruments with water for 3 minutes.

STERILIZATION

The guidelines for sterilization are listed below. Exceeding these sterilization limits may cause deterioration of the plastic components.

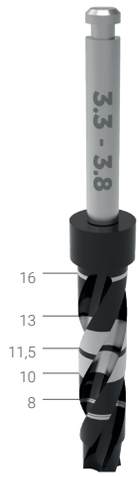
Type of cycle (value)	Temperature (°C - F)	Exposure	Drying time
Pre-vacuum	132 / 270	3 minutes	30 minutes
Pre-vacuum	134 / 273	18 minutes	30 minutes
Gravity	121 / 250	80 minutes	30 minutes

DRILLS

For a proper osteotomy and to maintain the integrity of bone quality, the maximum recommended speed is 800rpm with direct input on drill of saline solution to facilitate cooling. All drills are made of medical stainless steel and subjected to hardening heat treatment.
Maximum recommended number of use of the devices 30 times. The helical milling cutters have reference laser markings that identify the depth to reach, until 8 mm with a thin white line, from 10 to 13 mm with a white band in which at half is identified the 11.5 mm height, and finally a thin white line for the 16 mm. This system gives a clear and intuitive glance of the depth level reached by the drill. 4.5 and 6.5mm are not present to avoid confusion in reading the demarcation lines, and being these measures close to the nerve, it is always recommended to use stop by 4.5 and 6.5 mm. The drills from **2.0 to 2.8/3.3** have a **sharp apex**, The drills from **33/38** - **38/44** - **44/48** have a **flat apex**, they do not increase the height of the cut, but are only used to widen the osteotomy.
They must not be used for cutting, but as an aid for inserting the implant.

Cylindrical
ø 2.0

Double cylindrical
ø 2.0/2.4



Double cylindrical
ø 2.4/2.8 - 2.8/3.3
3.3/3.8 - 3.8/4.4
4.4/4.8 mm

DRILL EXTENDER

Material: Surgical steel

code
DE

LANCE DRILL Ø 2

Material: Surgical steel

code
LD

DRILLS H. 36

Material: Surgical steel

ø 2
code
D20M

ø 2.0|2.4
code
D2024M

ø 2.4|2.8
code
D2428M

ø 2.8|3.3
code
D2833M

ø 3.3|3.8
code
D3338M

ø 3.8|4.4
code
D3844M

ø 4.4|4.8
code
D4448M

STOPS FOR DRILLS 2.0 - 2.0/2.4 - 2.4/2.8 - 2.8/3.3

Material: Ti-6Al-4V

h. 4.5
code
DS43341M

h. 6.5
code
DS63341M

h. 8
code
DS83341M

h. 10
code
DS103341M

h. 11.5
code
DS113341M

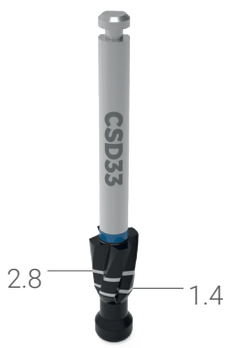
h. 13
code
DS133341M

The length of the stops ranges from **4.5 mm to 13 mm**.
The 33/38 - 38/44 - 44/48 cutters do not have stops as they are characterized by a flat tip.

COUNTERSINK

The countersinks are used when there is **the need to enlarge the initial part of the hole** created to adapt this shape to the neck of the implant to be inserted. **The maximum recommended speed is 300 rpm** with direct input on drill of saline solution to facilitate cooling. The countersink should be used in perfect axis with the osteotomy to avoid its ovalization in the coronal part. The countersinks present **two laser markings** that identify the depth to be reached on the basis of the bone consistency, at **1.4 mm for a "D3" bone, at 2.8 mm for both "D2" and "D1"bones**. Above the marking at 2.8 mm, the countersink continues with a cylindrical geometry that does not compromises the osteotomy although more deeply inserted.

ø 3.3 - 3.7 - 4.1 - 4.7 - 5.2



for short implant

without insertion
head for all sizes

COUNTERSINK

Material: Surgical steel

ø 3.3
code
CSD33

ø 3.7
code
CSD37

ø 4.1
code
CSD41

ø 4.7
code
CSD47

ø 5.2
code
CSD52

ø 3.3
code
CSDS33

ø 3.7
code
CSDS37

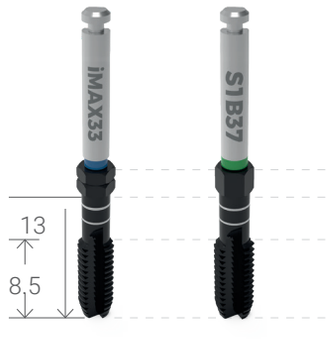
ø 4.1
code
CSDS41

ø 4.7
code
CSDS47

ø 5.2
code
CSDS52

TAPS

In very dense bone (Type I) it is recommended to use a tap with the same system profile to insert. The tap is sharper than the implant and it allows to prepare the implantation site with reduced trauma.
The maximum recommended speed is 30 rpm with direct input on tap of saline solution to facilitate cooling.



SHAPEONE TAPS

Material: Surgical steel

ø 3.7	ø 4.1	ø 4.7
code	*code*	*code*
TAPS1B37	TAPS1B41	TAPS1B47

IMAX TAPS

Material: Surgical steel

ø 3.3	ø 3.7	ø 4.1	ø 4.7	ø 5.2
code	*code*	*code*	*code*	*code*
TAPIMAX33	TAPIMAX37	TAPIMAX41	TAPIMAX47	TAPIMAX52

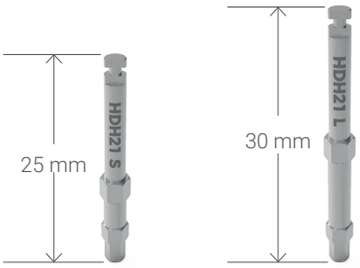
MUCOTOMES

Material: Surgical steel

ø 3.3	ø 4
code	*code*
HDHCSN	HDHCSR

CONNECTORS

In the kit all the connectors have a handpiece attack that may be used both in manual mode and with the ratchet, thanks to the special washer (WH2). The insertion torque for the **immediate loading** will be in the range **from 35 to 50Ncm.** For the **conventional** load the **insertion torque should never exceed 50Ncm**.



Handle attack

The drive hexagon confers greater solidity during the tightening phase

Position hexagon
during the insertion allows to see the internal positioning of the hexagon

Exagon connection
that reaches the stop of the system, has a steel retention ring reinforced and raised both to avoid interferences during the implant insertion and to reduce the wear of the retention

Material: Surgical steel

ø	h.	code
2.1	25	HDH21S
2.1	30	HDH21L

Internal hex narrow

ø	h.	code
2.5	25	HDH25S
2.5	30	HDH25L

For internal hex regular

ø	h.	code
2.4	25	HDH24S
2.4	30	HDH24L

External hex narrow

ø	h.	code
2.7	25	HDH27S
2.7	30	HDH27L

For external hex regular

ø	h.	code
3,1	25	HDH31S
3,1	30	HDH31L

For octagon

code
HDH20

For straight MUA

code
HDH25M

For Shape Mini

code
NHSMHDH

For iMAX MUA

ACCESSORIES

PARALLELISM PIN

Material:TI-6AI-4V

code
0°
PP

ORIENTER POSITION

Material: POM-C e Ti

code
NHSMFL

For iMAX Mua

GUIDE TO DRILL INCLINATION

Material: Surgical steel

code
NHSMG

A 0° - 18° - 30°

DRIVERS AND SCREWDRIVERS

PROSTHETIC SCREWDRIVERS

Material: Surgical steel

	code
short	THDDS
long	THDDL

For hex 1.25 mm contra-angle connection

	code
extra short	MDXS
short	MDS
long	MDL
extra long	MDXL

Manual screwdriver for hexagon 1.25 mm

code
MDLAA

Torx 1.25 mm manual angled

code
THDDAL

Angled torx contra-angle screwdriver

SCREWDRIVERS

Material: Surgical steel

code
IDL

code
8393

For iRetor

REMOVAL TOOLS

Material: Surgical steel

code
TRI

For implant

code
TRT

For abutment

code
MTRT

Manual abutment extractor

EXTRACTION KIT FOR RETAINING SCREWS

code
D15RS

Drill
Material: Surgical steel

code
GRS

Guide for drill
Material: Ti-6Al-4V

code
SGRS

Holder for GRS
Material: Ti-6Al-4V

RATCHET

Material: Surgical steel

Reverse fixed ratchet: It allows to screw and unscrew without having to pull out and turn the adapter
Ratchet wrench: mounted on the reverse ratchet, it allows to measure up to 70Ncm without breaking the rod through the stop final race

Ratchet adaptor
ø 8 mm reinforced that adding solidity

code
WH2

Housing for 8mm washer to confer greater resistance to higher torque.

Under the 70Ncm is present a safety catch to prevent the leakage of the dragging arm, avoiding its breakage.

Reverse to change direction of unscrewing and screwing without having to remove and replace the ratchet.

Material: Surgical steel

code
TW4

Without adapter

code
TWA4

Complete

KIT **SINUS LIFT**

code
SINUS KIT

code	*description*
DE	drill extender
SD5	standard drill h 5 mm
SD6	standard drill h 6 mm
SD7	standard drill h 7 mm
SD8	standard drill h 8 mm
SPD	standard pilot drill
SPI	standard start drill
SBL	standard body lift
APD	advanced pilot drill
AID	advanced start drill
AD2	advanced drill h 2 mm
AD3	advanced drill h 3 mm
AD4	advanced drill h 4 mm
ABL	advanced body lift
RBL	ratchet body lift

SURGICAL
PROTOCOL

HEIGHTS FROM 8 TO 16 mm

CODRIVERS- FINAL DRILLS- COUNTERSINKS - TAPS

Implant system	Drivers	Ø	Finla drills (Bone d4)	Final drills (Bon d3-d2-d1)	CSD (Bone d3 - d2)	TAP (Bone d1)
Volution SVB HANDY HNDC	HDH21S - HDH21L	3.3	D2024M	D2428M	CSD33	
	HDH25S - HDH25L	3.7	D2428M	D2833M	CSD37	
		4.1	D2833M	D3338M-P	CSD41	
		4.7	D3338M-P	D3844M-P	CSD47	
		5.2	D3844M-P	D4448M-P	CSD52	
HANDY HNDC	HDH21S - HDH21L	3.3	D2024M	D2428M	CSD33	
		3.7	D2428M	D2833M	CSD37	
		4.1	D2833M	D3338M-P	CSD41	
		4.7	D3338M-P	D3844M-P	CSD47	
		5.2	D3844M-P	D4448M-P	CSD52	
iMAXMUA 0° NHSM	NHSMHDH NHSMFL (driver)	3.3	D2024M	D2428M	CSD33	TAPIMAX33
iMAXMUA 18° NHSM		3.7	D2428M	D2833M	CSD37	TAPiMAX37
iMAXMUA 30° NHSM		4.1	D2833M	D3338M-P	CSD41	TAPiMAX41

SHORT IMPLANTS

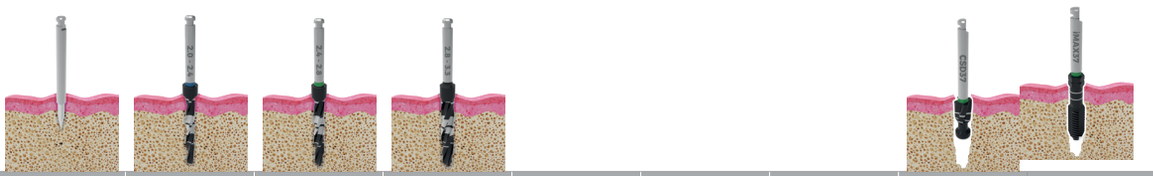
DRIVERS - FINAL DRILLS - COUNTERSINKS - TAPS

Implant system	Drivers	Ø	Final drills (Bone d4)	Final drills (Bone d3-d2-d1)	CSDS (Bone d3-d2)	TAP (d1 bone)
Volution SVB	HDH21S - HDH21L	3.3	D2428M	D2833M	CSDS33	
	HDH25S - HDH25L	3.7	D2833M	D3338M-P	CSDS37	
		4.1	D3338M-P	D3844M-P	CSDS41	
		4.7	D3844M-P	D4448M-P	CSDS47	
		5.2	D4448M-P	D4448M-P	CSDS52	
HANDY HNDC	HDH21S - HDH21L	3.3	D2428M	D2833M	CSDS33	
		3.7	D2833M	D3338M-P	CSDS37	
		4.1	D3338M-P	D3844M-P	CSDS41	
		4.7	D3844M-P	D4448M-P	CSDS47	
		5.2	D4448M-P	D4448M-P	CSDS52	

ø 3.3 Sink countersink: up to 1.4 mm for d3 medium bone/ up to 2.8 mm for d2 medium bone and d1 compact bone
Use 3.3 countersink and 3.3 tap

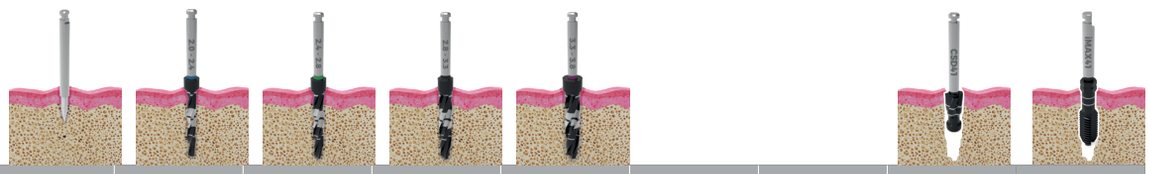
	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9
Bone	Lance drill	Drill 2.0|2.4	Drill 2.4|2.8	Drill 2.8|3.3	Drill 3.3|3.8	Drill 3.8|4.4	Drill 4.4|4.8	Countersink	Tap
Soft d4	•	•							
Medium d3/d2	•	•	•					•	
Compact d1	•	•	•					•	•

ø 3.7 Sink countersink: up to 1.4 mm for d3 medium bone/ up to 2.8 mm for d2 medium bone and d1 compact bone
Use 3.7 countersink and 3.7 tap



	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9
Bone	Lance drill	Drill 2.0|2.4	Drill 2.4|2.8	Drill 2.8|3.3	Drill 3.3|3.8	Drill 3.8|4.4	Drill 4.4|4.8	Countersink	Tap
Soft d4	•	•	•						
Medium d3/d2	•	•	•	•				•	
Compact d1	•	•	•	•				•	•

ø 4.1 Sink countersink: up to 1.4 mm for d3 medium bone/ up to 2.8 mm for d2 medium bone and d1 compact bone
Use 4.1 countersink and 4.1 tap



	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9
Bone	Lance drill	Drill 2.0|2.4	Drill 2.4|2.8	Drill 2.8|3.3	Drill 3.3|3.8	Drill 3.8|4.4	Drill 4.4|4.8	Countersink	Tap
Soft d4	•	•	•	•					
Medium d3/d2	•	•	•	•	•			•	
Compact d1	•	•	•	•	•			•	•

ø 3.3 Sink countersink: up to 1.4 mm for d3 medium bone/ up to 2.8 mm for d2 medium bone and d1 compact bone
Use 3.3 countersink

	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8
Bone	Lance drill	Drill 2.0|2.4	Drill 2.4|2.8	Drill 2.8|3.3	Drill 3.3|3.8	Drill 3.8|4.4	Drill 4.4|4.8	Countersink
Soft d4	•	•						
Medium d3/d2	•	•	•					•
Compact d1	•	•	•					•

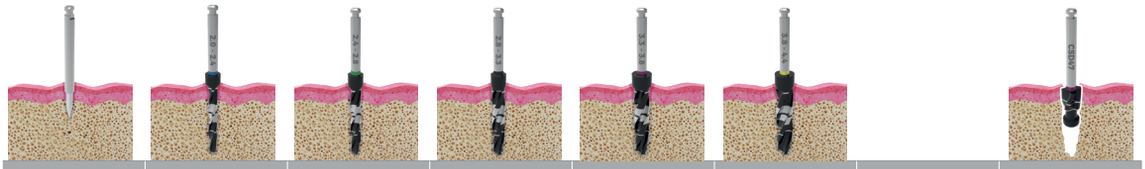
ø 3.7 Sink countersink: up to 1.4 mm for d3 medium bone/ up to 2.8 mm for d2 medium bone and d1 compact bone
Use 3.7 countersink

	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8
Bone	Fresa lancia	Fresa 2,0|2,4	Fresa 2,4|2,8	Fresa 2,8|3,3	Fresa 3,3|3,8	Fresa 3,8|4,4	Fresa 4,4|4,8	Countersink
Soft d4	•	•	•					
Medium d3/d2	•	•	•	•				•
Compact d1	•	•	•	•				•

ø 4.1 Sink countersink: up to 1.4 mm for d3 medium bone/ up to 2.8 mm for d2 medium bone and d1 compact bone
Use 4.1 countersink

	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8
Bone	Fresa lancia	Fresa 2,0|2,4	Fresa 2,4|2,8	Fresa 2,8|3,3	Fresa 3,3|3,8	Fresa 3,8|4,4	Fresa 4,4|4,8	Countersink
Soft d4	•	•	•	•				
Medium d3/d2	•	•	•	•	•			•
Compact d1	•	•	•	•	•			•

ø 4.7 Sink countersink: up to 1.4 mm for d3 medium bone/ up to 2.8 mm for d2 medium bone and d1 compact bone
Use 4.7 countersink

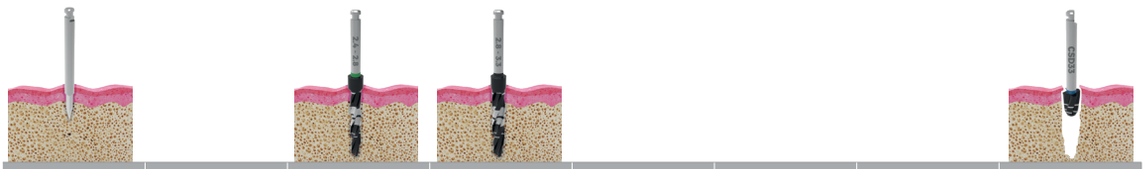


	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8
Bone	Fresa lancia	Fresa 2,0|2,4	Fresa 2,4|2,8	Fresa 2,8|3,3	Fresa 3,3|3,8	Fresa 3,8|4,4	Fresa 4,4|4,8	Countersink
Soft d4	•	•	•	•	•			
Medium d3/d2	•	•	•	•	•	•		•
Compact d1	•	•	•	•	•	•		•

ø 5.2 Sink countersink: up to 1.4 mm for d3 medium bone/ up to 2.8 mm for d2 medium bone and d1 compact bone
Use 5.2 countersink

	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8
Bone	Fresa lancia	Fresa 2,0|2,4	Fresa 2,4|2,8	Fresa 2,8|3,3	Fresa 3,3|3,8	Fresa 3,8|4,4	Fresa 4,4|4,8	Countersink
Soft d4	•	•	•	•	•	•		
Medium d3/d2	•	•	•	•	•	•	•	•
Compact d1	•	•	•	•	•	•	•	•

ø 3,3 Sink countersink: up to 1.4 mm for d3 medium bone/ up to 2.8 mm for d2 medium bone and d1 compact bone
Use 3.3 countersink



	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8
Bone	Lance drill	Drill 2.0|2.4	Drill 2.4|2.8	Drill 2.8|3.3	Drill 3.3|3.8	Drill 3.8|4.4	Drill 4.4|4.8	Countersink
Soft d4	•		•					
Medium d3/d2	•		•	•				•
Compact d1	•		•	•				•

ø 3.7 Sink countersink: up to 1.4 mm for d3 medium bone/ up to 2.8 mm for d2 medium bone and d1 compact bone
Use 3.7 countersink

	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8
Osso	Lance drill	Drill 2.0|2.4	Drill 2.4|2.8	Drill 2.8|3.3	Drill 3.3|3.8	Drill 3.8|4.4	Drill 4.4|4.8	Countersink
Soft d4	•	•		•				
Medium d3/d2	•	•		•	•			•
Compact d1	•	•		•	•			•

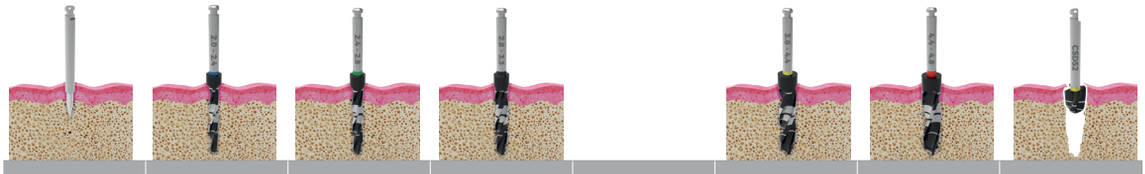
ø 4.1 Sink countersink: up to 1.4 mm for d3 medium bone/ up to 2.8 mm for d2 medium bone and d1 compact bone
Use 4.1 countersink

	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8
Osso	Lance drill	Drill 2.0|2.4	Drill 2.4|2.8	Drill 2.8|3.3	Drill 3.3|3.8	Drill 3.8|4.4	Drill 4.4|4.8	Countersink
Soft d4	•	•	•		•			
Medium d3/d2	•	•	•		•	•		•
Compact d1	•	•	•		•	•		•

ø 4.7 Sink countersink: up to 1.4 mm for d3 medium bone/ up to 2.8 mm for d2 medium bone and d1 compact bone
Use 4.7 countersink

	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8
Osso	Lance drill	Drill 2.0|2.4	Drill 2.4|2.8	Drill 2.8|3.3	Drill 3.3|3.8	Drill 3.8|4.4	Drill 4.4|4.8	Countersink
Soft d4	•	•	•	•		•		
Medium d3/d2	•	•	•	•		•	•	•
Compact d1	•	•	•	•		•	•	•

ø 5.2 Sink countersink: up to 1.4 mm for d3 medium bone/ up to 2.8 mm for d2 medium bone and d1 compact bone
Use 5.2 countersink



	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8
Osso	Lance drill	Drill 2.0|2.4	Drill 2.4|2.8	Drill 2.8|3.3	Drill 3.3|3.8	Drill 3.8|4.4	Drill 4.4|4.8	Countersink
Soft d4	•	•	•	•		•		
Medium d3/d2	•	•	•	•		•	•	•
Compact d1	•	•	•	•		•	•	•

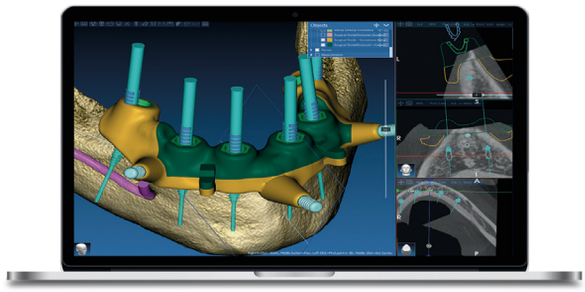
GUIDED
SURGERY

Add the mounters according to the implant connection

GUIDED SURGERY KIT

code	*description*
BP	bone profile
GD202406	drill ø 2.0/2.4 x 6 mm
GD202408	drill ø 2.0/2.4 x 8 mm
GD202410	drill ø 2.0/2.4 x 10 mm
GD202411	drill ø 2.0/2.4 x 11 mm
GD202413	drill ø 2.0/2.4 x 13 mm
GD202416	drill ø 2.0/2.4 x 16 mm
GD242806	drill ø 2.4/2.8 x 6 mm
GD242808	drill ø 2.4/2.8 x 8 mm
GD242810	drill ø 2.4/2.8 x 10 mm
GD242811	drill ø 2.4/2.8 x 11,5 mm
GD242813	drill ø 2.4/2.8 x 13 mm
GD242816	drill ø 2.4/2.8 x 16 mm
GD283306	drill ø 2.8/3.3 x 6 mm
GD283308	drill ø 2.8/3.3 x 8 mm
GD283310	drill ø 2.8/3.3 x 10 mm
GD283311	drill ø 2.8/3.3 x 11.5 mm
GD283313	drill ø 2.8/3.3 x 13 mm
GD283316	drill ø 2.8/3.3 x 16 mm
GD333806	drill ø 3.3/3.8 x 6 mm
GD333808	drill ø 3.3/3.8 x 8 mm
GD333810	drill ø 3.3/3.8 x 10 mm
GD333811	drill ø 3.3/3.8 x 11.5 mm
GD333813	drill ø 3.3/3.8 x 13 mm
GD333816	drill ø 3.3/3.8 x 16 mm
GD384406	drill ø 3.8/4.4 x 6 mm
GD384408	drill ø 3.8/4.4 x 8 mm
GD384410	drill ø 3.8/4.4 x 10 mm
GD384411	drill ø 3.8/4.4 x 11.5 mm
GD384413	drill ø 3.8/4.4 x 13 mm
GD384416	drill ø 3.8/4.4 x 16 mm
GDCSD33	countersink ø 3.3
GDCSD37	countersink ø 3.7
GDCSD41	countersink ø 4.1
GDCSD47	countersink ø 4.7
GDTAPS1B37	S1B taps ø 3.7
GDTAPS1B41	S1B taps ø 4.1
GDTAPS1B47	S1B taps ø 4.7
GDTAPIMAX33	iMAX taps ø 3.3
GDTAPIMAX37	iMAX taps ø 3.7
GDTAPIMAX41	iMAX taps ø 4.1
GDTAPIMAX47	iMAX taps ø 4.7
PING15 (3 psc)	pin ø 1.5
HDH25S	short internal hexagon connector 2.5
MDL	hexagonal screwdriver 1.25 h. 29
FR15L	drill D15
CS	guided surgery mucotome
TRT	abutment extractor
GD444806	drill ø 4.4/4.8 x 6 mm
GD444808	drill ø 4.4/4.8 x 8 mm
TWA4	ratchet wrench

IMPLANT LIBRARIES FOR GUIDED SURGERY



iRES offers to **its customers a free kit of implant libraries for the planning of guided surgery procedures. All iRES implants are included in IESS Guide**, the diagnostic and guided surgery software proposed by **IESS Group** based on Real Guide, which accurately reprocesses the patient's anatomical data and facilitates the definition of the ideal treatment plan.

Comprehensive and versatile, thanks to the extensive implant library, the implant placement can be planned taking into account not only the anatomical characteristics of the site but also the prosthetic aspects, in order to achieve functional and aesthetic rehabilitation.

iRES implant libraries are available on the website **https://it.ires.dental/media-kit/** for the following software:
IESS Guide (RealGuide)
Exocad
BlueSky Bio
3Shape Implant Studio

Upon request, libraries can also be created for other software.

PIN Ø 1.5

Material: Ti-6Al-4V

cod
PING15

DRILLS Ø 1.5

Material: Surgical steel

cod
FR15L

DRILLS Ø 2.0/2.4

Material: Surgical steel

h.	*cod*
6	GD202406
8	GD202408
10	GD202410
11	GD202411
13	GD202413
16	GD202416

DRILLS Ø 2.4/2,8

Material: Surgical steel

h.	*cod*
6	GD242806
8	GD242808
10	GD242810
11	GD242811
13	GD242813
16	GD242816

DRILLS Ø 2.8/3.3

Material: Surgical steel

h.	*cod*
6	GD283306
8	GD283308
10	GD283310
11	GD283311
13	GD283313
16	GD283316

DRILLS Ø 3.3/3,8

Material: Surgical steel

h.	*cod*
6	GD333806
8	GD333808
10	GD333810
11	GD333811
13	GD333813
16	GD333816

DRILLS Ø 3.8/4.4

Material: Surgical steel

h.	*code*
6	GD384406
8	GD384408
10	GD384410
11	GD384411
13	GD384413
16	GD384416

DRILLS Ø 4.4/4.8

Material: Surgical steel

h.	*code*
6	GD444806
8	GD444808

COUNTERSINKS

Material: Surgical steel

ø	*code*
3.3	GDCSD33

ø	*code*
3.7	GDCSD37

ø	*code*
4.1	GDCSD41

ø	*code*
4.7	GDCSD47

IMAX TAPS

Material: Surgical steel

ø	*code*
3.3	GDTAPIMAX33

ø	*code*
3.7	GDTAPIMAX37

ø	*code*
4.1	GDTAPIMAX41

ø	*code*
4.7	GDTAPIMAX47

SURGICAL TAP S1B

Material: Surgical steel

ø	*code*
3.7	GDTAPS1B37

ø	*code*
4.1	GDTAPS1B41

ø	*code*
4.7	GDTAPS1B47

BONE PROFILE

Material: Surgical steel

code
BP

MUCOTOME

Material: Surgical steel

code
CS

MOUNTER

Material: Ti-6Al-4V • Screw included: S1BRS1

	code
BL	S1B1GSM

Internal hex 2.5

	code
NBL	S1BN1GSM

Internal hex 2.1

	code
NHSIC NARROW	NHSICN1GSM

Conometric connection 2.1

Materiale: Ti-6Al-4V

	code
EH	S1EH1GSM

External hex 2.7
Screw included: S1EHRS1

	code
EH 3.3	S1EHN1GSM

External hex 2.4
Screw included: S1EHNRS1

	code
STRAIGHT IMAX MUA	NHSMGSM

Screw included: NHSMRS1

SLEEVE

code
BPG15

For pin
Material: Ti-6Al-4V

code
BG001

ø 6.2
Material: PEEK

code
BG002

Material: Ti-6Al-4V

DRILL
SEQUENCE

IMPLANT Ø 3.3

	heights implant (mm)					
	6	8	10	11.5	13	16
mucotome CS	•	•	•	•	•	•
bone profile BP	•	•	•	•	•	•
drill ø 2.0/2.4 L.6	•	•	•	•	•	•
drill ø 2.0/2.4 L.8		•	•	•	•	•
drill ø 2.0/2.4 L.10			•	•	•	•
drill ø 2.0/2.4 L.11.5				•	•	•
drill ø 2.0/2.4 L.13					•	•
drill ø 2.0/2.4 L.16						•
drill ø 2.4/2.8 L.6	•					
drill ø 2.4/2.8 L.8		•	•	•	•	•
drill ø 2.4/2.8 L.10			•			
drill ø 2.4/2.8 L.11.5				•		
drill ø 2.4/2.8 L.13					•	•
drill ø 2.4/2.8 L.16						•
countersink ø 3.3	•	•	•	•	•	•
taps ø 3.3	•	•	•	•	•	•

D1 D2-D3 D4

IMPLANT Ø 3.7

	heights implant (mm)					
	6	8	10	11.5	13	16
mucotome CS	•	•	•	•	•	•
bone profile BP	•	•	•	•	•	•
drill ø 2.0/2.4 L.6	•	•	•	•	•	•
drill ø 2.0/2.4 L.8		•	•	•	•	•
drill ø 2.0/2.4 L.10			•	•	•	•
drill ø 2.0/2.4 L.11.5				•	•	•
drill ø 2.0/2.4 L.13					•	•
drill ø 2.0/2.4 L.16						•
drill ø 2.4/2.8 L.6	•					
drill ø 2.4/2.8 L.8		•	•	•	•	•
drill ø 2.4/2.8 L.10			•			
drill ø 2.4/2.8 L.11.5				•		
drill ø 2.4/2.8 L.13					•	•
drill ø 2.4/2.8 L.16						•
drill ø 2.8/3.3 L.6	•					
drill ø 2.8/3.3 L.8		•	•	•	•	•
drill ø 2.8/3.3 L.10			•			
drill ø 2.8/3.3 L.11.5				•		
drill ø 2.8/3.3 L.13					•	•
drill ø 2.8/3.3 L.16						•
countersink ø 3.7	•	•	•	•	•	•
taps ø 3.7	•	•	•	•	•	•

D1 D2-D3 D4

IMPLANT Ø 4.1

	heights implant (mm)					
	6	8	10	11.5	13	16
mucotome CS	●	●	●	●	●	●
bone profile BP	●	●	●	●	●	●
drill ø 2.0/2.4 L.6	●	●	●	●	●	●
drill ø 2.0/2.4 L.8		●	●	●	●	●
drill ø 2.0/2.4 L.10			●	●	●	●
drill ø 2.0/2.4 L.11.5				●	●	●
drill ø 2.0/2.4 L.13					●	●
drill ø 2.0/2.4 L.16						●
drill ø 2.4/2.8 L.6	●					
drill ø 2.4/2.8 L.8		●	●	●	●	●
drill ø 2.4/2.8 L.10			●			
drill ø 2.4/2.8 L.11.5				●		
drill ø 2.4/2.8 L.13					●	●
drill ø 2.4/2.8 L.16						●
drill ø 2.8/3.3 L.6	●					
drill ø 2.8/3.3 L.8		●	●	●	●	●
drill ø 2.8/3.3 L.10			●			
drill ø 2.8/3.3 L.11.5				●		
drill ø 2.8/3.3 L.13					●	●
drill ø 2.8/3.3 L.16						●
drill ø 3.3/3.8 L.6	●					
drill ø 3.3/3.8 L.8		●	●	●	●	●
drill ø 3.3/3.8 L.10			●			
drill ø 3.3/3.8 L.11.5				●		
drill ø 3.3/3.8 L.13					●	●
drill ø 3.3/3.8 L.16						●
countersink ø 4.1	●	●	●	●	●	●
taps ø 4.1	●	●	●	●	●	●

D1 D2-D3 D4

IMPLANT Ø 4.7

	heights implant (mm)					
	6	8	10	11.5	13	16
mucotome CS	●	●	●	●	●	●
bone profile BP	●	●	●	●	●	●
drill ø 2.0/2.4 L.6	●	●	●	●	●	●
drill ø 2.0/2.4 L.8		●	●	●	●	●
drill ø 2.0/2.4 L.10			●	●	●	●
drill ø 2.0/2.4 L.11.5				●	●	●
drill ø 2.0/2.4 L.13					●	●
drill ø 2.0/2.4 L.16						●
drill ø 2.4/2.8 L.6	●					
drill ø 2.4/2.8 L.8		●	●	●	●	●
drill ø 2.4/2.8 L.10			●			
drill ø 2.4/2.8 L.11.5				●		
drill ø 2.4/2.8 L.13					●	●
drill ø 2.4/2.8 L.16						●
drill ø 2.8/3.3 L.6	●					
drill ø 2.8/3.3 L.8		●	●	●	●	●
drill ø 2.8/3.3 L.10			●			
drill ø 2.8/3.3 L.11.5				●		
drill ø 2.8/3.3 L.13					●	●
drill ø 2.8/3.3 L.16						●
drill ø 3.3/3.8 L.6	●					
drill ø 3.3/3.8 L.8		●	●	●	●	●
drill ø 3.3/3.8 L.10			●			
drill ø 3.3/3.8 L.11.5				●		
drill ø 3.3/3.8 L.13					●	●
drill ø 3.3/3.8 L.16						●
drill ø 3.8/4.4 L.6	●					
drill ø 3.8/4.4 L.8		●	●	●	●	●
drill ø 3.8/4.4 L.10			●			
drill ø 3.8/4.4 L.11.5				●		
drill ø 3.8/4.4 L.13					●	●
drill ø 3.8/4.4 L.16						●
countersink ø 4.7	●	●	●	●	●	●
taps ø 4.7	●	●	●	●	●	●

D1 D2-D3 D4

PTERYGOID IMPLANTS

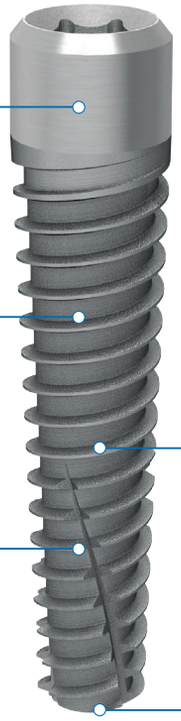
THE ALTERNATIVE FOR **REHABILITATION** OF **POSTERIOR MAXILLARY ATROPHY**

In cases of severe atrophy of the posterior region of the maxilla, **pterygoid implants** represent a valid solution among the available clinical options.
Due to their **greater length compared to standard implants**, pterygoid implants can bypass the tuberosity and reach the pterygoid plate, which is characterized by compact and stable bone.

2,5 mm of machined collar with **platform switching**
Distributes pressure on the cortical bone and hinders bacterial infiltration

Tapered body with ogival design
High penetration capability

3 helical apical cuts



Dual pronounced spiral with cutting profile
Greater primary stability and self-tapping properties

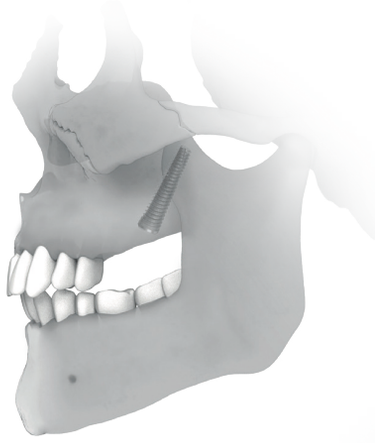
Tapered apex with rounded tip

ADVANTAGES

Safer osseointegration: the intrinsic characteristics of the site ensure high implant stability;

Minimally invasive solution: reduced healing times, as it avoids sinus lift procedures and grafting;

Complete reconstruction of the posterior sector: no need for cantilever prosthetics, ideal for optimal distribution of masticatory loads.



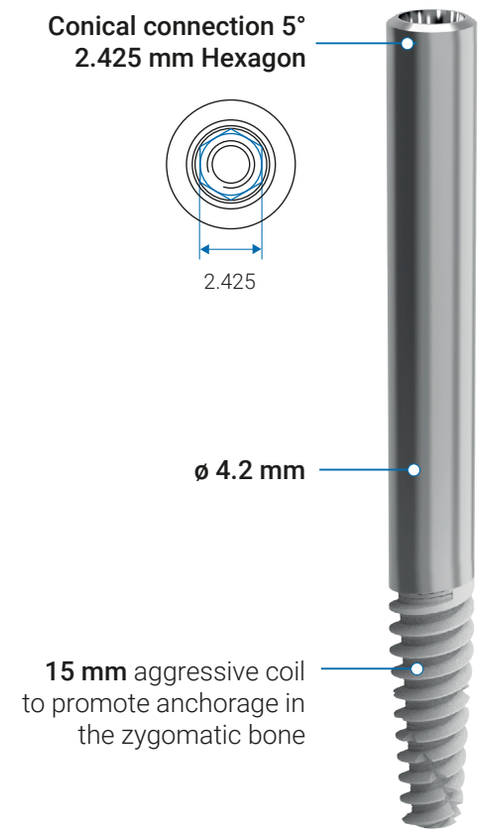
VOLUTION VOLUTION SVBC

AVAILABLE SIZES

Height	ø 3.7	Height	ø 4.1
18	SVB3818	18	SVB4118
20	SVB3820	20	SVB4120
22	SVB3822	22	SVB4122
24	SVB3824	24	SVB4124

ZYGOMATIC IMPLANTS

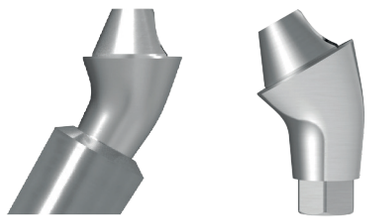
In cases of **severe maxillary atrophy**, the insertion of **zygomatic implants** represents a **valid alternative to complex bone regeneration procedures**.



AVAILABLE SIZES

Height	ø 4.1
35	Z4135T
37	Z4137T
40	Z4140T
42	Z4142T
45	Z4145T
50	Z4150T
52	Z4152T
55	Z4155T
57	Z4157T
60	Z4160T
62	Z4162T
65	Z4165T
67	Z4167T
70	Z4170T

Dedicated prosthetic components enable the correction of the prosthetic axis



MUA ABUTMENT

height	18°	30°	45°	60°
0/2	40956	40962	40974	-
2/4	40959	40965	40977	-
4/6	-	40968	40980	40986
6/8	-	40971	40983	40989

KIT - PTERYGOID AND ZYGOMATC

CANCELLOUS SUBSTITUTE **GRANULES**

iO bone

BIODEGRADABLE ATELOCOLLAGEN **MEMBRANE**

iO mem

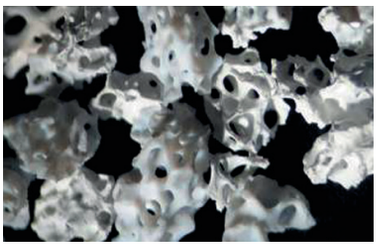
CANCELLOUS SUBSTITUTE **GRANULES**

WHY IS IO BONE SPECIAL?

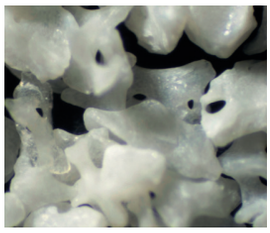
iO bone made from 100% BSE-free approved Australian Bovine origin, is a biocompatible, highly porous, OCP-based inorganic mineral matrix designed for dental regenerative applications.
The performance of **iO bone** clearly outstands other world-leading products in the market.

GENUINE MULTIPOROUS STRUCTURE

iO bone shows an excellent multiporous structure.
The porosity of bone graft substitute is one of the most crucial factors for angiogenic progress.
iO bone is made from 100% pure cancellous bone without the use of cortical portions. Specialized & advanced pulverizing technique enables mass production of highly porous and uniformed graft particles.

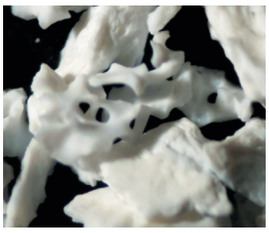


io bone 1.2-1.7x20
Consistent Microporous Nature

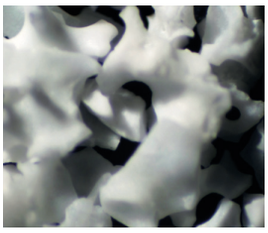


A Co. x20
Damaged Classified
Surface

B Co. x20
Large Particle
All Cortical Particles



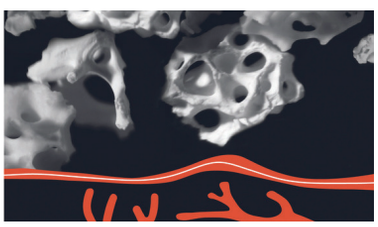
C Co. x20
Well Porous but
Cortical Particle Found

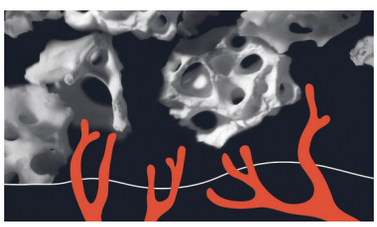


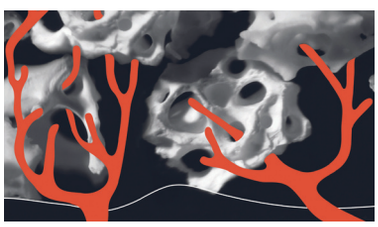
D Co. x20
Porous Nature
Damaged

Post Graft Surgery Blood Vessel Progress of io bone

When the graft surgery is implemented to the defect site, the new bone cell is conducted & delivered from the patient's existing bone to the graft site throughout the blood supply. The Blood vessels deliver blood, bone cells into the pores of the graft materials. If the graft particle shape has poor porosity, it prohibits the blood vessel growth inside the graft and consequently causes poor angiogenic progress. That's why the porosity of the graft material is essential.

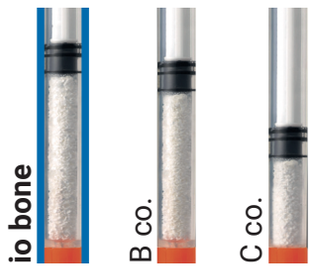






Outstanding Volume Stability

The unique 100% multiporous cancellous nature of **iO bone** offers higher quantitative mass volume per gram unit, compared to other poor porous products. It results in less material cost which means that **iO bone** is cost- efficient & effective.



ROUGH HYDROPHILIC SURFACE

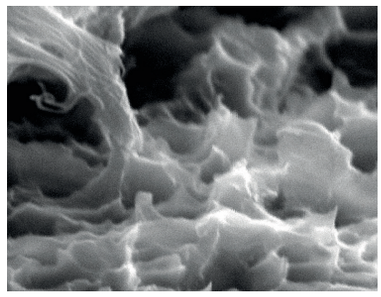
Our 15 years of R&D and sophisticated low-temperature manufacturing expertise enable **iO bone** to exhibit an optimal, natural surface topography, the same as human bone.

Why is the rough surface important?

The new bone is formed from the host bone directly onto the rough surface of the graft mass through the blood clots attachment process (fibrin network formation). How? The roughness of the graft enables to capture of the individual anchor of the blood clots onto the graft, and it is another essential step for new bone formation. Thanks to our advanced low-temp. manufacturing expertise, R&D, and collaborated research with scientific institutions, we are able to express an optimal, natural surface topography, the same as human bone. The vitrification phenomenon caused by a high temperature (1200°C and over) and cracks that happen in the cooling processes have been completely controlled with **iO bone**.

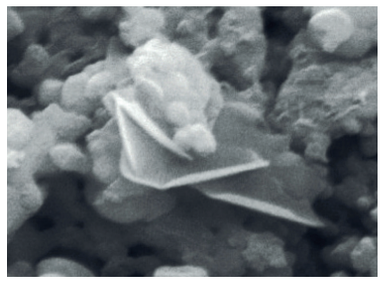
iO bone
Osteoblast preferred surface

Competitor Bone
Ceramic all classified surface



OSTEOPROMOTING FACTOR

Pre HA structure, Octacalcium Phosphate (OCP) cyrstal that exhibits excellent bone regenerative properties is found on the surface of **iO bone**.
The osteopromoting factor of the bone graft materials is one of the foremost points that you must consider when choosing the right product. it is an advanced technology that only a few companies in the world are able to produce. **iO bone** exhibits unique fish-fin-like structures on its surface and it is the secret of the osteopromoting factor of **iO bone.**



BIODEGRADABLE ATELOCOLLAGEN **MEMBRANE**

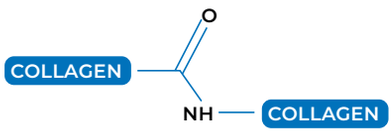
SPECIFICATION

INTENDED USE AND OVERVIEW

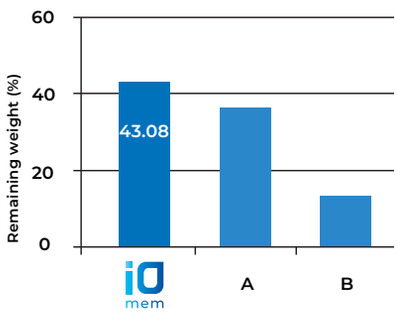
iO mem is an absorbable and implantable collagen membrane that is intended for tissue regeneration procedures in periodontal defects to enhance regeneration of the periodontal apparatus.
iO mem is crosslinked using 1-ethyl-3-(3-dimethylaminopropyl) carbodiimide (EDC) for the resistance to enzymatic degradation.
iO mem provides a stable barrier for 3~6 months and optimized physical property.

STABLE PROPERTY OF IO MEM

[Stable amide bond]

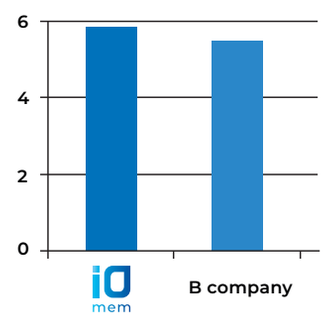


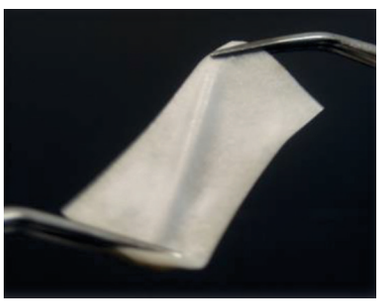
[Enzimatic Degradation Test]



In enzyme resistance test, **io mem** showed significant resistance to degradation compare to other company's products.

[Tensile strength]

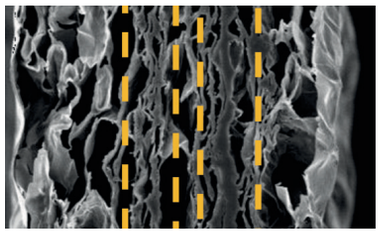




The result of tensile test suggested that **iO mem** has suitable tensile strength.

OPTIMIZED STRUCTURE

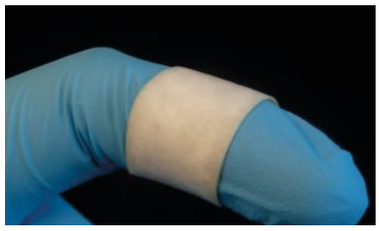
iO mem has optimized structure for GBR/GTR. This unique structure allows **iO mem** to achieve stable regeneration of periodontal tissue and prevent undesirable cell infiltration into bone tissue.



SEM image: the cross-sectional view of **iO mem**

FLEXIBILITY

iO mem provides appropriate flexibility for handling after rehydration.

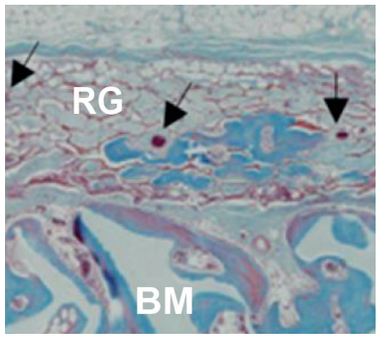


Type	Reorder No.	Size (cm)
io mem	DTG-10002	1.5 x 3

SCIENTIFIC EVIDENCE

ANIMAL TEST

Histological analysis shows newly generated vasculature and new bone integration into the bone defect site at PO 8 weeks.



Ref. Park et al. Guided bone regeneration using 1-ethyl-3-(3-dimethylaminopropyl) Carbodiimide (EDC)-cross-linked type-I collagen membrane with biphasic calcium phosphate at rabbit calvarial defects. Biomaterials Research (2015) 19:15.

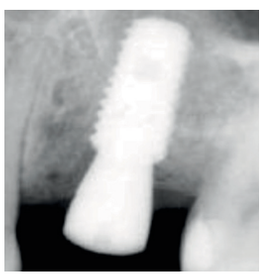
CLINICAL CASE

Surgical presentation of the bone defect

Lateral augmentation with bone materials

Application of **iO mem**

Close with healing abutment



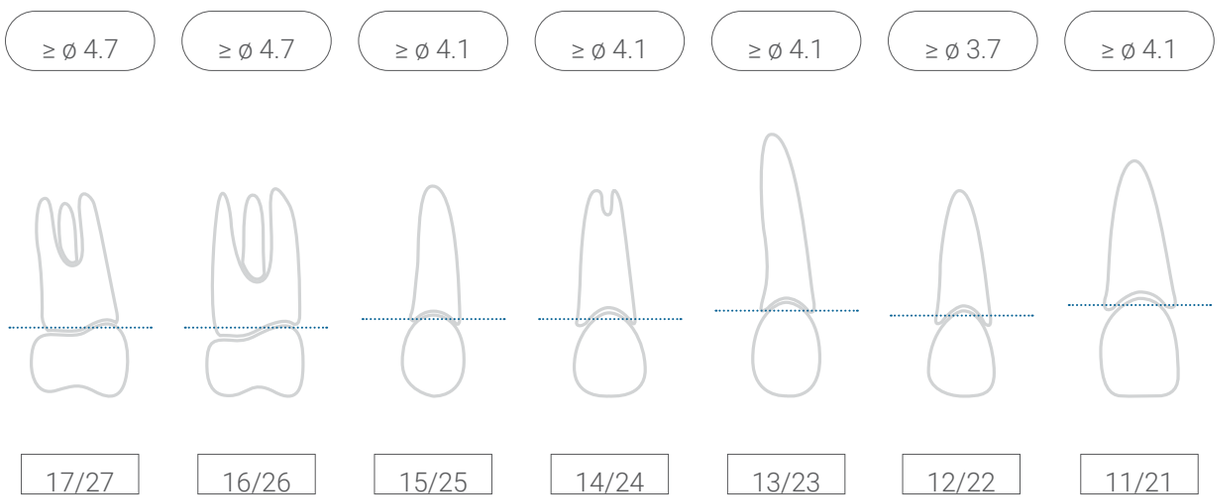
After 4 months, increased bone formation and implant integration were confirmed

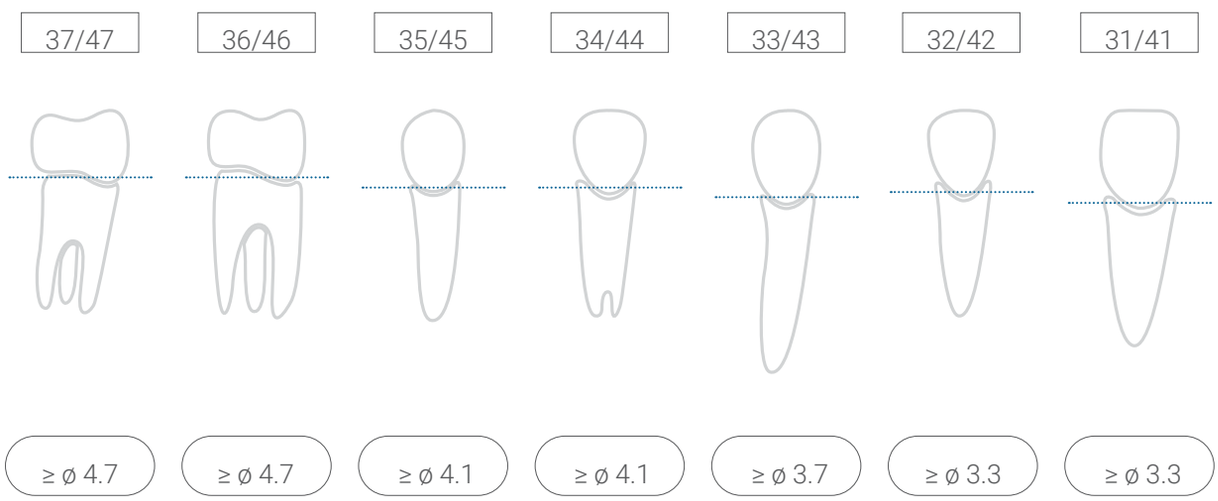
Ref. Lee et al. Guided Bone Regeneration Using Type-I Collagen Membrane Cross- Linked by 1-ethyl-3- (3-dimethyl aminopropyl) Carbodiimide in Two Implant Dehiscence Cases. Implantology 2015; 19(1): 16~25.

MINIMUM IMPLANTS SIZE ALLOWED FOR POSITION

iRES declines all responsibility in case of failure if the information leaflet are not be respected as regard the implants position in relation to implants site and diameters

UPPER





LOWER

INSTRUCTIONS FOR USE I-RES SHAPE1, IMAX, VOLUTION, IMAXMUA, HANDY AND SHAPEMINI IMPLANT SYSTEM

PRODUCT CHARACTERISTICS

The SHAPE1, iMAX, VOLUTION, iMAXMUA, HANDY and SHAPEMINI implant systems, by I-RES SAGL offers the dentist a wide choice of titanium implant configurations that differ in diameter, height and possibility of surgical positioning A) submerged/bone level, B) transmucose/ tissue level, and various prosthetic components for the different rehabilitation procedures.

Indications for use

The SHAPE1, iMAX, VOLUTION, iMAXMUA, HANDY and SHAPEMINI implant systems are indicated for surgical treatment in the upper or lower jaw for the partial or total replacement of teeth in patients who have lost part or all of their teeth. The implant to be used must be chosen by the medical personnel based on the medical history and on the subsequent surgical and prosthetic plan required for each individual patient. The onepiece implants iMAXMUA, having the same geometric shape of iMAX dental implants, ensure an excellent retention of the prosthesis, thanks to the ability to accommodate the retained screw designed for MUA components with a pitch of 1/72 instead of 1,4 mm as in the classic MUA. The implants are delivered in sterile packs and the operator must pay great attention when positioning it in the oral cavity, so that the implant does not come in contact with elements that could alter the surface, hindering the healing processes, so all manoeuvres must be performed in an environment suitable for surgical activities. The SHAPE1, iMAX, VOLUTION, iMAXMUA, HANDY and SHAPEMINI implant system has a series of dedicated surgical instruments for its implant lines, useful for the non-traumatic preparation of the site that is to receive the implant, and instruments designed for extracting the implant from the blister and transporting it to the mouth for insertion. Each blister containing the implant is provided with a closing screw, useful for sealing the internal part of the implant after it has been inserted in the mandibular or maxillary bone. SHAPEMINI implants fix the dentures but can also be used for the replacement of a single tooth.

Contraindications

Do not use SHAPE1, iMAX, VOLUTION, iMAXMUA, HANDY and SHAPEMINI implant systems in patients who have a scarce amount of bone suitable to guarantee the primary stability of the implant in the first phase of insertion, in patients with poor oral hygiene, smokers, with uncontrolled systemic pathologies and blood disorders. In addition to the normal contraindications for general surgery, the conditions described above can have a negative influence on the partial or total integration of the implant.

Warnings

To use the SHAPE1, iMAX, VOLUTION, iMAXMUA, HANDY and SHAPEMINI implant systems by I-RES SAGL, the dentist must know the general surgical and prosthetic techniques and the specific techniques for SHAPE1, iMAX, VOLUTION, iMAXMUA, HANDY and SHAPEMINI, following the indications of the surgical protocol and specific training courses. An incorrect choice of implant and surgical technique can be prejudicial to the success of the operation, causing the loss of the implant and of the surrounding bone. No implant must be used that has been used previously, or that has come in contact with the organic elements of third parties. The sterility of the implant is guaranteed by the sealed packaging and by correct storage in controlled dry environments; packages that are not intact or damaged are prejudicial to the use of the implant. For product traceability it is important to keep the batch number marked on the implant package and on the adhesive labels to be found in the same package. For the same reason it is recommended that the dentist keep as long as possible his patients' medical files, in which he has a record of their medical history, treatment plans, types of operations and prosthetic rehabilitations performed and everything that can be useful for the patient's medical history. The use of non-original I-RES instruments is not advised, as is the failure to follow the indications for inserting the SHAPE1, iMAX, VOLUTION, iMAXMUA, HANDY and SHAPEMINI implant systems and the respective prosthetic components, because they have been designed to obtain the best result. SHAPE1, iMAX, VOLUTION, iMAXMUA, HANDY and SHAPEMINI implant systems must be inserted with a maximum torque of 50 Ncm, exceeding this force could be prejudicial to the precision of connection with the subsequent prosthetic part. The SHAPE1, iMAX, VOLUTION, iMAXMUA, HANDY and SHAPEMINI implant systems include, in their range of implants, very small diameters made not only in pure titanium but also in titanium alloy (such as Ø 3.3 mm, Ø 3.7 mm in the connections internal hexagon and for Ø 2.7 mm for SHAPEMINI mini-implants), which must be used as implants only in the front of the mouth and not in diatoric areas where there is great masticatory stress. Especially the mini implants, with a Ø 2.7 mm, may be used only for the anchorage of the prosthesis. Furthermore, the implants with Ø 3.7 mm must not be inserted individually on premolars and molars, but at most should be only linked with bars to distribute the loading force. SHAPEMINI mini-implants may be used only in the front part of the mouth for single tooth replacement and not in the rear part of the mouth where masticatory stress are higher, in this sites, they can only be used for dentures anchoring.
THE COMPANY I-RES SAGL DISCLAIMS HERSELF FOR ANY LIABILITY DUE TO THE NON OBSERVANCE OF THE INDICATIONS REPORTED IN THIS INSTRUCTION LEAFLET.

Collateral effects

The known possible collateral effects are the partial or total failure of osseointegration, with consequent loss of the prosthetic function for which the implant system is intended, pain and transient paresthesia, fracture due to excessive load on the implant system, post or prosthesis.

Pre-operative planning

The careful study and assessment of patients who are candidates for implant-prosthetic therapy is of fundamental importance. Physical, instrumental, and radiological examinations and the study of models allow the dentist to make the best diagnosis and consequent therapy. The preparation of the patient for surgical implant therapy and the preparation of the operating room must be given the same care and attention as general surgery; the preparation of the implant site using dedicated drills with controlled revolutions, cooled with saline solution, these are all indispensable conditions for implant therapy.

Surgical complications

Implant surgery operations may lead to some complications that are usually temporary and restricted to the area of operation, such as inflammation, paresthesia, haematoma; there may also be injuries to nerves, to vascular complexes and the membrane of the maxillary sinus. Bone sequestration has rarely occurred.

Materials and packaging

Implant surgery operations may lead to some complications that are usually temporary and restricted to the area of operation, such as inflammation, paresthesia, haematoma; there may also be injuries to nerves, to vascular complexes and the membrane of the maxillary sinus. Bone sequestration has rarely occurred.

Symbols on the package

The SHAPE1, iMAX, VOLUTION, iMAXMUA, HANDY and SHAPEMINI implant systems are produced in commercially pure grade 4 titanium - ASTM F67 - and in grade 5 titanium alloy (Ø 3.3 and Ø 3.7 in internal hexagon connections) – ASTM F136. SHAPE1, iMAX, VOLUTION, iMAXMUA, HANDY and SHAPEMINI implants are surface treated to improve osseointegration by means of sandblasting followed by double acid-etching. In the market are also available implants with different surface treatments depending on the intended use of the product, as well as implants with a final coating with hyaluronic acid for a better bone tissue healing. The only machined implants are suitable for the patient with periodontitis. The Hybrid implants (presenting a surface half machined and half superficially treated) are specified both for patients with periodontitis and for all those patients where greater care is necessary aimed at reducing or better treating peri-implantitis. Decontamination is performed with cold Argon plasma followed by packaging in a cleanroom, for the final sterilisation phase with gamma or beta rays. The pack containing the implant and the respective cover screw must be opened in a sterile environment in the phases of surgical implant therapy. I-RES' SAGL implants are DISPOSABLE devices. Their reuse is not desirable from a medical, legal and ethical point of view. The use of not validated sterilization procedures can cause both the infection onset in the patient and impair the product performances. The failure compliance with these instructions implies a different use as provided by the manufacturer and those who make the reuse must take this action on their own responsibility.

SYMBOLS ON THE PACKAGE

MANUFACTURER
I-RES® SAGL Piazzale Roncaa 4
6850 Mendrisio [Switzerland]
info@ires.dental
www.ires.dental

(EN) EUROPEAN
AUTHORIZED REPRESENTATIVE
IESS GROUP SRL
Via Madonna della Salute 23
33050 Pozzuolo del Friuli (UD) [Italy]

CE Mark according to standard
MDD93/42/EEC

Batch number

Use by

Sterilized by gamma or beta rays

Do not reuse

Do not restirilize

Follow the instructions
given in the illustrative leaflet

Do not expose to direct sunlight

Do not expose to rain and keep in an environment free from damp

Do not use if the packaging is damaged

IFU_Shape1_Rev 05 - 04/2024

The I-RES implant-prosthetic system is intended for use in the oral cavity and is provided with useful com- ponents to enable the dentist and the dental techni- cian to prosthetically complete the operation begun by the dentist by inserting the implant in the patient. The I-RES implant-prosthetic system completes the line of I-RES dental implants and the respective I-RES instruments.

Product characteristics

Healing screws. The healing screw is a device used by the dentist to keep the oral mucosa pervious in the vicinity of the implant previously inserted. Once the soft tissues have healed, this will allow the dentist to perform the subsequent manoeuvres for prosthetization. The healing screws are made of grade 5 titanium.

Transfer. The transfer in grade 5 titanium is the instru- ment that allows the transfer from the mouth to a model of the information needed for the prosthetic connec- tion and for making the respective prosthesis. There are two types of transfer: "closed tray and open tray", and they are all composed of two parts (a screw and a repositioner). After being inserted in the implant and secured to it with the screw, the transfer is ready to take the impression in the mouth.

Analog. The analog made of grade 5 titanium has the function of reproducing the internal characteristics of the implant and it must be securely fixed to the transfer. Once joined, the model can be cast.

Straight, angled and millable posts. They are made of grade 5 titanium; they have different shapes depending on the characteristics they have to satisfy, they are used mostly for prosthetic rehabilitations of bridges or crowns. The choice of the device that must be connected to the analog in the first phase is dictated by the clinical and processing decisions, which are at the discretion of the dentist and the dental technician.

Plastic posts. Plastic posts may be divided into two families, one for using directly in the oral cavity, ap- propriately modified and connected to the post to support temporary prostheses, one for the transfor- mation of plastic posts into metal posts by the dental technician, with processing characteristics that are at the discretion of the dentist and the dental technician.

Gold Bases. These are components made of gold al- loy and allow the creation of customized posts using overcasting techniques.

Ball attachments. Ball attachments are made of grade 5 titanium and, once fixed to the implants, they are able to act as an anchorage by means of special attach- ments to the patient's mobile prosthesis.

Contraindications:

Do not use I-RES products on patients who have al- lergies to the materials of which the component is made. The use of I-RES components in patients who have metabolic and periodontal diseases or poor oral hygiene may be prejudicial to the success of the

work, as may prosthetic constructions not in line with international standards. The lack of periodic controls, which the patient must undergo with his dentist after prosthetisation, may compromise the life of the implant-prosthetic system.

Warnings:

I-RES prosthetic components are reserved for use by personnel with knowledge of the subject. I-RES points out that alterations to the implant/post connections may be prejudicial to the success of the work, as may the failure to use original components. When using prosthetic components it is important to follow the instructions given by the dentist and the dental technician. When using prosthetic components in the oral cavity it is important to respect the final tightening value which must be between 20 and 30 Ncm, as better specified in the catalogue.

Collateral effects

Today there are no known collateral effects in the use of I-RES components that can endanger the patient's health.

Prosthetic planning:

The choice of the I-RES components to be used for the case is the specific responsibility of the dentist and of the dental technician, depending on their re- quirements.

Materials and packaging:

All I-RES prosthetic components are packed in such a way as to be immediately identifiable, once removed from their pack; it is important for the operator to pay great attention in identifying them to avoid changes of position during work. It is useful to make note of the material batch used on the patient's file, for the purpose of traceability. Whether it has been processed or not, before inserting the I-RES prosthetic component in the oral cavity it is of fundamental importance that it be washed and sterilized. Some I-RES components are single-use, so intended for only one patient.

Cleaning I sterilization I storage:

Caution !!! All prosthetic components for dental implants are sold NON-STERILE.

Before use, all prosthetic components must be cleaned, disinfected and sterilized. These process- es must also be performed before intraoral use, i.e. before each use for any test phases and in any case before final restoration loading. Repetition of the pro- cesses described in this paragraph does not alter the characteristics of these devices. Failure to follow these indications may lead to the onset of infections and complications for the implant and, more generally, for the patient. Important: care must be taken during the subsequent phases in preserving the zone of the connection with the implant (hexagon/octagon/ threading).

a. Cleaning:

In case of automatic cleaning: use an ultrasound bath with a suitable detergent solution. Use neutral de- tergents only. Follow the manufacturer's instructions concerning concentrations and washing times. Use demineralised water to prevent the formation of stains and marks.

When cleaning manually: use a suitable neutral de- tergent and follow the manufacturer's user instruc- tions. Brush the products with a soft-bristled brush (non-metal bristles) under running water. Use the brush to apply the detergent to all surfaces. Rinse with dis- tilled water. After rinsing, dry the devices thoroughly and place them inside suitable sterilization bags.

b. Sterilization:

Place in a vacuum autoclave and sterilize as follows: Temperature = 121 – 124°C, with autoclave cycle of at least 20 minutes and drying cycle of 15 minutes.

c. Storage:

After sterilization, the product must remain in the sterilization bags. Only open the bags immediately prior to use. In normal conditions, sterilization bags main- tain the sterility of the contents, unless the wrapping is damaged. Therefore, do not use components if the bags in which they were kept are damaged, and rest- erilizes in new bags before using them again. The stor- age time of products sterilized inside the bags should not exceed that recommended by the manufacturer of the bags.

The product must be stored in a cool dry place, away from direct sunlight, water and heat sources.

ATTENTION:

Some components such as transfers and healing screws are devices that can be reused after.

CLEANING/STERILIZATION/STORAGE (follow the respective indications).

DO NOT REUSE a device classified as SINGLE-USE. Although it cannot be seen, it could be mechanically deformed or have been contaminated.

Disposal procedures:

If removed from the oral cavity due to biological or mechanical failure, the prosthetic components must be disposed of as biological waste according to local regulations. More detailed information on the use of the medical device can be found in the specific Sur- gical Protocol available on the site www.i-res-group. com or in the IRES Shape1 catalogue supplied by the Manufacturer.

Symbols on the package:

MANUFACTURER
I-RES® SAGL Piazzale Roncaa 4
6850 Mendrisio [Switzerland]
info@ires.dental
www.ires.dental

European Authorized Representative
IESS GROUP SRL Via Madonna della Salute 23 - 33050 Pozzuolo del Friuli (UD) [Italy]

CE Mark according to standard MDD93/42/EEC

Batch number

use before the expiry date

Do not reuse

Follow the instructions given in the illustrative leaflet

Do not expose to direct sunlight

Do not expose to rain and keep in an environment free from damp

Do not use if the packaging is damaged

not sterile

INSTRUCTIONS FOR iRES ROTARY INSTRUMENTS (DRILLS - COUNTERSINKS - TAPS) FOR THE PREPARATION OF THE SITE THAT HAS TO RECEIVE IRES® SHAPE1® IMPLANTS

Product description:

Dental drills, produced by I-RES Sagl, must be used as tools to perforate the bone. The diameters to be used, the lengths and the drilling sequence (number of drills to be used) are the sole choice and decision of the dentist, depending on the surgical protocol that must be followed. The maximum recommended speed is 800 rpm with saline solution applied directly on the drill to assist cooling.

a) The sole purpose of the initial precision drill is to incise the cortical bone in a very precise point where it will later be drilled.

b) The helical drills have laser markings for reference which identify the depth to be reached. Of course, in the use of this type of drill the manual skill and expe- rience of the dental surgeon are extremely important, especially for stopping at the chosen depth.

c) Countersinks are used when it is necessary to widen the initial part of the hole made to adapt the shape that of the neck of the implant to be inserted. The maximum recommended speed is 300 rpm with saline solution applied directly on the drill to assist cooling.

d) Bone taps: in particularly dense bone (type I), be- fore insertion it is advisable to use a bone tap with the same profile as the implant to be inserted. The bone tap has a greater cutting power than the implant, al- lowing the site to be prepared with reduced trauma. The maximum recommended speed is 30 rpm with saline solution applied directly on the bone tap to

assist cooling.

Materials used:

All I-RES Sagl drills are made of medical grade steel and undergo hardening heat treatment. The maximum recommended number of uses of the devices is 40 times.

Warnings and general precautions:

• It is fundamental to respect the surgical protocol that establishes the diameters, lengths and the se- quence of use. The operator is fully responsible for any uses other than those indicated.

•Check that the drills to be used are in good condi- tion, already cleaned and sterilized.

• Check that the drills are in good condition and have not been used more than 40 times.

• Before using them, check that the hand-piece holds the drills perfectly secure and that they rotate in the correct direction.

• Ensure that there is adequate irrigation.

• The application of leverage during drilling could cause breakage of the drill, the hand-piece, or the

bone walls on which you are working.

During drilling always exert alternating pressure, using the intermittent drilling technique.

• Always check that the laser marking that indicates diameter and length is clearly visible.

• Any eccentricity or lack of straightness in the drill could result in an oversized hole.

• Wear eye protection, to protect against particles that may be ejected.

CLEANING / STERILIZATION / STORAGE:

The medical devices are supplied NON-STERILE.

Before use, all rotary devices must be cleaned, disinfected and sterilized.

Failure to follow these indications may lead to the onset of infections and complications for the implant and, more generally, for the patient.

a. Cleaning

In case of automatic cleaning: use an ultrasound bath with a suitable detergent solution. Use neutral detergents only. Follow the manufacturer's instruc- tions concerning concentrations and washing times. Use demineralised water to prevent the formation of stains and marks.

When cleaning manually: use a suitable neutral de- tergent and follow the manufacturer's user instruc- tions. Brush the products with a soft-bristled brush (non-metal bristles) under running water. Use the brush to apply the detergent to all surfaces. Rinse with distilled water. After rinsing, dry the devices thoroughly and place them inside suitable steriliza- tion bags.

b. Sterilization

Place in a vacuum autoclave and sterilize as follows: Temperature = 121 – 124°C, with autoclave cycle of at least 20 minutes and drying cycle of 15 minutes.

c. Storage

After sterilization, the product must remain in the sterilization bags. Only open the bags immediately prior to use. In normal conditions, sterilization bags main- tain the sterility of the contents, unless the wrapping is damaged. Therefore, do not use components if the bags in which they were kept are damaged, and re-sterilize in new bags before using them again. The storage time of products sterilized inside the bags should not exceed that recommended by the man- ufacturer of the bags. The product must be stored in a cool dry place, away from direct sunlight, water and heat sources.

More detailed information on the use of the medical device can be found in the Surgical Protocol. If you do not have a copy, request one from your distributor or directly from the manufacturer.

Symbols on the package:

MANUFACTURER
I-RES® SAGL Piazzale Roncaa 4
6850 Mendrisio [Switzerland]
info@ires.dental
www.ires.dental

EC REP — European Authorized Representative
IESS GROUP SRL Via Madonna della Salute 23 - 33050 Pozzuolo del Friuli (UD) [Italy]

CE 0426 — CE Mark according to standard MDD93/42/EEC

LOT — Batch number

Follow the instructions given in the illustrative leaflet

Do not expose to direct sunlight

Do not expose to rain and keep in an environment free from damp

Do not use if the packaging is damaged

NON STERILE — Not sterile

INSTRUCTIONS FOR USE OF CLASS I PROSTHETIC COMPONENTS AND SURGICAL INSTRUMENTS

The I-RES implant-prosthetic system is intended for use in the oral cavity and is provided with useful components to enable the dentist and the dental techni- cian to prosthetically complete the operation begun by the dentist by inserting the implant in the patient. The I-RES implant-prosthetic system completes the line of I-RES dental implants and the respective I-RES instruments..

Product characteristic

Transfer

The transfer in gr. 5 titanium is the tool that allows to transfer, from the mouth to a replica model, the information useful for the prosthetic connection and the construction of the respective prosthesis. There are different types of transfers and they are all made up of two parts (a screw and a repositioner). After being inserted into the implant and firmly screwed to it by means of the screw, the transfer is ready to be detected in its position in the oral cavity by means of an impression.

Analog

The analogue is made of gr. 5 titanium and has the function to reproduce the internal characteristics of the implant and must be firmly fixed to the transfer. Once joined, the model can be poured.

Castable abutments

The compatible castable abutments are the most economical and practical prosthetic solution in the implantology field, consisting of a base in castable material such as POM that allow the dental technician to model an implant abutment in wax or resin starting from a pre-built castable base. These abutments will then be completed in their missing anatomical parts by the dental technician and subsequently the entire abutment will be invested and cast in metal alloys. The abutment that will come out of the casting machine will be a replica of the castable base and the modeled portion.

Steel surgical instruments in steel

Ratchet connectors, handpiece connectors, manual screwdrivers, prosthetic screwdrivers, etc., in stainless steel, provide the user with surgical instruments for performing proper dental surgery.

Contraindications:

Do not use I-RES products on patients who have allergies to the materials of which the component is made. The use of I-RES components in patients who have metabolic and periodontal diseases or poor oral hygiene may be prejudicial to the success of the work, as may prosthetic constructions not in line with international standards. The lack of periodic controls, which the patient must undergo with his dentist after prosthetisation, may compromise the life of the im- plant-prosthetic system.

Warnings:

I-RES prosthetic components are reserved for use by personnel with knowledge of the subject. I-RES points out that alterations to the implant/post connections may be prejudicial to the success of the work, as may the failure to use original components. When using prosthetic components it is important to follow the instructions given by the dentist and the dental technician. When using prosthetic components in the oral cavity it is important to respect the final tightening value which must be between 20 and 30 Ncm, as better specified in the catalogue.

Collateral effects

Today there are no known collateral effects in the use of I-RES components that can endanger the patient's health.

Prosthetic planning:

The choice of the I-RES components and surgical instruments to be used for the case is the specific responsibility of the dentist and of the dental technician, depending on their re- quirements.

Materials and packaging:

All I-RES prosthetic components and surgical instruments are packed in such a way as to be immediately identifiable; once removed from their pack, it is important for the operator to pay great attention in identifying them to avoid changes of position during work. It is useful to make note of the material batch used on the patient's file, for the purpose of traceability. Whether it has been processed or not, before inserting the I-RES prosthetic component in the oral cavity it is of undamental importance that it be washed and sterilized. Some I-RES components are single-use, so intended for only one patient.

CLEANING | STERILIZATION | STORAGE:

Caution !!! All prosthetic components for dental implants are sold NON-STERILE.

Before use, all prosthetic components must be cleaned, disinfected and sterilized. These processes must also be performed before intraoral use, i.e. before each use for any test phases and in any case before final restorationloading. Repetition of the processes described in this paragraph does not alter the characteristics of these devices. Failure to follow these indications may lead to the onset of infections and complications for the implant and, more generally, for the patient.

Important care must be taken during the subsequent phases in preserving the zone of the connection with the implant (hexagon/octagon/ threading).

a. Cleaning:

In case of automatic cleaning: use an ultrasound bath with a suitable detergent solution. Use neutral detergentsonly. Follow the manufacturer's instructions concerning concentrations and washing times. Use demineralised water to prevent the formation of stains and marks.

When cleaning manually: use a suitable neutral detergent and follow the manufacturer's user instructions. Brush the products with a soft-bristled brush (non-metal bristles) under running water. Use the brush to apply the detergent to all surfaces. Rinse with distilled water. After rinsing, dry the devices thoroughly and place them inside suitable sterilization bags.

b. Sterilization:

Place in a vacuum autoclave and sterilize as follows: Temperature = 121 – 124°C, with autoclave cycle of at least 20 minutes and drying cycle of 15 minutes.

c. Storage:

After sterilization, the product must remain in the sterilization bags. Only open the bags immediately prior to use. In normal conditions, sterilization bags maintain the sterility of the contents, unless the wrapping is damaged.

Therefore, do not use components if the bags in which they were kept are damaged, and resterilizes in new bags before using them again. The stor- age time of products sterilized inside the bags should not exceed that recommended by the manufacturer of the bags.

The product must be stored in a cool dry place, away fromdirect sunlight, water and heat sources.

ATTENTION:

Some components, such as transfer and surgical instruments, are devices that can be reused after prior follow the respective indications reported in CLEANING/STERILIZATION/STORAGE.

DO NOT REUSE a device classified as SINGLE-USE.

Although it cannot be seen, it could be mechanically deformed or have been contaminated.

Disposal procedures:

If removed from the oral cavity due to biological or mechanical failure, the prosthetic components must be disposed of as biological waste according to local regulations. More detailed information on the use of the medical device can be found in the specific Surgical Protocol available on the site www.ires.dental or in the IRES catalogue supplied by the Manufacturer.

SIMBOLS ON THE PACKAGE

Manufacturer
I-RES® SAGL
Piazzale Roncaa, 4
6850 Mendrisio [Switzerland]
info@ires.dental
www.ires.dental

EC REP European Authorized Representative
IESS GROUP SRL Via Madonna della Salute 23 - 33050 Pozzuolo del Friuli (UD) [Italy]

CE mark under MDR 17/745

LOT Batch number

Use before the expiry date

Do not reuse

Follow the instructions given in the illustrative leaflet

Do not expose to direct sunlight

Do not expose to rain and keep in an environment free from damp

Do not use if the packaging is damaged

NON STERILE Not sterile

iRES

all for a smile

iRES SAGL, a dynamic and flexible company sensitive to the needs of Professionals, offers a complete range of products for oral surgery: **regenerative materials, implant systems, guided surgery, custom prosthesis, Total Implant Care solutions, highlevel scientific courses** and programs with Key Opinion Leaders.

iRES combines practical experience and **scientific knowledge** to **facilitate procedures** and **improve performance**. This is all possible thanks to a highly professional staff with more than **30 years of experience** in the dental field.

The sales system, based on a **Continuing Education**, involves all Professionals in our scientific programs. **Customer satisfaction is our mission**. High swiss quality meets **advanced technology** to provide an **innovative product concept** and **economically sustainable solutions**.

iRES SAGL
Piazzale Roncaa 4 6850 Mendrisio [CH]
https://www.en.ires.dental/

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Morocco Cluster I15, Office No. 10,
International City, Dubai, UAE
Landline: +971 4 835 9719, +971 4 346 5001
WhatsApp: +971 52 462 1799

2026-02

SMART INTRA-ORAL DIGITAL SCANNER

DISTRIBUTED BY

AL THANAYA
PHARMACEUTICALS LLC

ITALIAN INTRA-ORAL SCANNER

Digital impression taking is the first step in any treatment in modern dentistry, allowing for several **important advantages**:

- **streamlined procedures**, time and cost **optimization** for the clinician
- **effective and timely communication** between clinic and laboratory
- **improved comfort**, greater awareness and therefore increased motivation to treatment for the patient

IESS Group offers you the **best technologies** to keep up with the evolution of **digital workflow**, thanks to **simple**, **versatile** and **reliable intraoral scanners**.

SMART

Sleek and Compact
Only 138g
221x27x25mm

Ultra Fast and Precise
1 min ultra-fast scan
7 μm ultra-high accuracy

Plug and Play
No power
adapter needed

Anti-fogging Technology
Our innovative instant heating technology prevents the frustration of fogged lens.

One Button, Infinite Control
Control should be effortless, and innovation be intuitive. This design is aimed to simplify your interaction with products. With just a single press, you saved the effort to point with a mouse.

Motion Sensing
This innovative technology allows you to control your devices without any redundant touch, which provides you a hygienic operating environment.

Silent Operating Process
Transforming your dental appointment into a calming and stress-free experience.

P3

Overall size
Only 228g
216x40x36mm

Ultra Fast and Precise
1 min ultra-fast scan
10 μm more precise
field of view 18x16 mm

Depth of field
0-15 mm
(Adjustable up to 20mm)

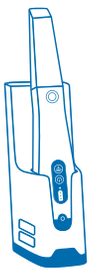
Button Control
The tiny button carries great responsibilities, controlling the entire digital workflow. It prevents cross contamination by not touching the screen or clicking the mouse. Safety is always top priority.

Motion Sensing
The gyroscope inside the scanner allows to see different angles of scanned images by just simply rotating the scanner. So you do not have to touch the screen to see the image.

P4 WIRELESS

2 H continuous scanning
High speed and high-quality transmission

Upper jaw+ lower jaw+ Occlusion
Total scan time of 2 min



Super charge 1H

Metal button
Remote control of scanning process

One Click:
Start/Pause scanning

Double Click:
Switch buccal/Switch color

Long Press:
Next step/Model process

Wireless connection
Breaking free from the constraints of traditional cables, making scanning more convenient and efficient.

Built-in battery
Set and charge. No need to replace the battery, making 24/7 standby accessible.

Detachable tips
You can choose suitable tips according to the different scanning scenarios.

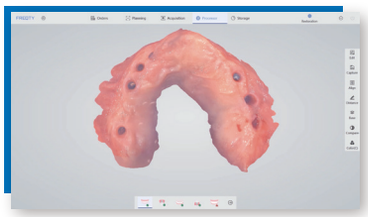
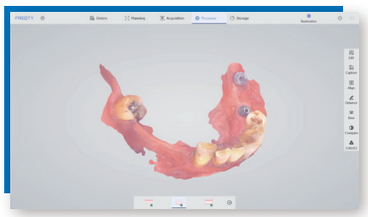
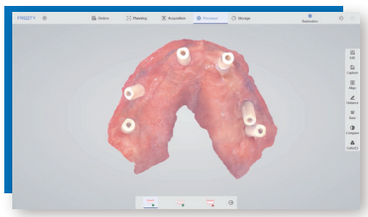
Upgraded chips
The chip upgrade has improved the scanning efficiency of smoke and blood stains, bringing higher quality scanning data.

Scan up to 60 cases with full battery Built-in battery
When you are not scanning, you can set it in the base for charging, which greatly extends the battery life

APPLICATION

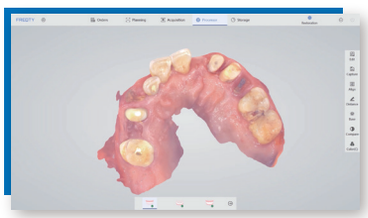
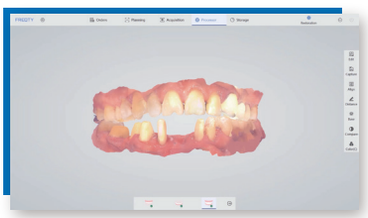
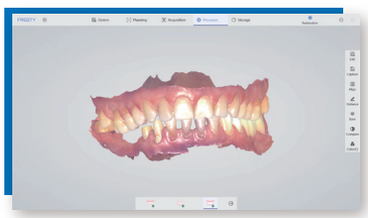
IMPLANT

Data Acquisition | CAD - Implant Surgery Planning | 3D Guide Printing | Dental implant | Secondary Data Acquisition | Make Dental Crowns | Fitting Dental Crowns

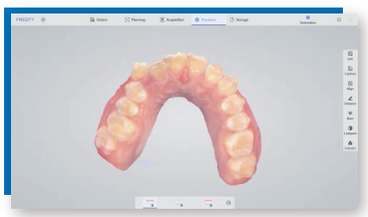
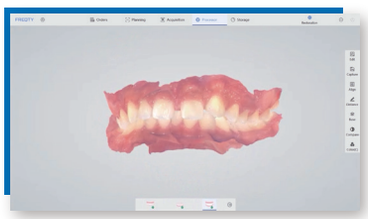
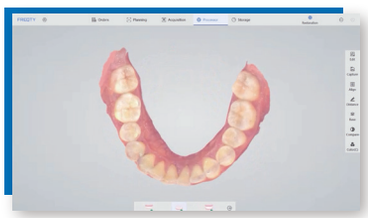
RESTORATION

Data Acquisition | CAD Restoration Design | CAM | Fitting Dentures

ORTHODONTICS

Data Acquisition | CAD Orthodontic Plan | 3D Model Printing | Make Aligners | Fitting Aligners

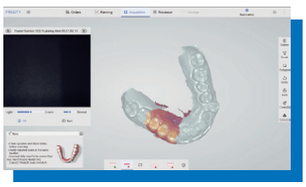




PARAMETERS	SMART	P3	P4
Accuracy	≤7 μm	≤15 μm	≤15 μm
Precision	≤5 μm	≤10 μm	≤10 μm
Handpiece Weight	138g (192g with cable)	228g	237g
Handpiece Dimension	221x27x25mm	216x40x36mm	238×42×35mm
Scan Field	18x16mm	18x16mm	18x16mm
Scan Depth	0~20mm	0~15 mm (Adjustable up to 20mm)	0~21mm
True Color	Full HD	Full HD	Full HD
Full arch scanning time	1 min	1 min	<2 mins

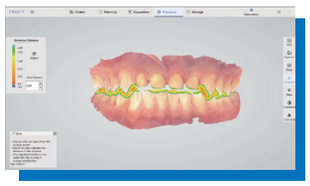
SOFTWARE FEATURES

Undercut Check
Auxiliary confirmation in place, colour gradient indicates undercut, accurate prediction, and improves the communication efficiency between doctors and technicians.

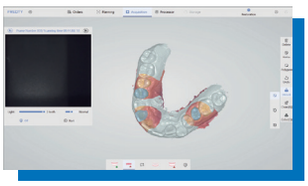
Margin Line Drawing
Draw accurate and clear margin lines, linking doctors and technicians to reduce rework.



Pre-preparation Scan
Obtain pre-preparation tooth state, retain bite data, and reshape the original teeth.



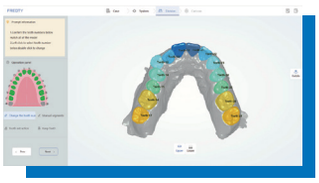
Bite Check
Color gradient indicates distance, accurately judges the restoration distance and assists in improving the effect of tooth preparation.



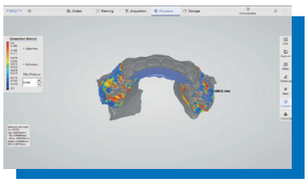
Data Lock
Locks the tooth position to prevent data loss and reject excess data interference.

Color Switch
True color jaws, clearly restore details, one click to switch colors, and check model data comprehensively.

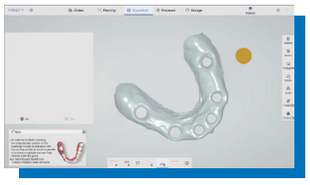
AI Intelligent Scan
Easily identify soft and hard tissues, eliminate redundant data, and make accurate dental models.



Orthodontic Simulation
Generate simulation animations to help doctors and patients communicate, share quickly, and promote orders.



Disease Course Monitoring
Full-cycle diagnosis and treatment monitoring, comparative observation of model differences, simultaneous analysis, comprehensive upgrade of diagnosis and research.



Cuff Tool
Clear cuff data, avoid tissue interference and lock automatically, significantly improving data reliability.

PC REQUIREMENTS	SMART - P3 - P4
CPU	Intel i7-12700H/Intel i7- 11800H or above
RAM	16G/32G
Hard Disk	SSD 512G or above
GPU	RTX2060/RTX3060 or above
Operating System	Windows10/11 64bit
Display	Resolution 1920×1080 and above

SOFTWARE	SMART - P3 - P4
Types of Scanning	Orthodontics, Implant, Restoration
Image Capture	Yes
3D Data Preview	Yes
Output Files	STL, PLY, PTY (encrypted for user) OBJ *(P4 only)*
Cloud Service	Yes
Cloud Service Price	5GB/free
Direct Compatibility with Dental CAD	Exocad*
Main Image Processing Tools	Trim/Edit/Recover/Lock, etc.
Software licences	Free
Software upgrade	Free

all for a smile

IESS Group is the new international company established in 2021 from the merging of **Geass** and **iRES Group** and which expanded further in 2022 with the entry of **Multysystem**.

In addition to one of **the sector's most extensive product portfolios**, IESS Group also provides a **wide range of services** designed to support the dentist in all professional aspects.

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02/2026