



25



Dental implants are now an indispensable part of dental treatment options. With the globalization of medical infrastructures and higher standards of living, implant applications continue to increase.

Southern Implants has been a manufacturer and distributor of dental implants since 1987. Today, the Southern group is a leading biomedical engineering entity, with major intellectual property and capabilities in implantable devices, arthroplasties and tissue regeneration. Top-end professional users, who want more choices, have driven our product range to enormous and exciting heights. Striving for excellence and meeting customer needs has led to our wide product range characterized by numerous unique and innovative products, which include:

- Multiple interfaces, both internal and external, to suit customer preference.
- The MAX, a wide-diameter implant specifically designed for molar tooth replacement.
- Co-axis, the only angled-top, tapered, screw-form implant, available in angulations of 12°, 24° and 36°.
- The 55° Zygomatic implant, optimized for load distribution.
- Many products optimized for primary stability and suitable for immediate loading.
- A surface which continues to out perform those which it is trialled against.

My sincere thanks to all specialists, dentists and technicians who give continual feedback, suggestions and input. The products are our interpretation of your needs.



**Graham Blackbeard**  
Managing Director, Southern Implants

# Contents

■	Ø3.50mm IA-LH-35 & IA-LHS-35 Implants, Components and Site Preparation.....	Page 04
	IA-LH-35 & IA-LHS-35 Prosthetics Flowchart.....	Page 05
■	Ø4.30mm IA-LH-43 & IA-LHS-43 Implants, Components and Site Preparation.....	Page 06
	IA-LH-43 & IA-LHS-43 Prosthetics Flowchart.....	Page 07
■	Ø5.00mm IA-LH-50 & IA-LHS-50 Implants, Components and Site Preparation.....	Page 08
	IA-LH-50 & IA-LHS-50 Prosthetics Flowchart.....	Page 09
■	Ø6.00mm IA-LH-60 Implants, Components and Site Preparation.....	Page 10
	IA-LH-60 Prosthetics Flowchart.....	Page 11
■	Ø4.30mm IA43-12d Implants, Components and Site Preparation.....	Page 14
■	IA43-12d Prosthetics Flowchart.....	Page 15
■	Ø5.00mm IA50-12d Implants, Components and Site Preparation.....	Page 16
■	IA50-12d Prosthetics Flowchart.....	Page 17
■	Ø7.0mm TRI-MAX® Implants, Components and Site Preparation.....	Page 20
	TRI-MAX®7 Prosthetics Flowchart.....	Page 21
■	Ø8.0mm TRI-MAX® Implants, Components and Site Preparation.....	Page 22
	TRI-MAX®8 Prosthetics Flowchart.....	Page 23
■	Ø9.0mm TRI-MAX® Implants, Components and Site Preparation.....	Page 24
	TRI-MAX®9 Prosthetics Flowchart.....	Page 25
	TRI-NEX & MAX Instrument Trays.....	Page 26
	Prosthetic Instrument Tray & TRI-NEX Tapered Drills.....	Page 27
	Southern Implants' Enhanced Surface.....	Page 28
	Instructions for Placement Tool & TRI-NEX Horizontal offset.....	Page 29
	Converters to External Hex.....	Page 30
	Precision Attachments & Bars.....	Page 31
	Explanation of Symbols & Certificates.....	Inside Back Cover
	Contact Details.....	Back Cover

## Complimentary Manuals & Instructions

Instructions for use.....	PRO-6038
Externally Hexed Product Catalogue.....	CAT-2020
IT Product Catalogue.....	CAT-2005
Instrument Catalogue.....	CAT-2006
Prosthetic & Laboratory Manual.....	CAT-2001
Cranio - Facial Brochure.....	CAT-2036
Patient Information Brochure.....	CAT-2022

Various Data Sheets are available on our website  
[www.southernimplants.com](http://www.southernimplants.com)

Images are for illustration purposes only and do not necessarily accurately represent the product.

## TRI-NEX - The next generation TRI-Lobe with HEX insertion

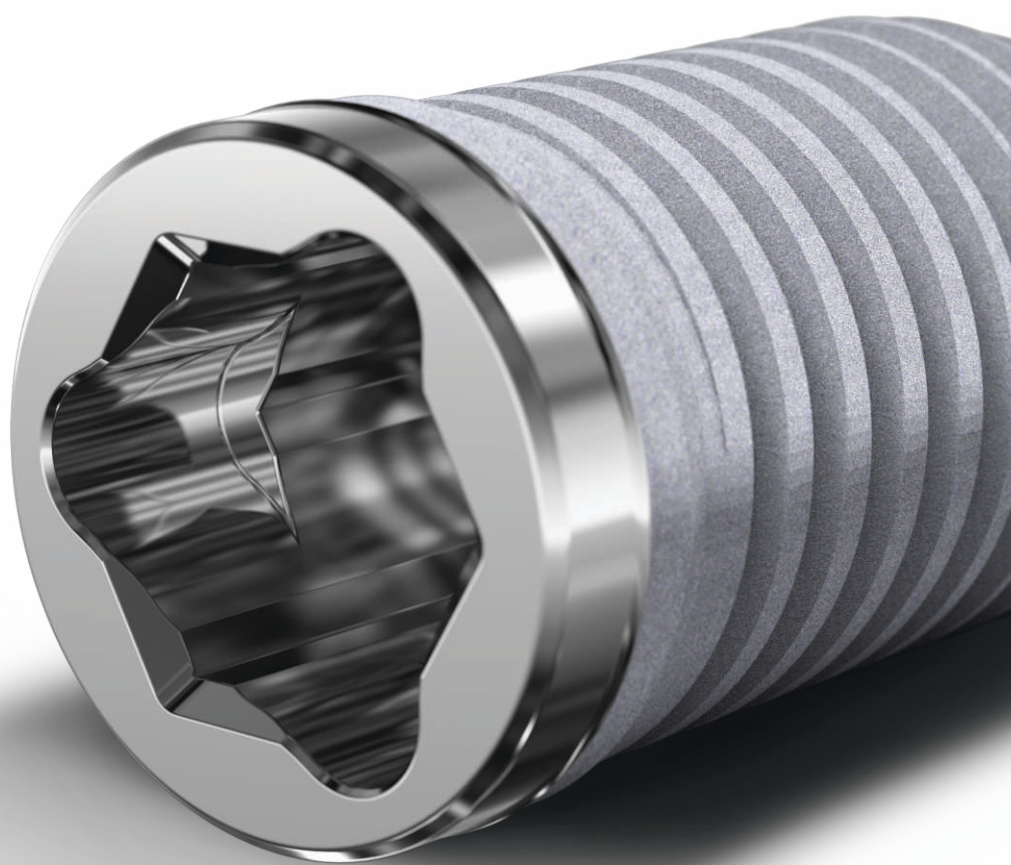
The TRI-Lobe prosthetic interface has become the market-leader due to its user-friendliness. It is, however, not an ideal interface for driving the implant into the bone. Southern's unique TRI-NEX uses the lobes for prosthetic interfacing and a long hex for implant placement.

Increasing demand for **PRIMARY STABILITY**, means that implants are being placed with ever increasing insertion torques. The Southern external thread has proven suitability for high insertion torque without causing bone necrosis. Hence the need for an insertion drive mechanism that:

1. **Gives precise feel and control / rigidity.**
2. **Can transmit insertion torques up to 100Ncm.**
3. **Will not distort or damage the prosthetic interface.**
4. **Will not weaken or reduce fatigue resistance of the implant.**

These requirements are answered by the hex drive of the TRI-NEX implant.





# IA-LH-35 & IA-LHS-35 Implants

 Diameter **3.5mm** Implants and Components

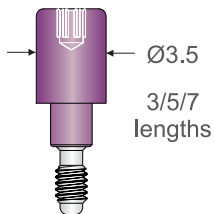
## Cover Screw

CS-L-35



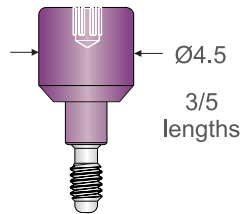
## One-Part Healing Abutments

HA-L-35



OR

HA-L-35W

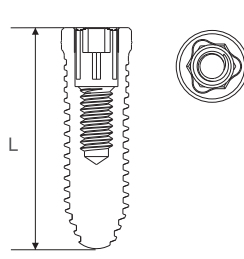
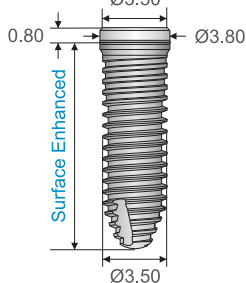
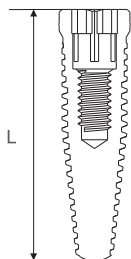
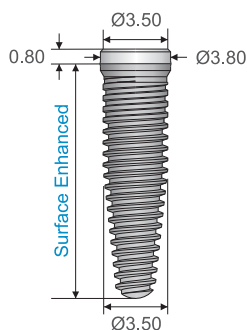


**IA-LH-35 Tapered Implants** are available in lengths of:

8.5mm	IA-LH-35-8
10.5mm	IA-LH-35-10
12mm	IA-LH-35-11.5
13.5mm	IA-LH-35-13
16.5mm	IA-LH-35-16

**IA-LHS-35 Cylindrical Implants** are available in lengths of:

8.5mm	IA-LHS-35-8
10.5mm	IA-LHS-35-10
12mm	IA-LHS-35-11.5
13.5mm	IA-LHS-35-13
15.5mm	IA-LHS-35-15



## Instrumentation

### Insertion Tools

I-HLH-35S

I-HLH-35M



To fit W&H Handpieces

I-HLHU-35S

I-HLHU-35M



To fit any Handpieces

### Peek Bits (Spares)

I-PBIT-L18



Use with Ø3.5 Insertion Tools

### Alternative Insertion Tools

I-WI-LH35S

I-WI-LH35M



To fit Wrench

### Converters

I-WI-C \*



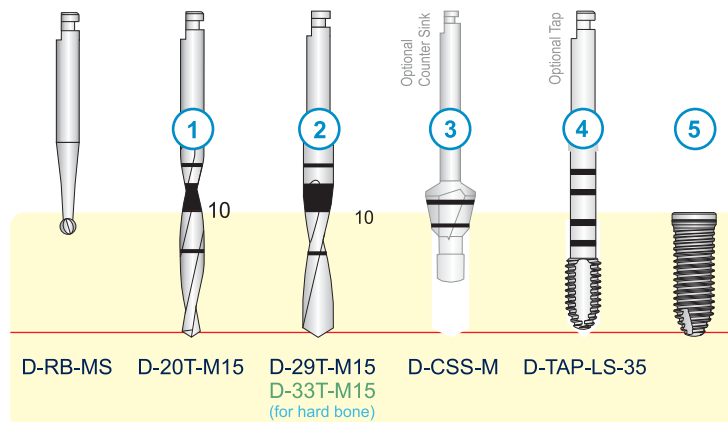
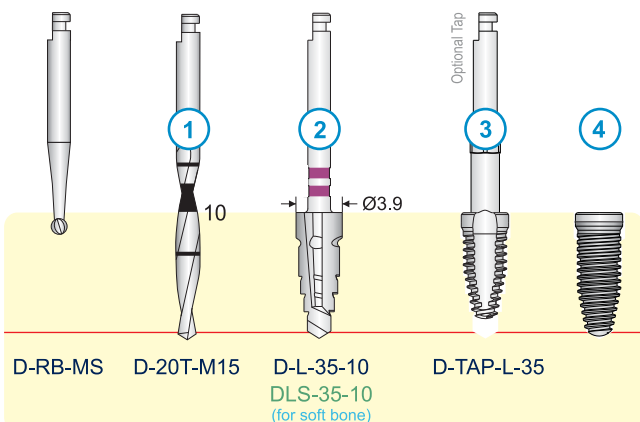
Converts handpiece W&H Insertion Tools to be used with wrench

\* Available in Long and Short Versions

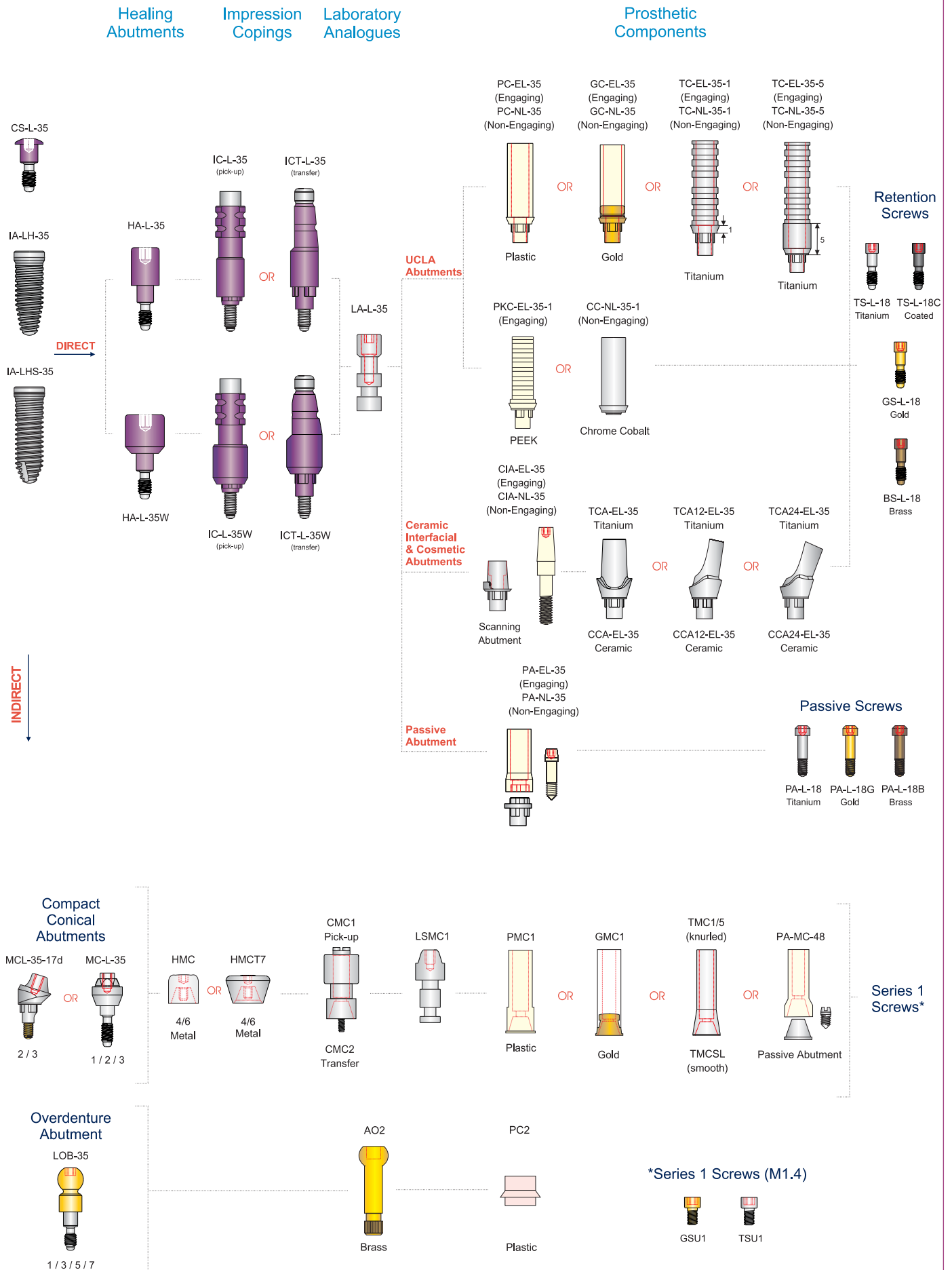
## Tapered & Cylindrical Implants Site Preparation Sequence

Step 1: Pilot 2mm Twist Drill to full depth of implant  
Step 2: Dedicated Tapered Drill to full depth of implant  
Step 3: Optional Tap for cortical bone  
Step 4: Place implant

Step 1: Pilot 2mm Twist Drill to full depth of implant  
Step 2: Twist Drill to full depth of implant  
Step 3: Optional Counter Sink  
Step 4: Optional Tap for cortical bone  
Step 5: Place implant

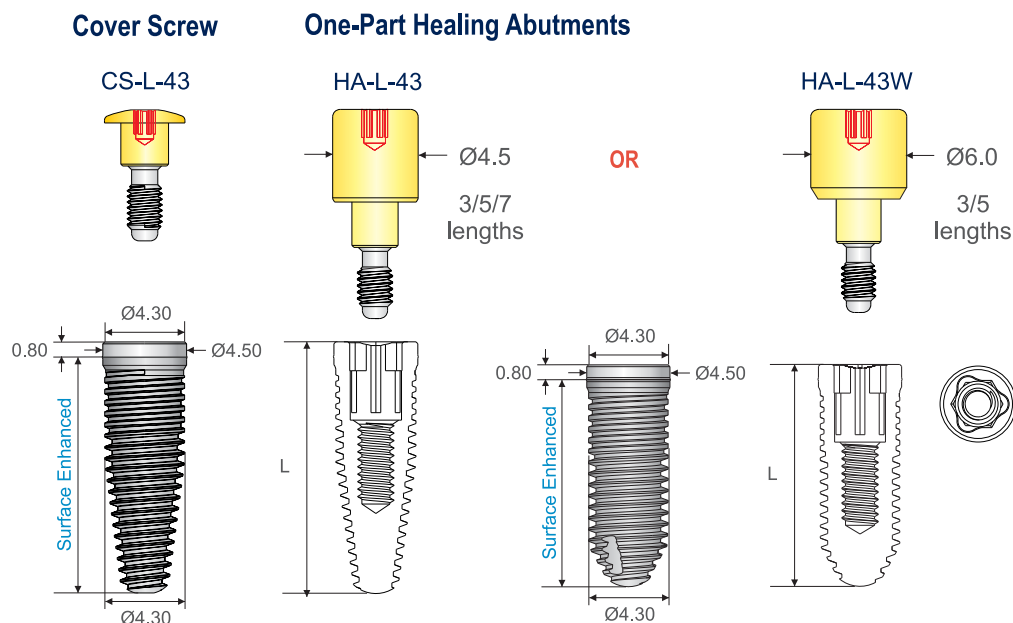


# IA-LH-35 & IA-LHS-35 Prosthetic Flowchart



# IA-LH-43 & IA-LHS-43 Implants

 Diameter **4.3mm** Implants and Components



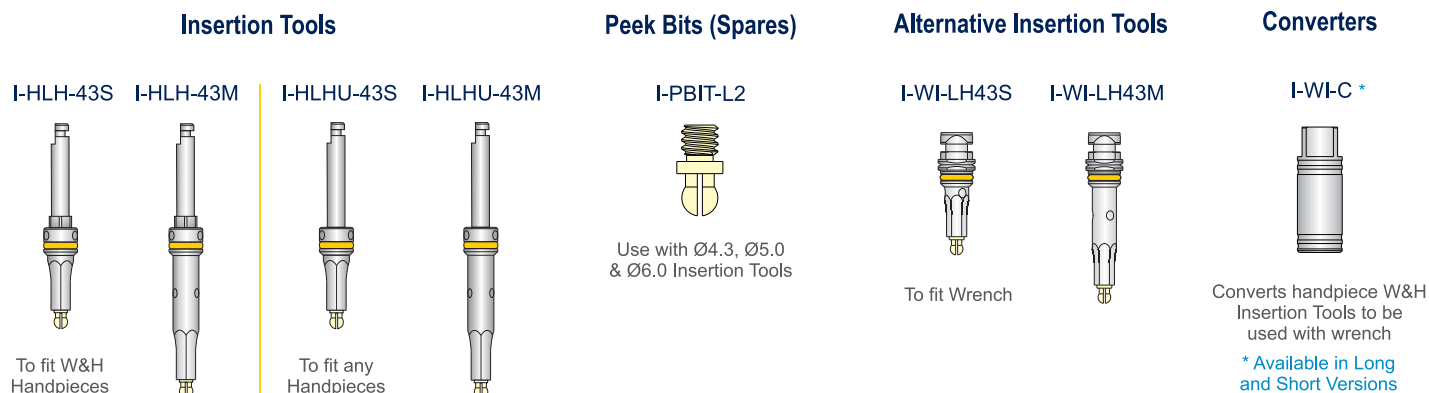
**IA-LH-43 Tapered Implants** are available in lengths of:

<b>8.6mm</b>	IA-LH-43-8
<b>10.5mm</b>	IA-LH-43-10
<b>12mm</b>	IA-LH-43-11.5
<b>13.5mm</b>	IA-LH-43-13
<b>16.5mm</b>	IA-LH-43-16

**IA-LHS-43 Cylindrical Implants** are available in lengths of:

<b>8.6mm</b>	IA-LHS-43-8
<b>10.5mm</b>	IA-LHS-43-10
<b>12mm</b>	IA-LHS-43-11.5
<b>13.5mm</b>	IA-LHS-43-13
<b>15.5mm</b>	IA-LHS-43-15

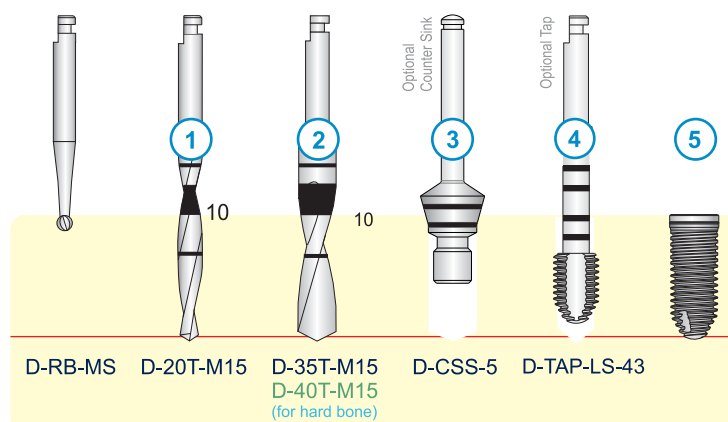
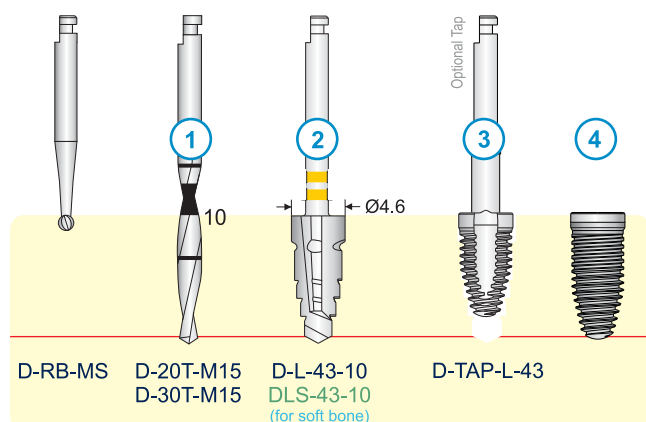
## Instrumentation



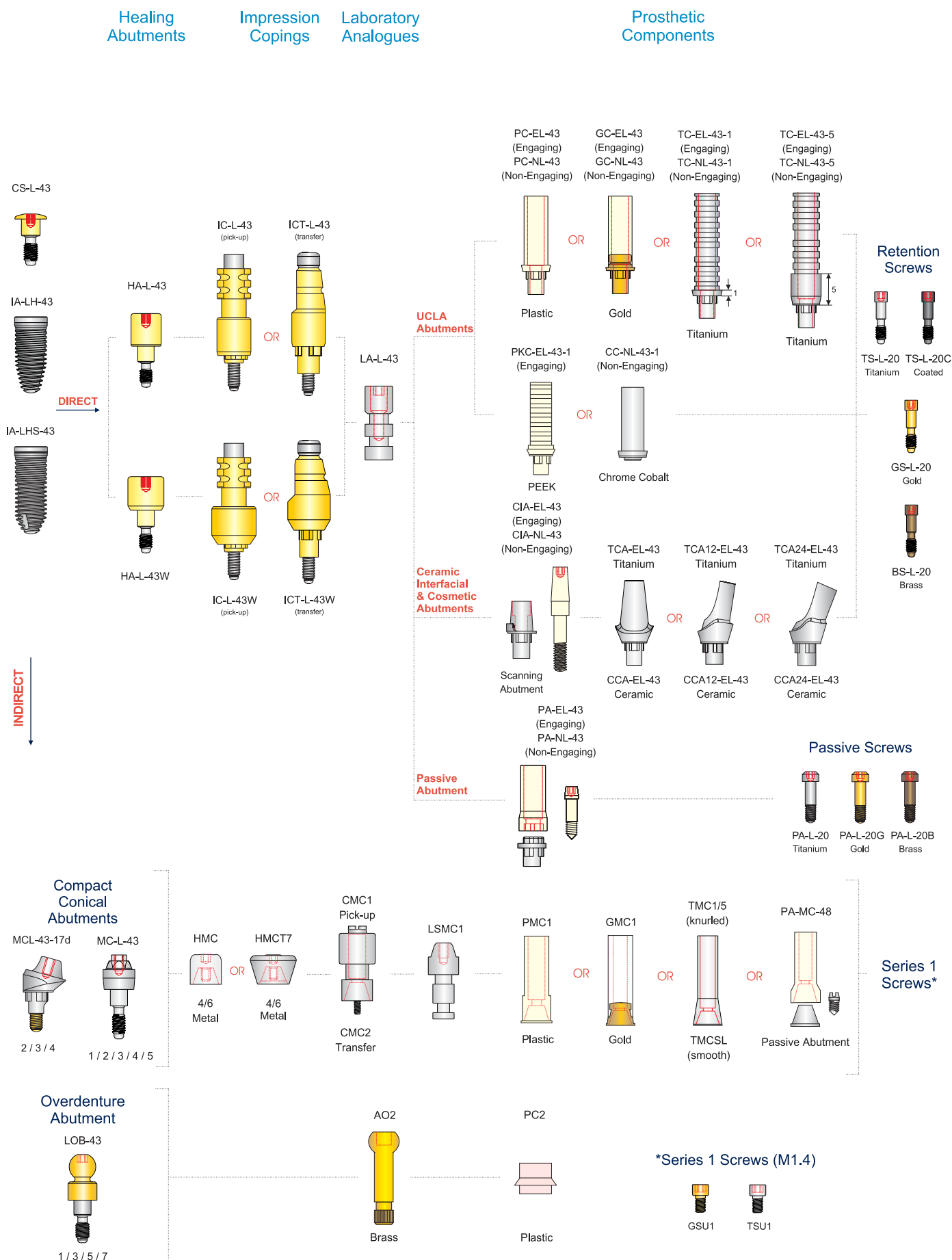
## Tapered & Cylindrical Implants Site Preparation Sequence

Step 1: Pilot 2mm Twist Drill to full depth of implant  
Step 2: Dedicated Tapered Drill to full depth of implant  
Step 3: Optional Tap for cortical bone  
Step 4: Place implant

Step 1: Pilot 2mm Twist Drill to full depth of implant  
Step 2: Twist Drill to full depth of implant  
Step 3: Optional Counter Sink  
Step 4: Optional Tap for cortical bone  
Step 5: Place implant



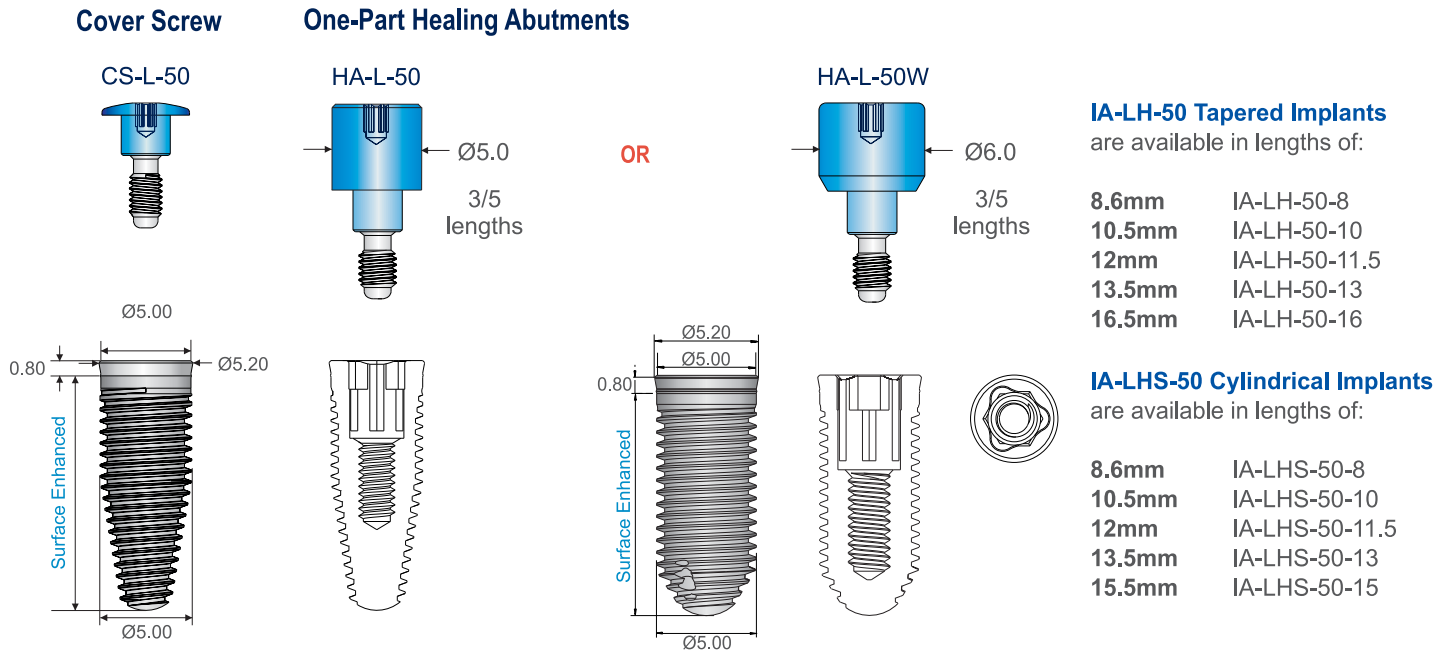
# IA-LH-43 & IA-LHS-43 Prosthetic Flowchart



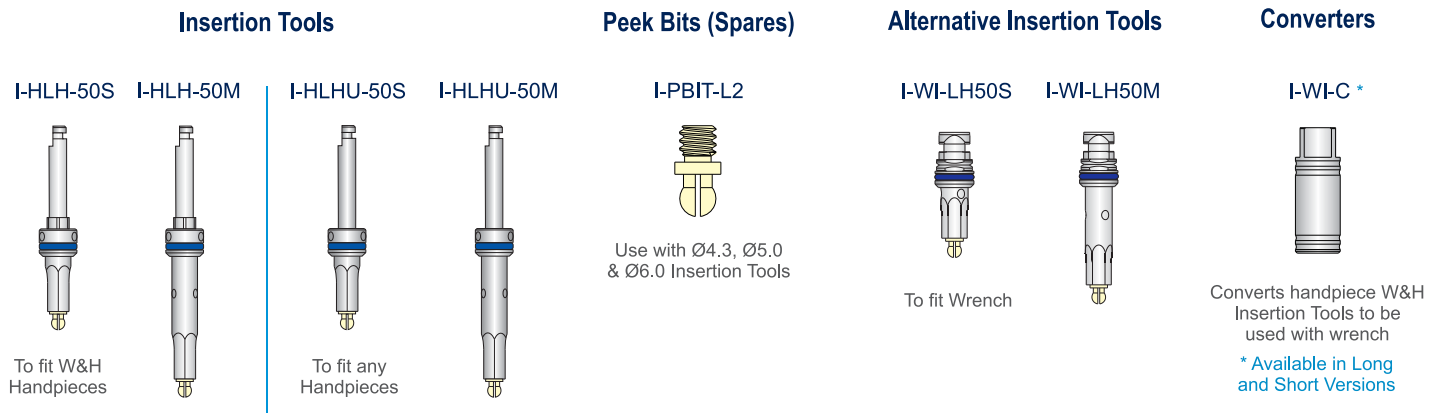


# IA-LH-50 & IA-LHS-50 Implants

 Diameter **5.0mm** Implants and Components

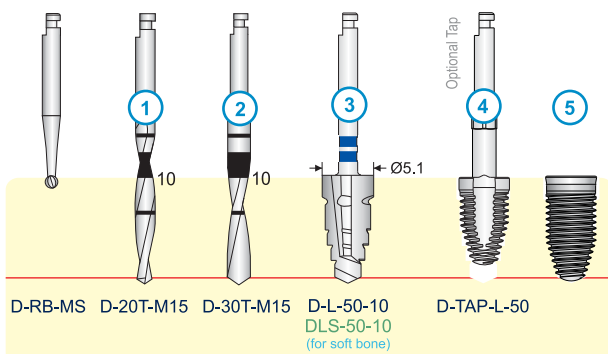


## Instrumentation

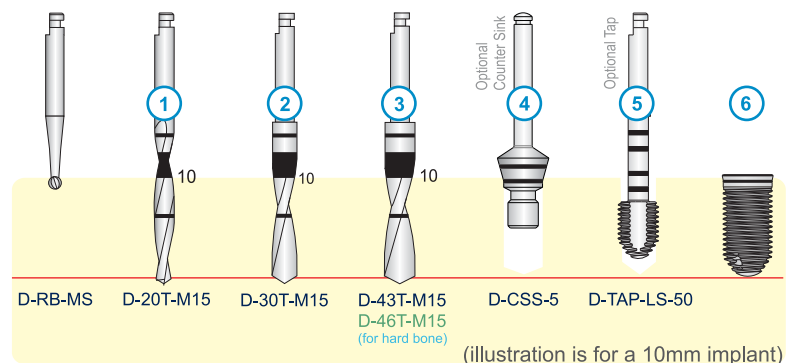


## Tapered & Cylindrical Implants Site Preparation Sequence

Step 1: Pilot 2mm Twist Drill to full depth of implant  
 Step 2: Twist Drill to full depth of implant  
 Step 3: Dedicated Tapered Drill to full depth of implant  
 Step 4: Optional Tap for cortical bone  
 Step 5: Place Implant



Step 1: Pilot 2mm Twist Drill to full depth of implant  
 Step 2: Twist Drill to full depth of implant  
 Step 3: Final Twist Drill to full depth of implant  
 Step 4: Optional Counter Sink  
 Step 5: Optional Tap for cortical bone  
 Step 6: Place implant



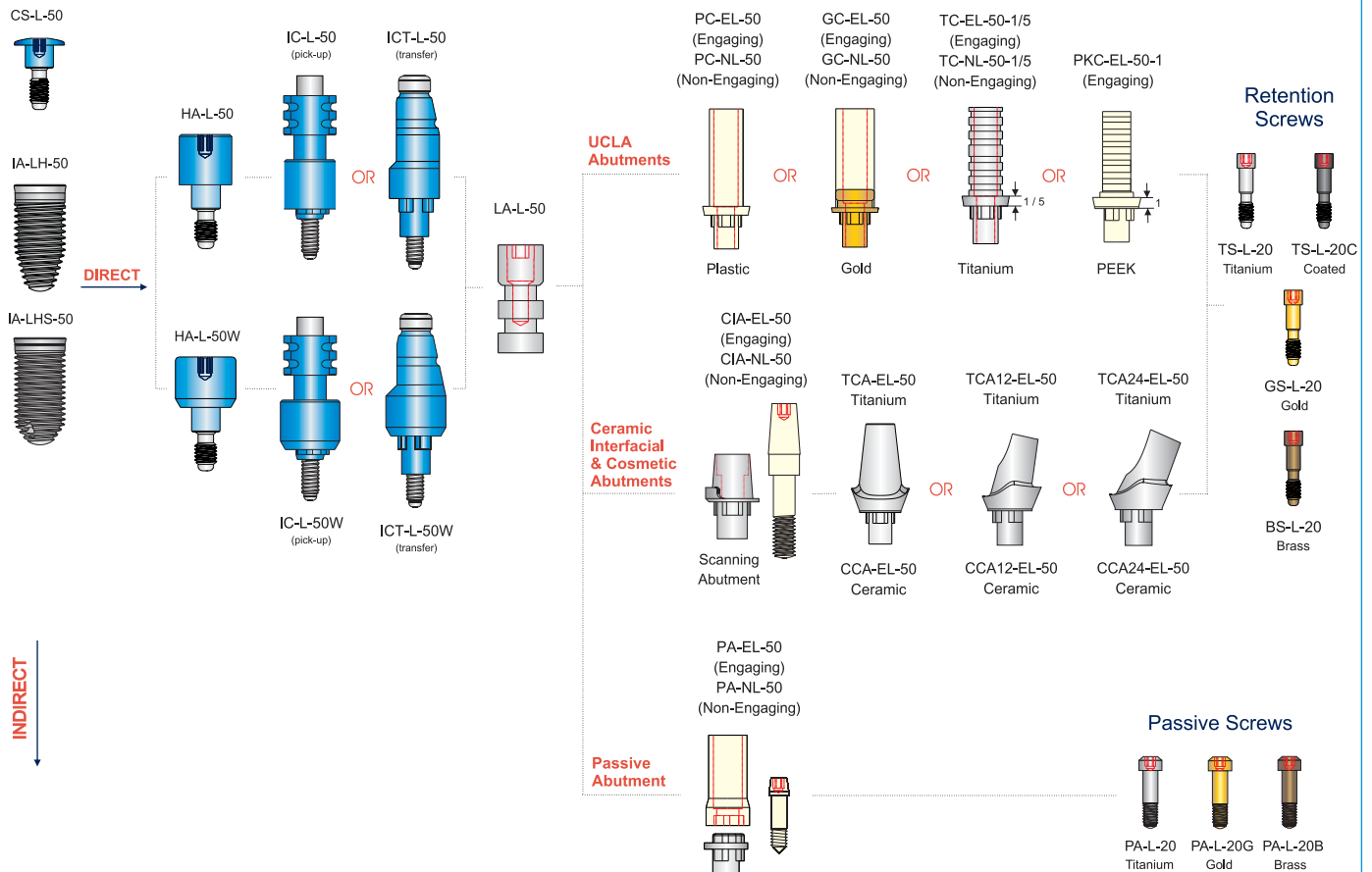
# IA-LH-50 & IA-LHS-50 Prosthetic Flowchart

Healing  
Abutments

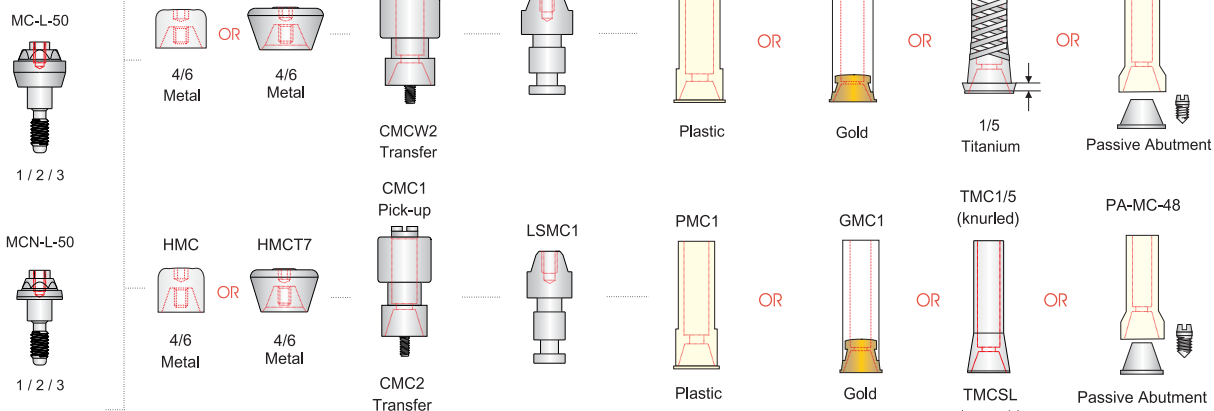
Impression  
Copings

Laboratory  
Analgues

Prosthetic  
Components



Compact  
Conical  
Abutments



Overdenture  
Abutment

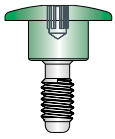


\*Series 1 Screws (M1.4)



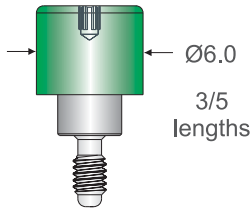
## Cover Screw

CS-L-60



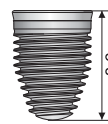
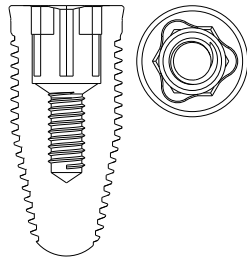
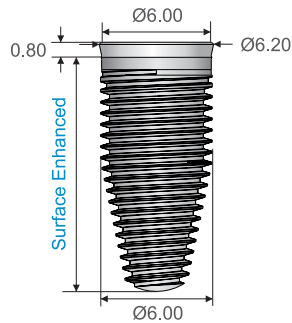
## One-Part Healing Abutments

HA-L-60

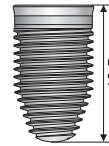


**IA-LH-60 Tapered Implants**  
are available in lengths of:

<b>8.6mm</b>	IA-LH-60-8
<b>10.5mm</b>	IA-LH-60-10
<b>12mm</b>	IA-LH-60-11.5
<b>13.5mm</b>	IA-LH-60-13
<b>16.5mm</b>	IA-LH-60-16



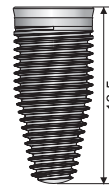
IA-LH-60-8



IA-LH-60-10



IA-LH-60-11.5



IA-LH-60-13



IA-LH-60-16

## Instrumentation

### Insertion Tools

I-HLH-60S



To fit W&H Handpieces

I-HLH-60M



I-HLHU-60S



To fit any Handpieces

I-HLHU-60M



### Peek Bits (Spares)

I-PBIT-L2



Use with Ø4.3, Ø5.0 & Ø6.0 Insertion Tools

### Alternative Insertion Tools

I-WI-LH60



To fit Wrench

### Converters

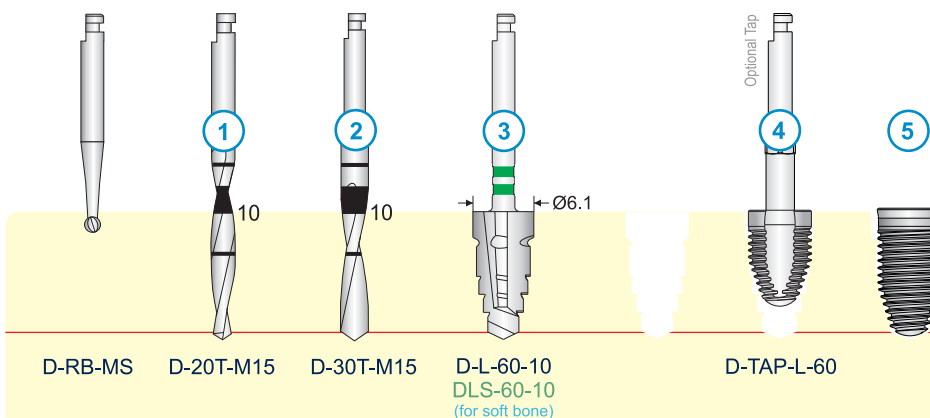
I-WI-C \*



Converts handpiece W&H Insertion Tools to be used with wrench

\* Available in Long and Short Versions

## Site Preparation Sequence



- Step 1: Pilot 2mm Twist Drill to full depth of implant
- Step 2: Twist Drill to full depth of implant
- Step 3: Dedicated Tapered Drill to full depth of implant
- Step 4: Optional Tap for cortical bone
- Step 5: Place Implant

(illustration is for a 10mm implant)

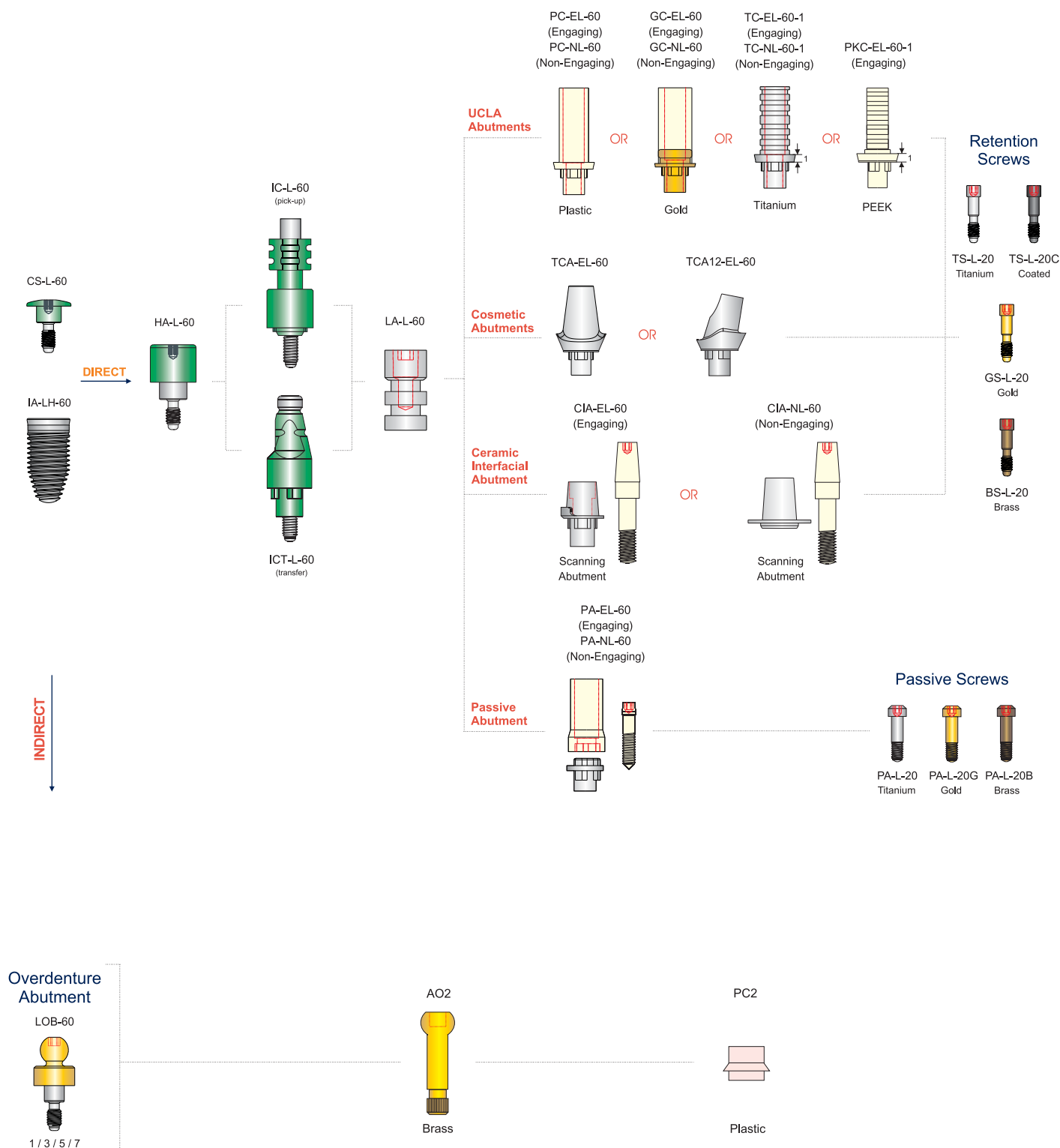
# IA-LH-60 Prosthetic Flowchart

Healing  
Abutments

Impression  
Copings

Laboratory  
Analogues

Prosthetic  
Components



## The TRI-NEX Co-Axis range

The TRI-NEX Co-Axis implant is indicated for use in situations where the long axis of a conventional implant would not coincide with the long axis of the restoration and would therefore result in a restorative compromise.

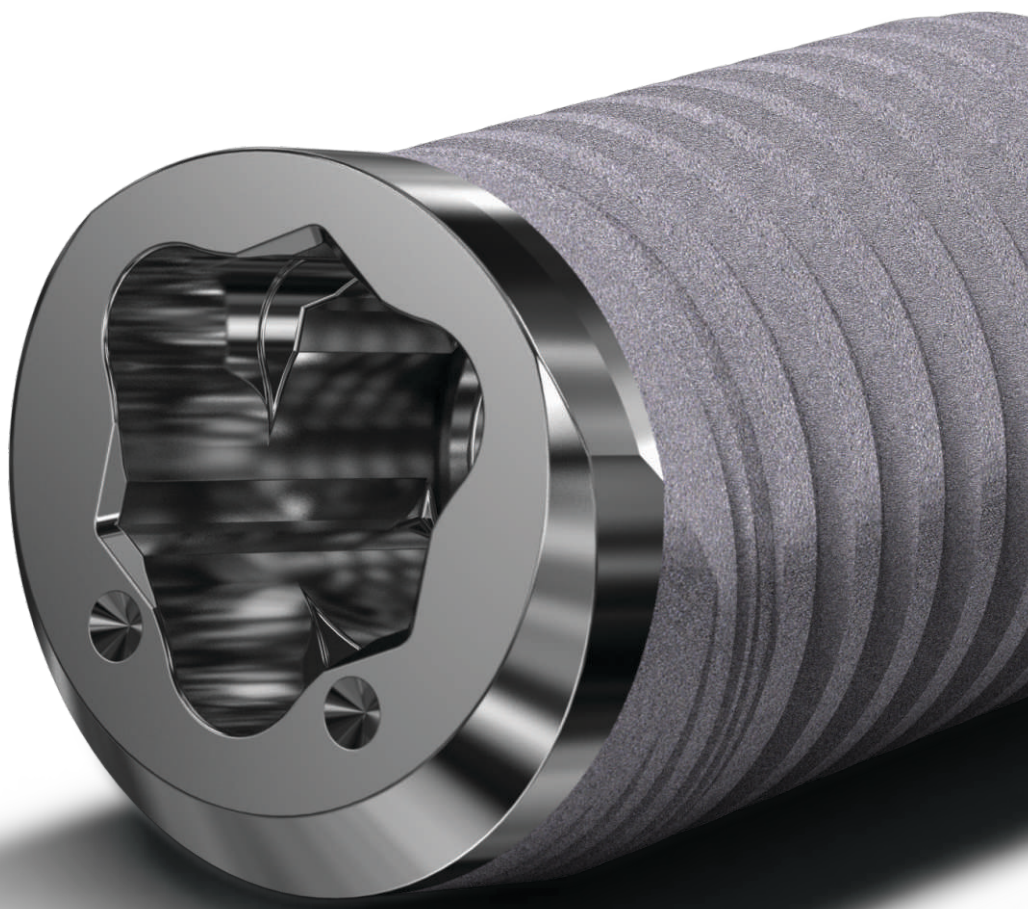
The most common example of this is encountered where an implant is placed in the anterior maxilla at a labially inclined angle, as dictated by the anatomy of the alveolus, resulting in the screw access hole of the prosthetic crown passing through the labial face of the crown. The TRI-NEX Co-Axis implant effectively solves this problem by having the prosthetic platform and screw hole of the implant tilted at an angle of 12 degrees to the long axis of the implant. The axis of the retaining screw is therefore also offset within the body of the implant.

The Co-Axis concept can be applied to solve many other situations where inclined placement of implants is either unavoidable or even an advantage. For example where avoidance of anatomical structures dictates (eg: maxillary sinus, mental foramen) or where bony anatomy can be maximised by inclined placement of an implant. An elegant and truly innovative solution to a frequent problem in implant dentistry.

### Advantages

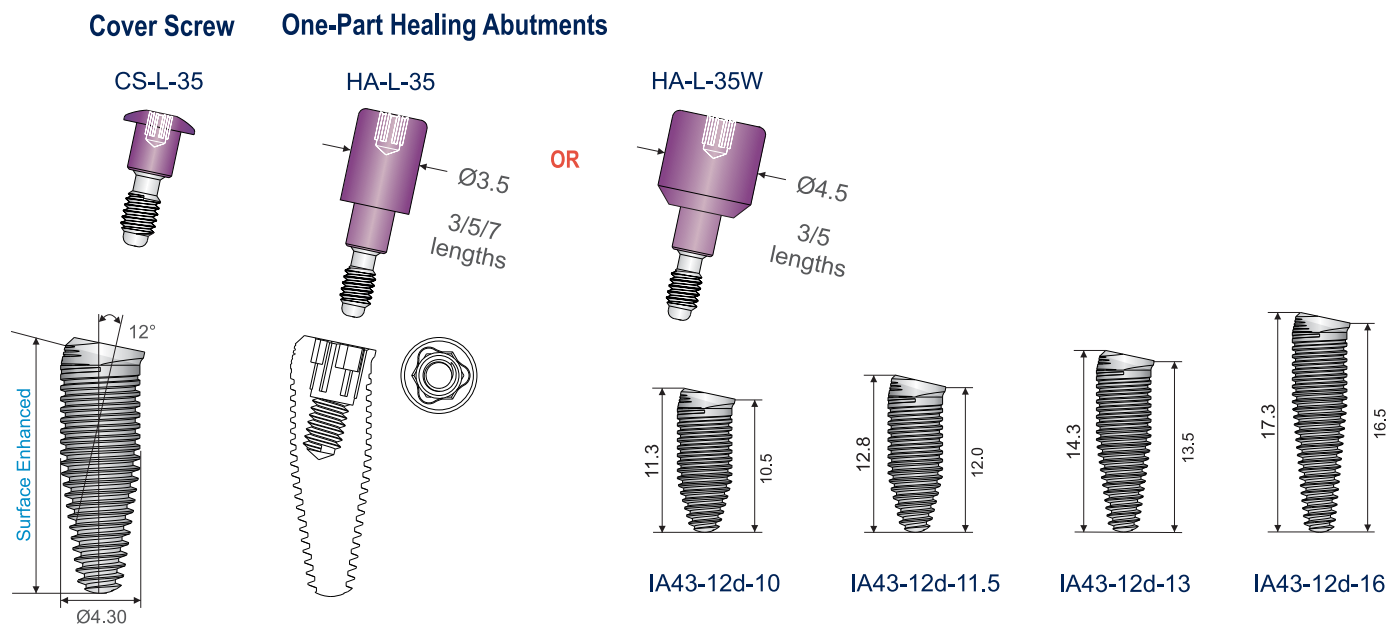
1. The TRI-NEX Co-Axis solution greatly simplifies the restorative treatment of an inclined implant by eliminating the need for angle correcting abutments or custom abutments. This reduces the number and cost of components required, reduces the complexity and cost of laboratory work as well as the number of patient visits required.
2. Aesthetic advantages result from having no need for labially placed screw access holes.
3. Avoidance of anatomical structures by inclined implant placement, without incurring prosthetic complications, is made possible by exploiting the Co-Axis concept.
4. The TRI-NEX Co-Axis implant allows for maximal utilisation of available bone anatomy and may result in the advantage of being able to use either a longer or larger diameter implant.
5. Screw retained restorations can be used instead of cemented restorations.
6. Immediate loading protocols are greatly facilitated by use of the TRI-NEX Co-Axis implant by making screw retained restorations routinely attainable.
7. The tapered TRI-NEX Co-Axis implant provides an anatomically correct implant for ideal use in the anterior Maxilla.



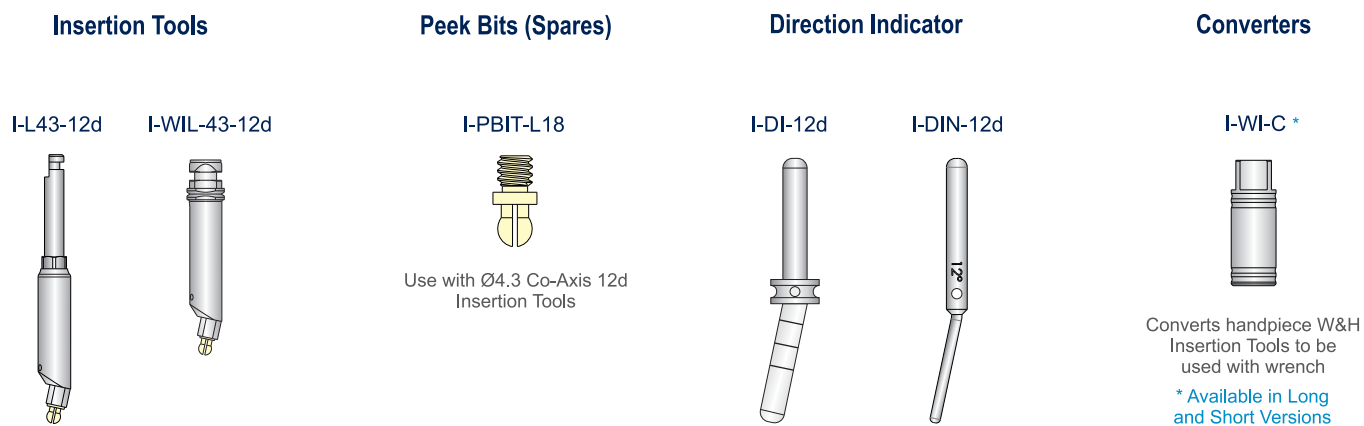


# IA43-12d Co-Axis Implants

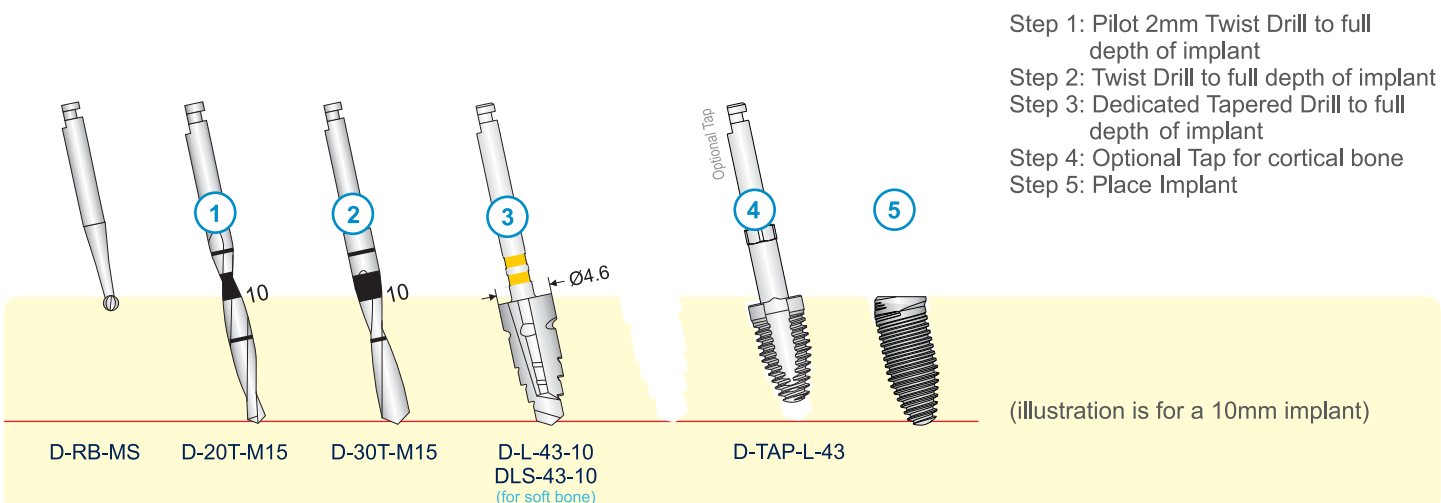
 Diameter 4.3mm Co-Axis Implants used with Diameter 3.5mm Components



## Instrumentation



## Site Preparation Sequence



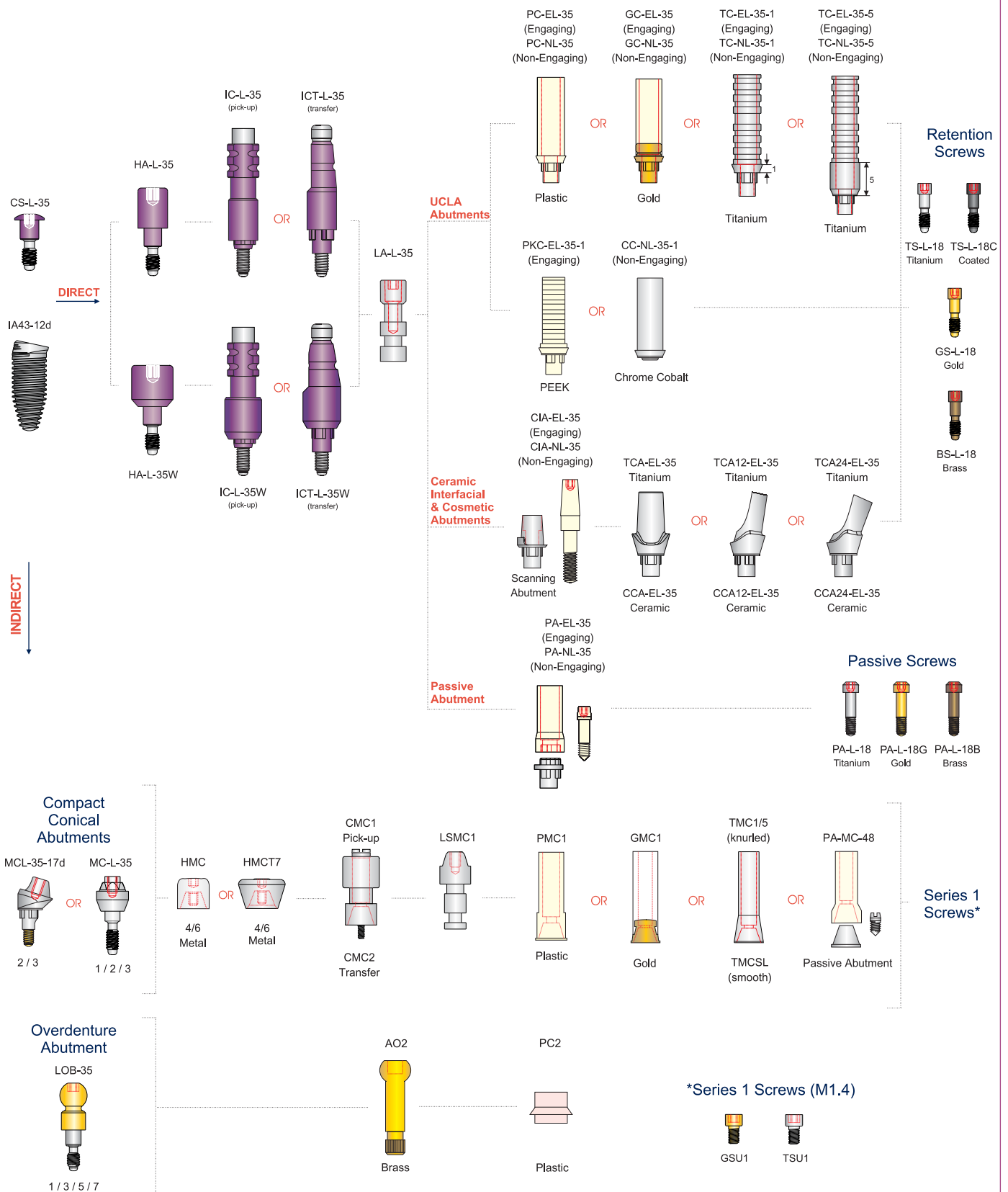
# IA43-12d Prosthetic Flowchart

Healing  
Abutments


Impression  
Copings

Laboratory  
Analogues

Prosthetic  
Components



# IA50-12d Co-Axis Implants

 Diameter 5.0mm Co-Axis Implants used with Diameter 4.3mm Components

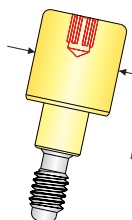
## Cover Screw

CS-L-43



## One-Part Healing Abutments

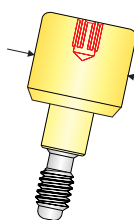
HA-L-43



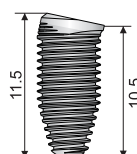
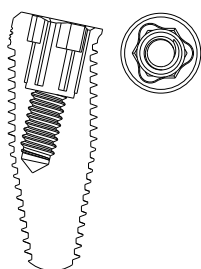
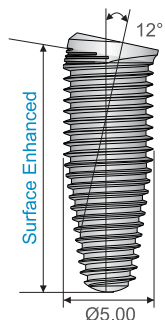
Ø4.5  
3/5/7  
lengths

OR

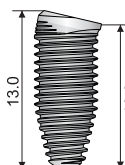
HA-L-43W



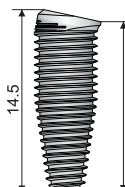
Ø6.0  
3/5  
lengths



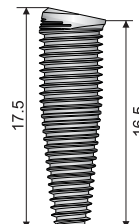
IA50-12d-10



IA50-12d-11.5



IA50-12d-13



IA50-12d-16

## Instrumentation

### Insertion Tools

I-L50-12d



I-WIL-50-12d



### Peek Bits (Spares)

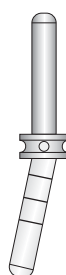
I-PBIT-L2



Use with Ø5.0 Co-Axis 12d  
Insertion Tools

### Direction Indicator

I-DI-12d



I-DIN-12d



### Converters

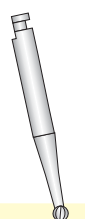
I-WI-C \*



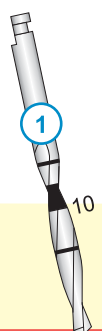
Converts handpiece W&H  
Insertion Tools to be  
used with wrench

\* Available in Long  
and Short Versions

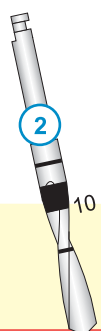
## Site Preparation Sequence



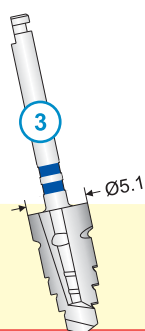
D-RB-MS



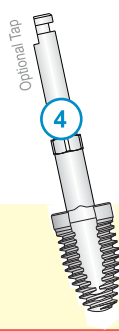
D-20T-M15



D-30T-M15



D-L-50-10  
DLS-50-10  
(for soft bone)



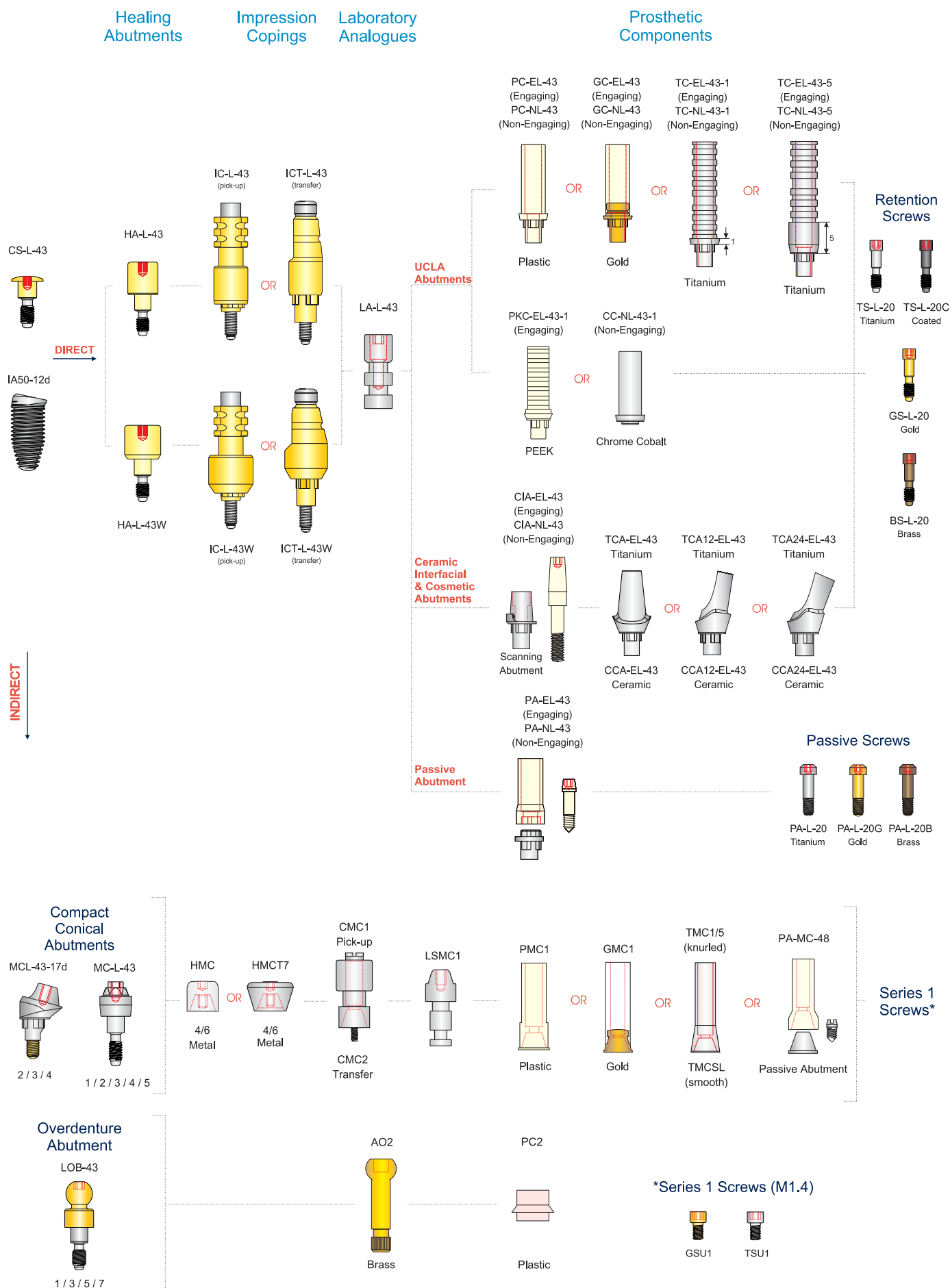
D-TAP-L-50

5

- Step 1: Pilot 2mm Twist Drill to full depth of implant
- Step 2: Twist Drill to full depth of implant
- Step 3: Dedicated Tapered Drill to full depth of implant
- Step 4: Optional Tap for cortical bone
- Step 5: Place Implant

(illustration is for a 10mm implant)

# IA50-12d Prosthetic Flowchart

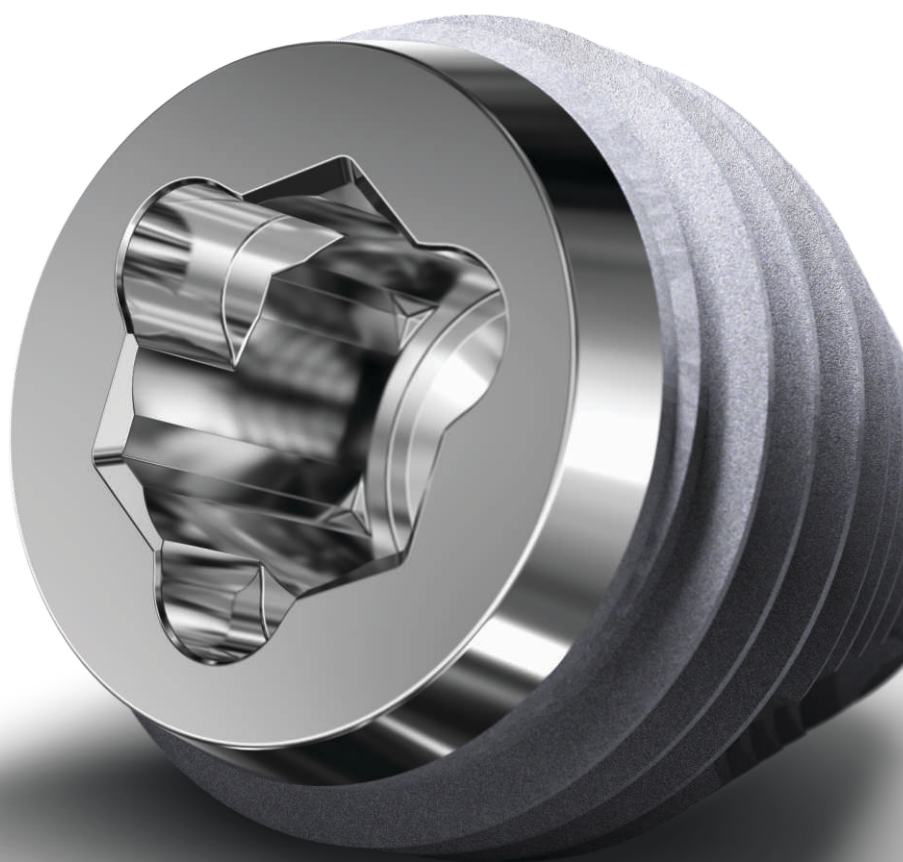


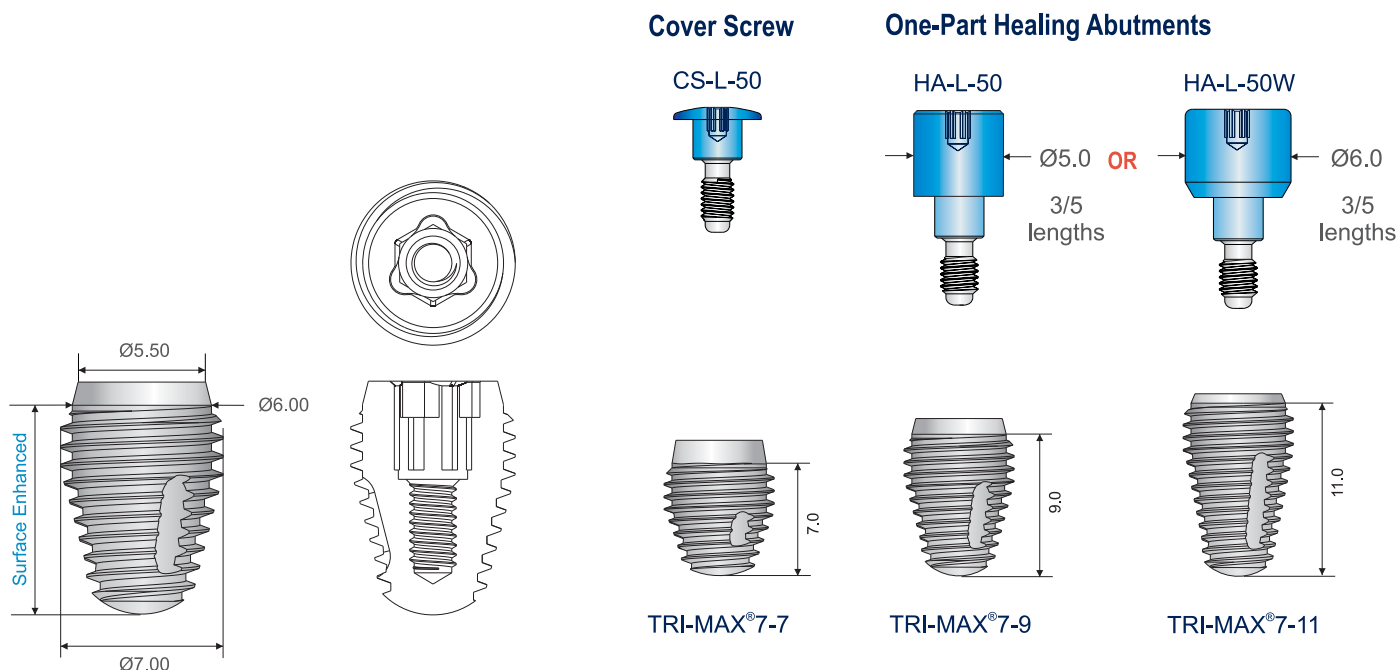


## The TRI-MAX<sup>®</sup> Implant

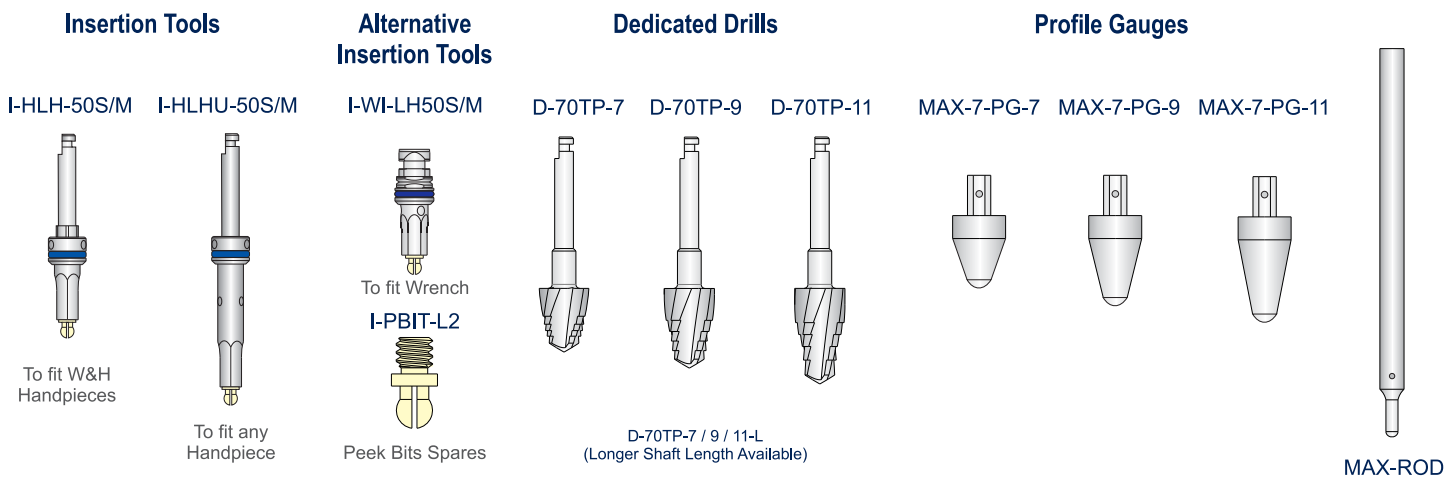
The concept of the TRI-MAX<sup>®</sup> implant, as with the MAX and MAXIT, provides for a design of implant and a surgical protocol which makes immediate placement of the implant into a multi-rooted molar socket attainable.

The TRI-MAX<sup>®</sup> implant features a body with larger than conventional diameter to achieve primary stability from engagement of small portions of the perimeter bony wall of the specially prepared molar socket. The greater taper of the implant body allows for maximal preservation and engagement of inter-radicular bone within the socket of a molar with divergent roots. In the case of a molar tooth with tapering root form, the implant body has a natural fit to the socket shape. The tapered geometry of the implant allows excellent primary stability to be achieved in most molar sockets.

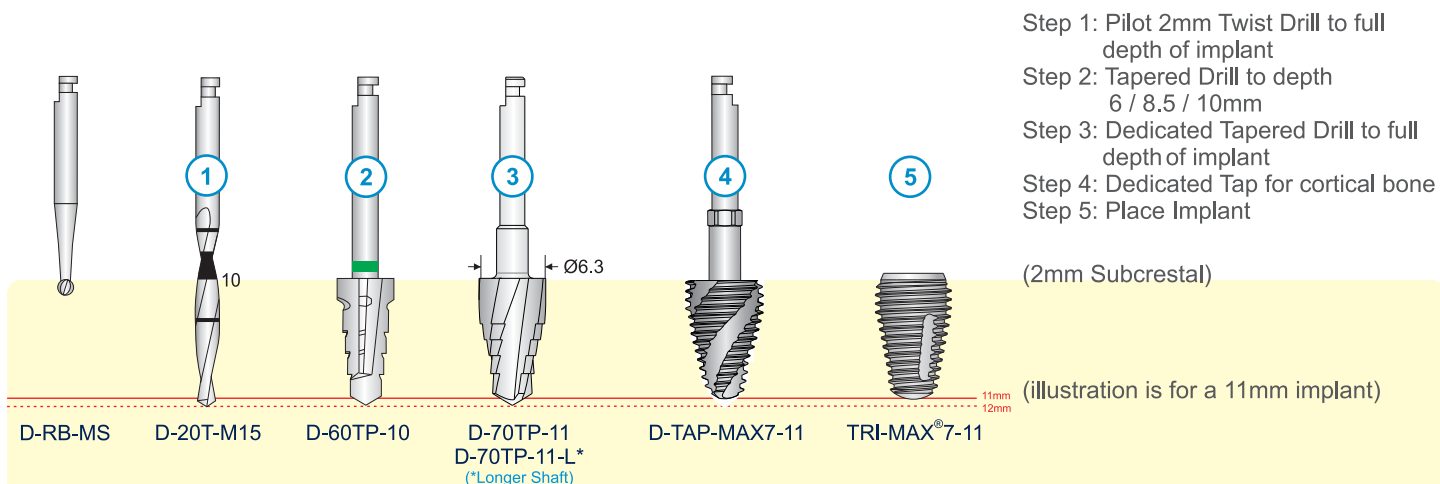




## TRI-MAX<sup>®</sup> 7 Drills & Additional Instrumentation



## Site Preparation Sequence



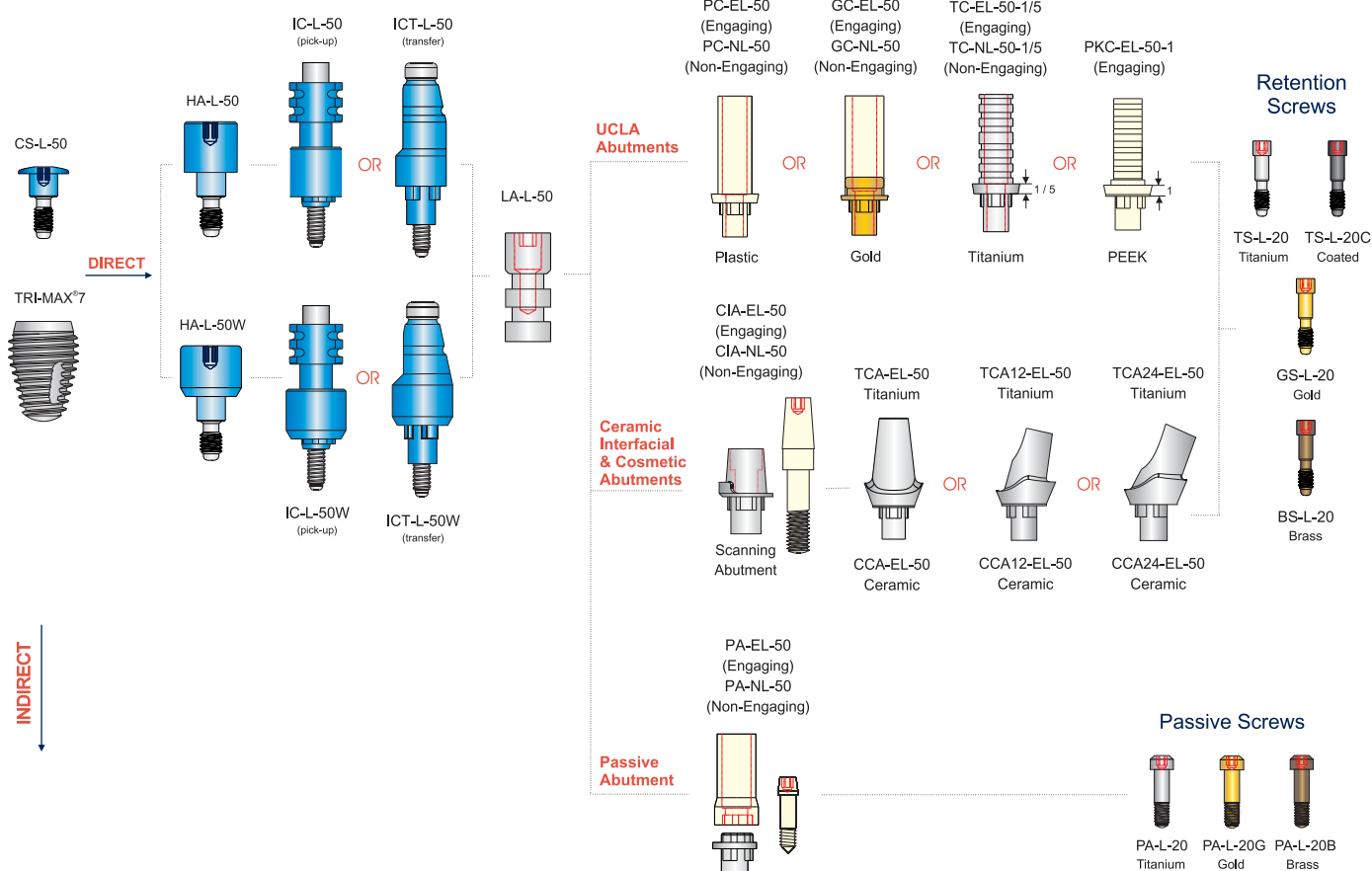
# TRI-MAX<sup>®</sup> 7 Prosthetic Flowchart

Healing  
Abutments

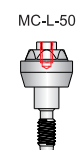
Impression  
Copings

Laboratory  
Analgues

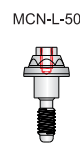
Prosthetic  
Components



Compact  
Conical  
Abutments



1 / 2 / 3



1 / 2 / 3

Overdenture  
Abutment



1 / 3 / 5 / 7

HMCW



4/6  
Metal

HMCTW9



4/6  
Metal

CMCW1  
Pick-up



CMCW2  
Transfer



CMC1  
Pick-up



CMC2  
Transfer



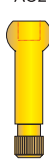
LSMCW1



LSMC1



AO2



Brass

PMCW1



Plastic

PMC1



Plastic

PC2



Plastic

GMCW1



Gold

GMC1



Gold

TMCW



1/5  
Titanium

TMC1/5  
(knurled)



TMCSL  
(smooth)



\*Series 1 Screws (M1.4)



GSU1

PA-MC-60



Passive Abutment

PA-MC-48



Passive Abutment

Series 1  
Screws\*

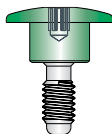


TSU1



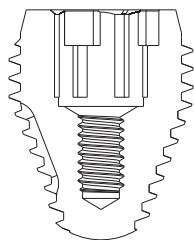
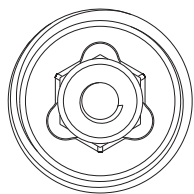
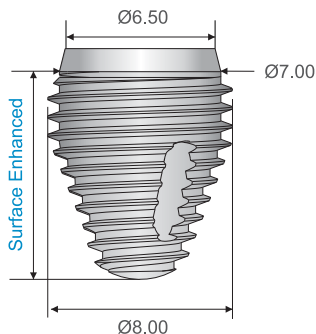
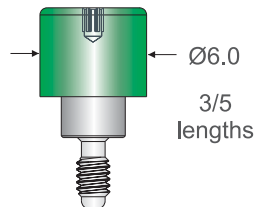
## Cover Screw

CS-L-60

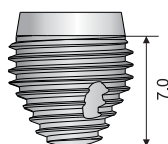


## One-Part Healing Abutments

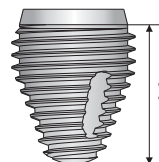
HA-L-60



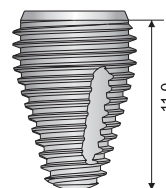
TRI-MAX® 8-7



TRI-MAX® 8-9



TRI-MAX® 8-11



## TRI-MAX® 8 Drills & Additional Instrumentation

### Insertion Tools

I-HLH-60S/M



To fit W&H Handpieces

I-HLHU-60S/M



To fit any Handpiece

### Alternative Insertion Tools

I-WI-LH60



To fit Wrench  
I-PBIT-L2



Peek Bits Spares

### Dedicated Drills

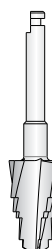
D-80TP-7



D-80TP-9



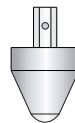
D-80TP-11



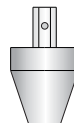
D-80TP-7 / 9 / 11-L  
(Longer Shaft Length Available)

### Profile Gauges

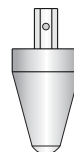
MAX-8-PG-7



MAX-8-PG-9

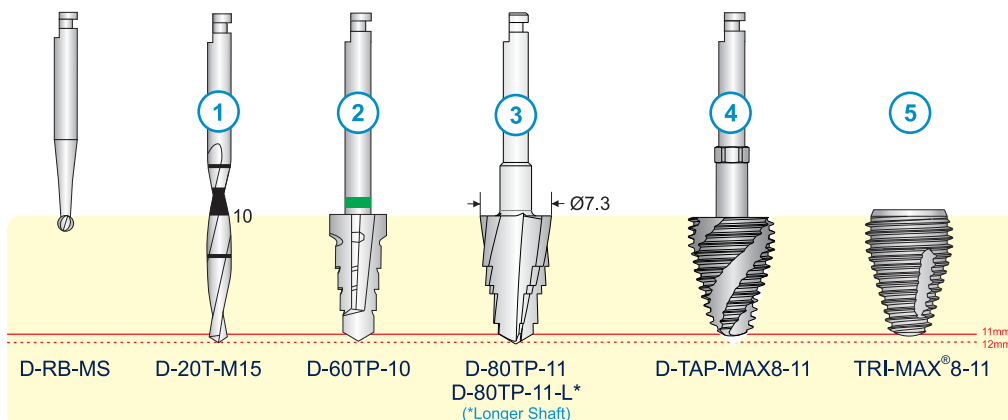


MAX-8-PG-11



MAX-ROD

## Site Preparation Sequence



- Step 1: Pilot 2mm Twist Drill to full depth of implant
  - Step 2: Tapered Drill to depth 6 / 8.5 / 10mm
  - Step 3: Dedicated Tapered Drill to full depth of implant
  - Step 4: Dedicated Tap for cortical bone
  - Step 5: Place Implant
- (2mm Subcrestal)

(illustration is for a 11mm implant)



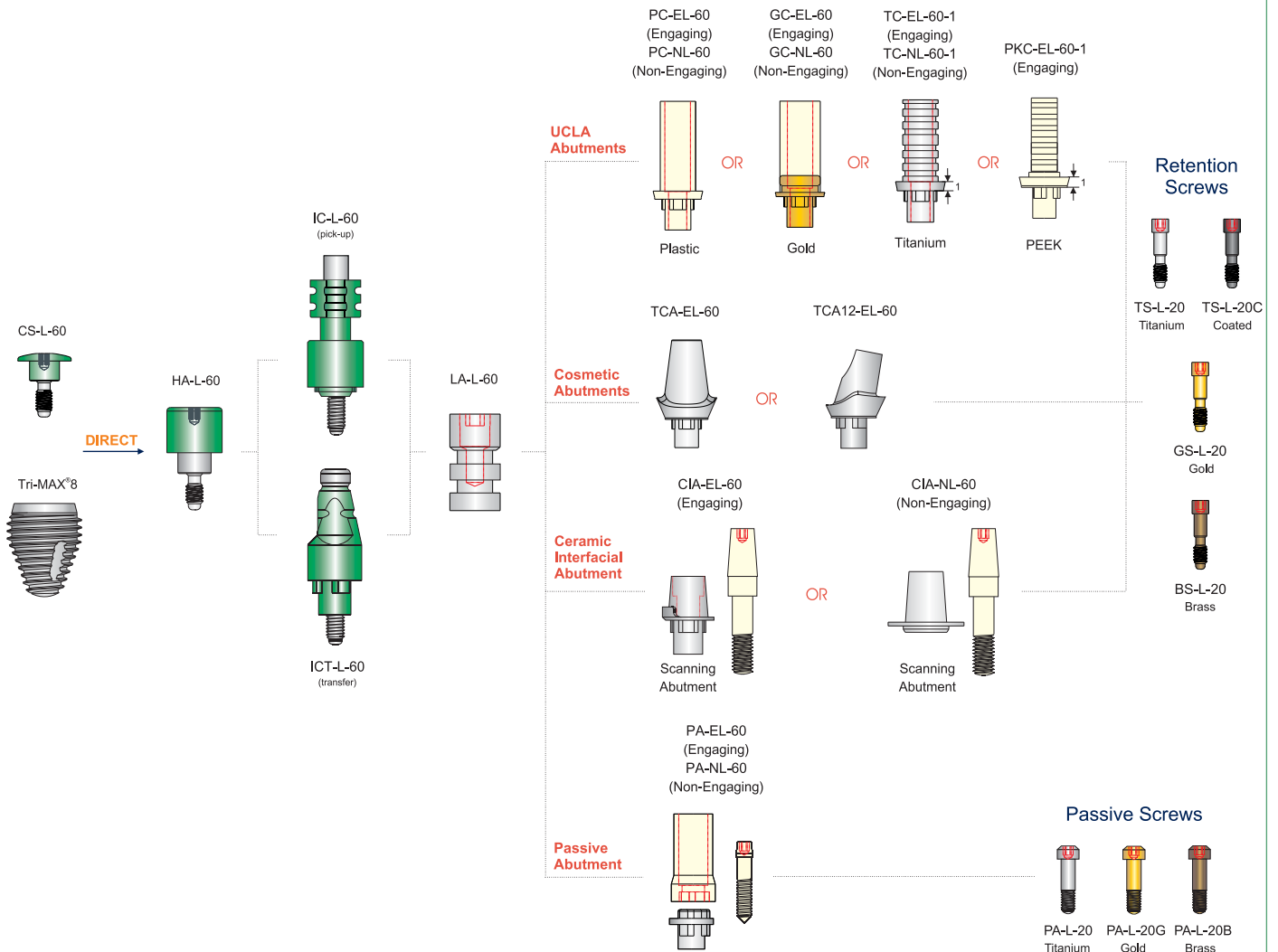
# TRI-MAX® 8 Prosthetic Flowchart

Healing  
Abutments

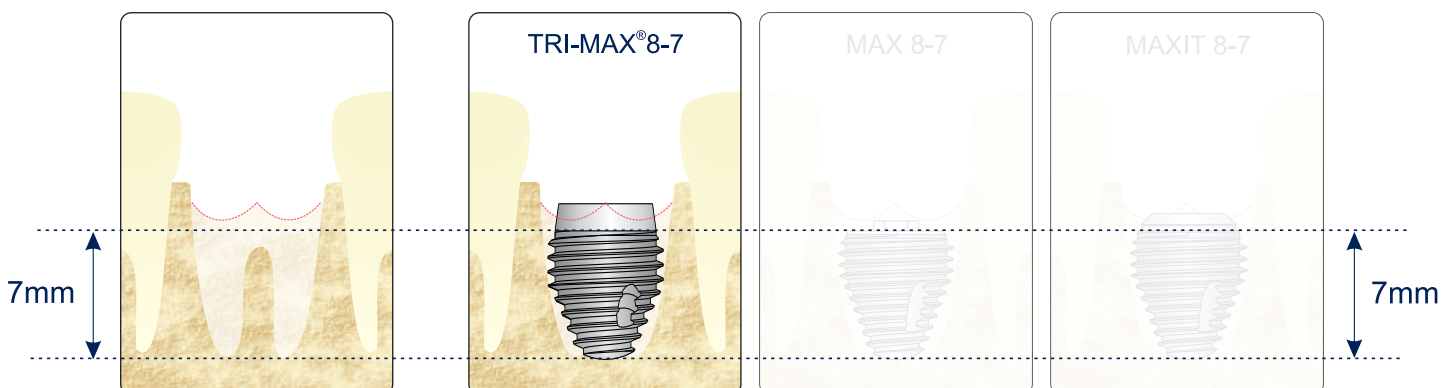
Impression  
Copings

Laboratory  
Analgues

Prosthetic  
Components



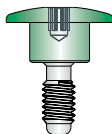
## MAX Placement





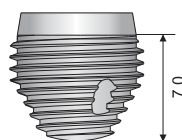
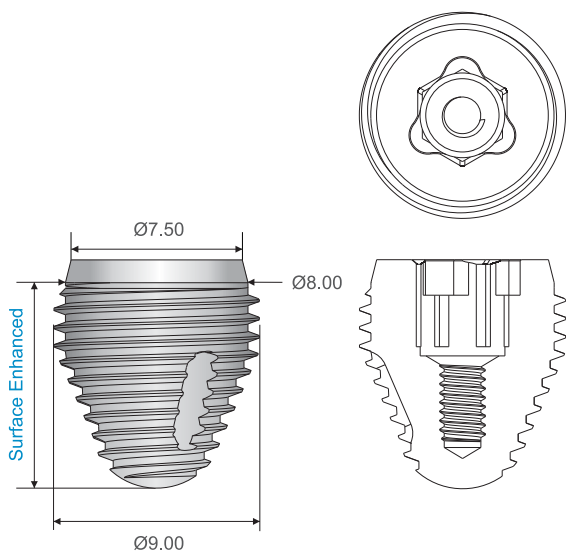
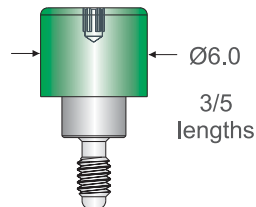
## Cover Screw

CS-L-60

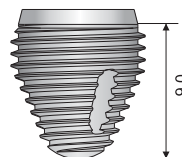


## One-Part Healing Abutments

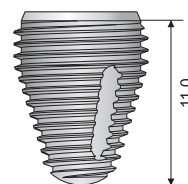
HA-L-60



TRI-MAX® 9-7



TRI-MAX® 9-9



TRI-MAX® 9-11

## TRI-MAX® 9 Drills & Additional Instrumentation

### Insertion Tools

I-HLH-60S/M



To fit W&H Handpieces

I-HLHU-60S/M



To fit any Handpiece

### Alternative Insertion Tools

I-WI-LH60



To fit Wrench  
I-PBIT-L2



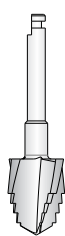
Peek Bits Spares

### Dedicated Drills

D-90TP-7



D-90TP-9



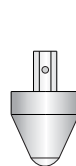
D-90TP-11



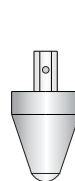
D-90TP-7 / 9 / 11-L  
(Longer Shaft Length Available)

### Profile Gauges

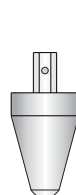
MAX-9-PG-7



MAX-9-PG-9

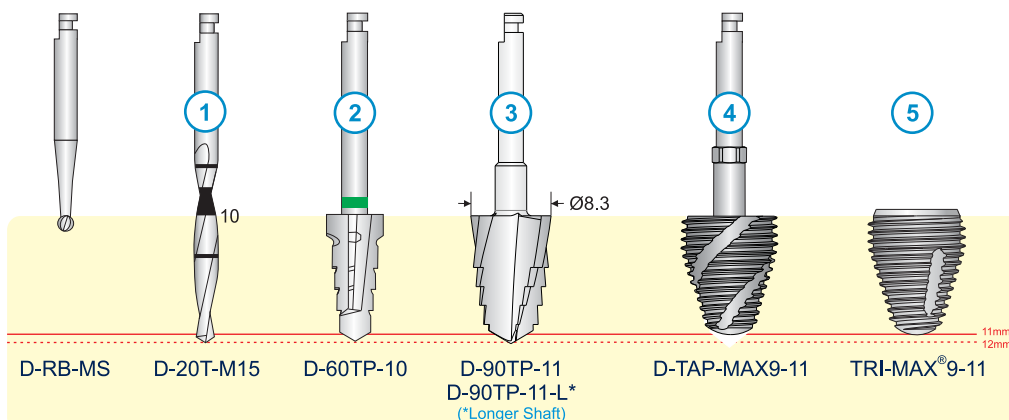


MAX-9-PG-11



MAX-ROD

## Site Preparation Sequence



- Step 1: Pilot 2mm Twist Drill to full depth of implant
  - Step 2: Tapered Drill to depth 6 / 8.5 / 10mm
  - Step 3: Dedicated Tapered Drill to full depth of implant
  - Step 4: Dedicated Tap for cortical bone
  - Step 5: Place Implant
- (2mm Subcrestal)

(illustration is for a 11mm implant)

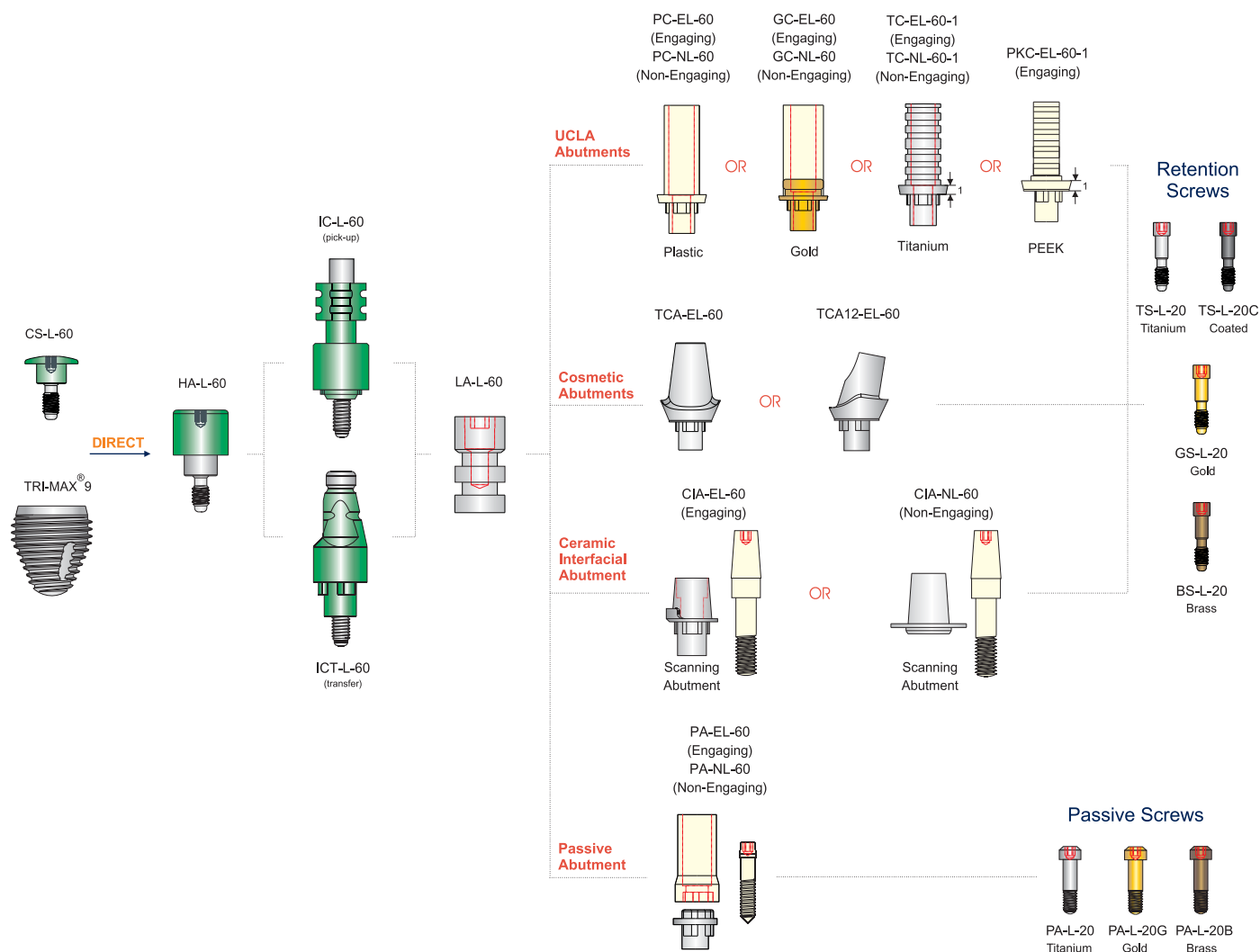
# TRI-MAX<sup>®</sup> 9 Prosthetic Flowchart

Healing  
Abutments

Impression  
Copings

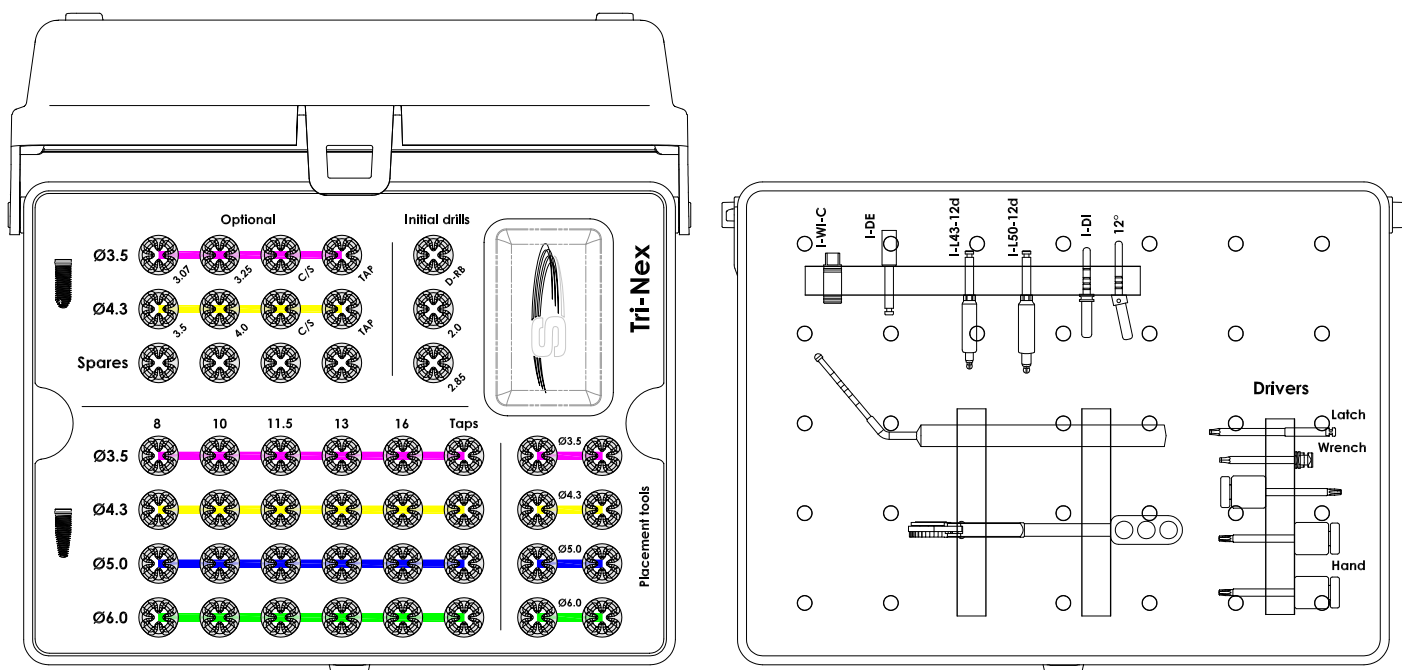
Laboratory  
Analogues

Prosthetic  
Components



## I-TRI-NEX-EG Surgical Tray for placement of TRI-NEX Tapered, Straight & CO-AXIS Implants.

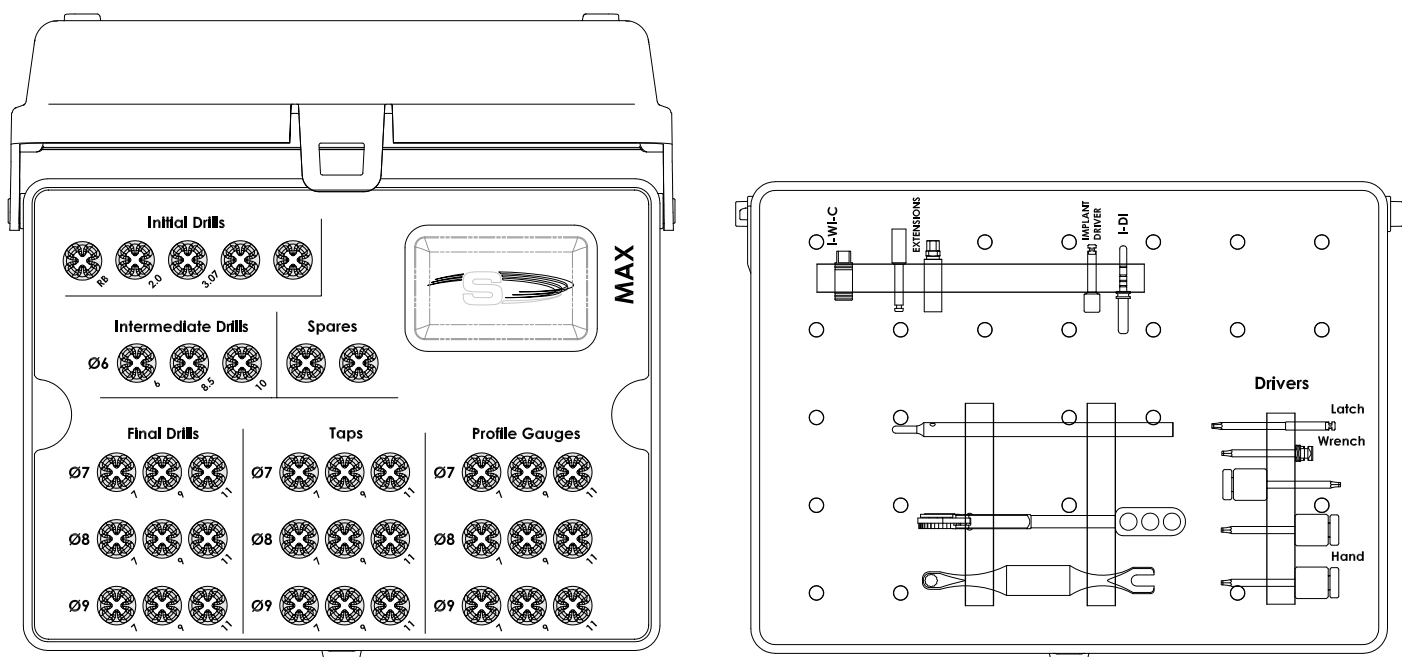
(for more information see CAT-1175)



(for Cleaning & Sterilization instructions see CAT-1039)

## I-MAX-EG Surgical Tray for placement of TRI-MAX® Implants.

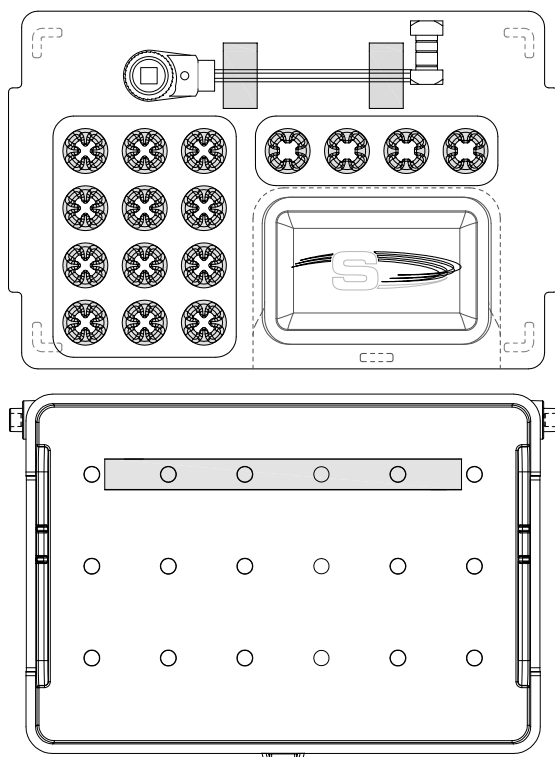
(for more information see CAT-1173)



(for Cleaning & Sterilization instructions see CAT-1039)

## I-PROS-EG Prosthetic Instrument Tray

(for more information see CAT-1178)

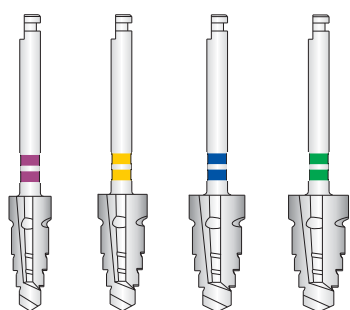


(for Cleaning & Sterilization instructions see CAT-1039)



## TRI-NEX Tapered Drills

### Dedicated Tapered Drills

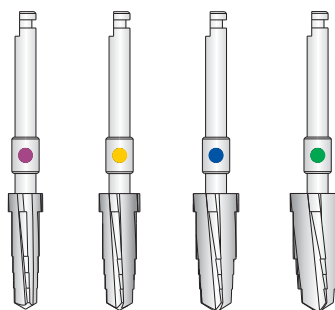


D-L-35 D-L-43 D-L-50 D-L-60

#### Available lengths for Dedicated Tapered Drills

8mm: (D-L-35 / 43 / 50 / 60-8)  
 10mm: (D-L-35 / 43 / 50 / 60-10)  
 11.5mm: (D-L-35 / 43 / 50 / 60-11.5)  
 13mm: (D-L-35 / 43 / 50 / 60-13)  
 16mm: (D-L-35 / 43 / 50 / 60-16)

### Dedicated Tapered Drills for Soft Bone



DLS-35 DLS-43 DLS-50 DLS-60

#### Available lengths for Dedicated "Soft Bone" Tapered Drills

8mm: (DLS-35 / 43 / 50 / 60-8)  
 10mm: (DLS-35 / 43 / 50 / 60-10)  
 11.5mm: (DLS-35 / 43 / 50 / 60-11.5)  
 13mm: (DLS-35 / 43 / 50 / 60-13)  
 16mm: (DLS-35 / 43 / 50 / 60-16)

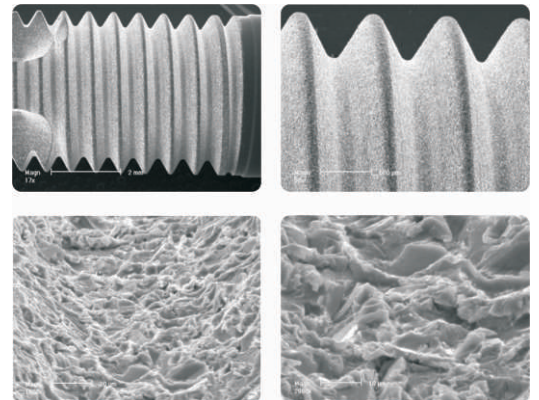
## Southern Implants' Enhanced Surface

The Southern enhanced surface is not a “coating”, it is an **abraded rough surface of Rutile Titanium**. This is the same dense form of titanium common to “machined” surface implants (the anodic oxidation surfaces are not Rutile Titanium; they are a mixture of anatase and amorphous titanium which are less dense and softer forms of titanium).

- A. The first experimentation with this Southern Enhanced surface was in **1992**. After extensive validation it was **put into widespread clinical use in 1997**. It is achieved by a subtractive process in which specifically sized and shaped, sharp cornered, Alumina particles ( $Al_2O_3$ ) are blasted with decontaminated air onto the implant surface with controlled pressure, displacement and time.
- B. The particle size of  $110\mu m$  is supported by the work of Soskalne (Israel) and Wennerberg (Sweden) on the one hand and Ronald (Norway) on the other. Based on their research, greatest bone to titanium bond strength is obtained with abrasion particles **greater than  $75\mu m$  and less than  $170\mu m$** .
- C. Szmukler-Moncler has analyzed and compared the popular implant surfaces in publications and a presentation at the AO, San Francisco 2004. He reports that the Southern Surface is **remarkably consistent** and **free of contaminants** whilst those that are acid etched or oxidized are shown to be highly variable.
- D. There seems to be consensus in the literature that “moderately rough” surfaces pose no risks for the patient and are therefore **safe to use**. Moderately rough was defined by Albrektsson as  $S_a$  1.0 to  $2.0\mu m$  (applied Osseointegration Research Vol 5, 2006). The Southern surface has  $S_a = 1.43$  in one published study and  $S_a = 1.55$  on implants analyzed by Prof Ann Wennerberg in 2006.

Dr Mats Wikström, Chief of Clinics, Brånemark Centre Göteborg, in 2007 concluded that the Southern surface is one of the three best documented moderately rough surfaces on the market.

The Oral Implantology Research Group, University of Otago, conducted Randomized Clinical Trials (RCTs) involving Southern Implants' rough surface. These studies have gone in excess of 10 years in both mandibles and maxillas. The 8 year and 5 year results are published in Cochrane Collaboration reports. Standardized radiographs show marginal bone loss of all the implants to be well within the criteria set by Albrektsson & Zarb (1993, 1998) as well as Fourmouis & Bragger (1999).



In conclusion, it is a **well documented surface** with a **consistent manufacturing process**.



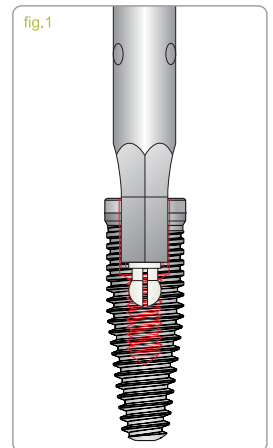


## Implant Placement for TRI-NEX Implants

### Pick-up and placement procedure

1. The tool I-HLH is used to pick up the implant from the packaging.
2. The dimples of the tool and lobes of the implant should line up. This allows alignment of a lobe buccally.
3. The hexagon must be fully engaged before torque is applied to the implant to prevent any damage.
4. The hexagon is fully engaged when the straight portion of the hexagon tool is almost completely sunken in the implant (fig.1)
5. The implant is placed in the prepared site and screwed in with a motor unit at 10 to 15 rpm while applying downwards pressure.

**Important:** The Peek bits (I-PBIT-L18 / L20) should be replaced on a regular basis. General wear & tear are to be expected with regular use. Items sold separately.



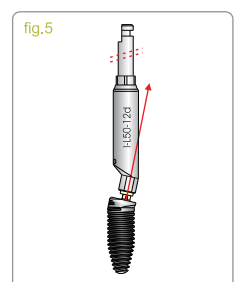
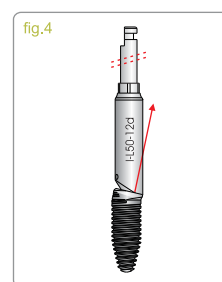
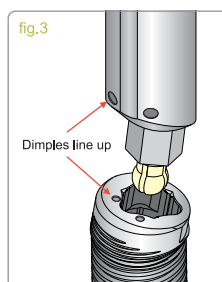
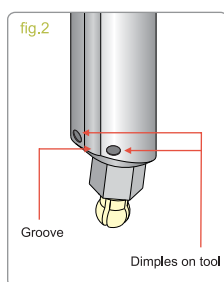
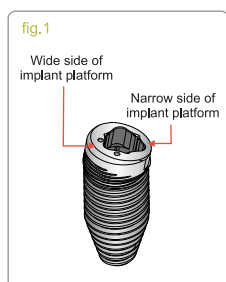
## Instructions for Inserting the Placement Tool for the TRI-NEX Co-Axis Implant

### Insertion tool insertion protocol

1. Identify the two dimples on the implant platform. This side lines up with one of the lobes and the micro-grooves (fig.1).
2. Identify the dimples on the tool (fig.2).
3. Line up the dimples on the placement tool with the dimples on the implant. Push the tool into the implant until the placement tool fits flush with the implant (fig.3).

### Insertion tool removal protocol

1. To remove the placement tool from the implant, pull the placement tool in the direction perpendicular to restorative platform and parallel to prosthetic axis (fig.4).
2. The placement tool will be removed in the direction of the pulling force (fig.5).

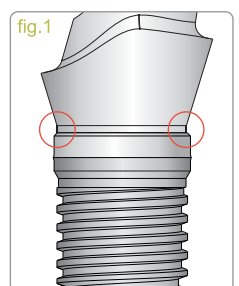


**Important:** The Peek bits (I-PBIT-L18 / L20) should be replaced on a regular basis. General wear & tear are to be expected with regular use. Items sold separately.

## TRI-NEX Natural Horizontal Offset

The **horizontal offset** or **platform shifting** concept implies that the prosthetic components, emerge from the implant at a diameter smaller than the diameter of the implant neck. In this way, the prosthetic connection is displaced horizontally inwards from the perimeter of the implant, creating space for a collar of soft tissue at the abutment / implant interface. This concept has been widely published with reports of improved bone response.

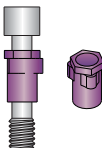


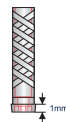
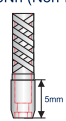


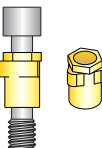


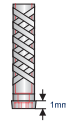
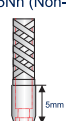









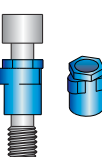


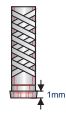
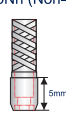









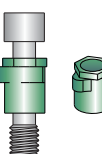


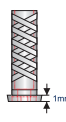
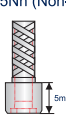








In the figure to the right a TRI-NEX implant is shown with its 12° angled Cosmetic Abutment attached. Please note the horizontal offsets as indicated.



# Converters to External Hex

This component is used to convert the internal TRI-NEX to an external hex connection. These converters are supplied with a special prosthetic screw and it is essential that this screw is used in conjunction with the prosthesis.

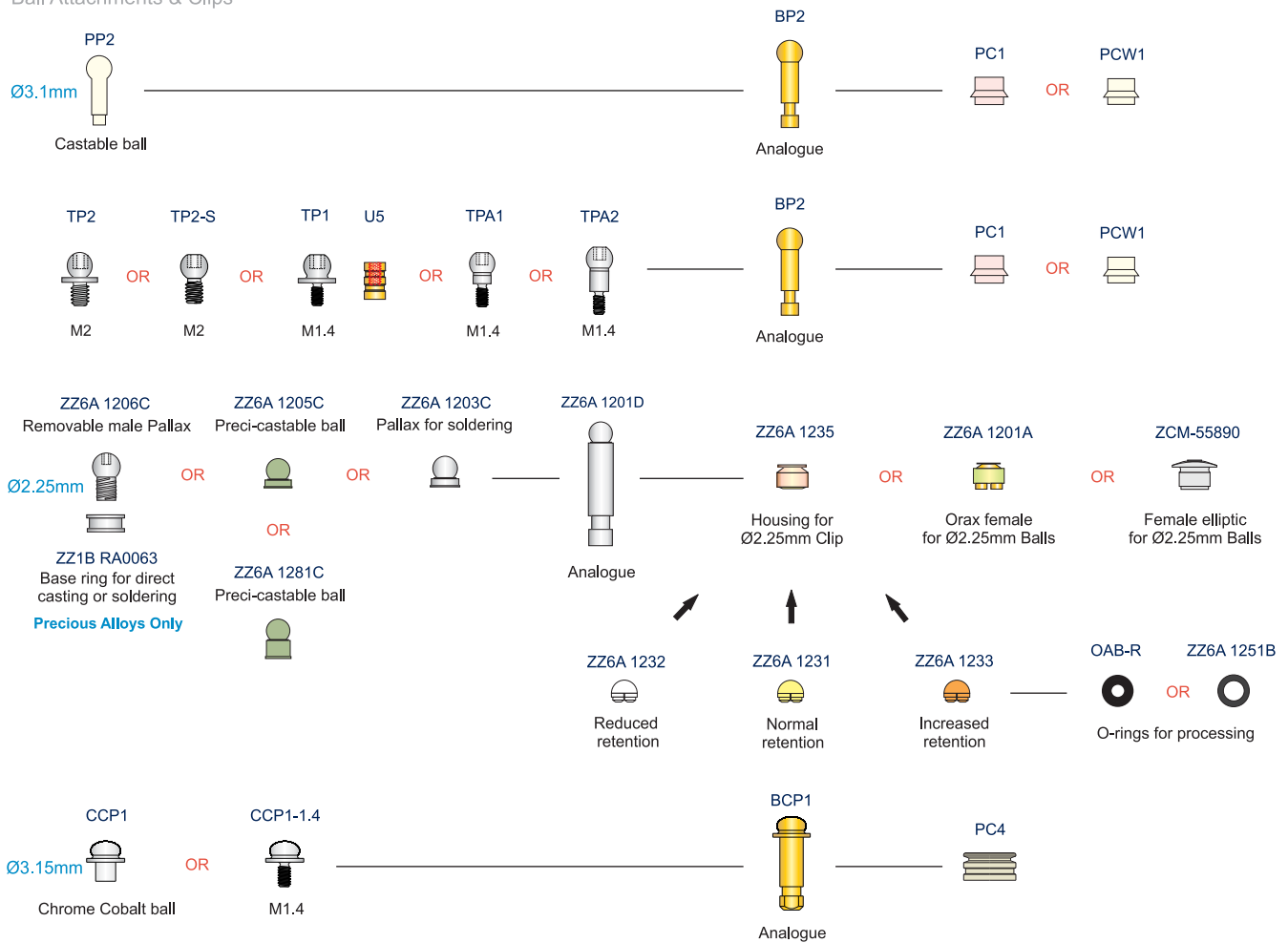
A conventional TRI-NEX impression is taken in the chair and a model is cast by the laboratory using the TRI-NEX analogue. The converter is then placed in the analogue and the prosthesis can now be manufactured. The prosthesis is supplied on the model to the restorative dentist and the converters are then placed in the same position in the mouth before the prosthetics are introduced.

Converters	Prosthetic Components						Angled Abutments
<div>CTH-35 (Hex = 2.54mm)</div> <div></div> <div>Packaged with TS-CL-18 *</div>	<div>SBN 1 (Hex) SBN 5 (Non-Hex)</div> <div></div> <div>Plastic</div> <div>OR</div> <div>GC-EX-34 (Hex) GC-NX-34 (Non-Hex)</div> <div></div> <div>Gold</div>	<div>TCBN 1h (Hex) TCBN 1Nh (Non-Hex)</div> <div></div> <div>1mm</div> <div>OR</div> <div>TCBN 5h (Hex) TCBN 5Nh (Non-Hex)</div> <div></div> <div>5mm</div>	<div>DN</div> <div></div> <div>2 / 3.5 / 5</div>	<div>DBNS12</div> <div></div> <div>Scalloped</div>	<div>Flowcharts for Angled Abutment Prosthetics are in the External Hex Connection Product Catalogue CAT-2020</div>		
<div>CTH-43 (Hex = 2.70mm)</div> <div></div> <div>Packaged with TS-CL-20 *</div>	<div>SB1 (Hex) SB5 (Non-Hex)</div> <div></div> <div>Plastic</div> <div>OR</div> <div>GC-EX-40 (Hex) GC-NX-40 (Non-Hex)</div> <div></div> <div>Gold</div>	<div>TCB 1h (Hex) TCB 1Nh (Non-Hex)</div> <div></div> <div>1mm</div> <div>OR</div> <div>TCB 5h (Hex) TCB 5Nh (Non-Hex)</div> <div></div> <div>5mm</div>	<div>PKB2H</div> <div></div> <div>PEEK</div>	<div>CER-ZR-45</div> <div></div> <div>OR</div> <div>CER-ZR-46</div> <div></div>	<div>MB</div> <div></div> <div>2 / 3.5 / 5</div> <div>OR</div> <div>DB</div> <div></div> <div>2 / 3.5 / 5</div>	<div>DBS12</div> <div></div> <div>Scalloped</div> <div>OR</div> <div>DBS24</div> <div></div> <div>Scalloped</div>	<div>Conical Abutment</div> <div>EB17d OR EB17d-3</div> <div></div> <div>GU-CL-9</div> <div>Compact Conical Abutment</div> <div>AMC17d-3 OR AMC30d-4</div> <div></div> <div>GU-CL-9</div>
<div>CTH-50 (Hex = 2.70mm)</div> <div></div> <div>Packaged with TS-CL-20 *</div>	<div>SBA1 (Hex) SBA5 (Non-Hex)</div> <div></div> <div>Plastic</div> <div>OR</div> <div>GC-EX-50 (Hex) GC-NX-50 (Non-Hex)</div> <div></div> <div>Gold</div>	<div>TCBA 1h (Hex) TCBA 1Nh (Non-Hex)</div> <div></div> <div>1mm</div> <div>OR</div> <div>TCBA 5h (Hex) TCBA 5Nh (Non-Hex)</div> <div></div> <div>5mm</div>	<div>PKBA2H</div> <div></div> <div>PEEK</div>	<div>CER-ZR-56</div> <div></div> <div>OR</div> <div>CER-ZR-57</div> <div></div> <div>OR</div> <div>CER-ZR-58</div> <div></div>	<div>DBA</div> <div></div> <div>2 / 3.5 / 5</div>	<div>DBAS12</div> <div></div> <div>Scalloped</div> <div>OR</div> <div>DBAS24</div> <div></div> <div>Scalloped</div>	<div>Conical Abutment</div> <div>EBA17d OR EBA17d-3</div> <div></div> <div>GU-CL-9</div> <div>Compact Conical Abutment</div> <div>ABAMC17D-3 OR ABAMC30D-4</div> <div></div> <div>GU-CL-9</div>
<div>CTH-60 (Hex = 2.70mm)</div> <div></div> <div>Packaged with TS-CL-20 *</div>	<div>SBBB1 (Hex) SBBB5 (Non-Hex)</div> <div></div> <div>Plastic</div> <div>OR</div> <div>GC-EX-60 (Hex) GC-NX-60 (Non-Hex)</div> <div></div> <div>Gold</div>	<div>TCBBB1h (Hex) TCBBB1Nh (Non-Hex)</div> <div></div> <div>1mm</div> <div>OR</div> <div>TCBBB5h (Hex) TCBBB5Nh (Non-Hex)</div> <div></div> <div>5mm</div>	<div>CER-ZR-67</div> <div></div> <div>OR</div> <div>CER-ZR-68</div> <div></div> <div>OR</div> <div>CER-ZR-69</div> <div></div>	<div>DBBB</div> <div></div> <div>2 / 3.5 / 5</div>	<div>DBBBS12</div> <div></div> <div>Scalloped</div> <div>OR</div> <div>DBBBS24</div> <div></div> <div>Scalloped</div>	<div>Conical Abutment</div> <div>EBBB17d</div> <div></div> <div>GU-CL-9</div> <div>Compact Conical Abutment</div> <div>ABBBMC17D-3 OR ABBBMC30D-4</div> <div></div> <div>GU-CL-9</div>	

\* Converter Screws can be purchased separately

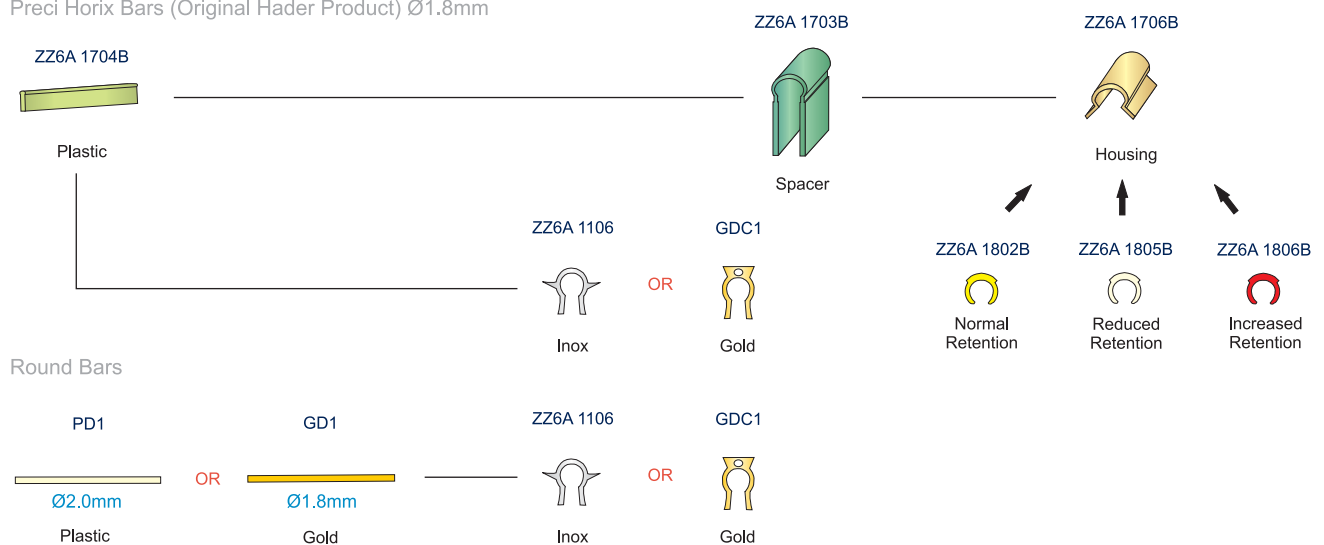
# Precision Attachments

## Ball Attachments & Clips



# Bars

## Preci Horix Bars (Original Hader Product) Ø1.8mm














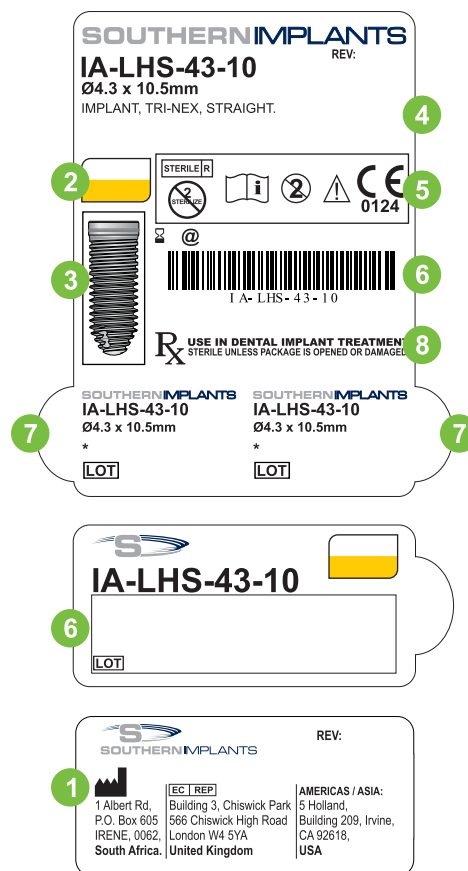




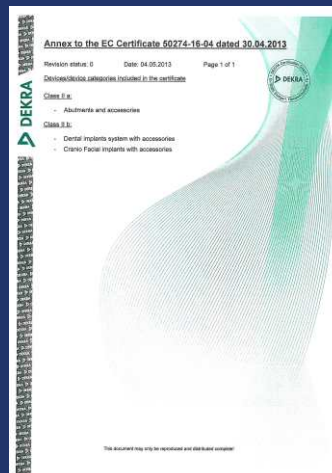
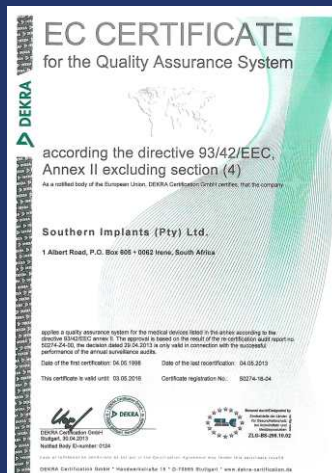
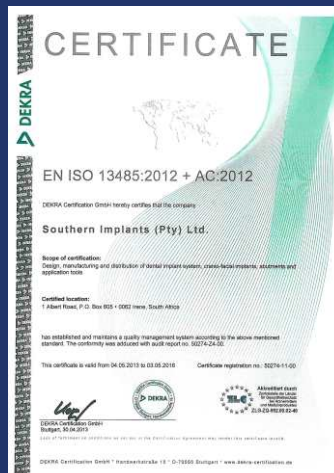
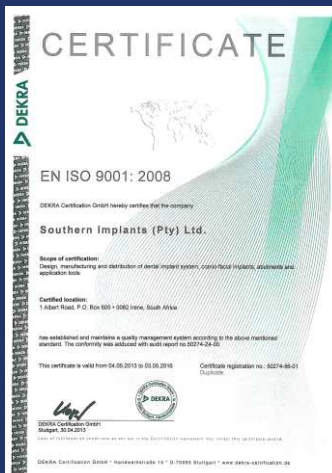
# Explanation of symbols

The following symbols are used on our packaging labels and they indicate the following:

- 1  **Manufacturer**
- 2  **Colour code**
- 3 **Implant image**
- 4 **Implant details and size**
- 5  **Batch code**  
  
 **Use by mm-yy**  
  
 **CE mark**  
  
 **Sterilization using Irradiation**  
  
 **Do not reuse**  
  
 **Do not Resterilize**  
  
 **Caution**  
  
 **Consult instruction for use**
- 6 **Barcode**  
Contains the product code and lot number.
- 7 **Sticker**  
For documentation purpose.
- 8  **Caution: (US Only) US Federal Law restricts this device to sale to, or on the order of a licenced dentist or physician**



Images are for illustration purposes only and do not necessarily accurately represent the product.





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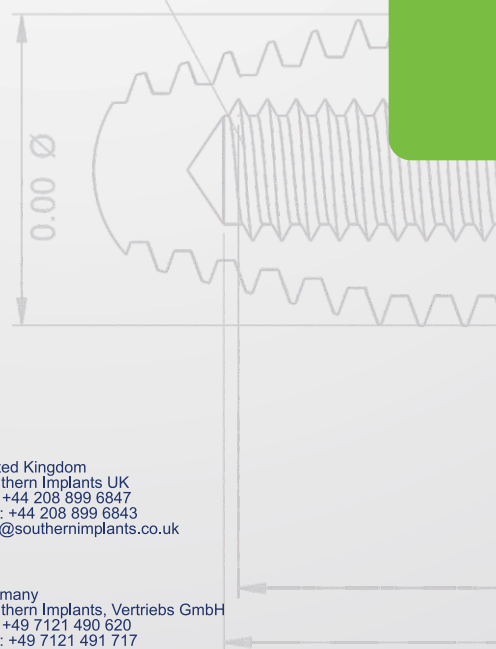
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SECTION A-A  
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