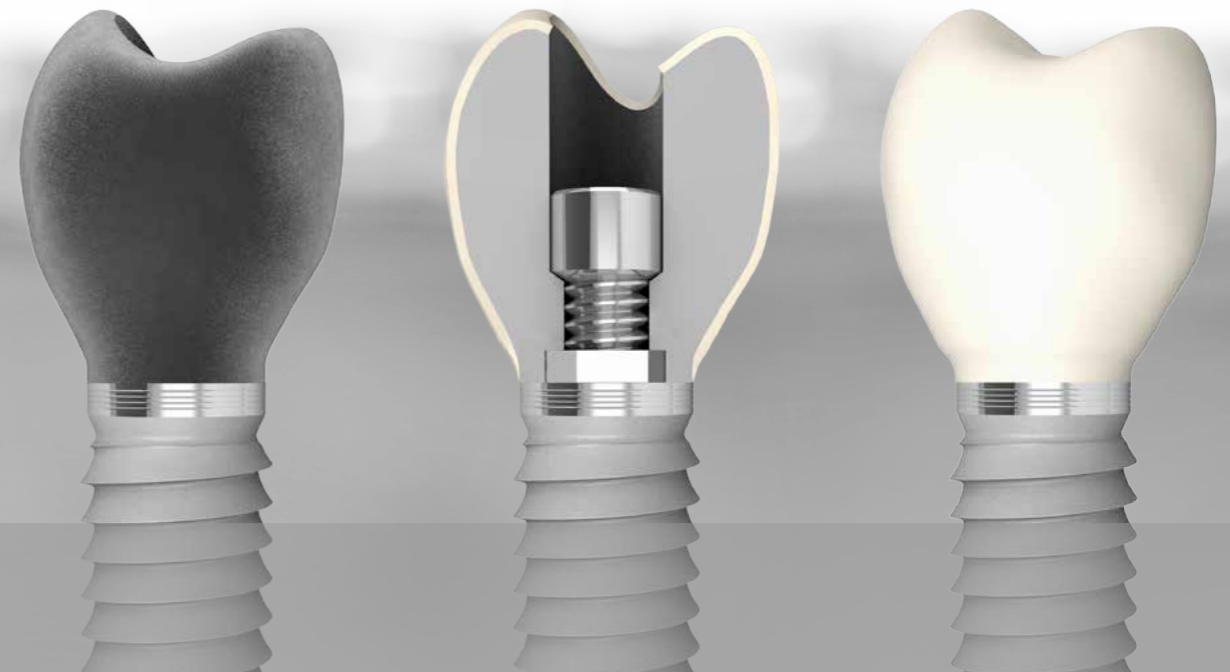


**TSH®**

The standardized  
connection

# Easy prosthetic connection

- Improved aesthetics results
- Patient comfort from the start
- Tissue care and maintenance



# Surface Avantblast®

Guarantees restoration stability in short term, medium and long term.

Avantblast is the surface that characterizes the TSH® implant, contributing **excellent bone-implant fusion stability**.

Avantblast® has been [endorsed scientifically\\*](#). It has seen 20 years of use and millions of patients who have benefitted.

# The simplicity of the TSH® connection

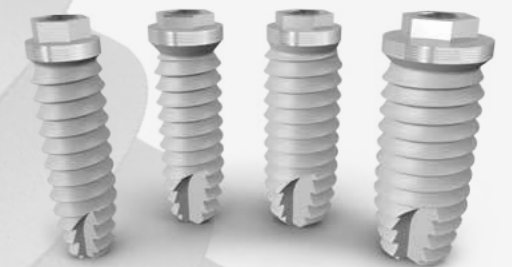
**The TSH® Phibo® implant system has been designed to simplify and reduce the clinical processes and restoration times.**

- Yields improve aesthetic results and patients comfort from the start
- Ensures tissue care and maintenance

Visit Bibliography section for scientific studies.



**The body of the TSH® implant is self-tapping offering this main characteristics:**



- Minimally invasive characteristics
- Directional tapping, to facilitate implant insertion and shorten the surgical times
- Reduction of the increase in bone temperature during implant insertion
- Biomechanical stimulation of the bone tissue
- Maximum implant stability upon insertion

Simplicity

Benefits

# The advantages of digitalization

## Optimises all the solutions of a customised prosthesis.

TSH® has been designed for integration on a workflow that is 100% digital. More simple rehabilitations which provides more accurate results.



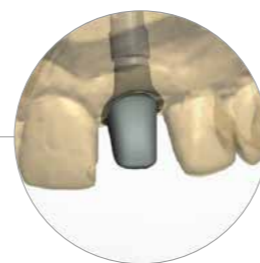
Designing smiles



Implant system



Digital data collection



Restoration design

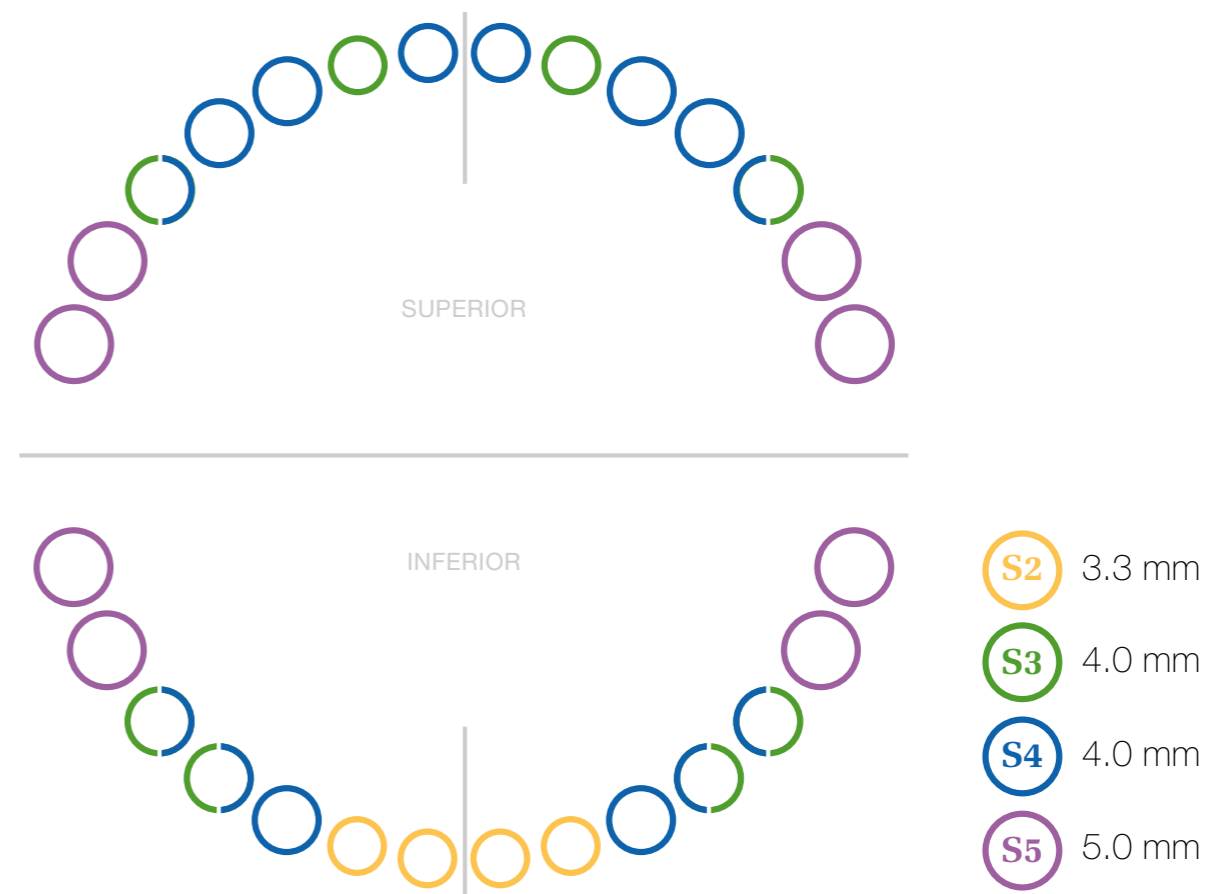
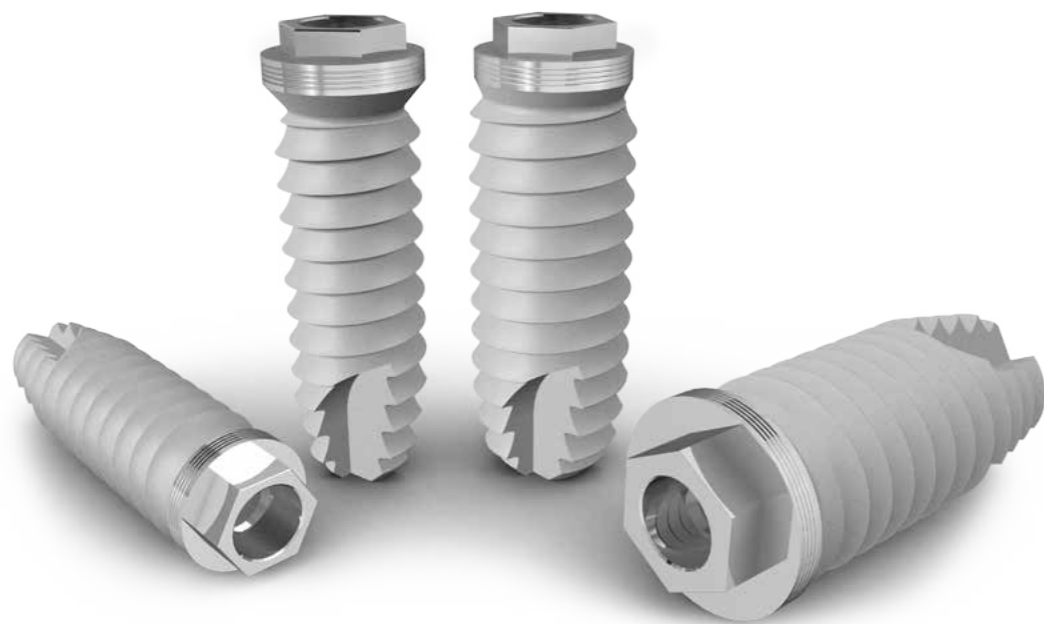


Prosthesis production



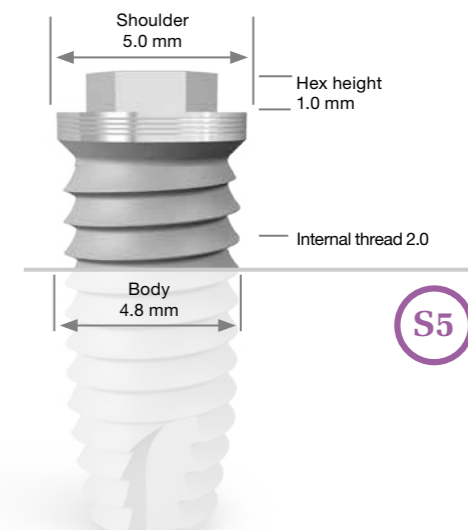
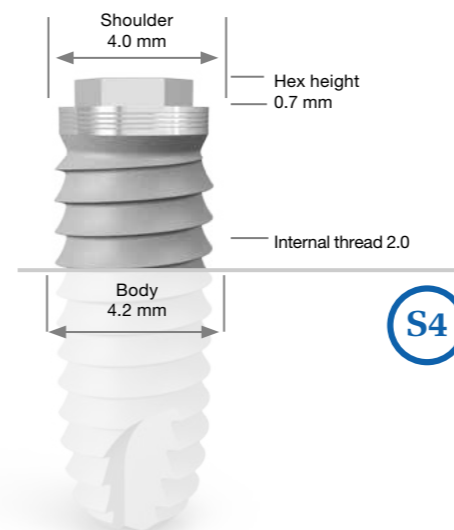
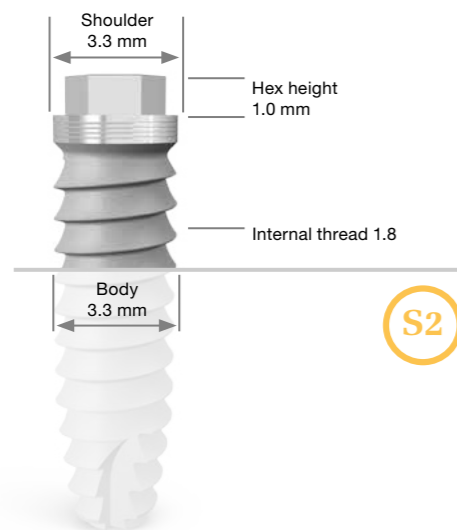
Final tooth

# Insertion sectors



# Platforms and dimensions

The TSH<sup>®</sup> implant is designed to position the implant platform above the bone crest. The drilling length for implant insertion is the length of the implant.



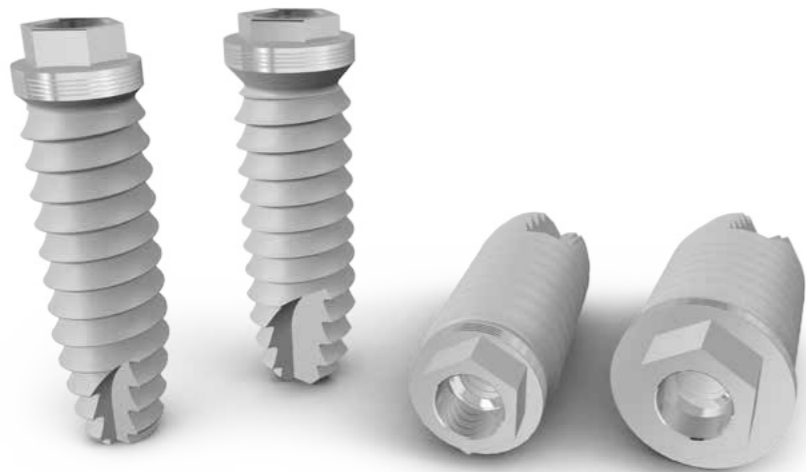
# Heights and references



Reference	Length
TSH 02.100	10.0 mm
TSH 02.115	11.5 mm
TSH 02.130	13.0 mm
TSH 02.145	14.5 mm
TSH 02.160	16.0 mm



Reference	Length
TSH 03.085	8.5 mm
TSH 03.100	10.0 mm
TSH 03.115	11.5 mm
TSH 03.130	13.0 mm
TSH 03.145	14.5 mm
TSH 03.160	16.0 mm



Reference	Length
TSH 04.085	8.5 mm
TSH 04.100	10.0 mm
TSH 04.115	11.5 mm
TSH 04.130	13.0 mm
TSH 04.145	14.5 mm
TSH 04.160	16.0 mm



Reference	Length
TSH 05.085	8.5 mm
TSH 05.100	10.0 mm
TSH 05.115	11.5 mm
TSH 05.130	13.0 mm

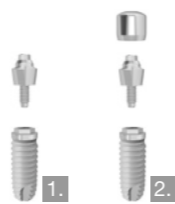
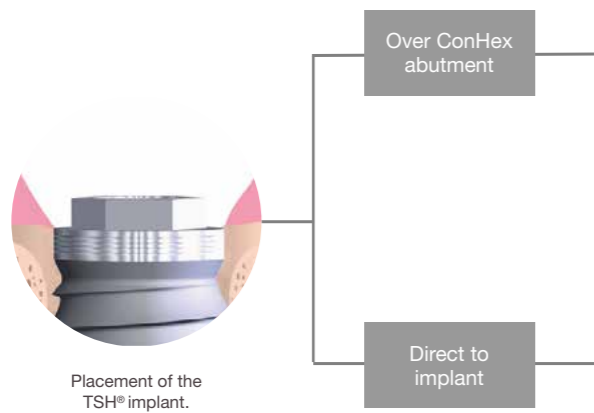
The information contained in this document is exclusively for health professionals. TSH® has the CE marking and complies with the European Directive 93/42 / EEC of Medical Devices. The availability of TSH® portfolio is subject to the availability of relevant medical records under the applicable regulation in each country.





# Restoration guide

## Single unit and multiple screwed solutions



1. Conhex abutment - straight or angled- (final torque 35 Ncm).
2. ConHex healing cap (manual adjustment).



3. Conventional or digital impression taking.
4. Casting cylinder or CAD-CAM structure.
5. Final torque 25 Ncm.



1. Healing Abutment (manual adjustment).

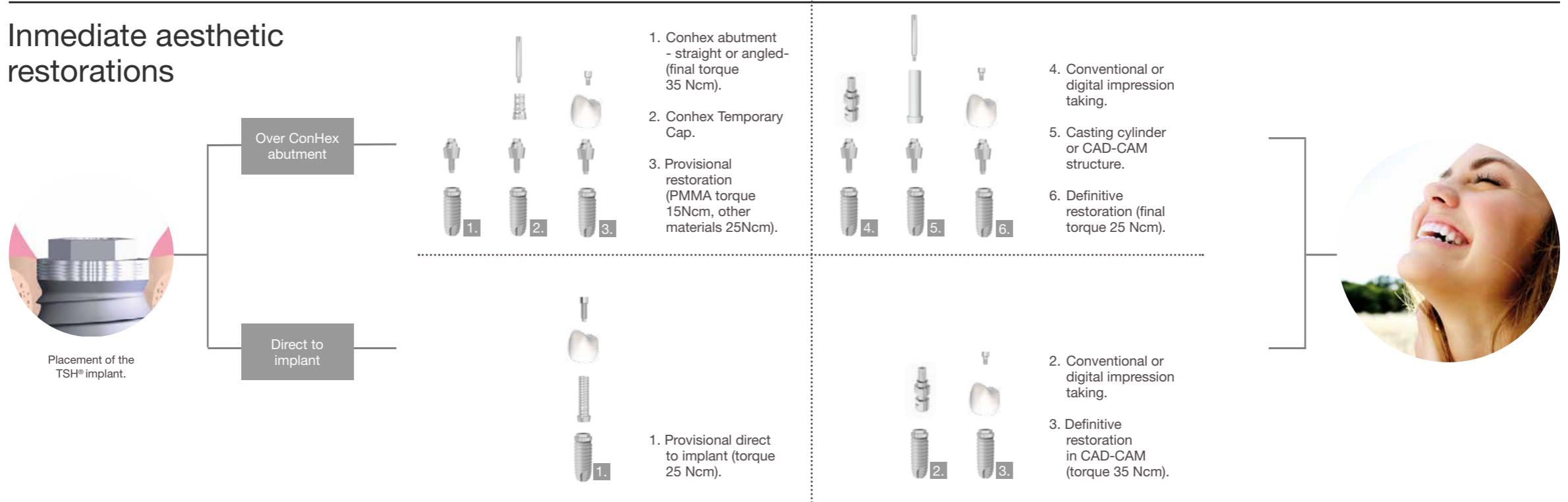


2. Casting cylinder or CAD-CAM structure.
3. Final torque 35 Ncm.



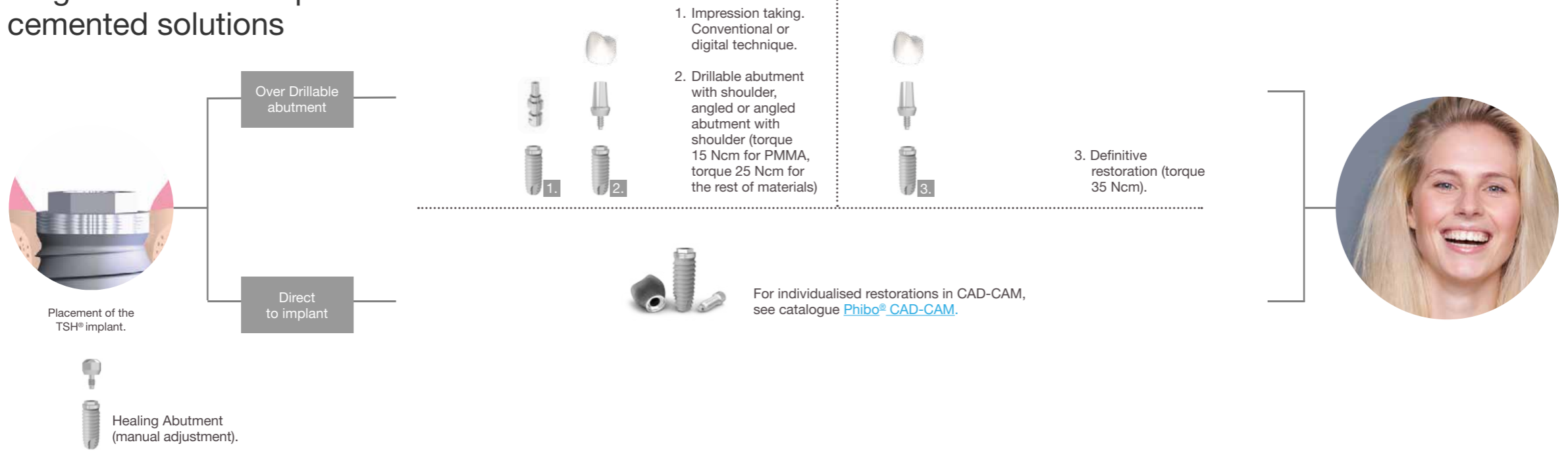
# Restoration guide

## Immediate aesthetic restorations



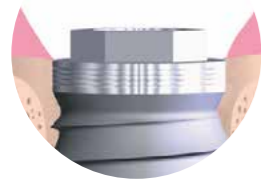
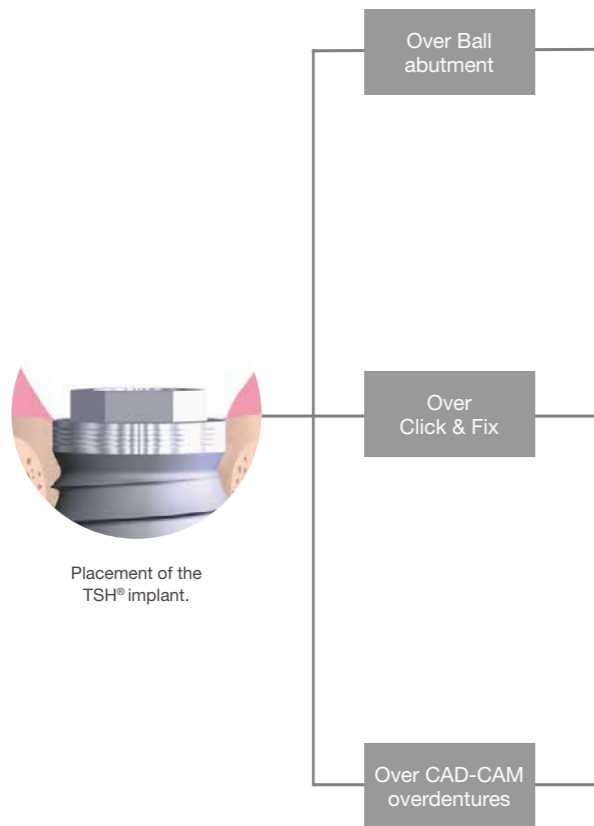
# Restoration guide

## Single unit and multiple cemented solutions



# Restoration guide

## Overdentures restorations



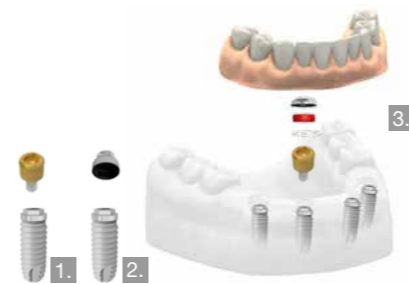
Placement of the TSH® implant.



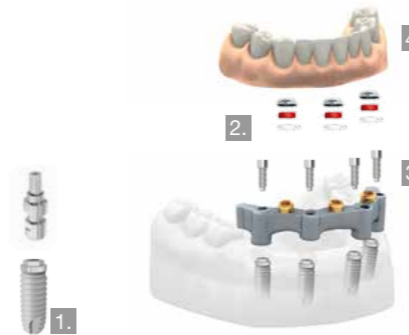
Healing Abutment (manual adjustment).



1. Conventional or digital impression taking.
2. Ball abutment (torque 35 Ncm).
3. Provisional or definitive restoration.



1. Click & Fix abutment (torque 30 Ncm).
2. Conventional or digital impression taking.
3. Provisional or definitive restoration.



1. Conventional or digital impression taking.
2. Click & Fix abutment over bar (torque 30 Ncm).
3. Bar screw to implant (torque 35 Ncm).
4. Provisional or definitive restoration.



# References

## Restorations

### Healing abutments



H10.2030	TSH® S2 3.0mm Healing Abutment
H10.2050	TSH® S2 5.0mm Healing Abutment
H10.2070	TSH® S2 7.0mm Healing Abutment
H10.3430	TSH® S3 S4 3.0mm Healing Abutment
H10.3450	TSH® S3 S4 5.0mm Healing Abutment
H10.3470	TSH® S3 S4 7.0mm Healing Abutment
H10.5030	TSH® S5 3.0mm Healing Abutment
H10.5050	TSH® S5 5.0mm Healing Abutment

## Standard screwed restorations

### Conhex Abutments



H17.2010	TSH® S2 x 1,0mm Conhex Abutment
H17.2020	TSH® S2 x 2,0mm Conhex Abutment
H17.2030	TSH® S2 x 3,0mm Conhex Abutment
H17.3410	TSH® S3 S4 x 1,0mm Conhex Abutment
H17.3420	TSH® S3 S4 x 2,0mm Conhex Abutment
H17.3430	TSH® S3 S4 x 3,0mm Conhex Abutment
H17.3440	TSH® S3 S4 x 4,0mm Conhex Abutment
H17.5010	TSH® S5 x 1,0mm Conhex Abutment
H17.5020	TSH® S5 x 2,0mm Conhex Abutment
H17.5030	TSH® S5 x 3,0mm Conhex Abutment

## Standard screwed restorations

### Final clinical screws



H19.2000	TSH® S2 Clinical screw
H19.3450	TSH® S3 S4 S5 Clinical screw



H25.2345	TSH® S2 S3 S4 S5 ConHex Short Clinical Screw
H26.2345	TSH® S2 S3 S4 S5 ConHex Clinical Screw

### Lab screws



H18.2000	TSH® S2 Lab screw
H18.3450	TSH® S3 S4 S5 Lab screw
H24.2345	TSH® S2 S3 S4 S5 ConHex Lab Screw

### ConHex angled abutments




H30.3417	TSH® 17° S3 S4 x 1,0mm Angled Conhex Abutment
H30.3430	TSH® 30° S3 S4 x 1,0mm Angled Conhex Abutment
H31.2017	TSH® 17° S2 x 2,0mm Angled Conhex Abutment
H31.3417	TSH® 17° S3 S4 x 2,0mm Angled Conhex Abutment
H31.3430	TSH® 30° S3 S4 x 2,0mm Angled Conhex Abutment
H32.2017	TSH® 17° S2 x 3,0mm Angled Conhex Abutment
H32.3417	TSH® 17° S3 S4 x 3,0mm Angled Conhex Abutment
H32.3430	TSH® 30° S3 S4 x 3,0mm Angled Conhex Abutment
H33.3417	TSH® 17° S3 S4 x 4,0mm Angled Conhex Abutment
H33.3430	TSH® 30° S3 S4 x 4,0mm Angled Conhex Abutment



# References

## Standard cemented restorations

### Abutment posts


	H20.2020	TSH® S2 2.0mm Abutment Post
	H20.2040	TSH® S2 4.0mm Abutment Post
	H20.3420	TSH® S3 S4 2.0mm Abutment Post
	H20.3440	TSH® S3 S4 4.0mm Abutment Post
	H20.5020	TSH® S5 2.0mm Abutment Post
	H20.5040	TSH® S5 4.0mm Abutment Post

### Angled abutment posts

	H21.3415	TSH® S3 S4 15° Angled Abutment
	H21.3425	TSH® S3 S4 25° Angled Abutment
	H22.3415	TSH® S3 S4 15° 1.0mm Angled Abutment
	H22.3425	TSH® S3 S4 25° 1.0mm Angled Abutment
	H23.3415	TSH® S3 S4 15° 0.5mm Angled Abutment
	H23.3425	TSH® S3 S4 25° 0.5mm Angled Abutment


## Immediate aesthetic restorations

### Provisional coping for ConHex abutments


	H60.2341	TSH® S2 S3 S4 ConHex Temporary Plastic Cap
	H60.2342	TSH® S2 S3 S4 ConHex Temporary Titanium Cap
	H60.5001	TSH® S5 ConHex Temporary Plastic Cap
	H60.5002	TSH® S5 ConHex Temporary Titanium Cap
	H61.2342	TSH® S2 S3 S4 Conhex Fenestrated Temp. Titanium Cap

## Immediate aesthetic restorations

### Provisional healing cap for ConHex abutments

	H10.2340	TSH® S2 S3 S4 ConHex Healing Cap
	H10.5000	TSH® S5 ConHex Healing Cap



### Temporary abutments

	H39.2001	TSH® S2 Temporary Abut. <i>Plastic.</i>
	H39.2002	TSH® S2 Temporary Non-hexed Abut. <i>Plastic.</i>
	H39.3401	TSH® S3 S4 Temporary Abut. <i>Plastic.</i>
	H39.3402	TSH® S3 S4 Temp. Non-hexed Abut. <i>Plastic.</i>
	H39.5001	TSH® S5 Temporary Abut. <i>Plastic.</i>
	H39.5002	TSH® S5 Temporary Non-hexed Abut. <i>Plastic.</i>
	H40.2001	TSH® S2 Temporary Abut. <i>Titanium.</i>
	H40.2002	TSH® S2 Temp. Non-hexed Abut. <i>Titanium.</i>
	H40.3401	TSH® S3 S4 Temporary Abut. <i>Titanium.</i>
	H40.3402	TSH® S3 S4 Temp. Non-hexed Abut. <i>Titanium.</i>
H40.5001	TSH® S5 Temporary Abut. <i>Titanium.</i>	
H40.5002	TSH® S5 Temp. Non-hexed Abut. <i>Titanium.</i>	

# References

## Standard impression copings

Impresion copings over ConHex abutments (Open and Closed Tray)


	H15.2341	TSH® S2 S3 S4 O.T. Hexed ConHex Imp. Coping
	H15.2342	TSH® S2 S3 S4 O.T. Non-Hexed ConHex Imp. Coping
	H15.5001	TSH® S5 O.T. Hexed ConHex Impression Coping
	H15.5002	TSH® S5 O.T. Non-Hexed ConHex Imp. Coping
	H16.2340	TSH® S2 S3 S4 C.T. Non-Hexed ConHex Imp. Coping
	H16.5000	TSH® S5 C.T. Non-Hexed ConHex Imp. Coping

Metallic Impression Copings direct-to-implants TSH® (Open and Closed Tray)

	H11.2001	TSH® S2 C.T. Non Hexed Impression Coping
	H11.3401	TSH® S3 S4 C.T. Non Hexed Impression Coping
	H11.5001	TSH® S5 C.T. Non Hexed Impression Coping
	H11.2002	TSH® S2 O.T. Non Hexed Impression Coping
	H11.3402	TSH® S3 S4 O.T. Non Hexed Impression Coping
	H11.5002	TSH® S5 O.T. Non Hexed Impression Coping

## Prosthetic accessories for the laboratory

ConHex abutment analogs


	H15.2340	TSH® S2 S3 S4 Hexed Analog
	H15.2343	TSH® S2 S3 S4 Non-Hexed Analog
	H15.5000	TSH® S5 Hexed Analog

## Prosthetic accessories for the laboratory



TSH® implant analogs

	H12.2000	TSH® S2 Implant Analog
	H12.3400	TSH® S3 S4 Implant Analog
	H12.5000	TSH® S5 Implant Analog

Casting cylinders for ConHex abutments

	H24.2342	TSH® S2 S3 S4 Non-Hex Conhex Casting Cylinder
	H24.5002	TSH® S5 Non-Hex Conhex Casting Cylinder
	H24.2341	TSH® S2 S3 S4 Hex Conhex Casting Cylinder
	H24.5001	TSH® S5 Hex Conhex Casting Cylinder

Direct-to-implant Casting Cylinders

	H38.2002	TSH® S2 Non-hexed casting cylinder
	H38.3402	TSH® S3 S4 Non-hexed casting cylinder
	H38.5002	TSH® S5 Non-hexed casting cylinder
	H38.2001	TSH® S2 Hexed casting cylinder
	H38.3401	TSH® S3 S4 Hexed casting cylinder
	H38.5001	TSH® S5 Hexed casting cylinder

# References

## Overdentures restorations

### Ball abutments



H22.3402\* TSH® S3 S4 2.0mm Ball Abutment

H22.3404\* TSH® S3 S4 4.0mm Ball Abutment

*\*Not indicated for restorations with disparellisms over 30° between implants.*



022.0010 TSH® S3 S4 Ball abutment metal sleeve. Titanium



022.0005 TSH® S3 S4 Ball abutment seal. EPDM

### CLICK & FIX

1916 C CLICK & FIX Abutment TSH® S2 x 1,0mm

1917 C CLICK & FIX Abutment TSH® S2 x 2,0mm

1918 C CLICK & FIX Abutment TSH® S2 x 3,0mm

1919 C CLICK & FIX Abutment TSH® S2 x 4,0mm

1920 C CLICK & FIX Abutment TSH® S2 x 5,0mm



1942 C CLICK & FIX Abutment TSH® S3-S4 x 1,0mm

1943 C CLICK & FIX Abutment TSH® S3-S4 x 2,0mm

1944 C CLICK & FIX Abutment TSH® S3-S4 x 3,0mm

1945 C CLICK & FIX Abutment TSH® S3-S4 x 4,0mm

1946 C CLICK & FIX Abutment TSH® S3-S4 x 5,0mm

1922 C CLICK & FIX Abutment TSH® S5 x 2,0mm

1923 C CLICK & FIX Abutment TSH® S5 x 3,0mm

8519 C CLICK & FIX Retention kit (1 unit)

## Overdentures restorations

### Locator®\*



08393

Locator® Tool



08505

Locator® Imprinting (4 units)



08514

Locator® Block out Spacer (20 units)



08517

Locator® Angulated Post (4 units)



08530

Locator® Analogue (4 units)



08540.2

Locator® Extended retention Kit (2 units)



09530

Locator® Angulation guide

*\*Locator® is a registered trademark of Zest Anchors, Inc.*



# References





## Surgical instruments and prostheses

### Prostheses and instrument kit



	171.0300	TSH® Surgical Kit
	171.0600	TSH® Prosthetic Kit
	170.0002	TSH® Radiographic Template
	173.0100	Contra-Angle Adapter, Short
	173.0300	Contra-Angle Adapter, Long
	173.1251	Contra-Angle Hex Driver 1.25mm, Short
	173.1252	Contra-Angle Hex Driver 1.25mm, Medium
	172.0000	Torque Wrench
	172.0001	Open end Wrench
	172.0100	Ratchet Adapter, Short - to Mounter
	172.0300	Ratchet Adapter, Long - to Mounter
	174.1251	Manual Hex Driver 1.25mm, Short
	174.1252	Manual Hex Driver 1.25mm, Medium
	174.1253	Manual Hex Driver 1.25mm, Long
	172.1251	Hex Tool 1.25mm, Short - to Wrench
	172.1252	Hex Tool 1.25mm, Medium - to Wrench

## Surgical instruments and prostheses

### Prostheses and instrument kit

	172.2301	Hex Tool Short Abutment ConHex TSH®
	172.2302	Hex Tool Medium Abutment ConHex TSH®
	174.2301	Manual Hex Driver Short Abutment ConHex TSH®
	174.2302	Manual Hex Driver Medium Abutment ConHex TSH®
	152.0001	Circular Scalpel Ø3.70
	152.0002	Circular Scalpel Ø4.70
	152.0003	Circular Scalpel Ø6.00
	172.1100	Phibo® manual handle




### Screw drivers for CAD-CAM restorations

	172.1101	Hexalobular tool, short - to wrench
	172.1102	Hexalobular tool, medium - to wrench
	172.1103	Axis® Hexalobular Angled Tool Short - to Wrench
	172.1104	Axis® Hexalobular Angled Tool Medium - to Wrench
	172.1105	Axis® Hexalobular Angled Tool Long - to Wrench



# References

## Surgical instruments


### Initial surgical sequence

	175.0001	Lancet Drill TSA® TSH®
	175.1018	Round Marking Drill ø 1.8mm
	175.1023	Round Marking Drill ø2.3mm
	173.0001	Drill Extender

### Surgical sequence / Drilling length


	176.1123	Pilot Drill - Short ø2.3mm TSA® TSH®
	176.1323	Pilot Drill - Long ø2.3mm TSA® TSH®
	177.0000	Depth Indicator Drill Parallelizer ø 2.3mm TSA® TSH®
	179.0028	Depth Indicator Drill ø 2.8mm TSA® TSH®
	179.0030	Depth Indicator Drill ø3.0mm TSA® TSH®
	179.0036	Depth Indicator Drill ø3.6mm TSA® TSH®
	179.0041	Depth Indicator Drill ø4.1mm TSH®

### Final surgical sequence/surgical drills


	178.1128	Surgical Drill - Short ø2.8mm TSA® TSH®
	178.1328	Surgical Drill - Long ø2.8mm TSA® TSH®
	178.1130	Surgical Drill - Short ø3.0mm TSA® TSH®
	178.1330	Surgical Drill - Long ø3.0mm TSA® TSH®

## Surgical instruments


### Final surgical sequence/surgical drills

	178.1136	Surgical Drill - Short ø3.6mm TSA® TSH®
	178.1336	Surgical Drill - Long ø3.6mm TSA® TSH®
	178.1241	Surgical Drill ø4.1mm TSH®

### Final surgical sequence/Bone taps

	181.0133	Bone Tap - Short TSH® S2
	181.0136	Bone Tap - Short TSA® TSH® S3
	181.0142	Bone Tap - Short TSA® TSH® S4
	181.0333	Bone Tap - Long TSH® S2
	181.0336	Bone Tap - Long TSA® TSH® S3
	181.0342	Bone Tap - Long TSA® TSH® S4
	181.0248	Bone Tap TSH® S5

### Final surgical sequence/Drill stops

	DS23	Drill Stop Ø2.30mm
	DS28	Drill Stop Ø2.80mm
	DS30	Drill Stop Ø3.00mm
	DS36	Drill Stop Ø3.60mm
	DS41	Drill Stop Ø4.10mm
	DS43	Drill Stop Ø4.30mm
	DS49	Drill Stop Ø4.90mm
	DS00	Drill Stop screw (5units)

# References

Surgical kit



# References

Prosthetic Kit



# Bibliography

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Palatal positioning of implants in severely resorbed edentulous maxillae. Int J Oral Maxillofac Implants. 2009 May-Jun;24(3):527-33. Peñarrocha M, Carrillo C, Boronat A, Balaguer J, Peñarrocha M.

Removal torque and physico-chemical characteristics of dental implants etched with hydro - fluoric and nitric acid. An experimental study in Beagle dogs Med Oral Patol Oral Cir Bucal 2006;11:E281-5. Martínez-González JM, GarcíaSabán F, Ferrándiz-Bernal J, Gonzalo- Lafuente JC, Cano-Sánchez J, Barona-Dorado C.

Extraction of impacted maxillary canines with simultaneous implant placement. J Oral Maxillofac Surg. 2007 Nov;65(11):2336-9. Peñarrocha M, Peñarrocha M, García-Mira B, Larrazabal C.

Evaluation of 80 implants subjected to immediate loading in edentulous mandibles after two years of follow-up. Med Oral Patol Oral Cir Bucal 2006; 11:E165-70 Martínez-González JM, Barona-Dorado C, Cano-Sánchez J, Fernández-Cáliz F, SánchezTurrión A.