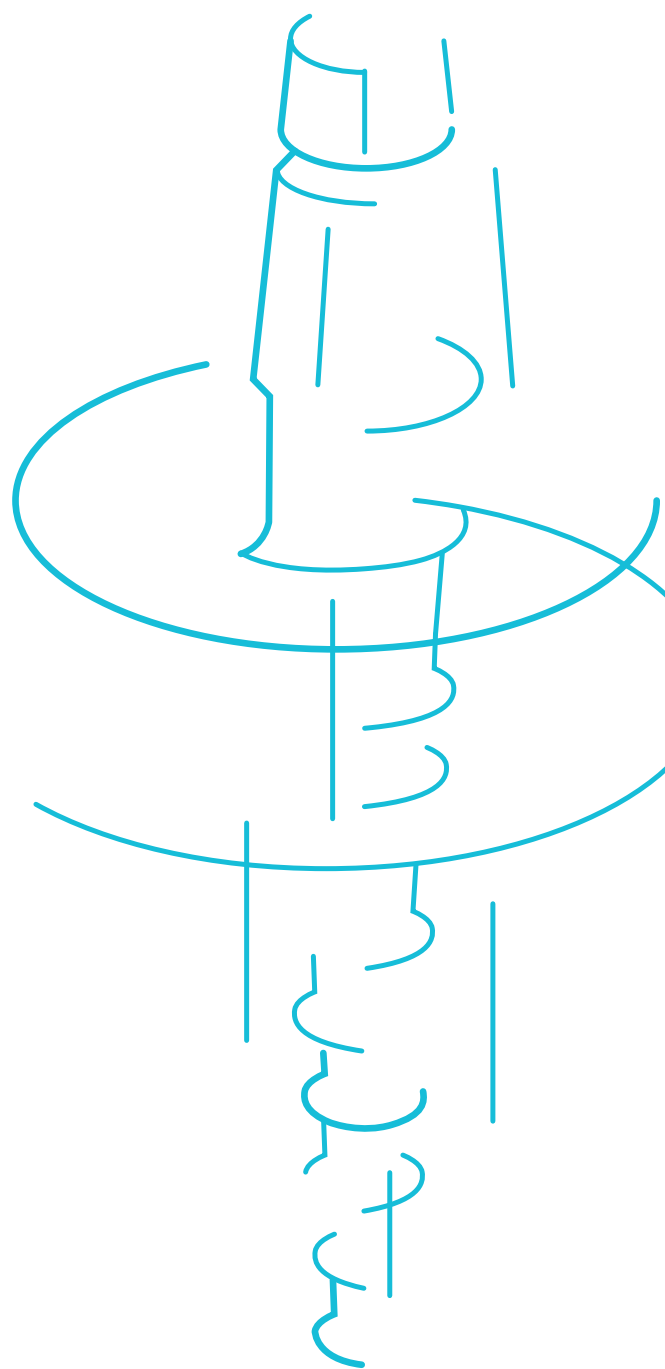


ONEWAY BIOMED



IMMEDIATE LOADING single part implants
DENTAL IMPLANT SYSTEM

GCS®

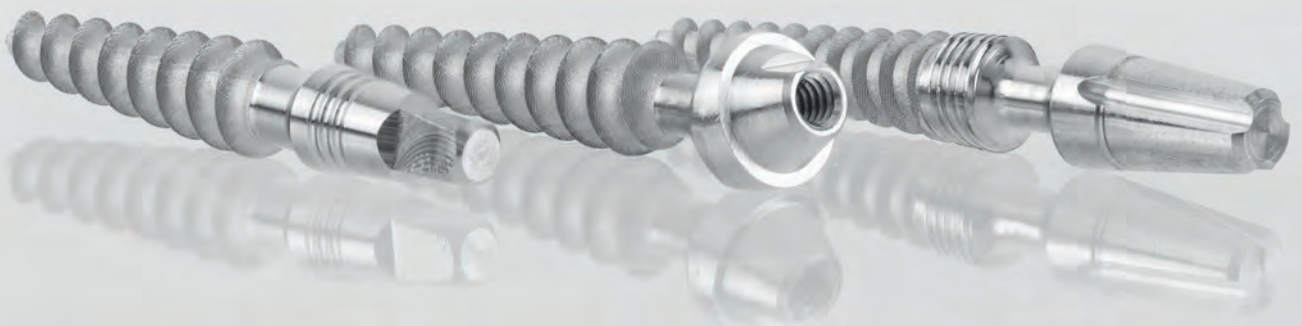
APPLICATION AREAS

OF THE ENDOSSEOUS DENTAL IMPLANT SYSTEM **GCS**[®]

Suitable for crowns, bridges and bars. With the correct surgical procedure and good bone quality, the compression screws design permits to incorporate the restoration in an immediate loading protocol (incorporation of the prosthesis within a maximum of three days). Today, **GCS**[®] implants are routinely used for immediately loaded bridge constructions. The single-piece design saves costs, effort and prevents the problem of screw loosening. In extraction cases, **GCS**[®] and **GBC**[®] are combined.

The prescribed or recommended tightening torques for implants, abutments and screws can be found on our website:

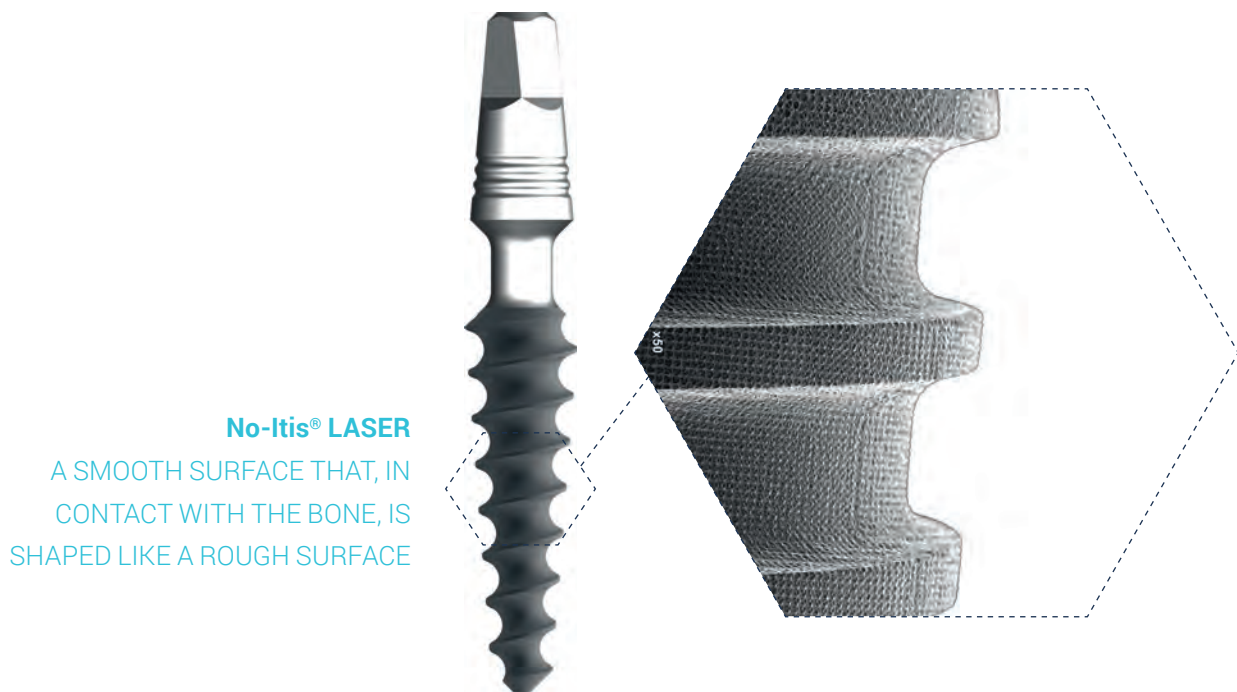
www.Implant.com/en/downloads



No-Itis® LASER – THE NEW SURFACE GENERATION

The new surface treatment for Dr. Ihde Dental AG implants is created with the latest generation of robotic tools for laser ablation. This new technology of high precision creates roughness in the implant through a mesh of hemispherical micrometric pores, with a defined, always identical size and shape and with a symmetrical distribution.

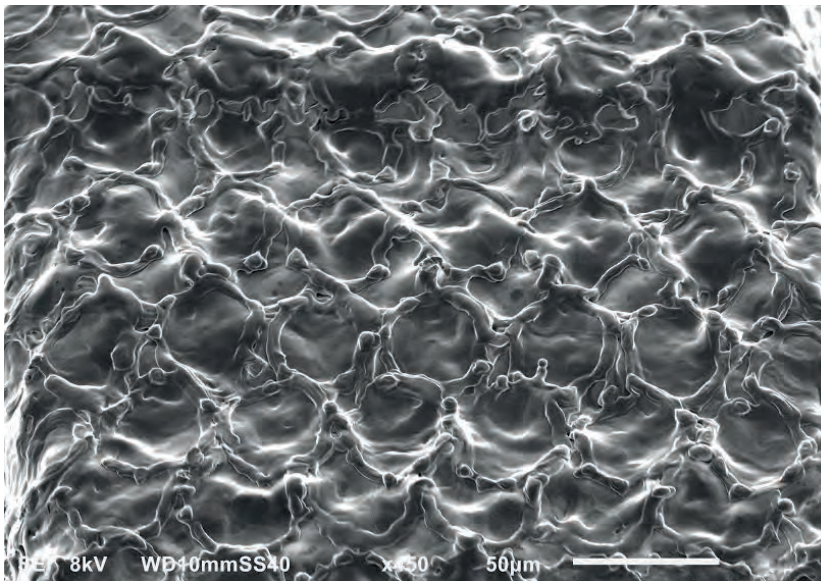
The result is a more adequate topography, which provides the most suitable conditions for the osseointegration of the implant, but at the same time it is, and behaves like, a smooth surface at a micrometric (cellular) level. This means that while bone grows well on this surface, the adhesion of bacteria to the same surface is significantly reduced.



In the 1990s, rough surfaces on dental implants became increasingly popular – while the risk of bacterial adhesion was blissfully disregarded. This caused the appearance of a new disease, peri-implantitis, which severely compromises the survival of the implants in the long term and which, as a result, requires a renewed intervention on a dissatisfied patient, wasting time and increasing costs. Surfaces like that are not patient-friendly!

The use of the laser technology we developed allows us to create an exactly defined micromorphology on the treated surface, leaving no residue and without altering the properties or composition of the titanium alloy. This creates a mesh of very perfect cavities in terms of the (hemispherical) shape and its dimensions (of 20 to 30 µm), as well as their distance and distribution. The surface of these cavities as well as the retentions created by laser ablation are smooth as experienced by the bacteria, a characteristic that is assumed to improve the resistance of the implant against bacterial colonisation. This characteristic might also radically limit the incidence of peri-implantitis. In contact with the bone, however, the laser-ablated surface behaves like a rough surface. Rough implants (e.g., GCS®, Hexacone®) and smooth implants (e.g., GBC®, GCS®) therefore have the same recovery rate.

No-Itis® LASER
THE SURFACE THAT INCREASES SURVIVAL RATIOS



Rugosity (Ra)	Definition
---------------	------------

$\leq 0,4 \mu\text{m}$	Smooth
0,5 - 1,0 μm	Machined
1,0 - 2,0 μm	Moderately rough
$> 2,0 \mu\text{m}$	Rough

Rugosity (Ra)	No-Itis® Laser
---------------	----------------

0,9 μm	Smooth
-------------------	--------

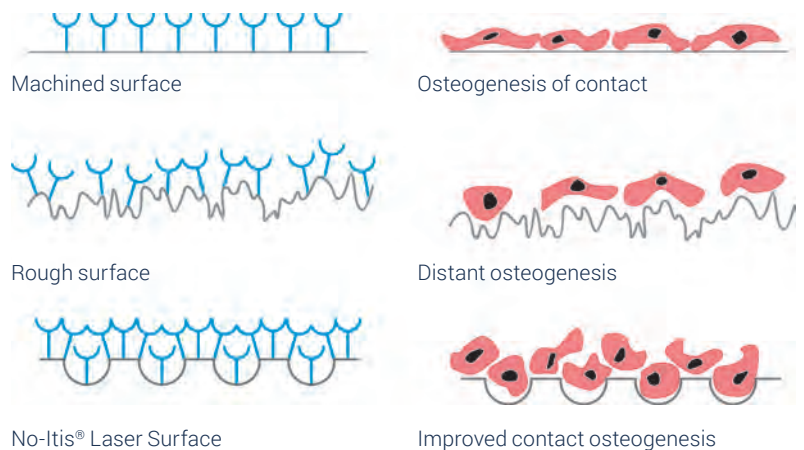
According to the classification of surface roughness by Albrektsson and Wenneberg, the Ra value corresponds to a moderately rough surface, and our lasered surface actually has the characteristics and many of the advantages of a smooth implant surface. The NO-ITIS® LASER surface allows the adhesion of the uniform and extended fibrin clot, which then leads to the formation of woven bone. The distribution and size of the concavities favours the accommodation and activity of the osteoblasts, promoting effective osseointegration

No-Itis® LASER

THE MOST ADVANCED SURFACE A SAFE ANSWER AGAINST PERI-IMPLANTITIS, MAINTAINING THE OSSEOINTEGRATION LONG TERM

STABLE FIBRIN MESH

With the NO-ITIS® LASER, as with traditional rough surface, fibrin filaments are almost exclusively attached to surface peaks forming bridges between them (distance osteogenesis). On the NO-ITIS® LASER surface, fibrin forms as a well developed and defined grid mesh even within the concavities, which favours colonisation of the osteogenic cells directly on the surface of the implant (contact osteogenesis).



MAXIMUM CONTACT OSTEOGENESIS

Thanks to the good cell adhesion, a normal fibrin mesh can be created, adapted and extended on the surface of the NO-ITIS® LASER. This process activates the formation of osteonal bone, also directly in contact with the implant.

No-Itis® LASER
A UNIQUE SURFACE

No-Itis® LASER

THE IDEAL SURFACE FOR IMMEDIATE OR EARLY LOADING

a stable and uniform manner. This process activates the formation of bone directly in contact with the implant, resulting in a more dynamic and favourable osseointegration, with greater BIC (Bone implant Contact), and it allows true bone engineering.

- Smooth implant surface
- Less bacterial adhesion

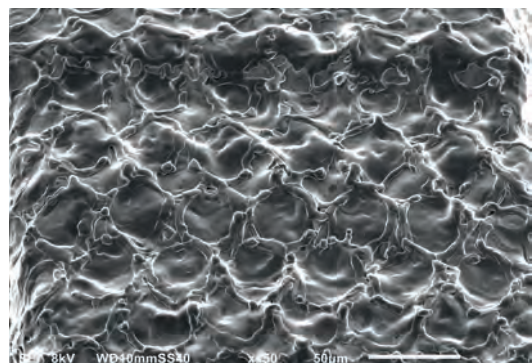
➔ LOWER RISK OF INFECTIONS

- Increased fibrin adhesion
- More contact osteogenesis on a larger surface

➔ PERFECT OSSEOINTEGRATION

No-Itis® LASER – A CLEAN SURFACE

Unlike standard-surface implants (sandblasting and etching, or blasting and anodising), the implants with the NO-ITIS® LASER surface have a completely clean surface without residues nor contaminants. Due to this modern manufacturing process, no residues of jet particles or traces of the chemicals (acids) or anodisation (oxides) used in the etching process can come into contact with the implant. Eliminating the anodisation also eliminates the risk that the top layer of the coloured implant dissolves mechanically.



No-Itis® LASER

A CLEAN SURFACE

No-Itis® LASER – THE IDEAL SURFACE FOR BONE CONTACT

The total cleanliness of the NO-ITIS® LASER allows the endosseous implant surface to be increased without having to accept the disadvantages of all the traditional methods for surface roughening.

This new surface generation can coexist for some time with others developed by onewaybiomed GmbH, while regularization of production and stocks, and therefore any reference may not be available on the new No-Itis® Laser surface.

GCS® - INSTRUCTION FOR APPLICATION

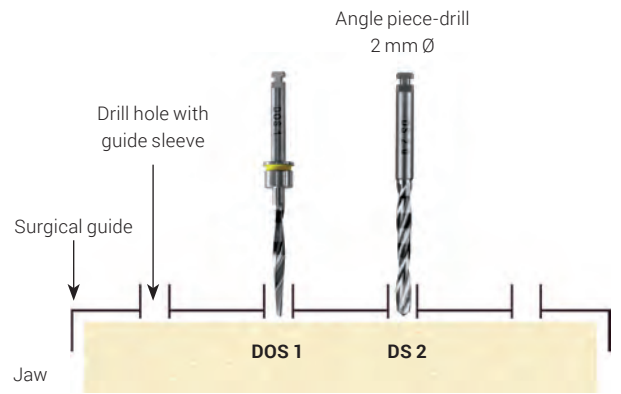
PREPARATORY WORK

Get your lab to make a drilling template with the specified drill holes for the marking hole.

For the pilot hole, use **DOS 1** or **BCD 1** (yellow) as the primary reamer. Prepare the implant bed with the form drills at full length.

Please use an intermittent drilling technique with good NaCl cooling. If necessary, the laboratory can insert guide sleeves can in the drill holes (code **BFH**) through which the precise direction of drilling can be set.

If, due to high drilling resistance in hard bone, it is difficult to reach the complete drilling depth with **DOS 1**, the correct depth can be reached with the cylinder drill **DS 2** (diameter 2 mm).



SURGERY

1. Drilling and preparation/compaction of the implant site

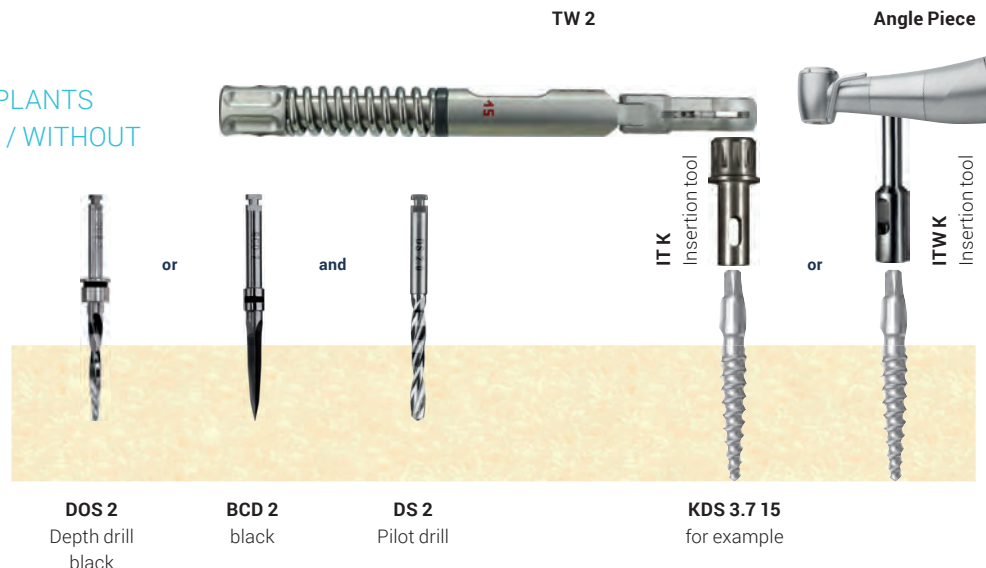
DRILL SEQUENCE normal / hard bone				DRILL SEQUENCE soft bone			
Pilot drill	Form drill	KDS	Implant	Pilot drill	Form drill	KDS	Implant
DOS 1	---	KDS 3.0	GCS 3.0	DOS 1	---	---	GCS 3.0
	DOS 2	KDS 3.2	GCS 3.2		---	KDS 3.0	GCS 3.2
	DOS 3 (4)	KDS 3.7	GCS 3.7		DOS 2	KDS 3.2	GCS 3.7
		KDS 4.1	GCS 4.1			KDS 3.7	GCS 4.1
	DOS 5	KDS 5.0	GCS 5.0		DOS 3 (4)	KDS 4.1	GCS 5.0

In very hard bone the implants should be inserted slightly deeper and then turned back 1/2 round.

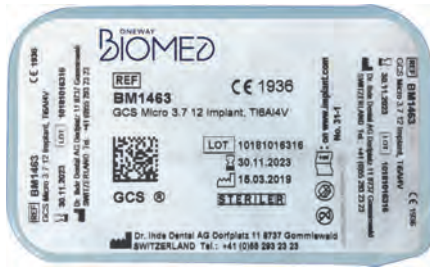
DRILL SEQUENCE FOR IMPLANTS WITHOUT MICROTHREAD / WITHOUT MICROGROOVE



Example GCS 3.7 15



2. Implant packaging



Original packaging

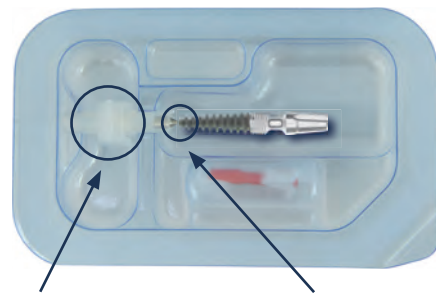


Open the sealed cover at the lid. Remove the label and place it into the patients record.

3. Remove the implant from its packaging



The open pack contains the implant, mounted to a plastic holder. The pack also contains the lab-set.



Remove the implant by holding onto the plastic holder

The implant is fixed to the holder by a break joint.

4. Handling

Hold the implant by the holder and place the insertion tool on the implant head. The endosseous implant surface must not be touched. Pull out the implant with the plug and then twist off the plug with the needle holder at the predetermined breaking point.

IMPLANTS WITH LARGE HEAD

GCS® / GCS® Micro

GCS® K (for ball attachment)



Predetermined break line

GCS® implant with insertion tool **IT2W** (for angle piece) and **IT2 GBC** (manual)



GCS® K implant with insertion tool **IT TB K**



Twisting off the bracket with the needle holder

IMPLANTS WITH SMALL HEAD

GCS® (straight) / GCS® B (flexible)



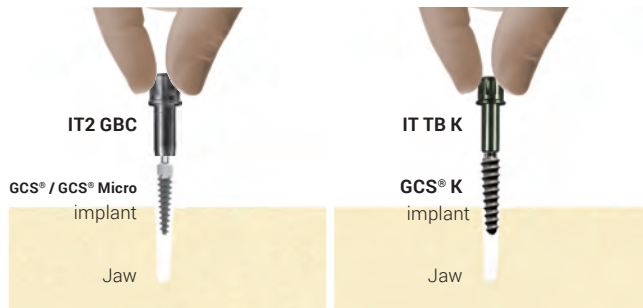
GCS® / GCS® B implants with insertion tool **ITW K** (for angle piece) and **IT K** (manual)

Twisting off the bracket with the needle holder

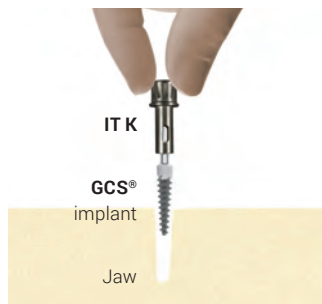
5. Insertion using manual tools

Insert the implant by hand until it is firmly seated in the jaw.

IMPLANTS WITH LARGE HEAD



IMPLANTS WITH SMALL HEAD



6. Definitive implant insertion

Using the ratchet, torque ratchet or contra-angle, screw the implant clockwise into the cavity. With **GCS® B**, the use of the torque ratchet is mandatory. The endosseous (blasted) part of the implant must be completely covered by bone. The polished implant neck is located in the mucosa. We recommend screwing the implant into the bone up to 1 mm deeper into the implant neck.

IMPLANTS WITH LARGE HEAD



The head of the bendable **GCS® 3.0 & 3.2, GCS® Micro (all diameters)** and **GCS® B** screws can be bent into the desired position after insertion with the aid of the mounted insertion tool and ratchet.

Maximum bend: approx. 15°. Only one bending operation may be performed. In the maxilla, the motorised insertion tool should be used due to its better implant guidance during insertion.



IMPLANTS WITH SMALL HEAD



IMPORTANT NOTE

GCS® B implants have a predetermined breaking point integrated into the head. If the preparation with bone-expanding screws was not performed sufficiently, high screwing forces can cause the upper head portion to be torn off.

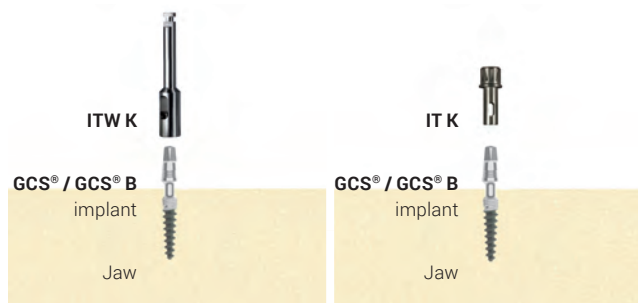
So that the implant can be screwed out again, an additional square is milled below the breaking point, into which the emergency tool **Tool E** can be inserted. The **Tool E** instrument may only be used to remove the implant.

7. Removing the placement aid from the implant

IMPLANTS WITH LARGE HEAD



IMPLANTS WITH SMALL HEAD



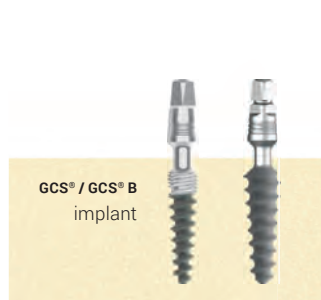
8. Result

All implant heads (except for the **GCS® K**) can be reshaped by grinding. The implants can be prosthetically supplied immediately if indicated. The definitive superstructure should be cemented within a few days. Immediate prosthetic splinting with a provisional bridge is recommended.

IMPLANTS WITH LARGE HEAD

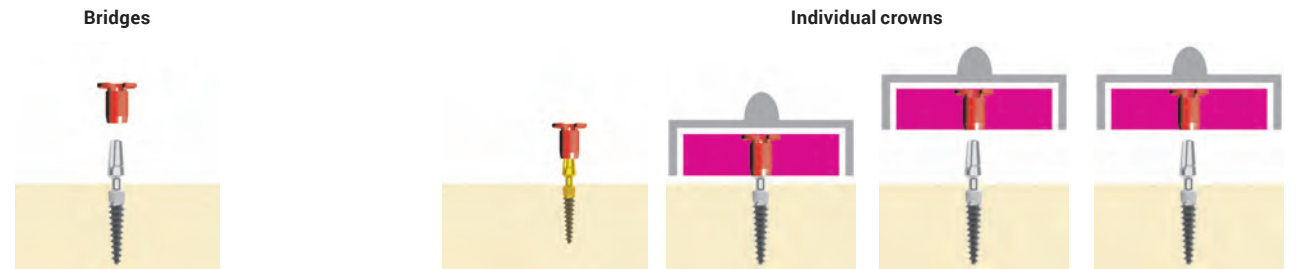


IMPLANTS WITH SMALL HEAD



9. Impression

IMPLANTS WITH LARGE HEAD

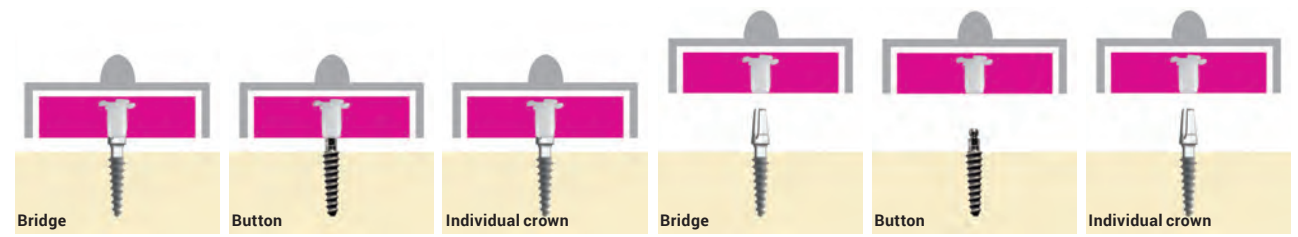


Attachment of the impression post **TSPA 5**, internally round, for **GCS®**

Attachment of the impression post **TSPA 5**, with anti-rotation protection, for **GCS® Micro**

Pressureless impression taking e.g. with **Safeprint®**

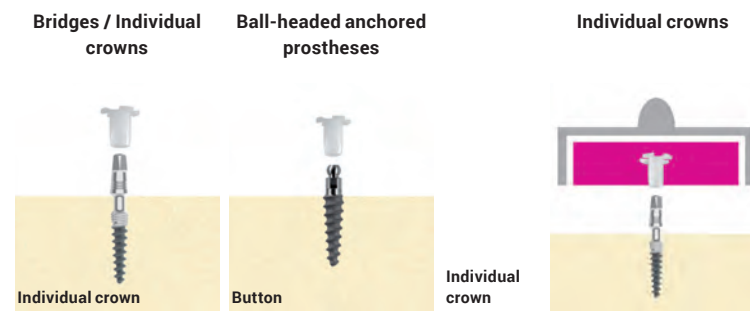
Removal of the individual scoop from the implant post. The impression post is located in the impression material. The impression can be sent to the laboratory.



Pressureless impression taking e.g. with **Safeprint®**

Removal of the individual scoop from the implant post. The impression post is located in the impression material. The impression can be sent to the laboratory.

IMPLANTS WITH SMALL HEAD



Attachment of the impression post **TSPA 4**, Internally round, for **GCS®, GCS® B** and **GCS® T**

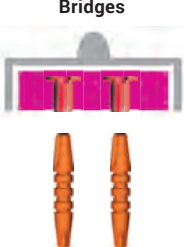


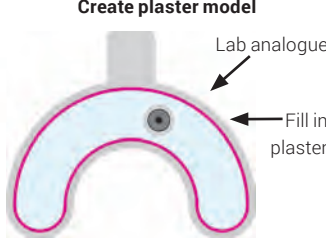
Fill **TSPA 4** inside with **Safeprint® IM**

Attachment of the impression post **TSKPA 4**, with anti-rotation protection, for **GCS®, GCS® B** and **GCS® T**

LABORATORY PROCEDURES

Attachment of the impression post onto lab analogues

IMPLANTS WITH LARGE HEAD

 <p>Bridges</p>	 <p>Dentures</p>	 <p>Individual crowns</p>	 <p>Create plaster model</p> <p>Lab analogue Fill in plaster</p>
<p>TSPA 5 on IA4/IAU</p>	<p>TSPA 5 on IA4/IAU</p>	<p>TSPA 5 on IA4/IAU</p>	<p>Pull impression from the model. The impression post and analogue are now separated again.</p>

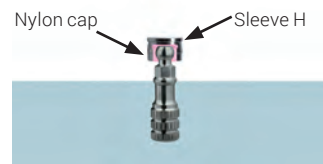


IA4/IAU



IA4/IAU




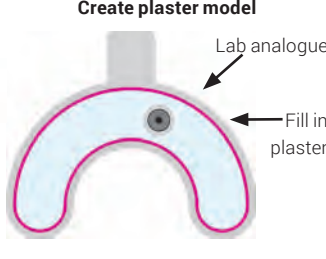
The modeling is performed on the castable parts **PO4/POB** (internally round; for bridges and bars) or **PO4A** (edged inside; for individual crowns).



IA4/IAU with nylon cap (pink) and sleeve

Polymerization of the sleeve H into the prosthesis.
Press **NC/NC1/NC2** into the sleeve.
For initial restorations, **NC1** or **NC2** should be used.

IMPLANTS WITH SMALL HEAD

 <p>Bridges</p>	 <p>Dentures</p>	 <p>Individual crowns</p>	 <p>Create plaster model</p> <p>Lab analogue Fill in plaster</p>
<p>TSPA 4 on IA4/IAU</p>	<p>TSPA 4 on IA4/IAU</p>	<p>TSKPA 4 on IA4/IAU</p>	<p>Pull impression from the model. The impression post and analogue are now separated again.</p>



IA4/IAU



IA4/IAU

The modeling is performed on the castable parts **PO4** (internally round; for bridges and bars) or **PO4A** (edged inside; for individual crowns).



IA4/IAU with nylon cap (pink) and Sleeve

Polymerization of the sleeve H into the prosthesis.
Press **NC/NC1/NC2** into the sleeve.
For initial restorations, **NC1** or **NC2** should be used.

SYMBOLS FOR IMPLANT PROPERTIES AND PROSTHETIC SOLUTIONS

Small Abutment Head



Multi-Unit Abutment



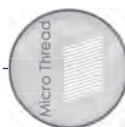
Apical Wide Thread



Large Abutment Head



Micro Thread



For Screw-in Prosthetics



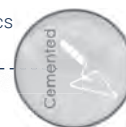
Ball Abutment



Bendable



For Cemented Prosthetics



Localicer® Abutment



THE ADVANTAGES OF GCS® CLASSIC AND CLASSIC X IMPLANTS

SMALL HEAD



LARGE HEAD



Immediate loading protocol

Very few working steps

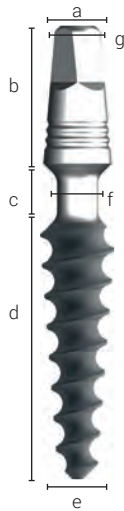
No micro gap

Compression thread

Made of highly resistant titanium alloy

GCS® CLASSIC IMPLANTS

Implants with small head for crowns and bridges.



	Description	Enossal Ø	Enossal length	Neck Ø	REF	Price cat.
	GCS 3.0 10	3.0 mm	10 mm	2.0 mm	BM1030	F
	GCS 3.0 12	3.0 mm	12 mm	2.0 mm	BM1031	F
	GCS 3.0 15	3.0 mm	15 mm	2.0 mm	BM1032	F
	GCS 3.2 12	3.2 mm	12 mm	2.0 mm	BM1033	F
	GCS 3.2 15	3.2 mm	15 mm	2.0 mm	BM1034	F
	GCS 3.7 6	3.7 mm	6 mm	2.5 mm	BM6204	F
	GCS 3.7 8	3.7 mm	8 mm	2.5 mm	BM6205	F
	GCS 3.7 10	3.7 mm	10 mm	2.5 mm	BM1035	F
	GCS 3.7 12	3.7 mm	12 mm	2.5 mm	BM1036	F
	GCS 3.7 15	3.7 mm	15 mm	2.5 mm	BM1037	F
	GCS 4.1 8	4.1 mm	8 mm	2.8 mm	BM1038	F
	GCS 4.1 10	4.1 mm	10 mm	2.8 mm	BM1039	F
	GCS 4.1 12	4.1 mm	12 mm	2.8 mm	BM1040	F
	GCS 4.1 15	4.1 mm	15 mm	2.8 mm	BM1041	F
	GCS 4.1 17	4.1 mm	17 mm	2.8 mm	BM1042	F
	GCS 4.1 19	4.1 mm	19 mm	2.8 mm	BM1043	F
a) Abutment Ø	3.35 mm	GCS 5.0 10	5.0 mm	10 mm	BM1044	F
b) Abutment height	6.8 mm	GCS 5.0 12	5.0 mm	12 mm	BM1045	F
c) Neck length	3.5 mm	GCS 5.0 15	5.0 mm	15 mm	BM1046	F
d) Enossal length	6 - 19 mm					
e) Enossal Ø	3.0 - 5.0 mm					
f) Neck Ø	2.0 / 2.5 / 2.8 mm					
g) Square AF (across flats)	1.9 mm					

GCS 3.0 - 3.2 Max. insertion torque 50 Ncm
GCS 3.7 - 5.0 Max. insertion torque 80 Ncm



INCLUSIVE

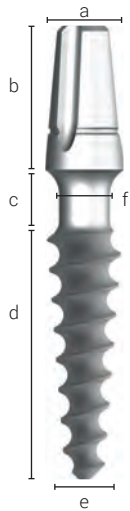
GCS® implants are delivered incl. lab-set REF 462353, consisting of

-  Double analogue, plastic
IA4/IAU
BM5118
-  Impression post castable, internally edged, for large head
PA X
BM1429
-  Impression post castable, internally round, for small head
TSPA 4
BM1394

NOTE This is a standard lab-set and therefore contains parts for both **LARGE** abutment heads (**PA X**) and **SMALL** abutment heads (**TSPA 4**).

GCS® CLASSIC X IMPLANTS

Large head for easy prosthetic handling.



- a) Abutment Ø 3.9 mm
- b) Abutment height 7.2 mm
- c) Neck length 3.0 mm
- d) Enossal length 8 - 19 mm
- e) Enossal Ø 3.0 - 5.0 mm
- f) Neck Ø 2.0, 2.5, 2.8 mm

Description	Enossal Ø	Enossal length	Neck Ø	REF	Price cat.
GCS X 3.0 10	3.0 mm	10 mm	2.0 mm	BM1110	F
GCS X 3.0 12	3.0 mm	12 mm	2.0 mm	BM1111	F
GCS X 3.0 15	3.0 mm	15 mm	2.0 mm	BM1112	F
GCS X 3.2 12	3.2 mm	12 mm	2.0 mm	BM1113	F
GCS X 3.2 15	3.2 mm	15 mm	2.0 mm	BM1114	F
GCS X 3.7 10	3.7 mm	10 mm	2.5 mm	BM1115	F
GCS X 3.7 12	3.7 mm	12 mm	2.5 mm	BM1116	F
GCS X 3.7 15	3.7 mm	15 mm	2.5 mm	BM1117	F
GCS X 4.1 8	4.1 mm	8 mm	2.8 mm	BM1118	F
GCS X 4.1 10	4.1 mm	10 mm	2.8 mm	BM1119	F
GCS X 4.1 12	4.1 mm	12 mm	2.8 mm	BM1120	F
GCS X 4.1 15	4.1 mm	15 mm	2.8 mm	BM1121	F
GCS X 4.1 17	4.1 mm	17 mm	2.8 mm	BM1107	F
GCS X 4.1 19	4.1 mm	19 mm	2.8 mm	BM1108	F
GCS X 5.0 10	5.0 mm	10 mm	2.8 mm	BM1122	F
GCS X 5.0 12	5.0 mm	12 mm	2.8 mm	BM1123	F
GCS X 5.0 15	5.0 mm	15 mm	2.8 mm	BM1109	F



INCLUSIVE

GCS® implants are delivered incl. lab-set REF 462353, consisting of



Double analogue, plastic
IA4/IAU
BM5118



Impression post castable, internally edged, for large head
PA X
BM1429



Impression post castable, internally round, for small head
TSPA 4
BM1394

ACCESSORIES

Analogue **IAB**

Pack of 5

REF BM5120

Price cat. B



Impression post **TSPA 5**

Pack of 5

REF BM1393

Price cat. B

The red impression cap and the red analogue are round (not secured against rotation).

NOTE This is a standard lab-set and therefore contains parts for both **LARGE** abutment heads (**PA X**) and **SMALL** abutment heads (**TSPA 4**).

THE ADVANTAGES OF GCS® B IMPLANTS



Suitable for bridges in the reduced-load range

The bendable implant offers dual safety:

1. Torque reduction by pre-compression with the congruent bone-expanding screw

2. Safety head with predetermined breaking point and dual square

GCS® B IMPLANTS WITH SMALL HEAD FOR BRIDGES

GCS® B implants with bendable neck (use after pre-drilling and preparation with the bone-expanding screw). Suitable for bridges in the reduced-load range (no individual tooth restorations). The bendable implant now offers dual safety:

1. Torque reduction by pre-compression with the congruent bone-expanding screw
2. Safety head with predetermined breaking point and dual square



Description	Code KDS	Enossal Ø	Enossal length	REF	Price cat.
GCS B 3.0 15	C	3.0 mm	15 mm	BM1019	F
GCS B 3.2 12	D	3.2 mm	12 mm	BM1020	F
GCS B 3.2 15	E	3.2 mm	15 mm	BM1021	F
GCS B 3.7 12	F	3.7 mm	12 mm	BM1022	F
GCS B 3.7 15	G	3.7 mm	15 mm	BM1023	F
GCS B 4.1 15	L	4.1 mm	15 mm	BM1024	F
GCS B 4.1 17	M	4.1 mm	17 mm	BM1025	F

The predetermined fracture site integrated in the abutment prevents the twisting off of the abutment head from the endosseous implant part. The implant socket has to however always be pre-compressed using the bone-expanding screw.

- a) Abutment Ø 3.35 mm
- b) Abutment height 6.8 mm
- c) Neck length 3.0 mm
- d) Enossal length 12 - 17 mm
- e) Enossal Ø 3.0 - 4.1 mm
- f) Neck Ø 1.8 mm

Max. insertion torque 45 Ncm




INCLUSIVE


GCS® implants are delivered incl. lab-set REF 462353, consisting of

 Double analogue, plastic

IA4/IAU
BM5118

 Impression post castable, internally edged, for large head

PA X
BM1429

 Impression post castable, internally round, for small head

TSPA 4
BM1394



After insertion, the bendable GCS® B screws can be bent into the desired position using the inserted insertion aid and ratchet. Maximum bend: approx. 15°. Only one bending process may take place. The motor insertion aid should be used in the upper jaw because of the better implant guidance when screwing in.

NOTE This is a standard lab-set and therefore contains parts for both **LARGE** abutment heads (**PA X**) and **SMALL** abutment heads (**TSPA 4**).

IMPRESSION TAKING AND LABORATORY ACCESSORIES



	Description	Unit	Code	REF	Price cat.
	Impression post made of POM Castable, internally round	Pack of 5	TSPA 4*	BM1394	B
	ALTERNATIVE Impression post made of POM Castable, internally round	Pack of 5	TSPA 4*	BM1372	B
	Impression post Castable, internally edged	Pack of 5	TSKPA 4	BM1395	B
	Double analogue, plastic For large and small head	Pack of 5	IA4/IAU	BM5118	B
	Double analogue, metal For large and small head	1 piece	IA4/IAU	BM5119	A
	Castable abutment and base for provisionals For small head 7 mm high, white, internally round	Pack of 5	PO4	BM1317	B
	Castable abutment and base for provisionals 7 mm high, white, internally edged	Pack of 5	PO4A	BM1318	B

***TSPA 4 and 5** For impressions on ground-down implant heads.

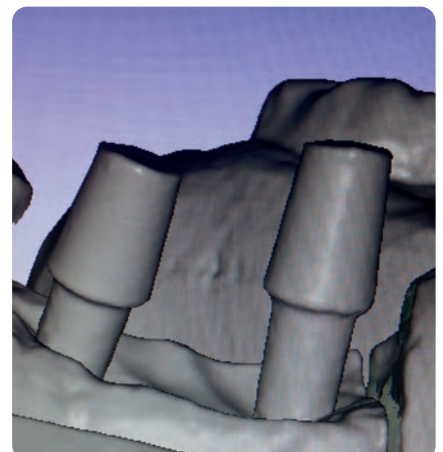
This ring-transfer exposes the lower border of the abutment head. The impression is then poured with extra-strong gypsum or epoxy-resin. For this techniques no implant analogues are needed. Material: PP

SCANNER ANALOG

Scanner analogue for large and small implant head, self-descriptive. These analogues do not need to be sprayed with spray paint. They can be pulled out of the model with anti-rotation protection. Matching impression posts: **TSPA 4** and **TSPA 5**

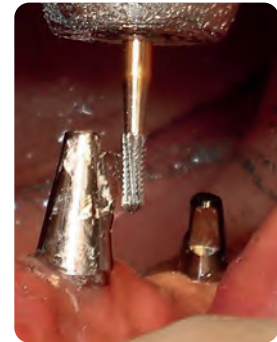
	Description	REF	Price cat.
IAS 4 	Scanner analogue IAS 4 For small head	BM5124	B
IAS 5 	Scanner analogue IAS 5 For large head	BM5125	B







Use example for self-descriptive scanner analogue



CEMENTABLE ANGULATION ADAPTER (Ti6AL4V)


These adapters are mounted on GCS® implants to compensate for the insertion direction. Plastic cements are preferably used. The implant head must be roughened beforehand. The protruding head parts are then removed. The impression is taken directly on the adapter.




	Description	Code	REF	Price cat.
  AA15 KK	Adapter, 15° For small head	AA15 KK	BM1303	C
 AA25 KK	Adapter, 25° For small head	AA25 KK	BM1305	C
  AA5 15°	Adapter, 15° For large head	AA5 15°	BM1197	C
 AA5 25°	Adapter, 25° For large head	AA5 25°	BM1198	C

CASTABLE CROWN BASE


These adapters are used by the dental technician for modeling of bridge frames. In the metal try-in, the protruding head parts are removed by the dentist.

	Description	Height	Code	REF	Price cat.
	Adapter 15° For small head Reducible and castable Pack of 5	7.5 mm	AAL 15 KK	BM1308	C

LAB ANALOGUE

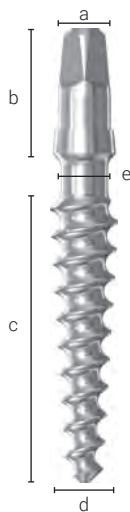
	Description	Code	REF	Price cat.
	Abutment analogue for angulation adapter For small head 15° and 25°	AAA	BM1309	B

CASTABLE PART AND IMPRESSION CAP

	Description	Code	REF	Price cat.
	Castable abutment and transfer for AAA Pack of 5	PA AAA	BM1310	B

KDS BONE EXPANDING SCREWS

For all **GCS® B** screw implants, bone-expanding screws are available as tools to create the definitive implant cavity. Basically, for each implant prior to insertion of a **GCS® B** screw implant, a bone compression with the bone-expanding screw should be performed. In addition, with a narrow alveolar ridge, an expansion of the alveolar ridge can be performed with the bone-expanding screw. By inserting the bone-expanding screw, it can be checked whether the **GCS® B** screw implant can be inserted into the bone easily and fully. Titanium alloy Ti6Al4V, machined. Tighten with **IT K**, **ITS K** or **ITX K** using the torque ratchet **TW2** (max. 45 Ncm), or alternatively **RAT 2**. Package unit: 1 piece, non-sterile



Description	Code KDS	Enossal Ø	Enossal length	Neck Ø	REF	Price cat.
KDS 3.0 10	A	3.0 mm	10 mm	2.0 mm	BM1173	F
KDS 3.0 12	B	3.0 mm	12 mm	2.0 mm	BM1174	F
KDS 3.0 15	C	3.0 mm	15 mm	2.0 mm	BM1003	F
KDS 3.2 12	D	3.2 mm	12 mm	2.5 mm	BM1175	F
KDS 3.2 15	E	3.2 mm	15 mm	2.5 mm	BM1176	F
KDS 3.7 12	F	3.7 mm	12 mm	2.8 mm	BM1177	F
KDS 3.7 15	G	3.7 mm	15 mm	2.8 mm	BM1004	F
KDS 4.1 8	H	4.1 mm	8 mm	2.8 mm	BM1178	F
KDS 4.1 10	I	4.1 mm	10 mm	2.8 mm	BM1179	F
KDS 4.1 12	K	4.1 mm	12 mm	2.8 mm	BM1180	F
KDS 4.1 15	L	4.1 mm	15 mm	2.8 mm	BM1005	F
KDS 4.1 17	M	4.1 mm	17 mm	2.8 mm	BM1181	F
KDS 4.1 19	N	4.1 mm	19 mm	2.8 mm	BM1182	F

a) Abutment Ø	3.35 mm
b) Abutment height	6.8 mm
c) Enossal length	8 - 19 mm
d) Enossal Ø	3.0 - 4.1 mm
e) Neck Ø	2.0 - 2.8 mm

The bone-expanding screws can easily be screwed in using suitable insertion tools and immediately screwed out again after reaching the full insertion depth. Subsequently, the **GCS® B** implant is inserted. With the **GCS® B** (bendable), **the use of bone-expanding screws is mandatory regardless of the region**, so that the shear forces occurring during insertion do not fracture the implant neck.

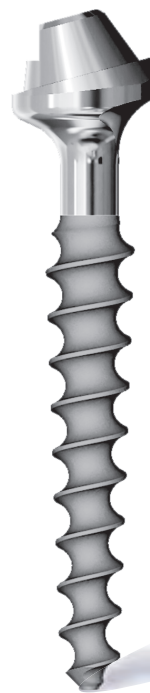
Do not use for GCS® implants with microthread.

AUXILIARY TOOL

Auxiliary tool for determining the plane of bite in relation to the Camper's plane and the bipupillary line during the creation of the upper jaw part of the bite registration. Can be used with wax or silicone.



REF	Price cat.
BM1199	N

THE ADVANTAGES OF GCS® MU IMPLANTS

Feature a pre-angulation of 15°

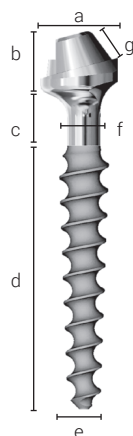
May be bent additionally, using the insertion tool

In conjunction with the clinically possible rotational positions of the head, virtually all possible angulations can be realized

Made of highly resistant titanium alloy

GCS® MU IMPLANTS

GCS® MU implants feature a pre-angulation of 15 degrees. GCS® MU may be bent additionally, using the insertion tool. In conjunction with the clinically possible rotational positions of the head, virtually all possible angulations can be realized. Material **Ti6Al4V**.



a) Abutment Ø	4.8 mm
b) Abutment height	3.7 mm
c) Trans-mucosal height	3 mm
d) Enossal length	8 - 15 mm
e) Enossal Ø	3.0 - 5.0 mm
f) Neck Ø	2 mm
g) Height of connecting part	2 mm

Prosthetic screw

Description	Enossal Ø	Enossal length	REF	Price cat.
GCS MU 3.0 15	3.0 mm	15 mm	BM1152	L
GCS MU 3.2 12	3.2 mm	12 mm	BM1233	L
GCS MU 3.2 15	3.2 mm	15 mm	BM1234	L
GCS MU 3.7 10	3.7 mm	10 mm	BM1235	L
GCS MU 3.7 12	3.7 mm	12 mm	BM1236	L
GCS MU 3.7 15	3.7 mm	15 mm	BM1153	L
GCS MU 4.1 8	4.1 mm	8 mm	BM1237	L
GCS MU 4.1 10	4.1 mm	10 mm	BM1238	L
GCS MU 4.1 12	4.1 mm	12 mm	BM1154	L
GCS MU 4.1 15	4.1 mm	15 mm	BM1155	L
GCS MU 5.0 10	5.0 mm	10 mm	BM1156	L
GCS MU 5.0 12	5.0 mm	12 mm	BM1139	L

**MULTI-UNIT LAB SET**

Description	Code	REF	Price cat.
Titanbasis Use with SF K MU	T-Base MU	BM3169	
Castable abutment Use with T-Base and SF K MU	PA2 MU	BM3170	
Prosthetic screw For GCS® MU and GBC® MU	SF K MU	BM3159	
COMPLETE SET		BM3112	E

ACCESSORIES SINGLE-PIECE MULTI-UNIT IMPLANTS

	Description	Code	REF	Price cat.
   	Insertion tool for GCS® MU, GBC® MU and Hexacone® Plus MU 15° Use with IT2 GBC, IT2 S GBC, AH MU Tool HT 1.25	ITX MU15	BM3222	G
	Insertion tool long For large head Use with RAT2 and TW2, length 19 mm	UST 1 M	BM2064	E
	Insertion tool short For large head Use with RAT2 and TW2, length 7 mm	UST 2 M	BM2110	E
	Adapter for handgrip Fits ITX MU15 (REF BM3222)	Adapter UST 1	BM2063	F
  	Hex Instrument 1.25, length 14 mm	short HTS 1.25	BM3023	C
	Hex Instrument 1.25, length 21 mm	medium HT 1.25	BM3022	C
	Hex Instrument, length 45 mm	long HTX 1.25	BM7764	C
	Scan abutment for MU implants Incl. screw SSA MU Sterilisable, two-part, material Ti6Al4V	SAB MU	BM3135	D
<p>Parts for passive connection of the bridge frame</p>   	Prosthetic screw for GCS® MU and GBC® MU	SF K MU	BM3159	B
	Castable abutment Use with T-Base and SF K MU	PA2 MU	BM3170	B
	Titanium base * Use with SF K MU (REF 418164) For GCS® MU, GBC® MU and Hexacone® Plus MU	T-Base MU	BM3169	B
<p>Parts for UCLA technique</p>  	Prosthetic screw For GCS® MU and GBC® MU	SF K MU	BM3159	B
	Castable abutment UCLA For direct use on MU implants SF K MU sold separately	PA MU	BM3200	B
<p>Part for UCLA technique & passive connection</p> 	Digital lab analogue for MU implants* For GCS® MU, GBC® MU and Hexacone® MU	IA K MU	BM3178	B
 	Long screw for prosthetic use or as pick-up screw for use with HLT MU Tool: HT 1.25, material Ti6Al4V	SFL MU	BM3218	B
	Transfer for pick-up impressions Straight Delivery incl. SFL MU	HLT MU	BM3152	C
	Temporary base SF K MU or SFL MU sold separately	TC MU	BM3151	D

EXTENSION SET FOR GCS® TRAY

Works with all MU implants

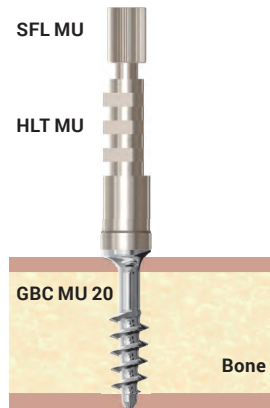
* PLEASE GO TO [HTTPS://IMPLANT.COM/EN/DOWNLOADS](https://implant.com/en/downloads) TO DOWNLOAD THE CORRESPONDING STL FILES
SEE PAGE 49 FOR SCANBODIES FOR DIGITAL IMPRESSIONS ON MU IMPLANTS

APPLICATION OF SINGLE-PIECE MULTI-UNIT IMPLANTS

1.

Tighten screw SFL MU with the tool HT 1.25.

Fix the transfer with the long screw, then take pick-up-impres- sion.



4.

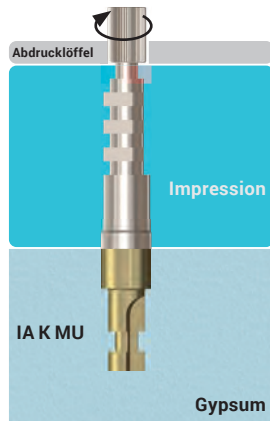
T-Base is sandblasted **from the outside** and cleaned.

The bridge frame is sandblasted **from below in the area of the implants.**



2.

Connect the transfer to the im- plant analogue (IA K MU) and pour the impression with gyp- sum.



5.

All T-Base are fixed to the im- plants with SF K MU or the long screw SFL MU. Then all T-Base are glued with adhesive cement to the bridge frame.

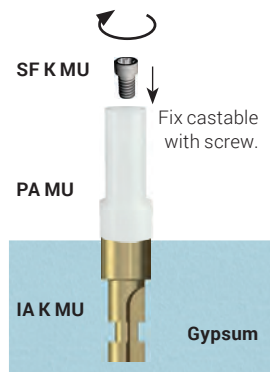
This guarantees a passive fit. Composite excess is removed and the site is polished.



3. a

Connect PA MU with SF K MU on the analogue IA K MU. Tight- en screw SFL MU with the tool HT 1.25.

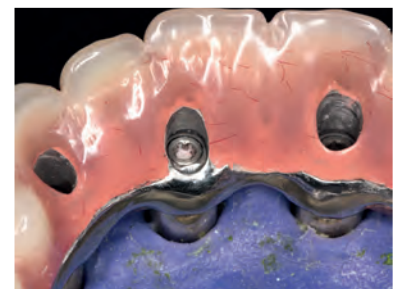
Now the modulation can be created and the frame is veneer- ed. Veneering is possible with acryl, composite and ceramics.



6.

Now the bridge may be screwed on passive with SF K MU.

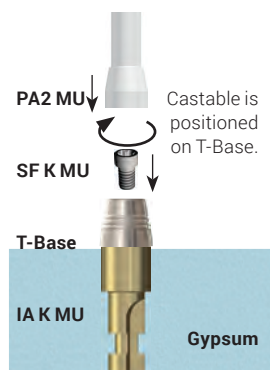
Screw canals are closed with temporary filling material or composite, taking into consid- eration that later access must be possible.



3. b

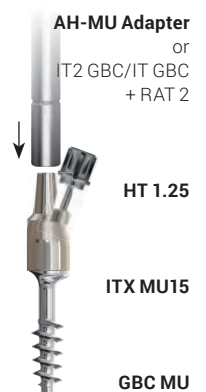
T-Base is positioned over the analogue and screwed on with SF K MU. The cartable PA2 MU is then fitted on top of the T- Base.

Now the modulation is made. Veneering is possible with acryl, composite and ceramics.

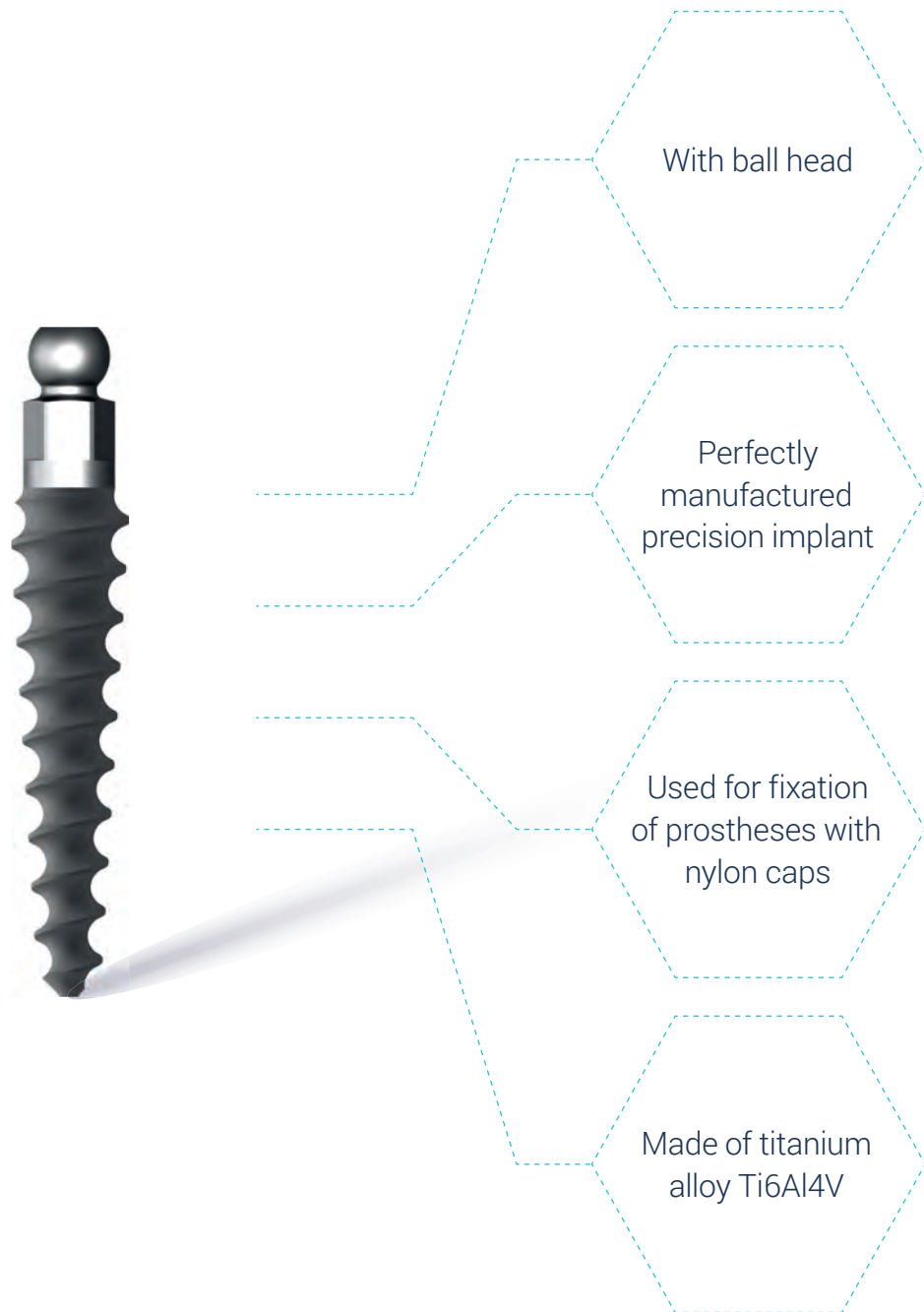


Application of insertion tool MU

Example for insertion tool ITX MU15 on the implant GBC® MU / GCS® MU.



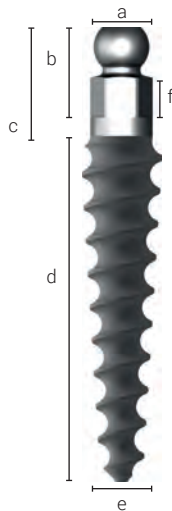
THE ADVANTAGES OF GCS® K IMPLANTS



GCS® K IMPLANTS

Perfectly manufactured precision implant made of highly fracture-resistant titanium alloy Ti6Al4V.










GCS® K implants with ball head are used for fixation of prostheses with nylon caps.



Description	Code KDS	Enossal Ø	Enossal length	REF	Price cat.
GCS K 3.0 12	B	3.0 mm	12 mm	BM1169	F
GCS K 3.0 15	C	3.0 mm	15 mm	BM1168	F
GCS K 3.7 12	F	3.7 mm	12 mm	BM1170	F
GCS K 3.7 15	G	3.7 mm	15 mm	BM1171	F
GCS K 4.1 15	L	4.1 mm	15 mm	BM1172	F

a) Ball head Ø	2.5 mm
b) Abutment height	4.1 mm
c) Length	5.6 mm
d) Enossal length	12 - 15 mm
e) Enossal Ø	3.0 / 3.7 / 4.1 mm
f) Height of hexagon	1.8 mm

ACCESSORIES

Description	Unit	Code	REF	Price cat.
 IAK Lab analogue		IAK	BM1324	B
 Nylon cap transparent, Pull-off force ca. 1200g (EXTERNAL PRODUCT)	Pack of 2	NC	465028	A1
 Nylon cap pink, Pull-off force ca. 800g (EXTERNAL PRODUCT)	Pack of 2	NC 1	465029	A1
 Nylon cap yellow, Pull-off force ca. 500g (EXTERNAL PRODUCT)	Pack of 2	NC 2	465030	A1
 Green, strong Nylon caps R-NC With increased friction strength Only with reduced diameter ball ≤ 2.3 mm	Pack of 2	R-NC	465034	A1
 Pink, medium (EXTERNAL PRODUCT)	Pack of 2	R-NC 1	465033	A1
 Orange, soft	Pack of 2	R-NC 2	465032	A1
 Metal sleeve for all nylon caps (EXTERNAL PRODUCT)		H	465031	B
 Giessbare Kugel für einteiligen Abdruck with Stegverbindung		PA SB	BM6652	A

BALL ADAPTER (SPARE BALL)



Description

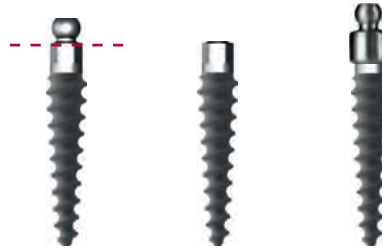
Ball adapter for GCS® K implants, cementable

REF

BM1328

Price cat.

B



INSERTION TOOLS



Description

For GCS, GCS B, KDS
 For GCS, GCS B, KDS
 For GCS, GCS B, KDS
 For GCS, GCS B, KDS
 Only for W&H contra-angle with new drive
 Hex

Type

long
 extralong
 short
 contra-angle/
 hex
 contra-angle

Length

20 mm
 45 mm
 7 mm
 23 mm
 23 mm

Code

IT K
ITX K
UST 1 S
ITWH K
ITW K

REF

BM1336
BM1337
BM1338
BM1339
BM1340

Price cat.

D
D
D
D
D

For GCS K

long

20 mm

IT TB K

BM1345

D

For GCS B
 Emergency tool for
 retrieving GCS® B

long

20 mm

Tool E

BM3336

D





INSTRUMENTS AND TOOLS

	Description	Length	Code	REF	Price cat.
	Drill extension Extends by 19 mm		DX 2	BM1349	D
	Standardized probe. 1 mm scale For radiological measurements	22 mm	PDG	BM1350	A
	Radiological measure pin Fits DOS 1		RMS	BM1364	A
	Ratchet for all Hex instruments and insertion tools		RAT2	BM1352	K
	Torque wrench 10-70 Ncm		TW2 *	BM1356	S








* It is recommended to have the torque ratchets recalibrated by us once a year.

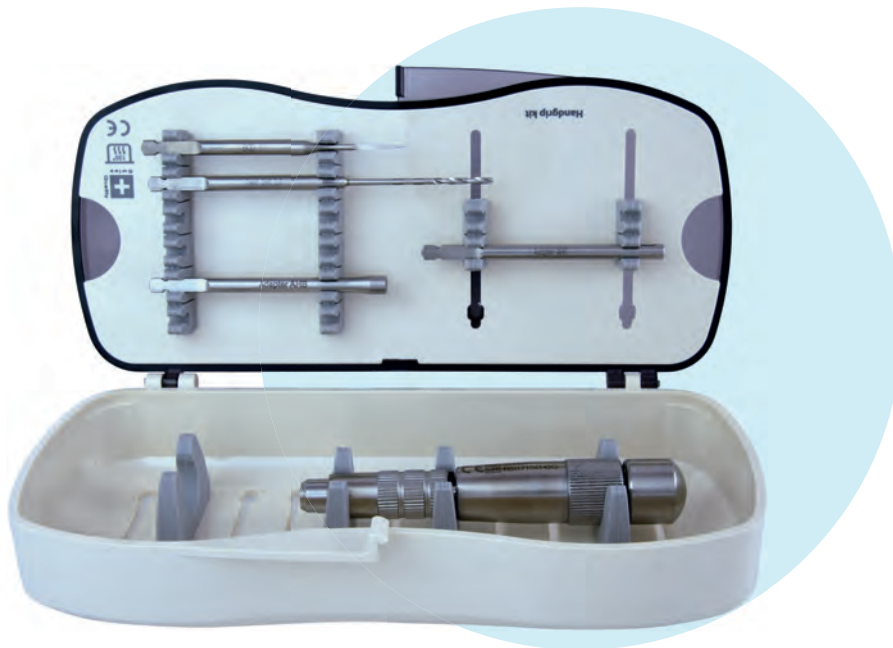
HARD METAL BONE CUTTER

	Description	Length	Code	REF	Price cat.
	Hard metal bone cutter short, for FG	30 mm	SHMCS	BM6026	F
	Hard metal bone cutter long, for FG	36 mm	SHMCL	BM6027	F

HANDGRIP SELF LOCKING, CANNOT BE DISMANTLED

Please note the cleaning instructions on www.implant.com/en/downloads

	Description	Length	Code	REF	Price cat.
 Length 110 mm REF BM1360 Price cat. V	 Adapter	100 mm	BCD 1 Adapter	BM1222	F
	 Twist Drill	110 mm	Twist Drill 2.0	BM1220	F
DRILLS					
INSERTION TOOLS					
 	For GCS®, GCS® B, KDS, GBC 3.5, GBC 4.5	70 mm	Adapter UST 2	BM2062	D
 	For GCS® X, GCS® TX, GCS® Plus, GBC 3.6, GBC 4.6, ab > 5.5	70 mm	Adapter UST 1	BM2063	F

HANDGRIP TRAY

Size of closed tray

W 195 mm **D** 90 mm **H** 45 mm
For all autoclaves**Description**

BCD 1 Adapter
Twist Drill 2.0
Adapter UST 2
Adapter UST 1
Handgrip

Length

100 mm
110 mm
70 mm
70 mm
110 mm

REF

BM1222
BM1220
BM2062
BM2063
BM1360

Price €**Handgrip tray** w/o content**BM2061**

upon request

Handgrip tray with content**SBM2061**

upon request

Please read our detailed instructions for cleaning and re-sterilization of surgical instruments on
<https://implant.com/en/downloads>

INSTRUMENT TRAY FOR GCS® AND GBC®

Size of closed tray

W 175 mm **D** 145 mm **H** 65 mm

For all autoclaves. Autoclaveable up to 134° C,
not suitable for dry heat sterilizers.

Description	System	Head	REF	Description	System	REF	Price €
IT2 GBC	GCS/GBC	large	BM2064	Twist Drill 2.0 30	GBC *	BM1362	
IT2 S GBC	GCS/GBC	large	BM2110	Twist Drill 2.0 21	GBC *	BM1361	
IT2 W	GCS/GBC	large	BM3339	Twist Drill 2.5 21	GBC *	BM1363	
IT K	GCS/GBC	small	BM1336	BCD 1	GCS/GBC	BM2100	
UST 1 S	GCS/GBC	small	BM1338	BCD 2	GCS/GBC	BM2101	
ITW K	GCS/GBC	small	BM1340	BCD 3	GCS/GBC	BM2102	
ITWH K	GCS/GBC	small	BM1339	BCDX 1	GCS/GBC	BM2103	
DOS 1	GCS		BM1330	BCDX 2	GCS/GBC	BM2104	
DOS 2	GCS		BM1331	BCDX 3	GCS/GBC	BM2105	
DOS 3	GCS		BM1332	RMS	GCS/GBC	BM1364	
DOS 4	GCS		BM1333	RMS	GCS/GBC	BM1364	
DOS 5	GCS		BM1334	DX 2	GCS/GBC	BM1349	
C-Drill KM 1	GCS		BM1071	TW2	GCS/GBC	BM1356	
C-Drill KM 2	GCS		BM1072				
C-Drill KM 3	GCS		BM1073	Instrument tray w/o content		BM4264	upon request
DS 2	GCS		BM1359	Instrument tray with content		SBM4264	upon request
IT TB K	GCS		BM1345				

* The content for the system **GBC®** is optional

DRILLSTOP TRAY



Not suitable for dry heat sterilizers

Tiefe	Drills	Drillstop	Tiefe	Drills	Drillstop
GCS 3.0 (3.2)			GCS 4.1		
10	DOS 1	K	8	DOS 3	L
12	DOS 1	H	10	DOS 3	K
15	DOS 1	D	12	DOS 3	H
GCS 3.7			15	DOS 4	K
10	DOS 2	K	17	DOS 4	H
12	DOS 2	H	19	DOS 4	F
15	DOS 2	D	GCS 5.0		
			10	DOS 5 (6)	K
			12	DOS 5 (6)	H
			15	DOS 5 (6)	D

Description	REF	Price €
Drillstopp B	BM1501	
Drillstopp C	BM1502	
Drillstopp D	BM1503	
Drillstopp F	BM1505	
Drillstopp H	BM1507	
Drillstopp K	BM1510	
Drillstopp L	BM1511	
Drill DOS 1	BM1330	
Drill DOS 2	BM1331	
Drill DOS 3	BM1332	
Drill DOS 4	BM1333	
Drill DOS 5	BM1334	
Drill DOS 6	BM1335	
Tray with content	BM4209	498.00

IT HAS BEEN SCIENTIFICALLY PROVEN

Heatless® drills by Dr. Ihde Dental generate 55 % less heat than traditional bone drills from other manufacturers. This makes it possible to use higher rotational speeds: between 3,000 and 5,000 rpm are recommended with good external cooling and intermittent drill technique.

STARTER TRAY



Autoclaveable up to 134° C, not suitable for dry heat sterilizers. This surgical kit contains all drills and tools for first works with the system GCS®. Material: autoclaveable plastic.

Description	REF	Price €
IT K	BM1336	
UST 1 S	BM1338	
C-Drill KM 1	BM1071	
C-Drill KM 2	BM1072	
C-Drill KM 3	BM1073	
UST 1 M	BM2064	
UST 2 M	BM2110	
DOS 1	BM1330	
DOS 2	BM1331	
DOS 3	BM1332	
BCDX 1	BM2103	
Torque wrench TW2	BM1356	
HT 1.25	BM3022	optional content
ITX MU 15	BM3222	
Starter tray w/o content	BM6500	upon request
Starter tray with content	SBM6500	upon request

INDICATIONS GCS® II GCS® MICRO

- Anchorage of crowns, bridges and bars, with the presence of adequate bone supply in terms of bone quality, bone width and bone height
- Anchorage of prostheses via bar and button anchorage systems
- Not for use in combination with simultaneous bone augmentations

RESTRICTIONS FOR GCS® B APPLICATION

- These two implant types may only be used as support implants in the reduced-load area
- Splinting of at least three and possibly several implants for cross arch stabilisation
- At least one **GCS®** or **GCS® Micro** implant must be involved in the construction
- The prosthetic restoration must be securely fixed (with definitive cements)
- Not to be used for segmented bridges without the involvement of at least two **GCS®** screws
- If in doubt, angulation adapters on **GCS®** screws are preferable to the **GCS® B** implant
- Not to be used for additional abutments in combination with natural teeth
- Not to be used under off-axis load as well as in deep-bite cases in the maxillary and mandibular anterior region
- Max. width of occlusal surface 5 mm
- Not to be used as terminal abutments
- Bendable up to 13 degrees

NOTES ON THE CARE OF SURGICAL STEEL INSTRUMENTS

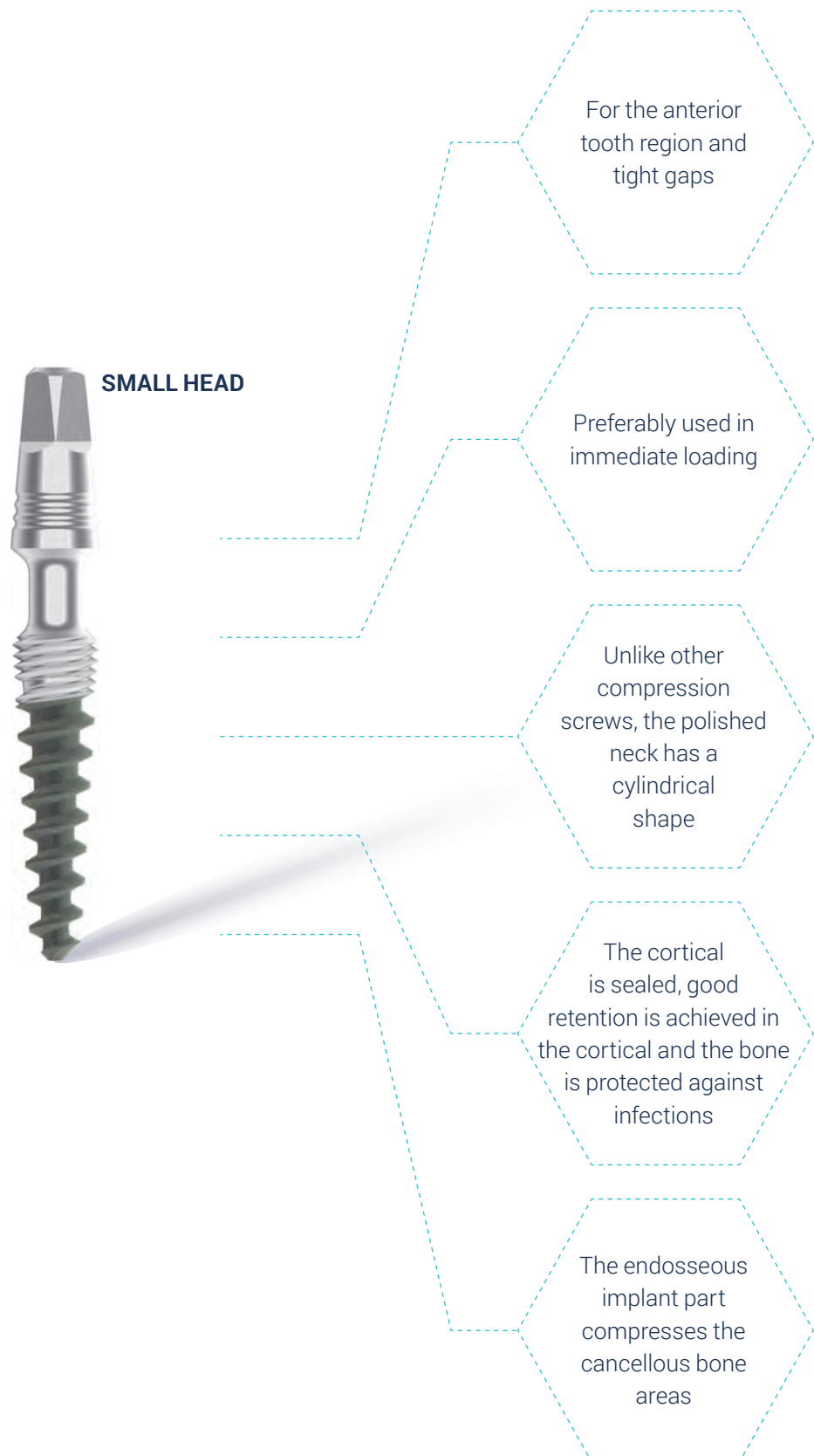
Surgical steel instruments can quickly become damaged if inadequately or improperly cared for. Only the special solvents for cleaning surgical steel should be used; in case of doubt, consult **Dr. Ihde Dental GmbH / AG**.

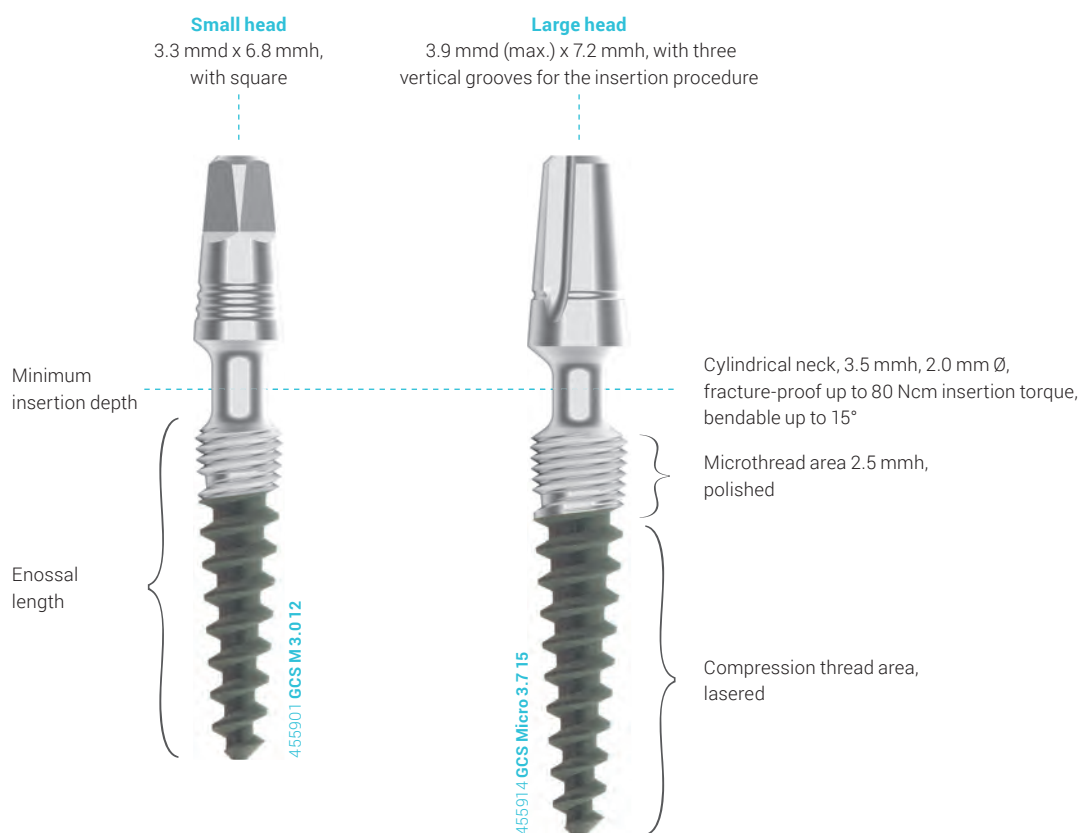
The following are not recommended:

- Disinfectants/cleaners with a high chlorine content
- Disinfectants/cleaners with a high oxalic acid content

For instruments with colour coding, the following are NOT recommended:

- Excessively high solvent concentrations, disinfectants/cleaners with the components mentioned above
- Excessive temperatures during cleaning and sterilization (no dry heat sterilization)

THE ADVANTAGES OF GCS® M IMPLANTS

GCS® M AND MICRO IMPLANTS**MATERIAL**

Ti6AL4V, also known as „Grade 5“, is the high-purity version of the conventional 6/4 Ti alloy, which is used for more than 50% of all metallic human implants. This material is the first choice for all applications which require high stability, corrosion resistance and mechanical strength. This is why today's most modern dental implant designs are made of this material. This titanium alloy is superior to the alternatively used pure titanium in terms of stability by more than 25%. Also regarding biocompatibility and the support of bone cell growth, this titanium alloy shows advantages compared to pure titanium.

FUNCTIONALITY

The one-piece **GCS® M / GCS® Micro** dental implant is preferably used in immediate loading. Unlike other compression screws, the polished neck has a cylindrical shape. Thus, the cortical is sealed, good retention is achieved in the cortical and the bone is protected against infections. At the same time, the endosseous implant part compresses the cancellous bone areas.

NOTE The smooth microthread must be completely submerged below the bone level. The cylindrical neck must extend into the bone at least 1 mm deep. Therefore, the implant must be selected so that at least 1.5 mm more usable vertical bone is present than the nominal length of the implant.

Example For GCS Micro 3.7 15, 17 mm of usable vertical bone must be present. If in doubt, a shorter implant should be selected so as to ensure a sufficient insertion depth.

DRILLING PROCEDURE

The pilot hole is made with the drills of the GCS® system. Except in very dense mandibular bone, the pilot hole is usually sufficient with BCD1 or DOS1.

INSERTION

The implant can be inserted most easily with the handgrip (REF 311431) and the adapter (REF 900 037). When using the ratchet RAT2, small or medium insertion tools are used. Max. torque is 80 Ncm.

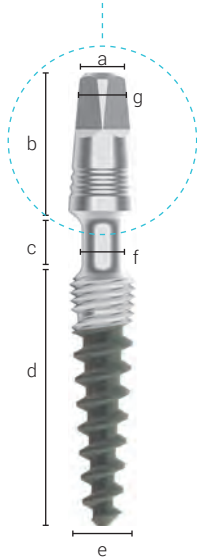
THE IMPLANTS ARE SUPPLIED WITH TWO DIFFERENT HEAD SIZES

GCS® M implants are supplied with a small head; they also fit in small individual tooth gaps.

GCS® Micro implants are supplied with a large head. This head permits easy and speedy prosthetic restoration.

GCS® M IMPLANTS WITH SMALL ABUTMENT HEAD

GCS® M with small head for the anterior tooth region and tight gaps. Material Ti6Al4V.



Description	Enossal Ø	Enossal length	Neck Ø	Drill *	REF	Price cat.
GCS M 3.0 10	3.0 mm	10 mm	2 mm	DOS 1 or BCD 1	BM6252	F
GCS M 3.0 12	3.0 mm	12 mm	2 mm		BM6253	F
GCS M 3.0 15	3.0 mm	15 mm	2 mm		BM6254	F
GCS M 3.2 12	3.2 mm	12 mm	2 mm		BM6255	F
GCS M 3.2 15	3.2 mm	15 mm	2 mm	DOS 2 or BCD 2	BM6256	F
GCS M 3.7 6	3.7 mm	6 mm	2 mm		BM6250	F
GCS M 3.7 8	3.7 mm	8 mm	2 mm		BM6251	F
GCS M 3.7 10	3.7 mm	10 mm	2 mm		BM6257	F
GCS M 3.7 12	3.7 mm	12 mm	2 mm		BM6258	F
GCS M 3.7 15	3.7 mm	15 mm	2 mm		BM6259	F

* In very hard bone, it may be additionally necessary to make a cylindrical hole with a twist Drill 2.5 mm to a depth of 2.5 mm.


- a) Abutment Ø 3.35 mm
- b) Abutment height 6.8 mm
- c) Neck length 3.5 mm
- d) Enossal length 6 - 15 mm
- e) Enossal Ø 3.0 - 3.7 mm
- f) Neck Ø 2.0 mm
- g) Square AF (across flats) 1.9 mm




INCLUSIVE

GCS® implants are delivered incl. lab-set REF 462353, consisting of

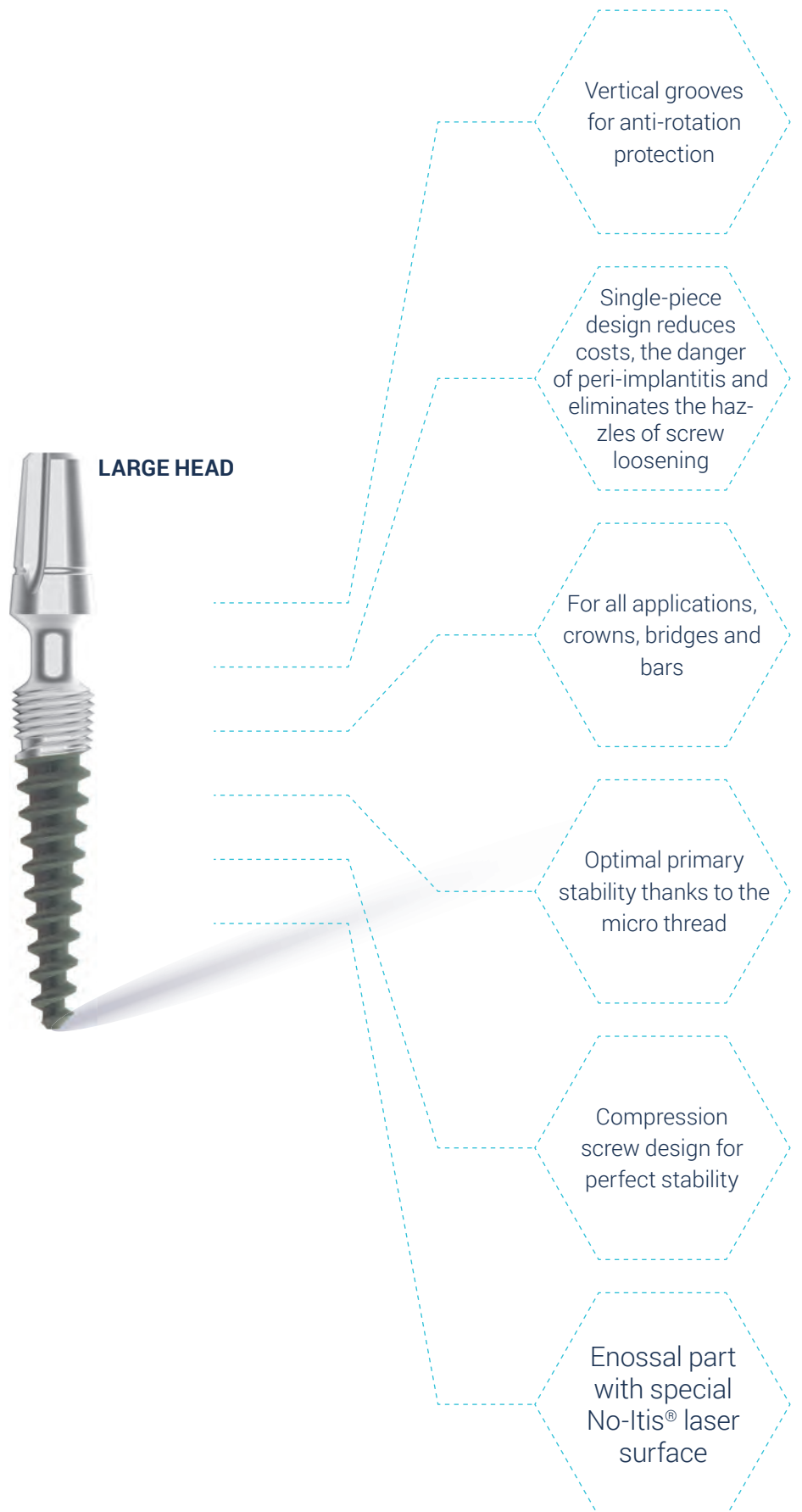
 Double analogue, plastic
IA4/IAU
BM5118

 Impression post castable, internally edged, for large head
PA X
BM1429

 Impression post castable, internally round, for small head
TSPA 4
BM1394

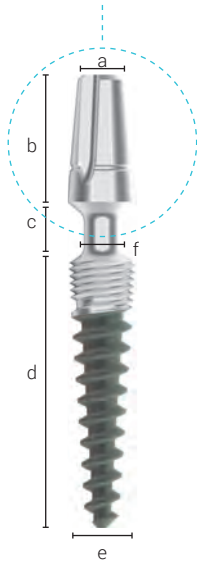
NOTE This is a standard lab-set and therefore contains parts for both **LARGE** abutment heads (**PA X**) and **SMALL** abutment heads (**TSPA 4**).

THE ADVANTAGES OF GCS® MICRO IMPLANTS



GCS® MICRO IMPLANTS WITH LARGE ABUTMENT HEAD

GCS® Micro with large head for all applications. Material Ti6Al4V.



Description	Enossal Ø	Enossal length	Neck Ø	Drill *	REF	Price cat.
GCS Micro 3.7 6	3.7 mm	6 mm	2.0 mm	DOS 2 / BCD 2	BM1460	F
GCS Micro 3.7 8	3.7 mm	8 mm	2.0 mm	DOS 2 / BCD 2	BM1461	F
GCS Micro 3.7 10	3.7 mm	10 mm	2.0 mm	DOS 2 / BCD 2	BM1462	F
GCS Micro 3.7 12	3.7 mm	12 mm	2.0 mm	DOS 2 / BCD 2	BM1463	F
GCS Micro 3.7 15	3.7 mm	15 mm	2.0 mm	DOS 2 / BCD 2	BM1464	F
GCS Micro 4.1 8	4.1 mm	8 mm	2.0 mm	DOS 3 / BCD 3	BM1470	F
GCS Micro 4.1 10	4.1 mm	10 mm	2.0 mm	DOS 3 / BCD 3	BM1471	F
GCS Micro 4.1 12	4.1 mm	12 mm	2.0 mm	DOS 3 / BCD 3	BM1472	F
GCS Micro 4.1 15	4.1 mm	15 mm	2.0 mm	DOS 3 / BCD 3	BM1473	F
GCS Micro 5 10	5.0 mm	10 mm	2.0 mm	DOS 5	BM1475	F
GCS Micro 5 12	5.0 mm	12 mm	2.0 mm	DOS 5	BM1476	F

* In very hard bone, it may be additionally necessary to make a cylindrical hole with a twist Drill 2.5 mmd to a depth of 2.5 mm.

- a) Abutment Ø 3.9 mm
- b) Abutment height 7.2 mm
- c) Neck length 3.5 mm
- d) Enossal length 6 - 15 mm
- e) Enossal Ø 3.7 - 5.0 mm
- f) Neck Ø 2.0 mm



INCLUSIVE

GCS® implants are delivered incl. lab-set REF 462353, consisting of



Double analogue, plastic

IA4/IAU
BM5118



Impression post castable, internally edged, for large head

PA X
BM1429



Impression post castable, internally round, for small head

TSPA 4
BM1394

ACCESSORIES

Analogue **IAB**

Pack of 5

REF BM5120

Price cat. B



Impression post **TSPA 5**

Pack of 5

REF BM1393

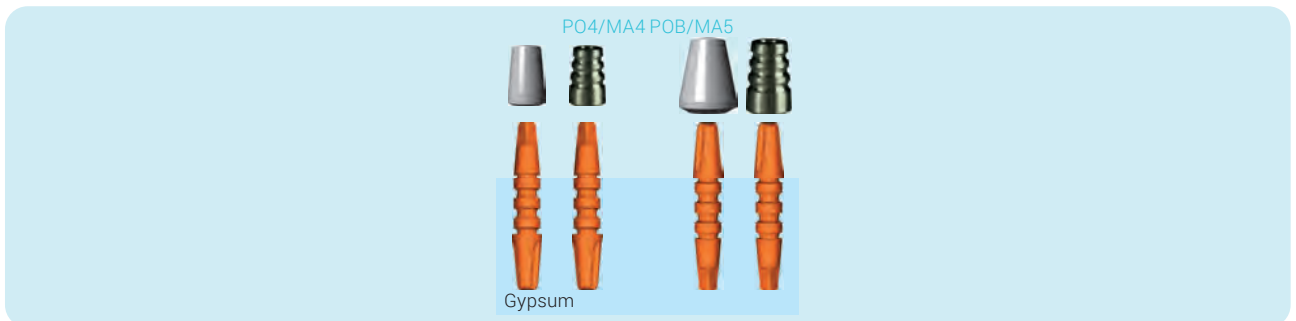
Price cat. B


The red impression cap and the red analogue are round (not secured against rotation).

NOTE This is a standard lab-set and therefore contains parts for both **LARGE** abutment heads (**PA X**) and **SMALL** abutment heads (**TSPA 4**).




IMPRESSION TAKING AND LABORATORY ACCESSORIES

		Description	Unit	Code	REF	Price cat.
FOR SMALL HEAD		Impression post castable, POM Internally round	Pack of 5	TSPA 4	BM1394	B
		Impression post castable, POM Internally round	Pack of 5	TSPA 4	BM1372	B
		Castable abutment and base for provisionals For small head 7 mm high, white, internally round	Pack of 5	PO4	BM1317	B
		Double analogue, plastic For large and small head	Pack of 5	IA4/IAU	BM5118	B
		Double analogue, metal For large and small head	1 piece	IA4/IAU	BM5119	A
FOR LARGE HEAD		Impression post castable Internally edged	Pack of 5	PA X	BM1429	B
		Castable abutment for large head Internally round	Pack of 5	POB	BM5121	B

**TITANIUM CAPS**

	Description	Material	Code	REF	Price cat.
	Titanium cap, radio opaque For small head	Ti6Al4V weldable	MA4	BM6024	B
	Titanium cap, radio opaque For large head	Ti6Al4V weldable	MA5	BM6025	B

CORTICAL MILLING FOR GCS® M AND GCS® MICRO

	Description		Code	REF	Price cat.
	C-Drill KM1 3.0 - 3.2	Cortical milling	C-Drill KM1	BM1071	E
	C-Drill KM2 3.7 - 4.1	Cortical milling	C-Drill KM2	BM1072	E
	C-Drill KM3 5.0	Cortical milling	C-Drill KM3	BM1073	E

SCANBODIES MATERIAL PEEK/POM

Description Scanbody-4
Cylindrical, for small head

Systems GCS®, GBC®

REF **BM1561**

Price cat. **B** (Pack of 5)



Description Scanbody-5
Cylindrical, for large head

Systems GCS®, GBC®

REF **BM1562**

Price cat. **B** (Pack of 5)



View from top



Description Scanbody-MU
Cylindrical

Systems GCS® MU, GBC® MU, GIH® MU

REF **BM1563**

Price cat. **B** (Pack of 5)



Description Flag-Scanbody **SCB4**
For small head
For intra-oral scans

Systems GCS®, GBC®

REF **BM5126**

Price cat. **C** (Pack of 5)



Description Flag-Scanbody **SCB5**
For large head
For intra-oral scans

Systems GCS®, GBC®

REF **BM5127**

Price cat. **C** (Pack of 5)



View from top



Description Flag-Scanbody **SCB MU**
Incl. screw SFK MU (418164)
For intra-oral scans

Systems GCS® MU, GBC® MU, GIH® MU

REF **BM5128**







Price cat. **B** (1 piece)

Please go to <https://implant.com/en/downloads> to download the corresponding STL files.

HEATLESS® DRILLS DOS FOR IMPLANTS WITH CONICAL CORE

Surgical steel, colour-coded, depth-coded and autoclaveable. The drill is marked with laser depth markings.
Use between 3,000 and 5,000 rpm with good cooling and intermittent drill technique.
Due to the extremely high cutting performance, you can work without pressure.



	Description	Colour	Max. working length	REF	Price cat.
	DOS 1	yellow	17 mm	BM1330	D
	DOS 2	black	17 mm	BM1331	D
	DOS 3	red	17 mm	BM1332	D
	DOS 4	blue	21 mm	BM1333	D
	DOS 5	green	17 mm	BM1334	D
	DOS 6	transparent	15 mm	BM1335	D

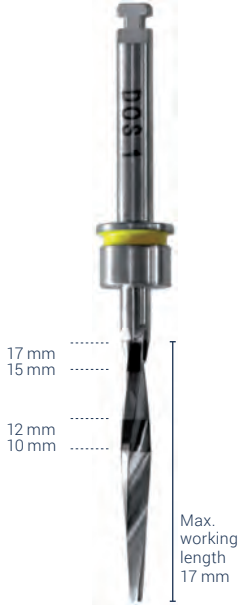
DOS 6 This drill is 2 mm shorter at the tip. It can therefore drill up to 2 mm deeper into hard bone than nominally indicated on the drill. Therefore, the conical bone cavity is only circularly extended in the crestal area without increasing the drilling depth.

INSTRUMENTS AND TOOLS

	Description	Length	Code	REF	Price cat.
	Insertion tool short, for large head Use with RAT 2 and TW2	7 mm	UST 2 M	BM2110	E
	Insertion tool long, for large head Use with RAT 2 and TW2	19 mm	UST 1 M	BM2064	E
	Insertion tool for large head Use with contra-angle	23 mm	IT2W	BM3339	E
	Insertion tool long, for small head Use with RAT 2 and TW2	20 mm	IT K	BM1336	D
	Insertion tool short, for small head Use with RAT 2 and TW2	7 mm	UST 1 S	BM1338	D
	Insertion tool for small head Use with contra-angle	23 mm	ITW K	BM1340	D
	Torque wrench 10 - 70 Ncm		TW2	BM1356	S
	Adapter for large head Use with handgrip	70 mm	Adapter UST 1	BM2063	F
	Adapter for small head Use with handgrip	70 mm	Adapter UST 2	BM2062	D
	For machine reprocessing, cannot be dismantled Clean in an ultrasonic bath at 45° with an alkaline cleaning agent For adapter, self-locking	110 mm		BM1360	V

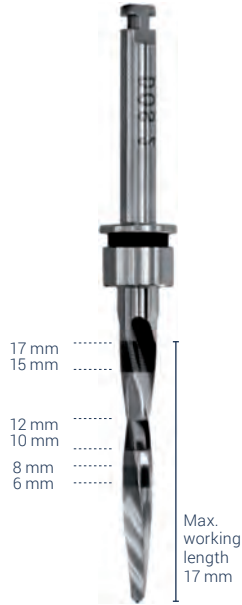
Heatless® Drill

DOS 1 **BM1330**



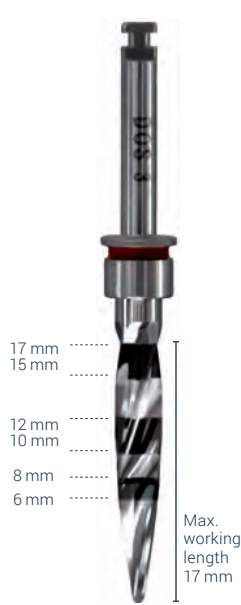
Heatless® Drill

DOS 2 **BM1331**



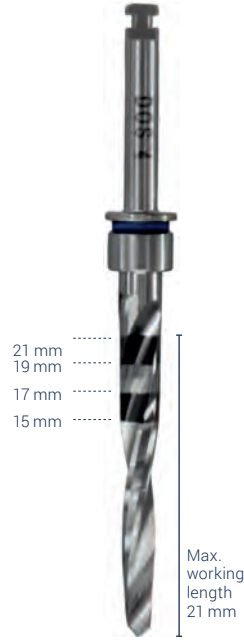
Heatless® Drill

DOS 3 **BM1332**



Heatless® Drill

DOS 4 **BM1333**



Heatless® Drill

DOS 5 **BM1334**



Twist Drill
ø 2.0 mm

Twist Drill 2.0/21
BM1361



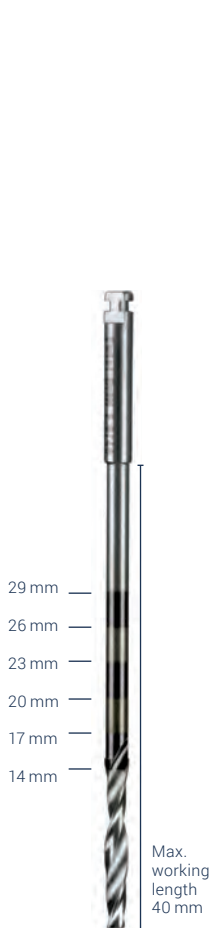
Twist Drill
ø 2.0 mm

Twist Drill 2.0/30
BM1362



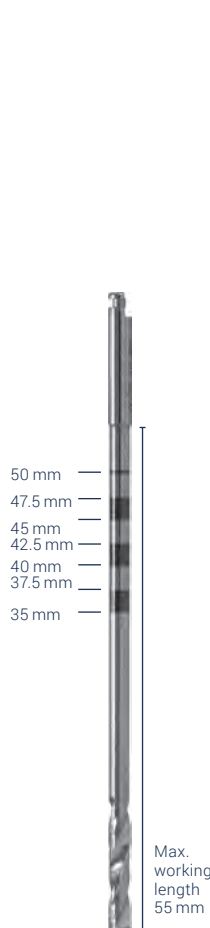
Twist Drill
ø 2.0 mm

Twist Drill 2.0/40
BM1223



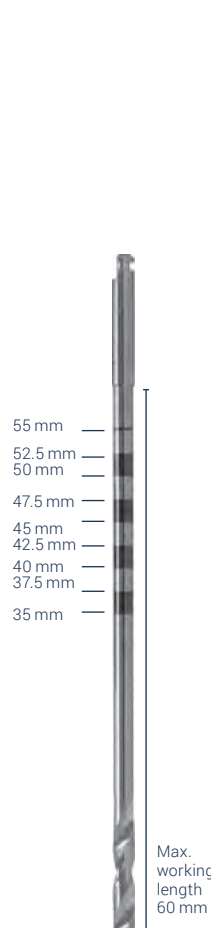
Twist Drill
for ZSI

Twist Drill 2.2 /50
BM1428



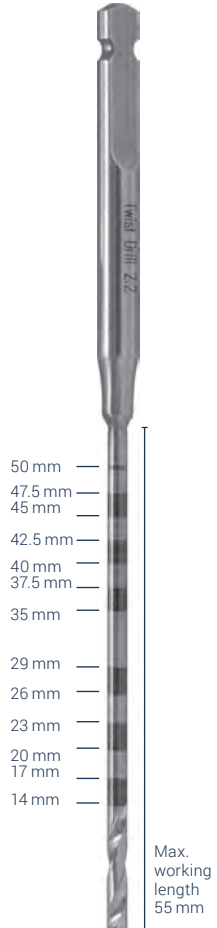
Twist Drill
for ZSI

Twist Drill 2.2 /55
BM1369



Twist Drill
for ZSI

Twist Drill 2.2
BM1224



EN

MANUFACTURER'S INFORMATION regarding the preparation of re-sterilizable medical devices complies with EN ISO 17664.

Please read carefully!

Medical devices which may be re-processed are

- Tools for abutments and screws
- Torques control instruments and ratchets
- Instruments for preparing endosteous bone cavities (drills, cutters)
- Bone expansion screws and distractors
- Drill guide sleeves
- Abutments and screws, provided they do not remain in with the patient between individual treatment appointments and are not used on other patients. They should be stored by the operator between the treatment appointments, e.g. together with the patient's file.
- Manual instruments for the placement of implants and bone preparation.

Re-usability

Frequent re-processing has influence on the product especially if high temperatures are applied for sterilization. Drills for bone cavities should be used only 10 times. Tools and ratchets may be used along as they fit to the 2nd part. In general the operator is responsible for the decision of re-using and re-processing of instruments. Damaged instruments and instruments showing signs of wear must be discarded. Liability of the manufacturer is void. If these restrictions are not regarded.

Legal bases

The following legal bases, regulations and recommendations are applied with regard to the products mentioned above (Germany):

- Directive 93/42/EEC
- Medical device regulation (which is valid in the country where the medical device is used for treatment or where the functionality of the medical device is being evaluated)
- Bundesgesundheitsblatt (Federal Health Gazette) 2001 : 44: 1115-1126

Hygiene requirements for the processing of medical devices (Recommendation of the Commission for Hospital Hygiene (Kommission für Krankenhaushygiene) at the Robert-Koch-Institute and the Federal Ministry for Drugs and Medical Devices [Bundesministerium für Arzneimittel und Medizinprodukte]).

Legal information:

Implants and other components of the implant system (Diston, BOL, BC3, BECES, GBC as well as K03 PLUS (Isaai) implants according to the Certificate on Biocompatibility Implants as issued by the International Implant Foundation/ Munich see www.ImplantFoundation.org/en/consensus-papers) are sold only to licensed practitioners with valid authorization of the manufacturer (or issued by the IF) for the use of the system. This demand for further and continuous education is also valid for advising patients before and after the placement of the implants.

General principles

All reusable products must be cleaned, disinfected and sterilized before each use. This also applies to the initial use of products that are supplied nonsterile. Efficient cleaning and disinfection is essential for effective sterilization. Special cleaning/sterilization instructions should be obtained from the instructions for use. The operating instructions of the practice unit must also be observed. As the operator responsible for the safety of instruments during use, please ensure that only adequate, validated parameters specific to the unit and product are constantly maintained during each cycle. Please also observe all valid legal and hygiene regulations of the dental practice and dental hospital.

This applies in particular to the different guidelines regarding effective personal inactivation, important! Always wear protective gloves for your own safety when handling contaminated instruments!

- Instruments made from different materials should never be disinfected, cleaned or sterilized together. This also applies when using an ultrasonic cleaner.
- During mechanical cleaning, instruments should be arranged so that they cannot come into contact, or otherwise there is the risk of damage.
- Multi-part instruments such as ratchets, trephine drills, screwdrivers etc. should be disassembled into their component parts and these should be individually disinfected, cleaned or sterilized.
- These instruments should also be stored disassembled until the next use.

Care instructions of surgical steel instruments

Surgical steel instruments can quickly become damaged with inadequate or incorrect care. Only commercially available solvents should be used for surgical steel if in doubt contact **one-waybiomed GmbH**.

The following are not recommended:

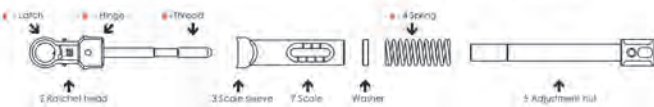
- Disinfection/cleaning agent with a high chlorine content
- Disinfection/cleaning agent with a high oxalic acid content

The following are not recommended for instruments with colour coding

- Too high solvent concentrations, disinfection/cleaning agent with the ingredients mentioned above
- Too high temperatures with mechanical cleaning and sterilization: never higher than 135° C

Schematic diagram of the TW/TW2 torque wrench

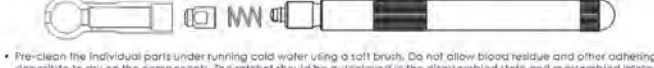
- After use the instrument should be disassembled into its individual parts – no tool is required for disassembly.



- Pre-clean the individual parts under running cold water using a soft brush. Do not allow blood residue and other adhering deposits to dry on the components.

Schematic diagram of the RAT2 ratchet

- After use the instrument should be disassembled into its individual parts – no tool is required for disassembly.



- Pre-clean the individual parts under running cold water using a soft brush. Do not allow blood residue and other adhering deposits to dry on the components. The ratchet should be disassembled in the disassembled state and reassembled immediately before use.

Conditioning

Coarse impurities must be removed from the products immediately after use (within 1-2 hrs maximum). Surgical residue (blood, secretions, tissue residue) should not be allowed to dry on the products. Instruments should be placed in a disinfectant solution immediately after surgery. For temporary storage and pre-disinfection/cleaning immediately after use on patients the instrument can be placed in an interim stand filled with a suitable cleaning/disinfection agent. Contamination should then be cleaned from the instruments under running water or in a disinfectant solution; the disinfectant should be aldehyde-free (otherwise fixation of blood and contamination), have proven efficacy (e.g. DGHM (German Society for Hygiene and Microbiology)/FDA approved and CE Mark), be suitable for instrument disinfection and compatible with the instrument (see Section "Material compatibility"). Follow the disinfectant instructions for use. For manual removal of contamination use only a clean, soft brush or a clean soft cloth which is used specifically for this purpose. Never use metal brushes or steel wool.

- Please note that the disinfectant used for conditioning is only for personal protection and cannot replace the subsequent disinfection step to be performed after cleaning.
- Never allow instruments to remain wet or moist for a longer period of time.
- Corroded, rusty instruments must be cleaned in an ultrasonic cleaner; the corrosion cannot be removed. The instrument should be discarded and may no longer be used.
- Encrustations must be thoroughly removed using nylon brushes.
- Encrusted blood can also be dissolved using hydrogen peroxide 3%
- Instrument disinfectant residues can be removed by rinsing several times with water.

Cleaning/disinfection

For cleaning and disinfection **one-waybiomed GmbH** recommends the use of:

- Instrument disinfectant (reaction time with high bacterial loading 15 minutes in a 3% concentration) or drill disinfectant (reaction time with high bacterial loading 15 min.). Ensure when using other products for cleaning and disinfection.
 - that the products are basically suitable for the cleaning and disinfection of instruments
 - that the cleaning and disinfection agent – if applicable – is suitable for ultrasonic cleaning (see footnote)
 - that a cleaning and disinfection agent with proven efficacy (e.g. DGHM or FDA approved and CE Mark) is used
 - that the chemicals used are compatible with the instruments; alkaline cleaning solutions should be preferred.
- A prerequisite for the use of a combined cleaning/disinfection agent is very low bacterial preloading (no visible contamination) due to effective pre-cleaning of the instruments. The concentrations and reaction times given by the manufacturer of the cleaning-disinfection agent must be strictly adhered to.
- Use only freshly mixed solutions, sterile or low-bacteria (max. 10 germs/ml) and low-endotoxin (max. 0.25 endotoxin units/ml) water (e.g. aqua vitae purificata) and only filtered or distilled water. Instruments that cannot be autoclaved must be disinfected before each use.

Process: Cleaning and disinfection

Automatic cleaning in a cleaning and disinfection unit in combination with the cleaning agent recommended by the unit manufacturer.

Pre-cleaning: Insert the instruments so that the liquid can flow out of the drain tubes and blind holes. Set the cycle and adhere to the unit manufacturer's wash and rinse times. The cleaned components should be examined for visible dirt when removing the instruments. If necessary, repeat the cycle or clean manually.

Manual cleaning

1. Thoroughly clean disinfection/cleaning agent from the instruments by rinsing them with water and, if required, with the aid of a soft nylon brush.
2. **Ultrasonic cleaner:** Place the components in a basket, avoid acoustic shadow. Add an enzymatic cleaning agent to the water and clean the components at a temperature of 40 - 50° C in the ultrasonic cleaner (35-40 kHz) for 3 minutes. Ensure that the components are immersed completely in the water without bubbles.
3. Then remove the instruments from the cleaning solution and rinse them thoroughly (minimum 1 min.) under running water. Use fully deaerated water for this stage, if possible.
4. Then dry the instruments with compressed air.
5. Check the instruments visually and repeat the cleaning stage, if necessary.
6. Pack the instrument as soon as possible after removal (see Section "Packaging"). If necessary after drying again at a clean location.
7. Document the approval.

Mechanical cleaning

Cleaning, disinfection and drying in accordance with DIN EN ISO 15883-1:2006 and DIN EN ISO 15883:2006

Pre-cleaning: Place the disassembled instruments in cold water for 5 minutes. Then brush the disassembled instruments with a soft nylon brush under water to remove coarse impurities.

Mechanical cleaning: e.g. using the Miele 6535 CD unit at 35° C for 3 minutes (programme Varia ID) with an enzymatic cleaner.

Important points

- All instruments must be sterilized after cleaning.
- When sterilizing multi-part instruments in an autoclave without a drying programme, it is essential that the instruments are always sterilized in a disassembled state!
- The instruments should always be checked for corrosion after sterilization.
- The scaling of the instruments must still be visible after sterilization; otherwise the instruments should be replaced.
- New instruments must be cleaned and sterilized without packaging before being for the first time.
- Preparation of all instruments with cavities is particularly critical. This applies especially to internally cooled drills, placement aids and instruments with blind holes. As the water supply cavity cannot be checked with internally cooled drills and bone chips and debris could be carried from patient to patient, we recommend using these instruments as single-use products only or using them exclusively on one patient. With all other instruments it must be ensured that the cavities are completely clean. Multi-part placement aids should be disassembled for cleaning, if possible.

Control

Check all instruments after cleaning and cleaning/disinfection for corrosion, damaged surfaces, chipping, damage to the shape (e.g. bent and non-concentric running instruments, damaged or blunt blades) as well as contamination and discard any damaged instruments. Instruments that are still contaminated must be cleaned and disinfected again. Then check the function and integrity of the instruments. It is not necessary to apply care products (e.g. oil) to instruments and abutments or screws.

Special aspects to observe with drills and cutters

Use cutting instruments for a maximum of 10 times. Thoroughly check these instruments after each use for cleanliness (including the internal cooling section) in particular) and the sharpness of the blades. The wear of bone drills depends on the hardness of the bone of the site, if in doubt, drills should only be used once. There is a considerable loss of cutting performance if the tip is damaged. To ensure care of the drills it is therefore essential to observe the following points:

- During the operation drills should be placed gently in the storage tray, which can be filled with physiological saline solution. Drills should not be kept in the physiological saline solution for longer than 1 hour to avoid corrosion.
- Never drop the drills directly on the floor.
- The drills should not come into contact during ultrasonic cleaning.

Packaging

Sort out the instruments in the sterilization tray and then pack them in single-use sterilization packaging (single or double packaging) and/or sterilization container, which

- complies with DIN EN 588-2/1/3/4/5 EN ISO/ANSI AAMI ISO 11607
- is suitable for steam sterilization (temperature resistant up to min. 137° C (279° F), adequate steam permeability)
- provides adequate protection of the instruments and sterilization packaging against mechanical damage
- is regularly serviced according to the manufacturer's instructions (sterilization container)

Sterilization

Method: Fractional pre-vacuum procedure (according to ISO 17665 or ISO 13060) in a unit that complies with EN 285

Temperature: Heat to 132° C max. 137° C

Pressure: 3 pre-vacuum stages with min. 60 mbar pressure

Hold time: minimum 3 min. at 132° C

Drying time: minimum 10 min.

After sterilization, the sterile instrument packaging for damage after sterilization, check the sterilization indicators. To avoid staining and corrosion the steam must not contain any ingredients. The disinfectant therefore has to have been thoroughly removed. The recommended heat-stable tests of the ingredients for drinking water and steam condensate are specified in EN 285.

Sterilization using hot-air sterilizer and/or gas bead sterilizers is not advised, as the high temperatures blunt the cutting surfaces of the drills.

Instruments should be sterilized in the trays recommended by the autoclave manufacturers if there is not a system-specific instrument tray available.

Storage

After sterilization the instruments must be stored dry and dust-free in the sterilization packaging. The instruments should also be protected against sunlight and heat. The maximum storage period (expiry date) depends on several factors and must be determined and validated by the user.

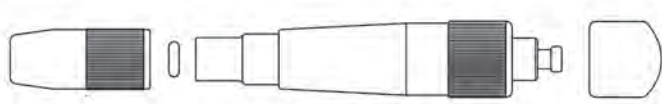
Information on handling multi-part instruments

Multi-part instruments must be disassembled before sterilization. Please note the schematic diagram below.

RAT2: Unscrew the cover screw and remove the push-rod, the push-rod and ratchet housing (inner and outer) must be thoroughly cleaned and then dried. The individual components of the ratchet are shrink-wrapped together in a sterilization bag and sterilized. Ensure that the paper side of the sterilization bag is placed so that the water vapour can escape and that the ratchet or its parts are not lying in water. After sterilization – generally just before beginning of implant placement, the ratchet should be thinly lubricated using a silicone oil and reassembled. The function of the ratchet should then be checked before beginning surgery.

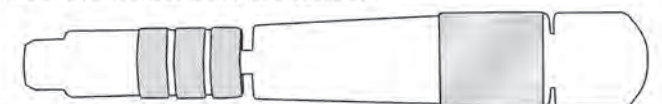
Schematic diagram of the handle REF 311430 (can be disassembled)

- After use the instrument should be disassembled into its individual parts – no tool is required for disassembly.



- Pre-clean the individual parts under running cold water using a soft brush. Do not allow blood residue and other adhering deposits to dry on the components. The handle should be disassembled in the disassembled state and reassembled immediately before use.

Schematic diagram of the handle REF 311431 (cannot be disassembled)



- Pre-clean the instrument under running cold water using a soft brush. Do not allow blood residue and other adhering deposits to dry on the handle. The handle should be thoroughly cleaned immediately using an ultrasonic cleaner before mechanical cleaning.
- Manual cleaning (including ultrasonic cleaner (see above) and mechanical cleaning should be performed in sequence).



Legend

- Read instructions
- Expiration date
- STERILE** Gamma-sterilized
- Only use once
- Do not sterilize
- non sterile
- LOT (Change number)
- Keep in a dry place
- Store lightly (keep closed)
- Do not use if packing is damaged
- Manufacturer

CE1936

Warnings
We do not know of any warnings, provided the instructions for use are followed for the products to be used as well as the corresponding disinfection and cleaning agent.

one-waybiomed GmbH reserves the right to change the design of the products and components or their packaging, except instructions for use as well as renegotiate prices and delivery conditions. Liability is limited to the use of defective products. Any further claims are excluded.

Further information about the preparation of medical products is available in the Internet at www.die.de/ww/a-3/.

Date of the latest revision: 2021-03

Inde Dental AG
Dorflatz 11
CH-8737 Coornwisd
SWITZERLAND
Tel. +41 (0)55 293 23 22
www.Implant.com

Distributed by
one-waybiomed GmbH
Dorflatz 11
CH-8737 Coornwisd
SWITZERLAND
Tel. +41 (0)55 293 23 22
www.one-waybiomed.com

ООО Биомед Биомед
123056, Россия, г. Москва
ул. Б. Прудовская 60, стр. 1
+7 967 018 12 82
www.biomed.ru

ONEWAY BIOMEED

We are certified according to DIN EN ISO 13485 and Annex II of Directive 93/42 EEC.
The product dimensions shown in this brochure may differ from reality for technical reasons.
GCS® is a registered trademark. Pat. Pend.

If implants are reprocessed, there is a risk of the development of infections, because no validated method for processing exists. Implants therefore may not be reprocessed.

(The products of this catalogue are CE marked (class I) and CE 1936 marked (class IIa and IIb) according to 93/42/EC Directive).

Commercial products that are not monitored by our notified body are declared as third-party products.

Compilation and explanation of symbols on the packaging:



Batch No.



Sterilized by radiation



Non-sterile



Intended for use by dentists or surgeons only



Single use product



Instruction for use



Expiry date



Store in a dry place



Store tightly keep closed



Do not use if packing is damaged



Do not resterilize



Manufacturer



Production date



Catalogue number

COMPRESSION SCREWS

GCS®

GCS® MU



1st cortical

2nd cortical

ONEWAY
BIOMED



Dr. Ihde **Dental AG**
Dorfplatz 11
CH - 8737 Gommiswald / SG
Tel +41 (0)55 293 23 23
contact@implant.com
www.implant.com

Distributed by **onewaybiomed GmbH**
Dorfplatz 11
CH - 8737 Gommiswald / SG
Phone +41 (0)55 293 23 23
Fax +41 (0)55 293 23 00
contact@implant.com
www.onewaybiomed.com



Dr. Ihde Dental GmbH
Erfurter Str. 19
D - 85386 Eching / München
Tel +49 (0)89 319 761 0
info@ihde-dental.de