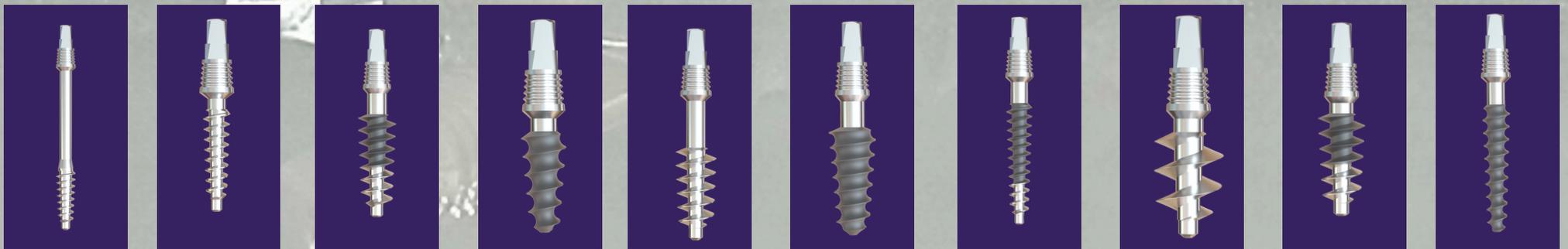




GS IMPLANTS[®]

Dedicated To Excellence



COSMODENT PRIVATE LIMITED

www.gsimplants.com

+91 86888 15861

GS IMPLANT SYSTEM

It aims to consistently provide high quality products manufactured according to the law at a reasonable cost while using only the most sophisticated machinery. Qualified and experienced teams handle production and distribution processes in compliance with national standards of quality.



SYSTEM SPECIFICATIONS

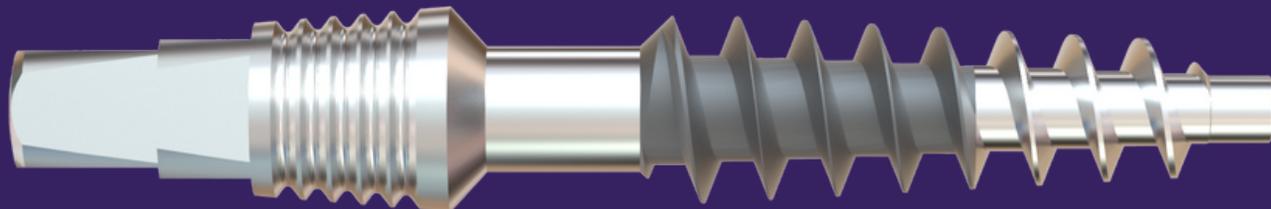
THE IMMEDIATE LOADING OF THE GS IMPLANT IS DUE TO THE FOLLOWING KEY FACTORS: THE PRINCIPLE OF BICORTICAL PENETRATION AND SINCE GS IMPLANT IS A ONE-PIECE MONOLITHIC SYSTEM, IT ALREADY INCLUDES AN ABUTMENT AT THE TOP OF THE IMPLANT.

BICORTICAL:

UNLIKE MOST PREVIOUS SYSTEMS, GS IMPLANT IMPLANTS ARE MEANT TO BE FIXATED BETWEEN BOTH CORTICAL BONE SITES OF THE JAWBONE: ENTRY POINT AND EXIT POINT. THIS CONNECTION PROVIDES VERY STRONG PRIMAL STABILITY SINCE THE CORTICAL BONE CAN CARRY AN ENORMOUS AMOUNT OF LOAD RIGHT AWAY, UNLIKE THE MUCH WEAKER TRABECULAR (CANCELLOUS) BONE, IN TERMS OF STABILITY. HAVING NO NEED FOR THE BONE TO HEAL AND THE IMPLANT TO GAIN INITIAL STABILITY, THE PATIENT CAN EASILY CHEW AND APPLY PRESSURE ON TO THE IMPLANT INSTALLATION SITE WITHOUT IT BECOMING LOOSE.

ONE-PIECE SYSTEM:

AS A ONE PIECE SYSTEM, GS IMPLANT HAS THE ADVANTAGE OF OCCUPYING LESS SPACE THAN A CONVENTIONAL TWO-PIECE. THAT IS DUE TO THE ABSENCE OF THE RELATIVELY WIDE WELL FOR THE ABUTMENT TO BE SCREWED IN. SINCE THE IMPLANT OCCUPIES LESS SPACE, LESS BONE IS LOST AND THEREFORE, THE BONE REQUIRES LESS HEALING TIME.



SURFACE

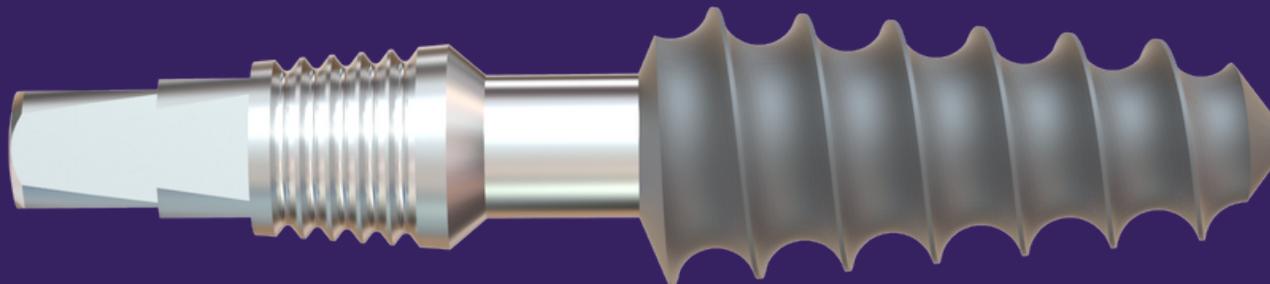
The surface of the GS implant Rough and Combi Dental Implants is modified through Sand blasted acid etching (SLA) process.

Research has shown a higher percentage of bone to implant contact around implants treated with SLA . GS IMPLANTS (excluding Smooth Implants) undergo a series of cleaning stages before and after the SLA surface treatment.

THREAD AND NECK DESIGN

CUTTING THREAD SHAPE:

The thread of the GS implant (Rough GS implant) is designed to slice the bone with very thin cuts so that less bone is damaged, and hence more bone area corresponds to the stability of the implant.



GS IMPLANT SYSTEM

THE GS IMPLANT SYSTEM IS A ONE-PIECE, SPECIALLY DESIGNED IMPLANT THAT CONNECTS TO THE BONE FROM ITS APICAL AND HAS EXCELLENT PRIMARY STABILITY DUE TO SUPPORT FROM ITS CONNECTION TO THE CORTICAL BONE (BASAL BONE).

GS IMPLANTS CAN WITHSTAND GREATER FORCE BECAUSE OF THE INTEGRATED SUPERSTRUCTURE. THE SYSTEM IS FREE FROM NECK FRACTURES, SCREW LOOSENING AND SCREW BREAKAGES WITH ITS ONE-PIECE STRUCTURE.

- IMMEDIATE LOADING
- IMPROVED PLATFORM
- SPECIAL DESIGN
- SLA SURFACE
- EXTRAORDINARY STABILITY WITH ALL BONE TYPES
- OPTIMIZED DIMENSIONS
- BENDABLE NECK
- SOLUTION ORIENTED ON PROSTHETIC

GS IMPLANTS HAVE INCREASED OSSEOINTEGRATION PERFORMANCE EVEN UNDER THE MOST CRITICAL CLINICAL SITUATIONS, SHORTENING THE TREATMENT PROCESS TO THREE DAYS. BOTH THE PATIENTS AND DENTISTS BENEFIT GREATLY FROM THIS SHORTENED TREATMENT STAGE AND HEALING TIME.



GS IMPLANT SYSTEM

TYPES OF IMPLANTS.

GS IMPLANTS ARE MANUFACTURED FROM BIOCOMPATIBLE Ti-6AL-4V ALLOY TITANIUM WITH HIGH QUALITY AND GREAT STRENGTH. THE SYSTEM HAS A WIDE VARIETY OF IMPLANTS WITH DIFFERENT DIAMETERS AND LENGTHS.

SMOOTH GS IMPLANT



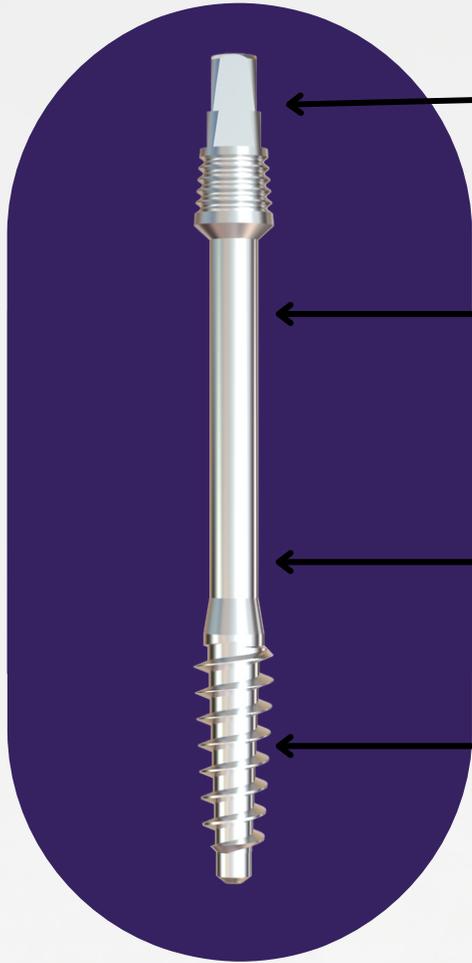
ROUGH GS IMPLANT



*COMBI (SMOOTH+ROUGH)
GS IMPLANT*



SMOOTH GS IMPLANT



→ **ABUTMENT** : Two different abutment types: normal and large

Trimming can be done for prosthetic ease

▪▪ *Compatible for welding (syncrystallization)*

→ **NECK** : Bendable neck allows for establishing parallelism

▪ *Smooth surface: to prevent peri-implantitis and bacterial Contamination*

▪ *No place for bacterial colonization*

→ **SHAFT** : Strong and fracture resistant

• *Long neck fit for bending*

→ **THREADS/FLUTES** : Slices the bone instead of compressing it

▪ *Excellent cortical engagement due to a greater number of threads*

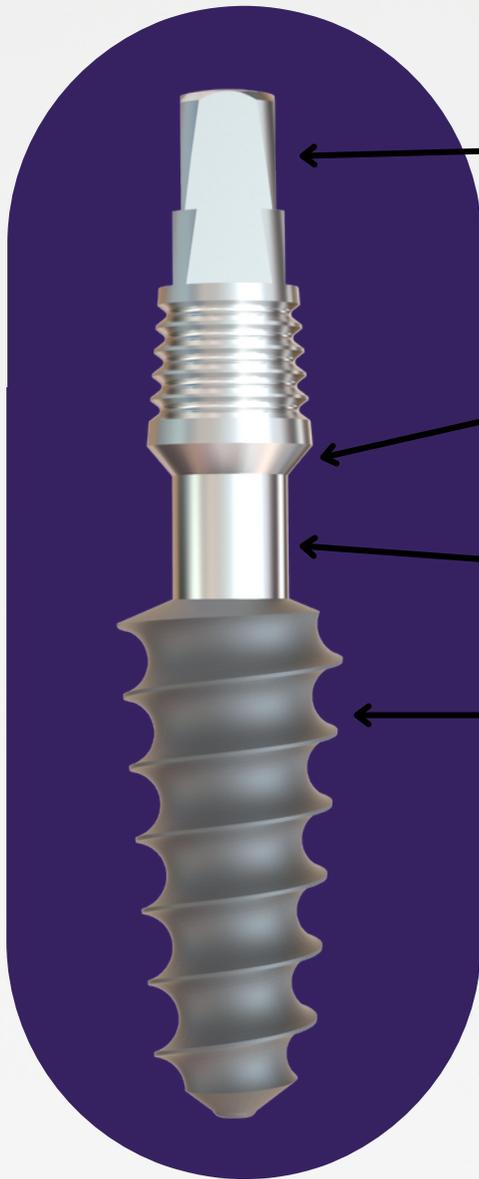
▪▪ *Sharp and self-tapping threads: to fascilitate the engagement to crestal and apical critical bones*

▪ *Bicortical fixation: to wedge the implant in two cortical bones for better stability*

▪ *Smooth surface: to penetrate the nasal floor of maxillary sinus region*



ROUGH GS IMPLANT



→ **ABUTMENT:** Two different abutment types: normal and large

- *Trimming can be done for prosthetic ease*
- *Compatible for welding (syncrystallization)*

→ **NECK:** Bendable neck: allows for establishing parallelism

- *Smooth surface: to prevent peri-implantitis and bacterial Contamination*

- *No place for bacterial colonization*

→ **SHAFT:** Strong and fracture resistant

→ **Rough surface thread:** slim and less aggressive thread
SURFACE Can be used in d1 and d2bone types
THREAD Facilitates osseointegration in a cancellous bone

- *To be used in healed edentulous jaw*

- *SLA surface: with calcium phosphate etching to create a porous surface*

- *Capable on compressing the crestal bone when cancellous bone is present*

- *Narrow shape: to bypass the mandibular nerve*



COMBI GS IMPLANT



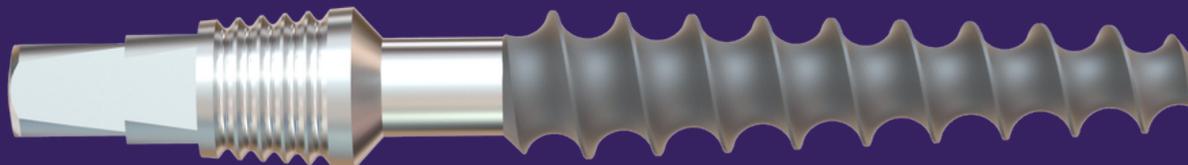
→ **ABUTMENT** Two different abutment types: normal and large
▪ *Trimming can be done for prosthetic ease*
▪ *Compatible for welding (syncrystallization)*

→ **NECK: Bendable neck: allows for establishing parallelism**
▪ *Smooth surface: to prevent peri-implantitis and bacterial Contamination*
▪ *No place for bacterial colonization*

→ **SHAFT : Strong and fracture resistant**

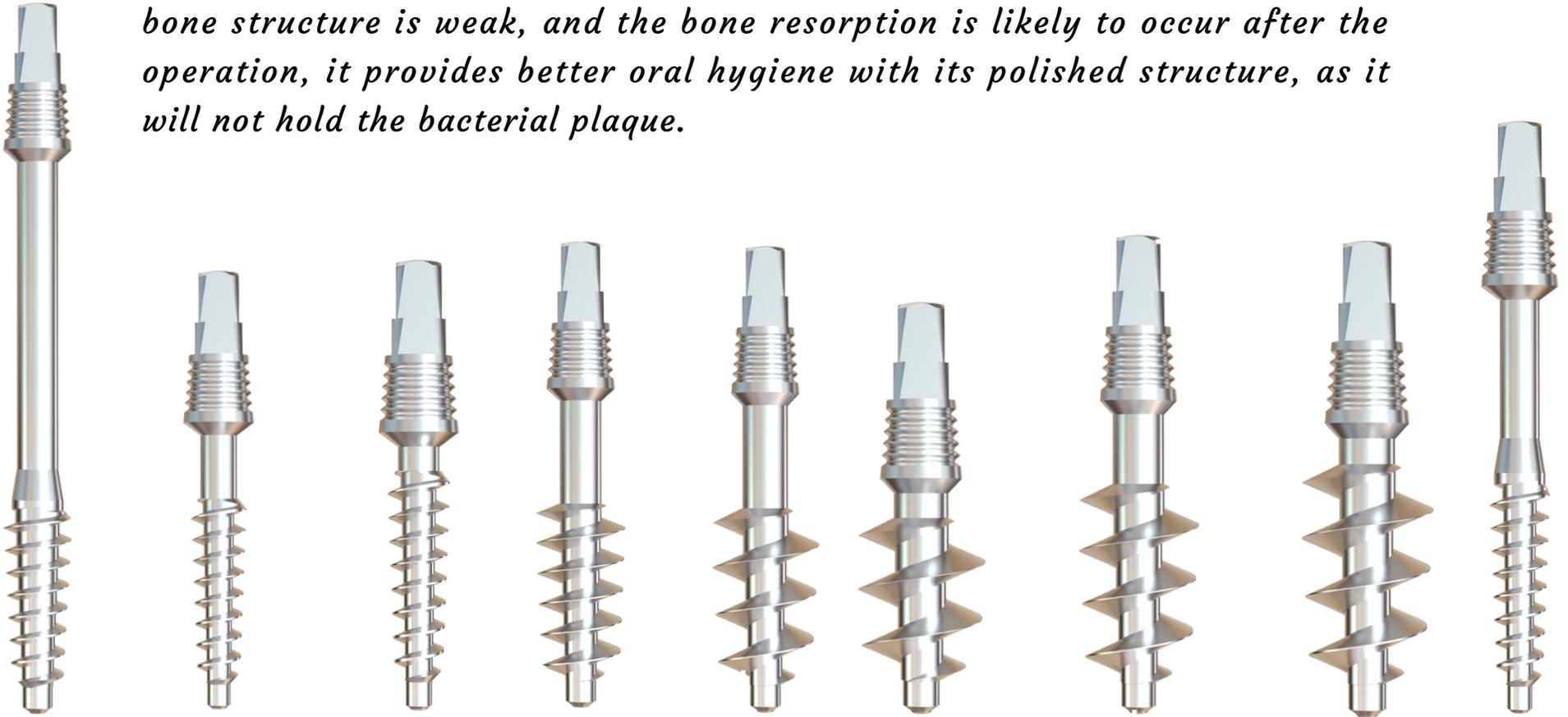
→ **Rough surface: to facilitate osseointegration in a cancellous bone**

→ **Polished tip: to reduce the bacterial contamination and avoid potential infections**
• *Application: to be used in the regions with thin bone, namely in maxillary sinus areas*



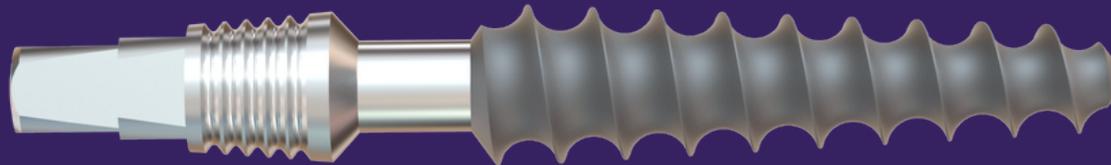
SMOOTH GS IMPLANT

Smooth GS implant can be used for immediate implantation and immediate loading after extraction in cases with chronic infection. In cases where the bone structure is weak, and the bone resorption is likely to occur after the operation, it provides better oral hygiene with its polished structure, as it will not hold the bacterial plaque.



ROUGH GS IMPLANT

Rough GS implant can be used in cases where high osseointegration is desired. Implantation is carried out by compressing the bones on the side. Especially in D3 and D4 type bones, it provides high cellular adherence to the surface thanks to its rough structure.



COMBI (ROUGH + SMOOTH) GS IMPLANT

HYBRID IMPLANT COMBINES THE FEATURES AND BENEFITS OF BOTH (ROUGH) IMPLANT AND (SMOOTH) IMPLANT, SUCH THAT THE UPPER PART OF THIS IMPLANT IS TREATED LIKE (ROUGH) TYPE TO STIMULATE OSSEOINTEGRATION. HOWEVER, THE BOTTOM TIP REMAINS, HIGHLY POLISHED TO REDUCE CONTAMINATION, THEREBY PREVENTS POTENTIAL INFECTIONS, ESPECIALLY IN MAXILLARY SINUS AREAS.

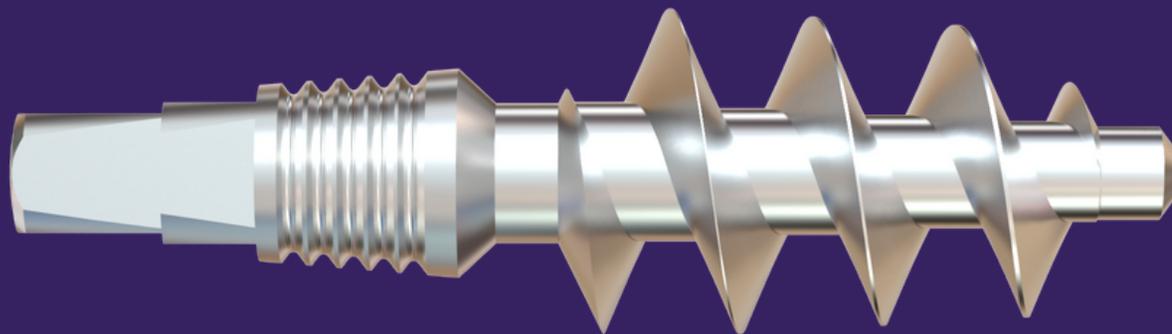
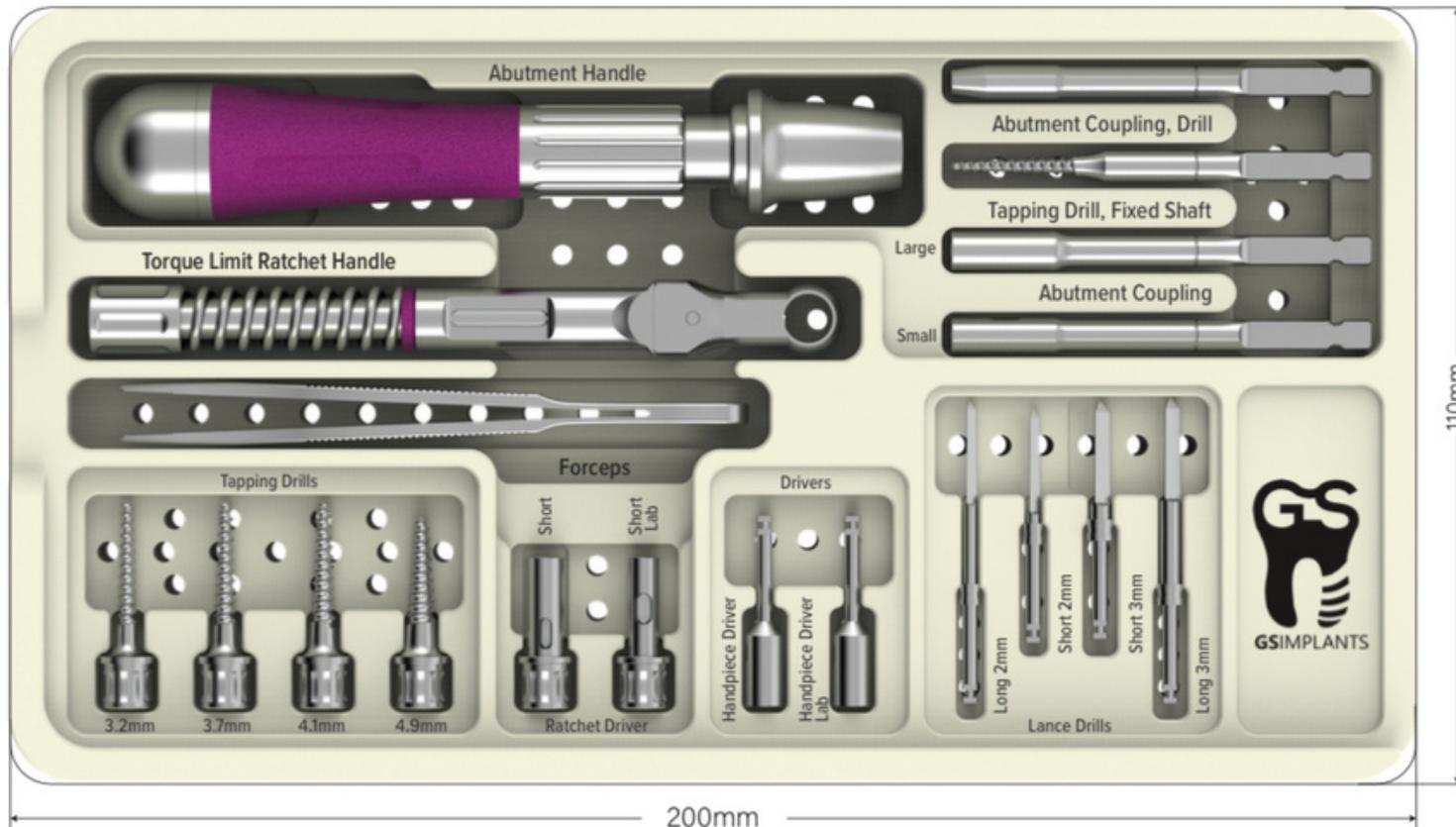
INDICATION FOR USE:

GS IMPLANT DENTAL FIXTURES OF THE MOT TYPE COMBINE PROPERTIES OF BOTH ROUGH IMPLANTS IN TERMS OF HAVING LESS AGGRESSIVE THREADS AND BETTER OSSEOINTEGRATION WHICH MAKES THEM MORE SUITABLE FOR D3 AND D4 BONE TYPES, AND SMOOTH SURFACED IMPLANTS, WHICH ARE MORE RESISTANT TO BACTERIAL INFECTION. SINCE ONLY THE TIP OF THE FIXTURE HAS A SMOOTH SURFACE. THIS FIXTURE IS THE BEST TO BE USED WHEN WORKING ON THE MAXILLARY SINUS AREA.



SURGICAL KIT

GS IMPLANT SURGICAL KIT PROVIDES EXTRA EASE OF USE FOR DENTISTS DURING IMPLANT SURGERIES.



SURGICAL TECHNIQUE

PRIOR TO OPERATION , THE DOCTOR MAY DECIDE WHETHER HE/SHE WOULD PREFER TO OPEN THE MUCOPERIOSTEAL FLAP OR TO PROCEED TRANSGINGIVALLY.

IN CASE THE DOCTOR WOULD CHOOSE TO OPEN THE FLAP, AN THE INCISION ALONG THE ALVEOLAR REGION MUST BE MADE WHERE THE MUCOPERIOSTEAL FLAP WILL BE PEELED OFF.

AFTER LOCAL ANESTHETIC HAS BEEN INJECTED , THE INITIAL DRILL [2MM-YELLOW OR 2.5MM-BLACK, ONE DRILL CONCEPT] IS ADVANCED THROUGH THE SOFT TISSUE AT THE DESIRED LOCATION UNTIL CONTACT WITH THE CRESTAL BONE IS ACHIEVED [ALVEOLAR CREST CORTICAL BONE]. PENETRATION OF THE CORTICAL BONE MUST BE PERFORMED AT 20,000 TO 40,000 RPM WITH A 1:1 SURGICAL HAND PIECE.

THE DRILL MUST BE ADVANCED UNTIL THE DESIRED DEPTH IS REACHED, WHILE PIERCING THE BASAL/CORTICAL BONE. THE INITIAL STEP OF THE DRILL PROTOCOL IS TO CREATE A PURCHASE POINT FOR THE SUBSEQUENT IMPLANT TIP TO TAKE A GRIP AND AVOID SLIDING INTO THE RIDGE. THIS ALSO RESULTS IN A HOLE OF A SMALLER DIAMETER IN COMPARISON TO THREADS OF THE IMPLANT. WHEN THE FIRST STAGE OF THE OPERATION IS COMPLETE, THE IMPLANT IS MOUNTED ONTO THE HAND DRIVE, INSERTED INTO THE FRESH OSTEOTOMY SITE AND REPEATEDLY TURNED CLOCKWISE UNTIL HIGH RESISTANCE IS FELT. THE HANDLE DRIVER SHOULD BE REPLACED BY THE RATCHET DRIVER (SHORT OR LONG DRIVERS WITH EITHER SMALL OR LARGE HEADS) AND RATCHET SINCE IT IS NO LONGER ENOUGH TO DEVELOP THE NECESSARY DRIVING FORCE.

IN CASE THE BONE IS VERY HARD, IT IS NECESSARY TO USE THE TAPPING DRILL WITH EITHER A HAND DRIVER OR HAND PIECE TO THE COMPLETE LENGTH OF THE PREPARED OSTEOTOMY SITE AND WHERE THE IMPLANTS WILL LATER BE LOADED. ONCE THE BONE SOCKET HAS BEEN FULLY THREADED, THE TAPPING DRILL IS WITHDRAWN BY ROTATING IT IN A COUNTER- CLOCKWISE DIRECTION. THE IMPLANT CAN NOW BE INSERTED UNTIL IT IS SEATED COMPLETELY. WE MUST KEEP IN MIND THAT THE IMPLANT AXIS AND THE DRILLING DIRECTION MUST CORRESPOND TO THE AXIS OF THE GREATER BONE LENGTH. IT SHOULD BE NOTED ABOVE ALL THAT THE IMPLANTS MUST BE INSTALLED WITH AS MUCH ACCURACY AND PRECISION AS POSSIBLE, EVEN THOUGH THE IMPLANT HEADS MAY NOT APPEAR PARALLEL TO THE NEIGHBORING TEETH.

WHEN ALL THE IMPLANTS HAVE BEEN PLACED, THEIR HEADS CAN BE BENT USING THE HANDLE OR RATCHET AND DRIVER PROVIDED EXCLUSIVELY BY GS IMPLANT. COMPLETE PARALLELISM IN RESPECT TO THE SURROUNDING TEETH CAN ALSO BE REACHED BY USING A CARBIDE BUR WITH THE HIGH-SPEED HAND PIECE, TRIMMED BY A DIAMOND BUR AND SMOOTHED BY A STONE.



IMPORTANT CAUTION:

The surgical techniques required for the insertion of the following implants are very complex and require very high levels of precision. These notes are only a brief summary of the method and should under no circumstances be considered in place of operating instructions. Undertaking in special training is essential for anyone wishing to approach this discipline.

Incorrect use can lead to the loss of inserted implants and even the patient's bony matter. This product is intended for use by trained medical professionals. Its use by any other person is prohibited

for further details regarding implants about implants , surgical technique please contact toll free number.

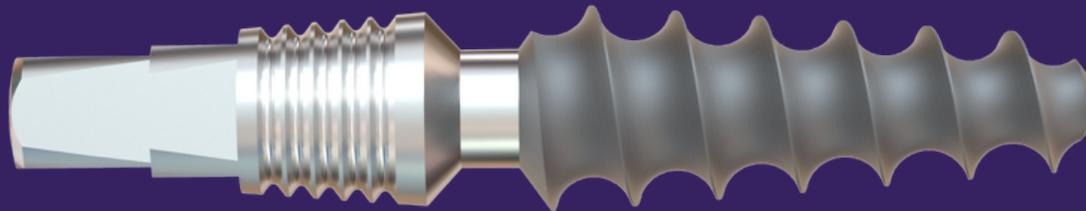
Incorrect use can lead to the loss of inserted implants and even the patient's bony matter. This product is intended for use by trained medical professionals. Its use by any other person is prohibited **CONDENSING OF THE IMPLANT BED FOR THE ROUGH GS IMPLANT**

All rough GS implants are used as compression screws. In order to achieve a good bone condensation and implant stability, drilling should be carried out with a drill thinner than the core diameter of the implant. The minimal diameter of the drill depends on the bone density. It is therefore not possible to suggest drill sequences that will fit all bone types. Typically for the soft maxillary bone only, small diameter drills are used (e.g. the use of a 2mm, yellow – colored drill is only for implants with a diameter of 3.0-4.9 mm), whereas in the highly mineralized lower jaw, a specific drill sequence is necessary.

1. Use a 2mm (yellow) or 2.5 mm (blue) drill to prepare the implantation bed, followed by shaping drill to adjust the bed to its full length. Use an intermittent drilling technique and copious saline irrigation.

2. In hard bone (mandible), if the full drilling depth is difficult to attain with a single drill, use the bone tapping (2mm) to achieve the correct depth.

3. It is possible to use the laboratory to produce a drilling template with the appropriate drill holes for the marker bore.



DRILLING AND PREPARATION

INSERTION OF THE SMOOTH GS IMPLANT TO THE IMPLANT BED

AFTER THE EXTRACTION, THE IMPLANT INSTALLATION SITE HAS TO BE THOROUGHLY CLEANED WITH BETADINE OR SIMILAR ANTI-MICROBIAL SOLUTION. FLAPS HAVE TO BE SUTURED TO PREVENT DEBRIS FROM GETTING INSIDE. SMOOTH GS IMPLANT : THESE IMPLANTS HAVE A SMOOTH SURFACE. THEIR AGGRESSIVE FORMS ARE IDEAL FOR D3 AND D4 BONE TYPES, AND FOR IMMEDIATE FIXATION IN THE EXTRACTION SOCKETS.

PRODUCT TRACEABILITY

GS IMPLANT

GS IMPLANT PRODUCTS CAN EASILY TRACKED FROM THE MOMENT OF PRODUCTION UNTIL FINAL DELIVERY.

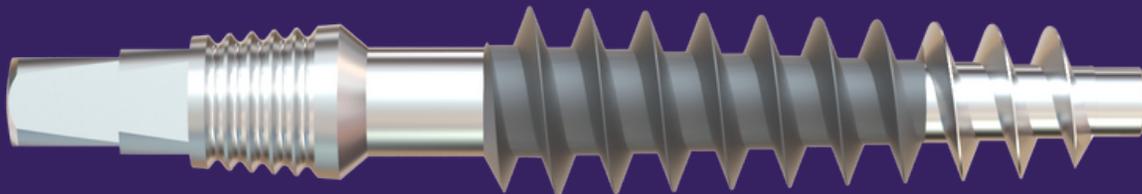
EACH PRODUCT PACKAGE FEATURES A BARCODE LABEL WITH A LOT NUMBER CREATED BY THE ERP SOFTWARE SYSTEM. STARTING WITH PRODUCTION, EVERY STEP CAN BE MONITORED WITH THE BARCODE SYSTEM, INCLUDING STOCK DELIVERY, CUSTOMER DELIVERY AND AFTER SALES FOLLOW- UP.

PACKAGING

TYVEK PACK

GS IMPLANT PLACES EMPHASIS ON THE IMPORTANCE OF PROTECTING NATURE AS WELL AS HUMAN HEALTH. THEREFORE, ALL GS IMPLANT IMPLANTS ARE PACKAGED IN 100% ECO-FRIENDLY, RECYCLABLE AND STERILE TYVEKCONTAINERS. TYVEK..... IS AN INERT CHEMICAL MATERIAL. ITS POLYMERIC COMPOSITION IS HIGHLY PREFERRED AND ADVANTAGEOUS IN PRESERVING STERILIZED MEDICAL DEVICES. THE CONTAINERS ARE HIGHLY DURABLE AND EASILY STERILIZED.

THE IMPLANT CAN EASILY BE REMOVED FROM THE CONTAINER AND LOADED INTO THE OSTEOTOMY BY USING THE FIXTURE DRIVER. EACH CONTAINER FEATURES A LABEL CONTAINING THE IMPORTANT PRODUCT INFORMATION SUCH AS TYPE, LENGTH AND COLOUR CODE. COLOUR CODING AND ASSOCIATED DIAMETERS OF THE IMPLANT ARE CLASSIFIED ACCORDING TO THE LABEL ON THE CONTAINER.



INDEX/CODE
GS IMPLANT SMOOTH

PRODUCT	LENGTH	DIAMETER	CODE
GS Implant smooth	11	2.7	GSS1127
GS Implant smooth	13	2.7	GSS1327
GS Implant smooth	15	2.7	GSS1527
GS Implant smooth	18	2.7	GSS1827
GS Implant smooth	21	2.7	GSS2127
GS Implant smooth	11	3.5	GSS1135
GS Implant smooth	13	3.5	GSS1335
GS Implant smooth	15	3.5	GSS1535
GS Implant smooth	18	3.5	GSS1835
GS Implant smooth	21	3.5	GSS2135
GS Implant smooth	24	3.5	GSS2435
GS Implant smooth	27	3.5	GSS2735
GS Implant smooth	11	4.0	GSS1140
GS Implant smooth	13	4.0	GSS1340
GS Implant smooth	15	4.0	GSS1540
GS Implant smooth	18	4.0	GSS1840
GS Implant smooth	21	4.0	GSS2140
GS Implant smooth	24	4.0	GSS2440
GS Implant smooth	09	4.5	GSS0945
GS Implant smooth	11	4.5	GSS1145
GS Implant smooth	13	4.5	GSS1345
GS Implant smooth	15	4.5	GSS1545
GS Implant smooth	18	4.5	GSS1845
GS Implant smooth	09	5.5	GSS0955
GS Implant smooth	11	5.5	GSS1155
GS Implant smooth	13	5.5	GSS1355
GS Implant smooth	15	5.5	GSS1555
GS Implant smooth	09	6.5	GSS0965
GS Implant smooth	11	6.5	GSS1165
GS Implant smooth	13	6.5	GSS1365
GS Implant smooth	15	6.5	GSS1565
GS Implant smooth	09	7.5	GSS0975
GS Implant smooth	11	7.5	GSS1175
GS Implant smooth	13	7.5	GSS1375
GS Implant smooth	15	7.5	GSS1575



GS IMPLANTS®

INDEX/CODE
GS IMPLANT ROUGH

PRODUCT	LENGTH	DIAMETER	CODE
GS Implant Rough	11	3.0	GSR1130
GS Implant Rough	13	3.0	GSR1330
GS Implant Rough	15	3.0	GSR1530
GS Implant Rough	09	3.2	GSR0932
GS Implant Rough	11	3.2	GSR1132
GS Implant Rough	13	3.2	GSR1332
GS Implant Rough	15	3.2	GSR1532
GS Implant Rough	17	3.2	GSR1732
GS Implant Rough	09	3.7	GSR0937
GS Implant Rough	11	3.7	GSR1137
GS Implant Rough	13	3.7	GSR1337
GS Implant Rough	15	3.7	GSR1537
GS Implant Rough	17	3.7	GSR1737
GS Implant Rough	09	4.2	GSR0942
GS Implant Rough	11	4.2	GSR1142
GS Implant Rough	13	4.2	GSR1342
GS Implant Rough	15	4.2	GSR1542
GS Implant Rough	17	4.2	GSR1742
GS Implant Rough	09	4.7	GSR0947
GS Implant Rough	11	4.7	GSR1147
GS Implant Rough	13	4.7	GSR1347
GS Implant Rough	15	4.7	GSR1547

INDEX/CODE
GS IMPLANT COMBI

PRODUCT	LENGTH	DIAMETER	CODE
GS Implant Combi	11	3.0	GSC1130
GS Implant Combi	13	3.0	GSC1330
GS Implant Combi	15	3.0	GSC1530
GS Implant Combi	11	3.2	GSC1132
GS Implant Combi	13	3.2	GSC1332
GS Implant Combi	15	3.2	GSC1532
GS Implant Combi	17	3.2	GSC1732
GS Implant Combi	11	3.7	GSC1137
GS Implant Combi	13	3.7	GSC1337
GS Implant Combi	15	3.7	GSC1537
GS Implant Combi	17	3.7	GSC1737
GS Implant Combi	11	4.2	GSC1142
GS Implant Combi	13	4.2	GSC1342
GS Implant Combi	15	4.2	GSC1542
GS Implant Combi	17	4.2	GSC1742
GS Implant Combi	11	4.7	GSC1147
GS Implant Combi	13	4.7	GSC1347
GS Implant Combi	15	4.7	GSC1547





GS IMPLANTS®



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