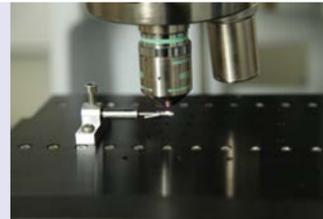
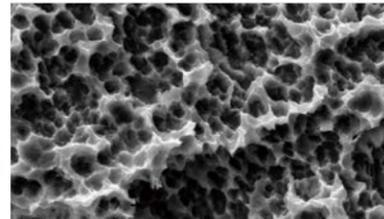


WEGO Dental Implant System





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ADVANCED

Equipment

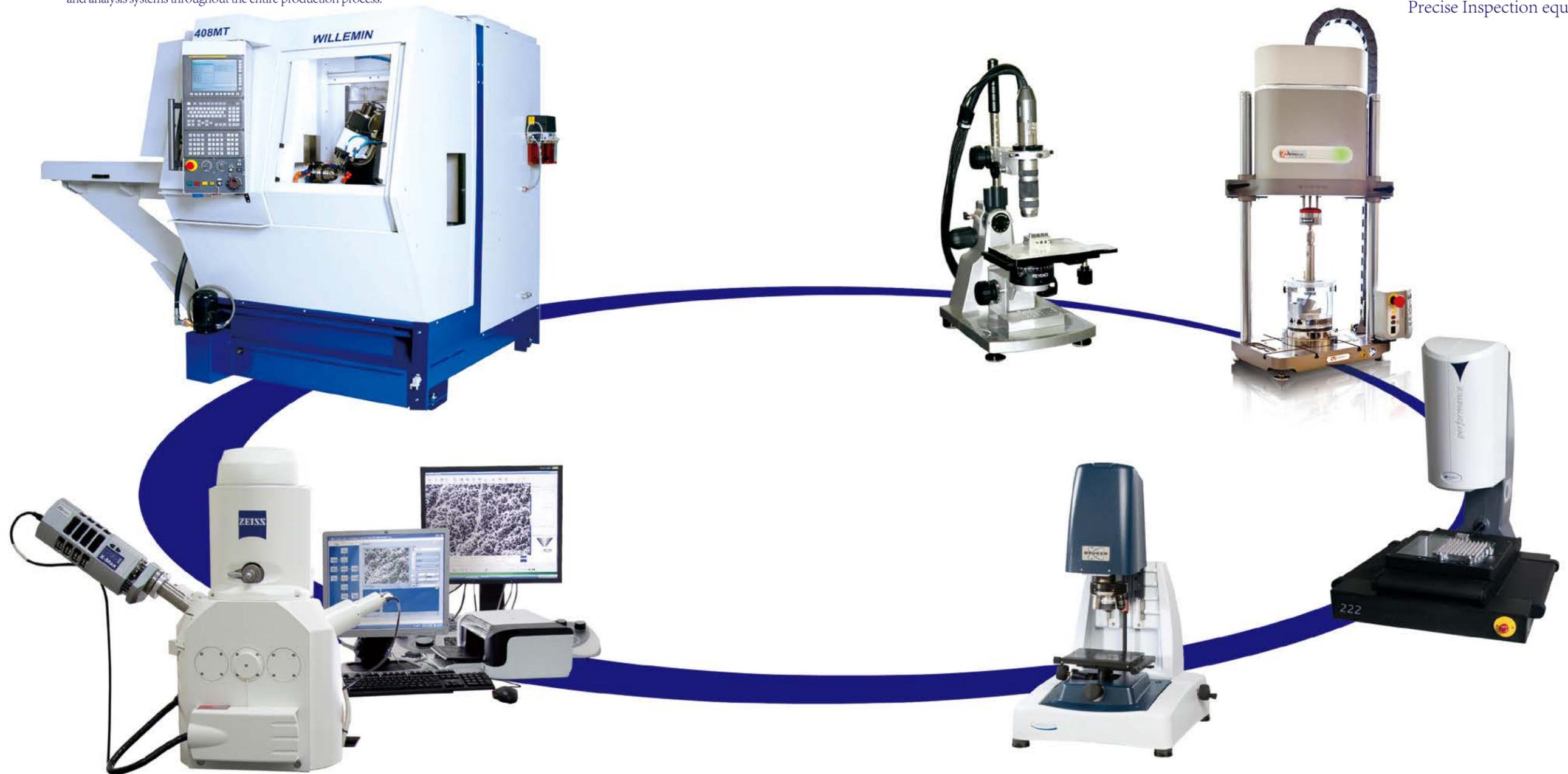
We have a high-tech Implant production line of international standards. Our line is composed of a variety of automated equipment, carrying out processes including R&D, testing, machining, surface treatment and product inspection. To ensure high quality, all products are monitored by strict and continuous quality control and analysis systems throughout the entire production process.



Systematic R&D Testing Equipment

Full-Automatic NC Machine Center

Precise Inspection equipment





▶ New Concept Unique Design

As a wholly-owned subsidiary of WEGO Group, WEIHAI WEGO JERICOM BIOMATERIALS CO., LTD. is a high-tech enterprise, integrating R&D, production, sales and training of dental devices. Our main products include dental implants, prosthetic components, surgical instruments and individualized CAD/CAM crowns.

WEGO implant system is patented for its independent intellectual property, diversified new technology and fused many advanced concepts with SLA surface treatment, slightly tapered body, cutting flute and arc bottom.

Our implant structure combines the most advanced concepts in the oral implant field, such as Platform Switching, Morse Taper Connection and Anti-rotation cross key, so as to realize the connection function of airtight and anti-rotation.

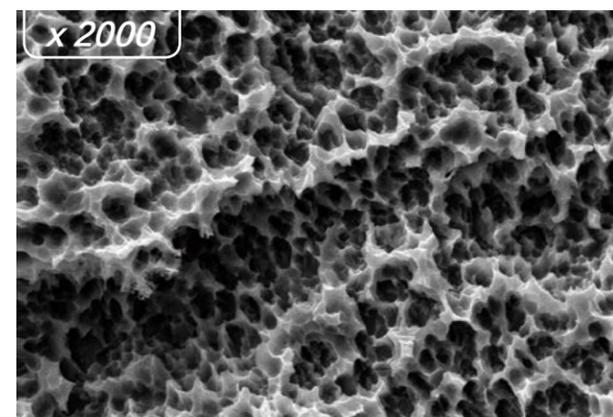
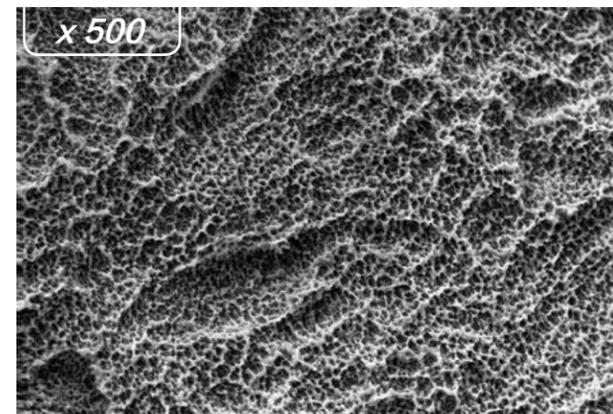
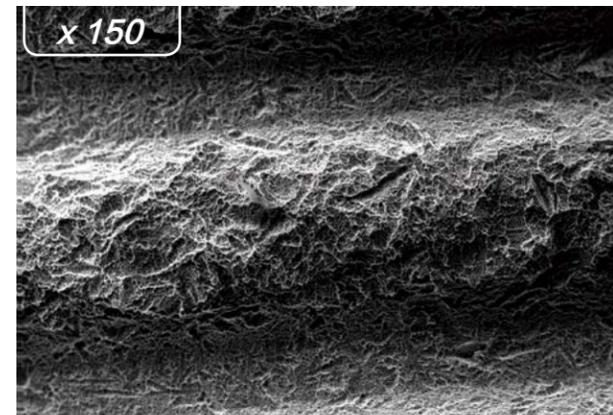
Pursuing excellence, WEGO Jericom commits to provide more high-quality products and convenient services for dental clinics.



▶ Advanced Surface Treatment

▶ SLA surface

WEGO Dental Implant System uses SLA which is the most advanced surface treatment with long term clinical verification. The surface shows a double cellular morphology with uniformly distributed multiple holes: a microstructure with 20-60 μ m hole diameters and a microstructure with 2-6 μ m hole diameters.



▶ Rapid Osseointegration. Greater Stability.

This surface contacts with bone and enhances the osseointegration. The function of bone induction is remarkable. It encourages more rapid osseointegration on the initial healing stage. This is the secret behind the excellent stability of the WEGO implant systems.

Design optimization

▶ Microdual-Thread

To effectively distribute stress levels and stimulate the jawbone of the implant.



▶ Slightly Tapered Body

There is an irregular trapezoid thread on the implant body which makes the implant more simple, achieves excellent primary stability and appropriately distributes stress levels.

▶ Self-Tapping Shape

By increasing the self-tapping properties during the implant insertion procedure, more space is provided for bone collection.

▶ Arc Bottom

To avoid bone injury

The implant has been designed for optimal primary stability. This is particularly advantageous when used for low density sclerotin. The micro taper and irregular trapezoid thread evenly distribute the stress from the implant and the jawbone in order to maintain a physiological balance.

Stable connection

▶ Platform switching

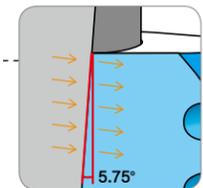
To provide more space for soft tissue whilst avoiding bone resorption.

▶ Central Screw Connection

High intensity of central screw ensures the stability of the connection.

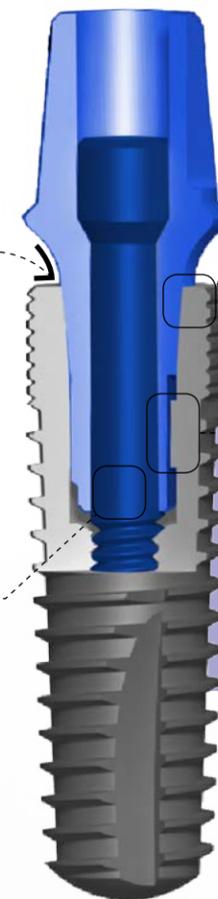
▶ Morse Taper Connection

Taper maintains an airtight seal, avoiding micro leaking and uniformly reducing the load on the implant.



▶ Anti Rotation Cross Keys

The uniformly distributed four cross slots in the abutment will engage with four keys of the implant so as to realize the connection function of antirotation.



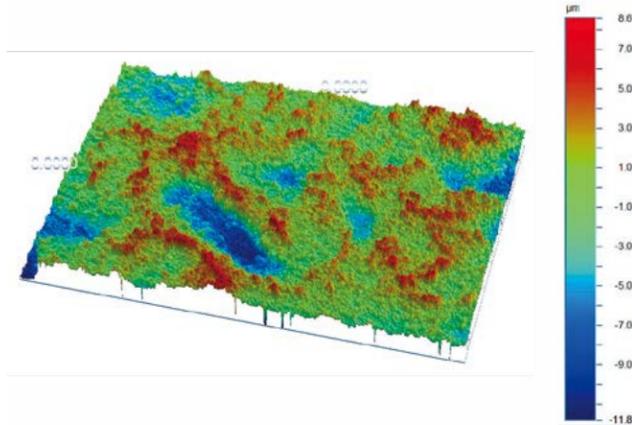
WEGO Dental Implant System adopts the advanced design of platform switching, Morse's connection and cross key anti-rotation. The implant and abutment are tightened by a central screw. The structure reflects the connection, power of dispersion and anti-rotation between the implant and abutment.

Performance evaluation

Surface Property Evaluation

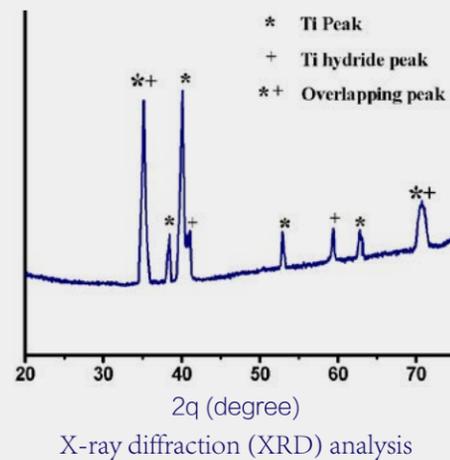
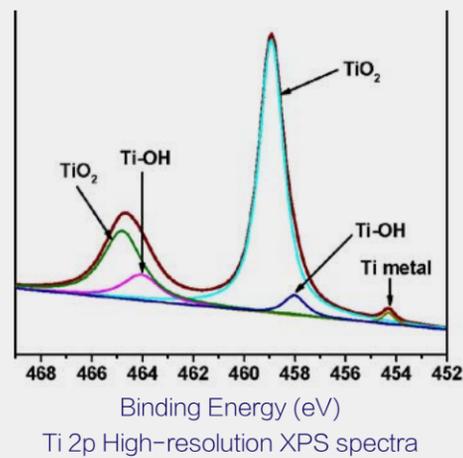
Roughness of implant surface

The roughness is Ra 1.5~2.5 μ m, which increases the contact area between osseous tissue and implant surface.



Composition and crystal structure

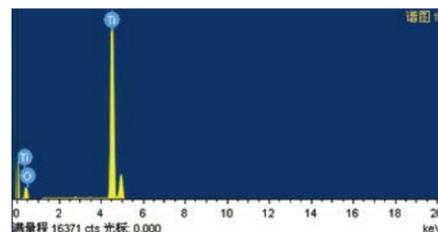
The analysis of EDX, XPS and XRD show that the surface consists of pure Ti and Ti-OH functional-group with strong hydrophilicity.



Composition of surface elements (%)

Element	Weight (%)	Atom (%)
O K	2.17	6.24
Ti K	97.83	93.76
Total	100.00	

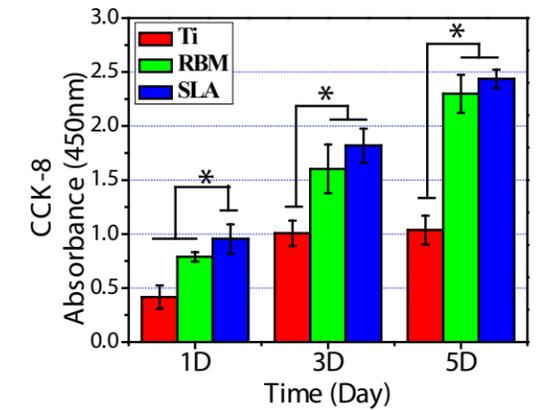
EDX Spectral analysis results



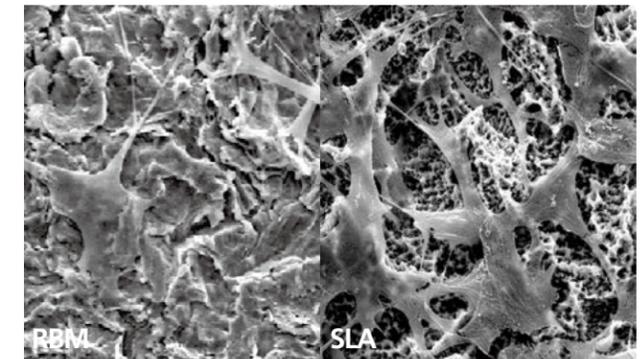
Biological Evaluation

The testing results of CCK-8 cell culture indicate that the cell adhesiveness of the SLA surface is greater than the RBM surface when measured at the same time intervals.

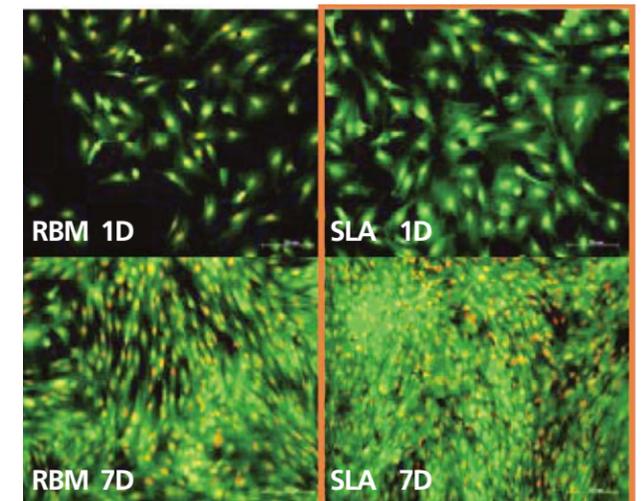
In vitro biological evaluation shows that an SLA surface is superior to a RBM surface in terms of cell adhesiveness and proliferation at its early stage.



Scanning electron microscope (SEM) images of RBM and SLA surfaces in vitro indicate that compared with a RBM surface, the morphology and structure of the SLA surface is superior in osteocyte adhesiveness, maximizing the osteocyte proliferation.



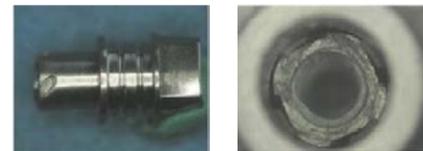
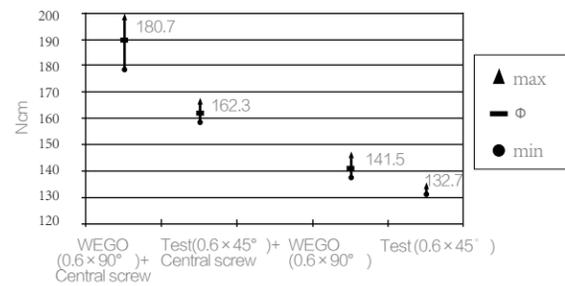
Light microscopy result of an osteoblast cultured in vitro show that the cellular morphology and number of SLA surfaces is superior to RBM surface on 1st and 7th day.



► Mechanical Property Evaluation

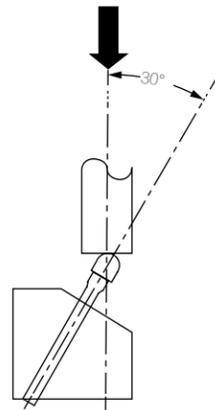
► Torque test

The result of torque test show that the maximum bearing torsion moment of the cross key inside the WEGO implant can reach 180.7N.cm



► Fatigue test

The fatigue test was done strictly according to ISO-14801 - The Fatigue Test of Endosseous Implant in Odontology. Testing showed the implant can bear 5,000,000 times circuit burden.

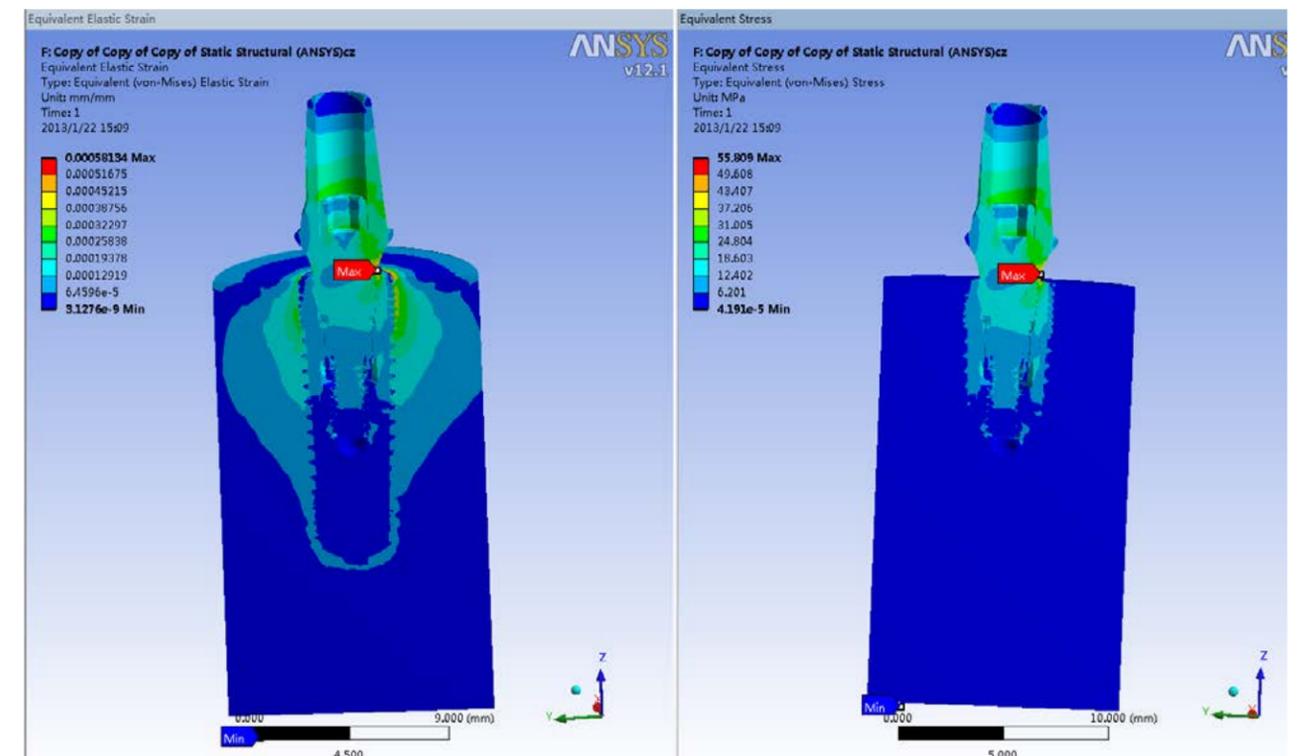


Test Parameters
set-up with an angle of 30° ± 1° according to item 5.2.3, DIN EN ISO 14801
Preload: -82,5N
Amplitude: ±67,5N
Frequency: 15Hz
Course of the curve: sinusoidal
Load alternations: 5.000.000

Result
Specimen 3: The test sample did not break.
Specimen 4: The test sample did not break.
Specimen 5: The test sample did not break.
Testing period: 2009-09-21 until 2009-10-06
Result files: 1967 Probe 3 to 5

► Finite element analysis

The result of the finite element analysis, using the method of mechanics simulation, showed that the stress is evenly dispersed under full load conditions.



► In Vivo Biological Evaluation

► The research of undecalcified bone slicing

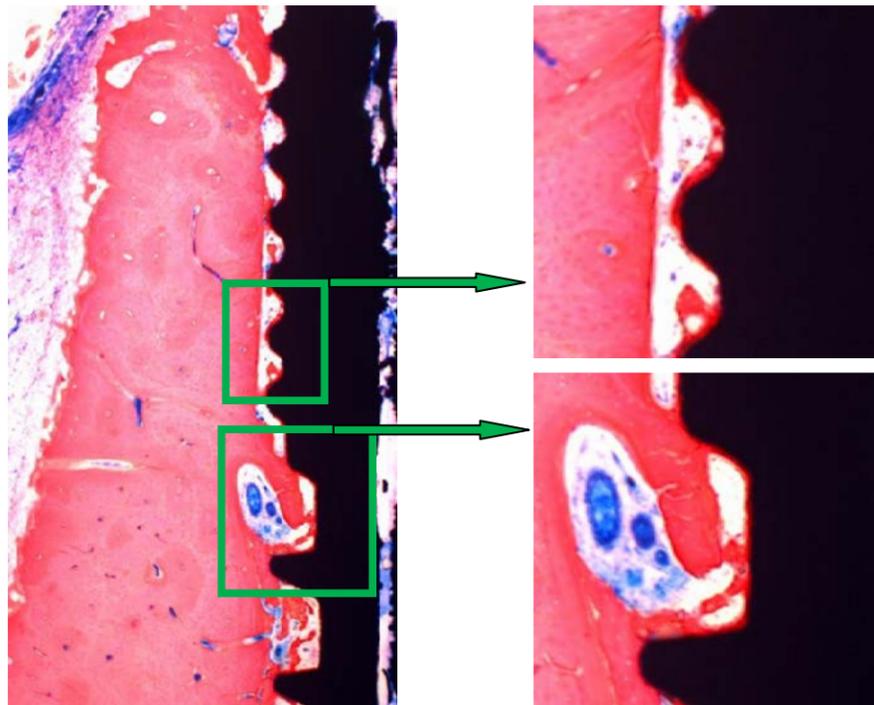


图 1

The observation of undecalcified bones slicing about 2 weeks after operation:

The observation of undecalcified bones slicing about 2 weeks after operation: new bone is forming on implant surface directly, and contact osteogenesis can be observed obviously.

Notes:

Contact Osteogenesis means that osteoblast absorbed on implant surface and proliferated to form new bone.
Distance Osteogenesis means that osteoblast form new bone on the bone surface, and then closer to implant step by step.
Nice surface treatment is benefit for both contact osteogenesis and the distance osteogenesis, it can speed up bone formation rate. Because of the new bone deposition of implant surface at early period of implantation, the risk of forming fiber healing on implant-bone interface can be reduced enormously at its early stage.

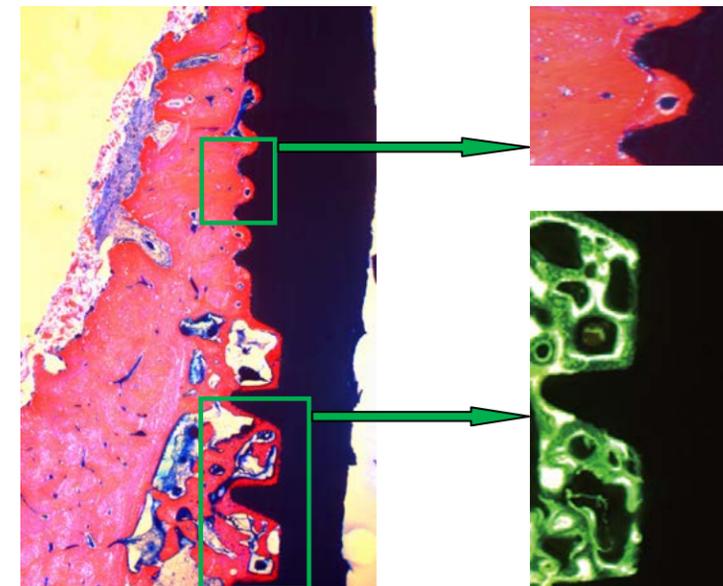


图 2

The observation of undecalcified bone slicing about 4 weeks after operation: the interface of implant and bone are showing good osseointegration.

► The research of Micro-CT

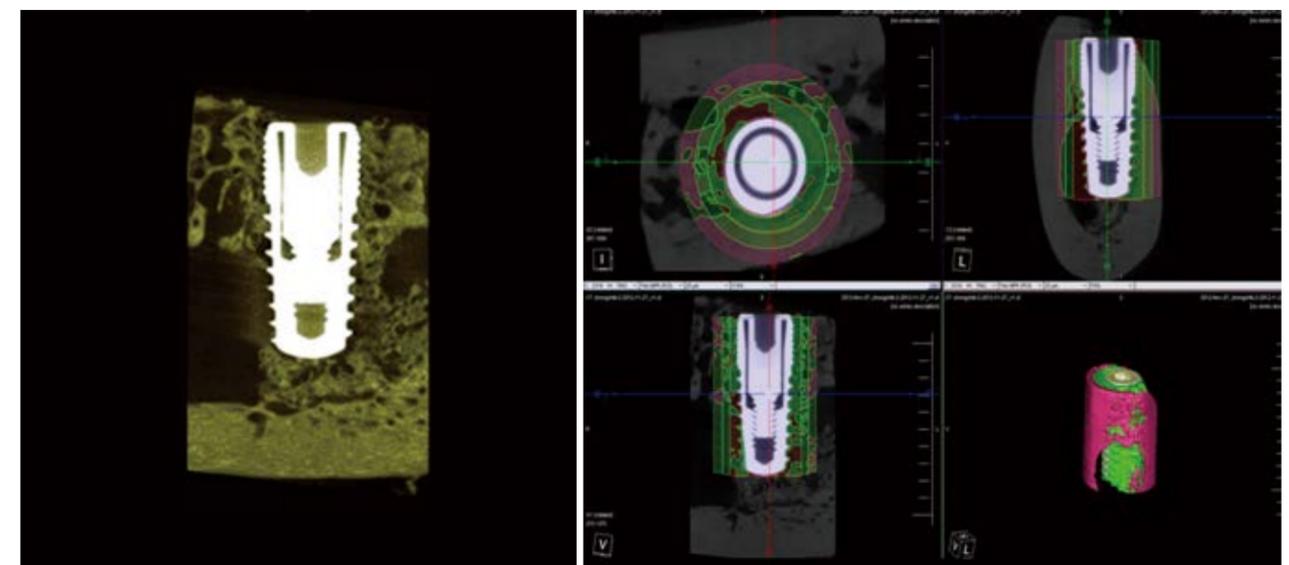


图 3

The observation of Micro-CT image about 4 weeks after operation: The implant has positive effects on osteogenesis, so that there are a large number of new bone attach to the implant surface. The osseointegration is favorable.

System Overview

Picture scale: 1:1

Implant



Closure Screw
Healing Abutment



Impression and
transfer system



Analog



Temporary
Abutment



Permanent
Abutment



Prosthetic
accessories



Abutment screw



Implants

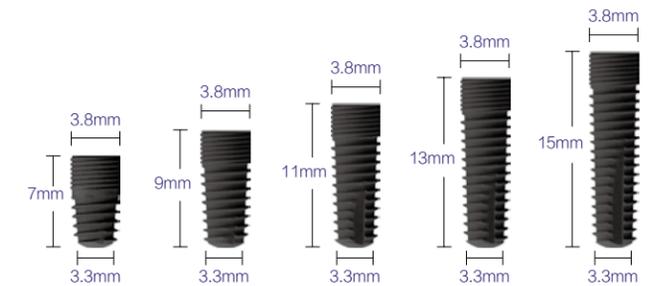
DIAMETER 3.4mm

LENGTH	PRODUCT CODE
9.0 mm	111-017
11.0 mm	111-018
13.0 mm	111-019
15.0 mm	111-020



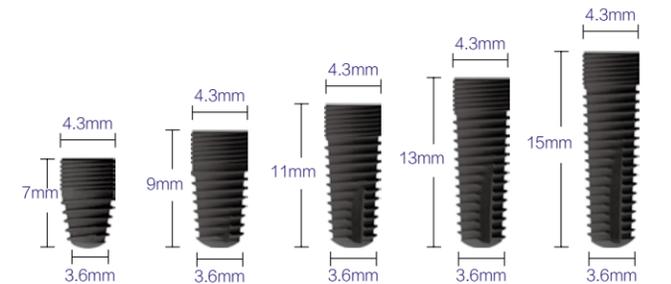
DIAMETER 3.8mm

LENGTH	PRODUCT CODE
7.0 mm	111-021
9.0 mm	111-001
11.0 mm	111-002
13.0 mm	111-003
15.0 mm	111-004



DIAMETER 4.3mm

LENGTH	PRODUCT CODE
7.0 mm	111-013
9.0 mm	111-005
11.0 mm	111-006
13.0 mm	111-007
15.0 mm	111-008



DIAMETER 5.0mm

LENGTH	PRODUCT CODE
7.0 mm	111-015
9.0 mm	111-009
11.0 mm	111-010
13.0 mm	111-011
15.0 mm	111-012



Sealing Screw

Picture scale: 1.8:1

- Uses the HEX Driver/ISO Driver with HEX1.3
- The torque is 5~10N.cm

Picture scale is 3:1



Suitable for the implant with $\Phi 3.8$, or larger diameter.

PRODUCT CODE
112-067



Suitable for the implant with $\Phi 3.4$.

PRODUCT CODE
112-069



Healing Abutment

Picture scale: 1.8:1

- Used with the HEX Driver/
ISO Driver with HEX1.3
- The torque is 5~10N.cm

Picture scale is 3:1



Suitable for the implants with $\Phi 3.8$, or larger diameter.

Diameter 4.5mm, top height 1.5mm

Gum height	PRODUCT CODE
1.5 mm	112-039
3.0 mm	112-041
4.5 mm	112-045

Diameter 5.5mm, top height 1.5mm

Gum height	PRODUCT CODE
1.5 mm	112-042
3.0 mm	112-044
4.5 mm	112-046

Suitable for the implants with $\Phi 3.4$.

Diameter 4.0mm, top height 1.5mm

Gum height	PRODUCT CODE
1.5 mm	112-137
3.0 mm	112-138
4.5 mm	112-139

Diameter 4.5mm, top height 1.5mm

Gum height	PRODUCT CODE
1.5 mm	112-143
3.0 mm	112-144
4.5 mm	112-145

Diameter 4.5mm, top height 3.0mm

gum height	PRODUCT CODE
1.5 mm	112-059
3.0 mm	112-061
4.5 mm	112-062

Diameter 5.5mm, top height 3.0mm

Gum height	PRODUCT CODE
1.5 mm	112-063
3.0 mm	112-065
4.5 mm	112-066

Diameter 4.0mm, top height 3.0mm

Gum height	PRODUCT CODE
1.5 mm	112-140
3.0 mm	112-141
4.5 mm	112-142

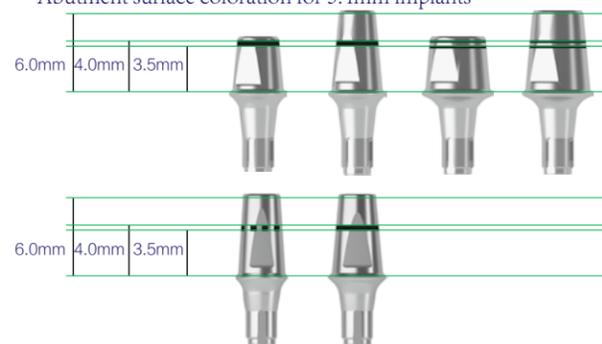
Diameter 4.5mm, top height 3.0mm

Gum height	PRODUCT CODE
1.5 mm	112-146
3.0 mm	112-147
4.5 mm	112-148

► Straight Abutment

Picture scale is 1.8:1

- Suitable for adhesive retention
- Connected to the implant with a central screw, connection torque 20N.cm
- The upper part of the abutment cone, a single dotted line indicates a diameter of 4.0, a single circular line indicates a diameter of 4.5, and a double circular line indicates a diameter of 5.5
- Abutment surface coloration for 3.4mm implants



Suitable for Ø3.8mm and above implants

Diameter 4.5mm, cone height 4.0mm

Gum height	PRODUCT CODE
1.5 mm	112-107
3.0 mm	112-108
4.5 mm	112-109

Diameter 5.5mm, cone height 4.0mm

Gum height	PRODUCT CODE
1.5 mm	112-113
3.0 mm	112-114
4.5 mm	112-115

Suitable for Ø3.4mm implants

Diameter 4.0mm, cone height 6.0mm

Gum height	PRODUCT CODE
1.5 mm	112-149
3.0 mm	112-150
4.5 mm	112-151

Diameter 4.5mm, cone height 6.0mm

Gum height	PRODUCT CODE
1.5 mm	112-110
3.0 mm	112-111
4.5 mm	112-112

Diameter 5.5mm, cone height 6.0mm

Gum height	PRODUCT CODE
1.5 mm	112-116
3.0 mm	112-117
4.5 mm	112-118

Diameter 4.5mm, cone height 6.0mm

Gum height	PRODUCT CODE
1.5 mm	112-152
3.0 mm	112-153
4.5 mm	112-154

Picture scale is 3:1



► Angled Abutment

Picture scale is 1.8:1

- Suitable for restoration which is asking for abutment angulation
- Suitable for cemented retention
- Connect with implant by central screw, the connective torque is 20N.cm
- Abutment which is suitable for the Φ 3.4 implant will be colored.



Abutment is suitable for the implant of Φ 3.8, or larger diameter.

Diameter 4.5mm

Gum height	PRODUCT CODE
1.5 mm	112-119
3.0 mm	112-120
4.5 mm	112-121

Abutment is suitable for the implant of Φ 3.4, or larger diameter.

Diameter 4.0mm

Gum height	PRODUCT CODE
1.5 mm	112-155
3.0 mm	112-156
4.5 mm	112-157

Picture scale is 3:1



Diameter 5.5mm

Gum height	PRODUCT CODE
1.5 mm	112-122
3.0 mm	112-123
4.5 mm	112-124

Diameter 4.5mm

Gum height	PRODUCT CODE
1.5 mm	112-158
3.0 mm	112-159
4.5 mm	112-160

► Universal Abutment

Picture scale is 1.8:1

- Suitable for individualized restoration which can be modified
- Connect with implant by central screw, the connective torque is 20N.cm
- Suitable for the implant with Φ 3.8, or larger diameter.

The ratio of the assembly drawing is 3:1



Diameter 6.0mm

Gum height	PRODUCT CODE
1.5 mm	112-130
3.0 mm	112-131
4.5 mm	112-132



Diameter 8.0mm

Gum height	PRODUCT CODE
1.5 mm	112-133
3.0 mm	112-134
4.5 mm	112-103



► Multifunction Abutment

Picture scale is 1.8:1

- Suitable for restoration of bridge and overlay denture
- Screwing torque is 20N.cm
- Suitable for the implant with Φ 3.8, or larger diameter.

the ratio of the assembly drawing is 3:1



Diameter 4.5mm

Gum height	PRODUCT CODE
1.5 mm	112-125
3.0 mm	112-104
4.5 mm	112-126



Diameter 5.5mm

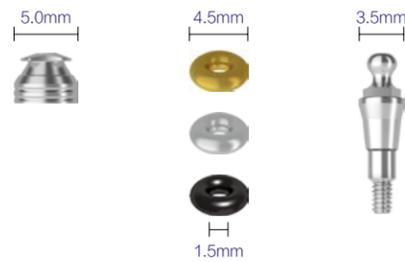
Gum height	PRODUCT CODE
1.5 mm	112-127
3.0 mm	112-128
4.5 mm	112-129



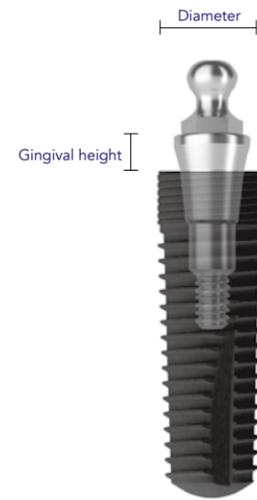
O-ring Abutment

Picture scale is 1.8:1

- Suitable for restoration of bridge and overlay denture
- The connective torque is 20N.cm
- Suitable for the implant with Φ 3.8, or larger diameter.



Assembly drawing scale: 3:1



Diameter 3.5mm

Gum height	PRODUCT CODE
1.5 mm	112-161
3.0 mm	112-162
4.5 mm	112-163

Ball cap O-ring

Color	Withdrawal force	Note:
Black	4~6 N	
White	4~6 N	Used for restoration
Orange	10~12 N	Used for restoration

Temporary Abutment

Picture scale is 1.8:1

- Suitable for the bridge of temporary restoration or single crown
- Connect with implant by central screw, the connective torque is 20N.cm
- Suitable for the implant with Φ 3.8, or larger diameter.

Assembly drawing scale: 3:1



diameter 4.5mm

Spin resistance	PRODUCT CODE
Non-spin resistant	112-106
Spin resistant	112-105



4.5mm
Non-spin resistant



4.5mm
Spin resistant

Diameter 5.5mm

Spin resistance	PRODUCT CODE
Non-spin resistant	112-136
Spin resistance	112-135



5.5mm
Non-spin resistant



5.5mm
Spin resistant

► Castable Abutment

Picture scale is 1.8:1

- Suitable for the individualized castable metallic prosthesis or single crown
- Connect with implant by central screw, the connective torque is 20N.cm
- Suitable for the implant with Φ 3.8, or larger diameter.

Assembly drawing scale: 3:1



Non-spin resistant



Spin resistant

Diameter 4.0mm

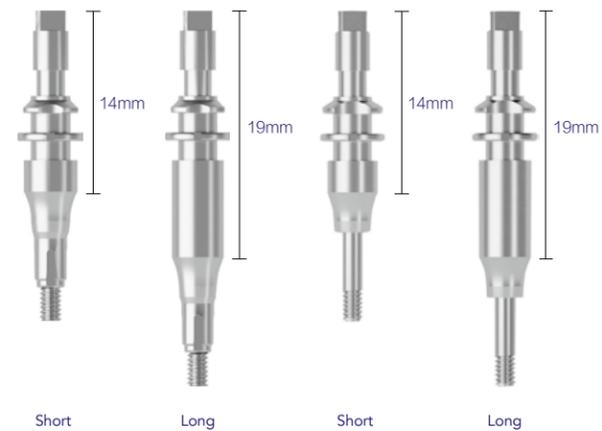
Spin resistance	PRODUCT CODE
Non-spin resistant	113-011
Spin resistant	113-010

► Impression System, Open Tray

Picture scale is 1.8:1

- Suitable to take impression with the open tray system which is used with the implant.
- Recommended torque is 5~10N.cm

Assembly drawing scale: 3:1



Suitable for implants Φ 3.8mm and above

Length	PRODUCT CODE	Antirotation
Short	113-005	Antirotation
Long	113-006	Antirotation

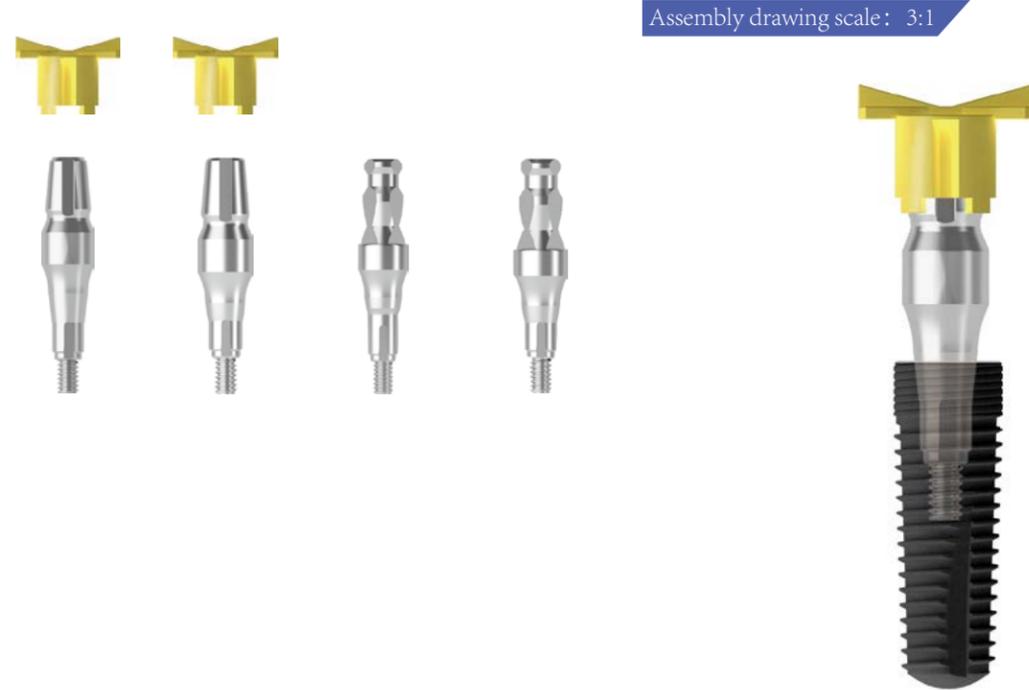
Length	PRODUCT CODE	Antirotation
Short	113-032	Non-antirotation
Long	113-033	Non-antirotation

Suitable for Φ 3.4mm implants

Length	PRODUCT CODE	Antirotation
Short	113-034	Antirotation
Long	113-035	Antirotation

Length	PRODUCT CODE	Antirotation
Short	113-036	Non-antirotation
Long	113-037	Non-antirotation

► Impression System, Closed Tray Picture scale is 1.8:1



-The impression cap is a part of the closed tray impression system.

PRODUCT CODE
113-002

-The impression post, a part of the closed tray impression system.
-Recommended torque is 5~10N.cm

PRODUCT CODE	Note:
113-001	Suitable for the implant of Φ 3.8, or larger diameter.
113-038	Suitable for the implant of Φ 3.4

- The impression post which can be with out cap
- Recommended torque is 5~10N.cm

PRODUCT CODE	Note:
113-039	Suitable for implants of Φ 3.8, or larger diameter
113-040	Suitable for implants of Φ 3.4

► The analog of dental implant Picture scale is 1.8:1

- The impression cap system is a replacement for implant during modeling

Specifications

PRODUCT CODE	Note:
113-003	Suitable for the implant of Φ 3.8, or larger diameter
113-041	Suitable for the implant of Φ 3.4



► The analog of multifunction abutment

-The impression cap system is a replacement for abutment during modeling.

Diameter 4.5mm

PRODUCT CODE
113-012



Diameter 5.5mm

PRODUCT CODE
113-013



► Impression cap for multifunction abutment

Product picture ratio 1.8:1

- Used for the taking of impressions with the closed tray system

Diameter 4.5mm

PRODUCT CODE

113-014



Diameter 5.5mm

PRODUCT CODE

113-015



► Impression post for multifunction abutment

Product picture ratio 1.8:1

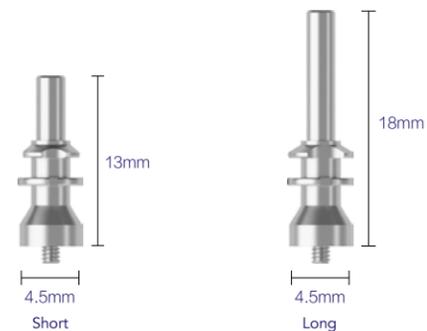
- Used for the taking of impressions with the open tray system

Diameter 4.5mm

Length	PRODUCT CODE
Short	113-028
Long	113-029

Short

Long

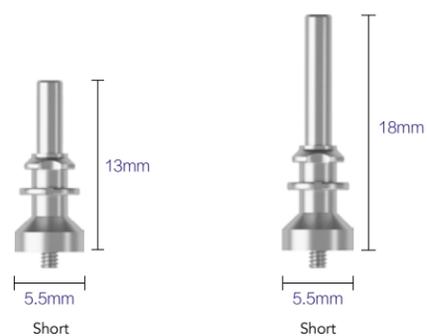


Diameter 5.5mm

Length	PRODUCT CODE
Short	113-030
Long	113-031

Short

Long



► Temporary Base for Multifunction Abutment

Picture scale is 1.8:1

- Used as temporary prosthesis during restoration

- Fixed by crown screw

Diameter 4.5mm

PRODUCT CODE

113-016



Diameter 5.5mm

PRODUCT CODE

113-017



► Castable Base for Multifunction Abutment

- Used as personalized metal prosthesis during restoration

- Fixed by crown screw

Diameter 4.5mm

PRODUCT CODE

113-018



Diameter 5.5mm

PRODUCT CODE

113-019



► Prosthetic Coping

Product picture ratio 1.8:1

-For multifunctional abutment,
diameter 4.5mm

Diameter 4.5mm

PRODUCT CODE

113-024



-For multifunctional abutment,
diameter 5.5mm

Diameter 5.5mm

PRODUCT CODE

113-025



-For straight abutment,
diameter 4.5mm

Diameter 4.5mm

Antirootation	PRODUCT CODE
Antirootation	113-022
Non-antirootation	113-020



Antirootation



Non antirotation

-For straight abutment,
diameter 5.5mm

Diameter 5.5mm

Antirootation	PRODUCT CODE
Antirootation	113-023
Non-antirootation	113-021



Antirootation



Non antirotation

► Protective Cap

-For multifunctional abutment, including screws. Recommended torque 5 ~ 10N.cm

Diameter 4.5mm

PRODUCT CODE

113-026



Diameter 5.5mm

PRODUCT CODE

113-027

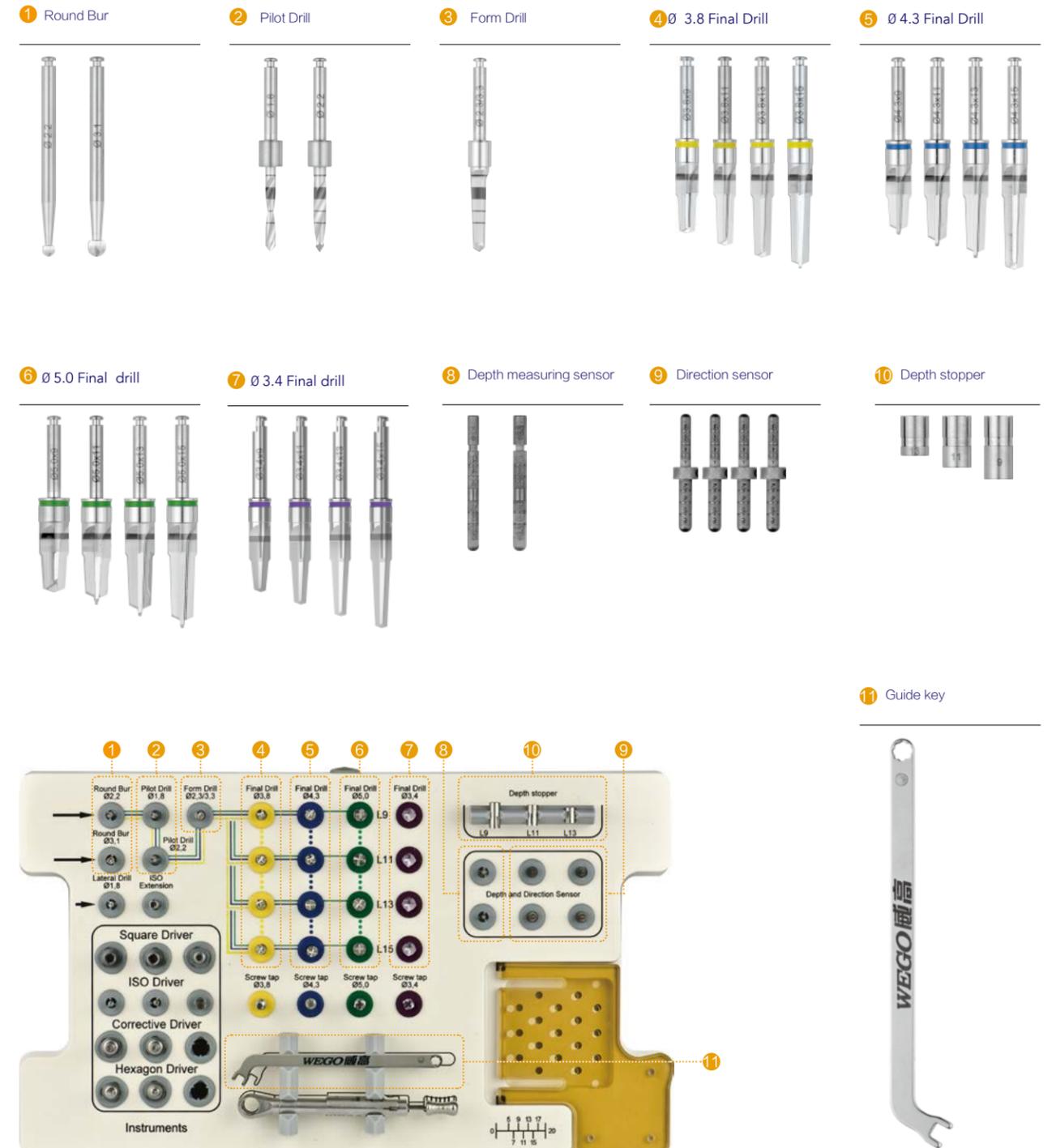


► Instruments

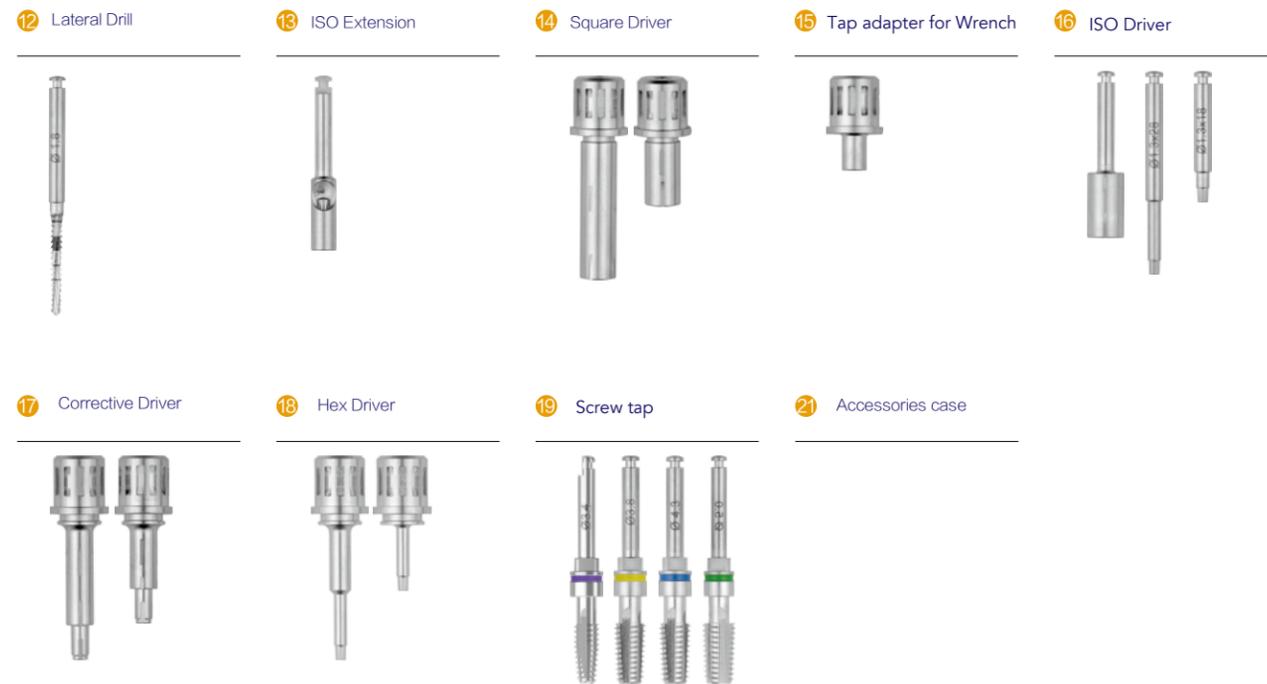
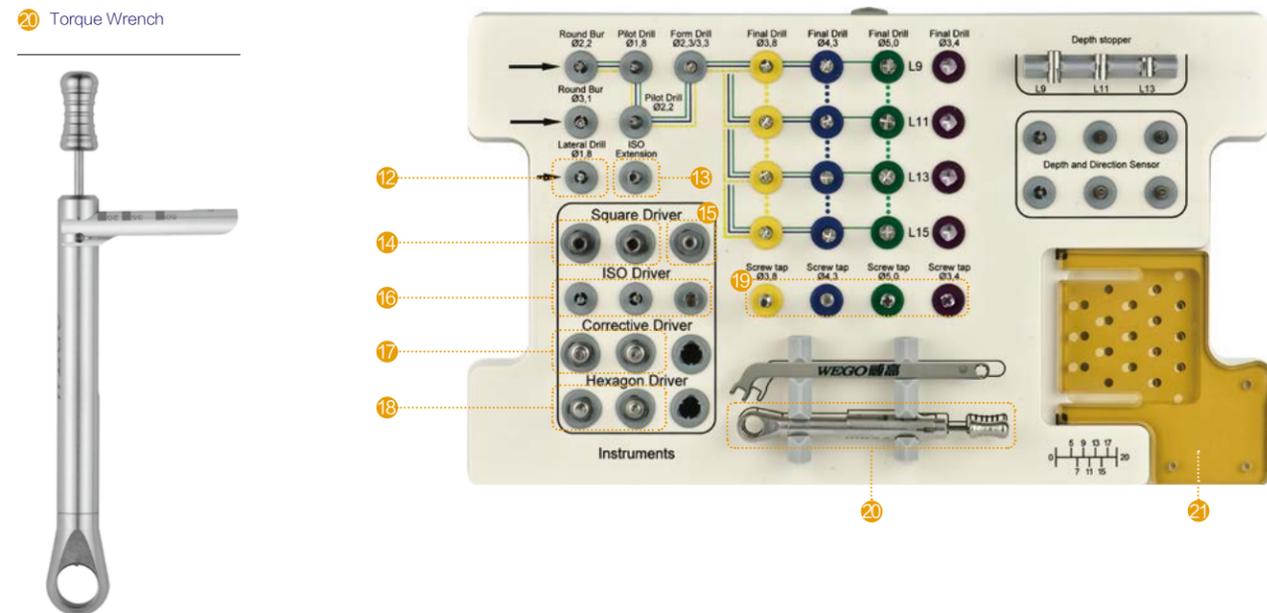
The instruments are solely for the WEGO Implant System, with the design of color marking, which can make the operation process more convenient. The instruments are supplied by a Swiss supplier who are the leaders in producing dental instruments. The instrument box has insert design, increasing the ease of use and sterilization. The box can be sterilized repeatedly.



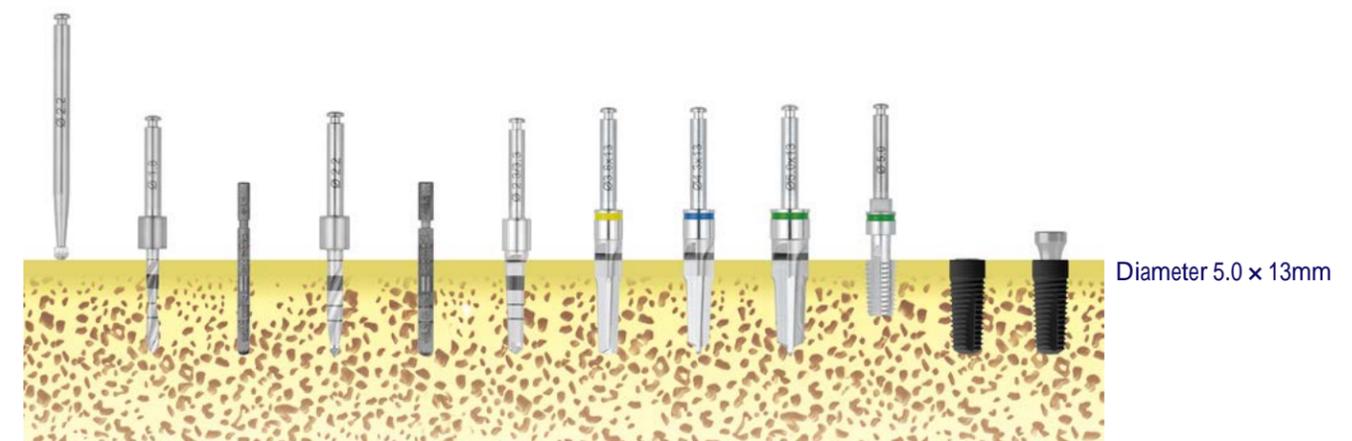
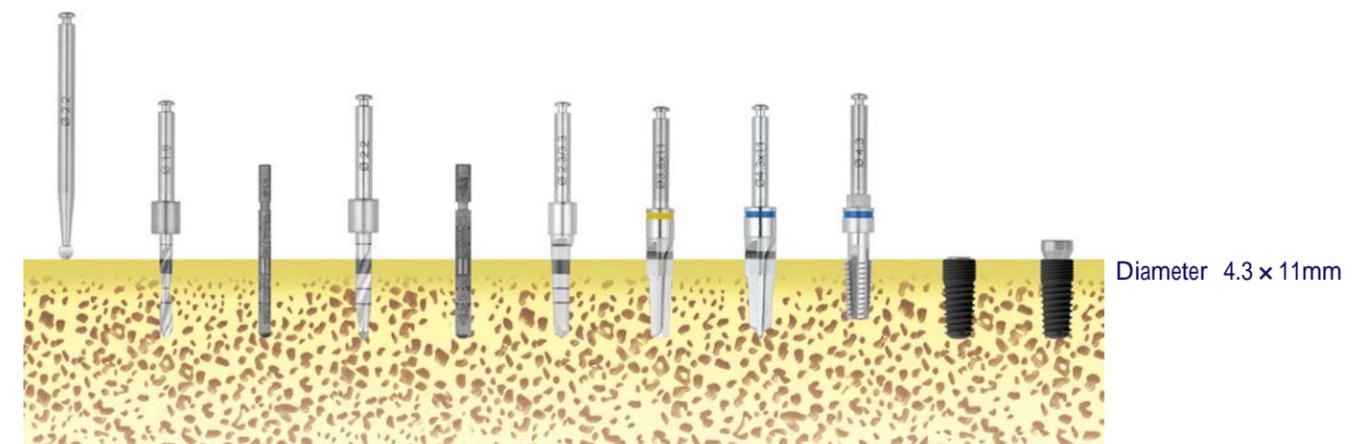
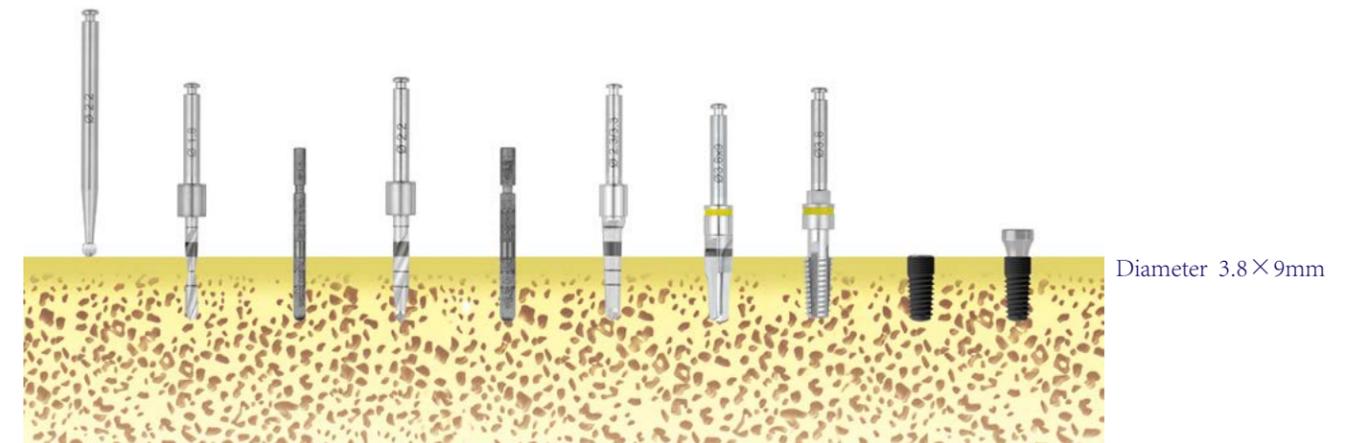
► Surgical instrument box of WEGO dental implant system



► Surgical instrument box of WEGO dental implant system



► The Example for Service Sequence of Surgical Tools





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