



US SYSTEM CATALOG



Osstem Implant 2018-19 Comprehensive Catalog

Overall Planning/EditingPR Department Design TeamSupervisionImplant Lab, Marketing PMProduction/DistributionMarketing & Planning TeamDate of Publication2018.08PublisherOsstem Implant8th FL, World Meridian II, 123, Gasan digital 2-ro,Geumcheon-gu, Seoul, KoreaPhone+82.2.2016.7000Fax+82.2.2016.7001www.osstem.com

2018 Printed in Seoul, Korea

US SYSTEM CATALOG

OO3 INTRODUCTIONO12 CONTENTSO16 US SYSTEMO72 USER MANUAL

CEO'S Message

Providing cutting edge technology and superior quality

Making products that dentists want to use, trust, and are satisfied with : This is our mission at OSSEM IMPLANT

We are forever grateful to all the dentists who have given unwavering support to OSSTEM IMPLANT Thank you for using Osstem Implant. Osstem, Korea's first implant manufacturer, has secured world-class implant competitiveness through continuous R&D investment and quality innovation. It has grown to become Asia-Pacific No.1 and World No.5 Implant Company. In addition to dental implants and treatment tools, we are leading the development of products that are essential for dentists, including dental equipment, dental materials, and dental IT, and contribute to the development of the dental industry. The comprehensive catalog of the 2018-19 product series published here shows Osstem's technology-rich products. We have focused on catalog structure so that it is convenient to browse and order products. In particular, in the case of fixtures, abutments, and surgical tools, we introduced the diameter, length, and functions in detail. GBR products are also easy to order by type, size and capacity. In addition, the product release date and time are displayed so that customers can understand when the existing product is released and what the newly released product is. We also introduced the CAD/CAM product in terms of preparing the digital dentistry, a major trend in the dentistry. In terms of design, we also implemented high-quality images of representative products by specification. By applying representative colors for each product system, it is easy to sort by category. We hope this will help you effectively find and purchase the products you need from the dental clinic of 2018-19. Osstem Implant will continue to develop products that the dentist can trust. We will work to create greater customer value. Thank you.



CEO of OSSTEM IMPLANT Choi Kyu-ok (DDS.Ph.D)

Choilywood



1997

01 Established 'Osstem Co., Ltd.' **12** Released 'Doobunae' (health insurance claim application software program)

2000

 06 Released 'Hanaro' (dentistry management software)
 10 Acquired sumin comprehensive

dental materials

2001

01 Obtained CE-0434 certification**03** Established AIC training center

2002

 61 Established Osstem Implant R&D center
 68 Obtained FDA certification, launched USII line
 10 Launched SSII line

2006

03 Changed the company name to Osstem Implant Co., Ltd

04 Obtained GOST-R certification (russia)
12 Established 12 overseas branches (first round)

2007

02 Listed on KOSDAQ and began trading publicly

06 Selected as No.1 products for the next generation and obtained TGA certification (australia)

2008

- **01** Established osstem bone science research center**12** Selected as a managing
- organization for the national strategic technology development project

2009

10 Obtained approval for medical device manufacturing and sale from the ministry of health, labor and welfare, japan

2010

2011

03 Launched TSIII SA line **06** Launched TSIII HA line

2012

06 Launched TSIII CA line07 Established osstem dental equipment research institute

2013

06 Osstem Implant R&D center was selected as ATC (advanced technology center) 09 La

- **07** Selected as 'World Champ' business
- **12** Launched 'K2 unit chair', which was selected as a 'World Class Product'
- **01** Launched osstem xenograft material 'A-Oss' **09** Launched 'K3 unit chair' **10** Selected as a 'Hidden Champion' company



EMEA

Germany United Kin France Italy Sweden Denmark Finland Norway Poland Hungary Spain Portugal Bulgaria Romania Serbia Slovakia Croatia Czech Estonia

Latvia Lithuania Albania Matta Ukraine Tunisia Sudan Egypt Iran Jordan Kuwait Lebanon Syria Pakistan Saudi Arabia UAE Kyrgyzstan

ASIA / OCEANIA

China South China Hong Kong Taiwan Japan India Russia Kazakhstan Thailand Singapore Malaysia ndonesia Vietnam Philippines Bangladesh Cambodia Sri Lanka Vyanmar Myanmar Mongolia Australia Papua New Guinea

N/S.AMERICA

USA Canada Mexico Chile Colombia ^Peru Costa Rica

2014

- **05** Selected as 'World Class 300'
- **05** Released 'HyFlex', an impression material
- **08** Released 'BeauTis' whitening material

2015

- **03** Established Osstem BioPharma Co., Ltd.
- **12** Awarded 'USD 50 Million Export Tower'

2016

- **01** Established Vussen Co., Ltd.
- 03 Acquired Cardiotec Co., Ltd.
- 08 Acquired Hubit Co., Ltd.
- **11** Launched OneGuide system

2017

12 2017 presidential commendation for job creation



01 TS exceeded 10 million production

OSSTEM⁶ Implant Design feature

OSSTEM IMPLANT has revolutionized implant dentistry in South Korea. With a focus on aggressive R&D, a commitment to education and a dedication to manufacturing the best products, Osstem Implant's ultimate goal is to become the global leader in implant dentistry.





Each implant system has its own unique color code

Submerged type implant with an internal hex and 11tapered connection

- Internal connection type Mini / Regular
- Excellent initial stability in soft bone due to smaller threads in the upper section
- Corkscrew thread with cutting edges
- Strong self-threading effect for easy fixture path
- Higher initial stability and consistent insertion torque
- Different body types to properly match the
- patient's bone quality and clinical condition
- TSII (straight body) : easy to adjust depth
- TSIII (1.5° tapered body) : excellent initial stability necessary for immediate loading, even in soft bone
- TSIV (6° tapered body) : specifically designed for
- the maxillary sinus and soft bone, excellent initial stability

Available surface types - SA / CA / HA / BA / SOI

Non-submerged type implant with an internal octa and 8tapered connection

- Internal connection type Regular / Wide
- Corkscrew thread with cutting edges
 Strong self-threading effect for easy fixture path
 Higher initial stability and consistent insertion torque
- Different body types to properly match the patient's bone quality and clinical condition
- SSII (straight body) : easy to adjust the insertion depth
 SSIII (1.5° tapered body) : excellent initial stability
- necessary for immediate loading, even in soft bone
- \bullet Available surface types SA / CA / HA / BA

Submerged type implant with an external hex connection structure

- Internal connection type Mini / Regular / Wide / Wide PS
- Corkscrew thread with cutting edges
- Strong self-threading effect for easy fixture path
- Higher initial stability and consistent insertion torque
- Different body types to properly match the patient's bone quality and clinical condition
- USII (straight body) : easy to adjust the insertion depth
- USIII (1.5° tapered body) : excellent initial stability necessary for immediate loading, even in soft bone
- USIV (6° tapered body) : specifically designed for the maxillary sinus and soft bone, excellent initial stability
- Available surface types SA / CA

OSSTEM[®] Implant Surface feature

The key factor in providing implant treatment safely and efficiently is surface technology. OSSTEM IMPLANT is proud of its cutting-edge surface technology.

Acid Treated Optimized Surface

Ra 2.5~3.0µm surface roughness (note : the upper 0.5mm part of the implant has Ra 0.5~0.6um)
Consistent surface micro pits between 1 to 3µm
Surface area is increased by 46 percent compared to RBM treated implants

In-vitro & In-vivo Bone Response

- 20% improvement in osteoblast separation and ossification compared to RBM
 Initial bone reaction performance in animal model (mini-pig)
- 48% improvement in initial stability (RT, 4 weeks) compared to RBM
 - 20% improvement in ossification
- (BIC, 4 weeks) compared to RBM

Super-hydrophilic SA surface suspended in a calcium solution

Same SA surface morphology
Optimizing surface reaction by suspension in a calcium (CaCl2) solution
Increased new bone formation area due to the excellent blood wettability
Bone response improved in early osseointegration stage compared to standard SA surface

In-vitro & In-vivo Bone Response

- Protein and cellular adhesion tripled compared to SA surfaces
 Julia cellular differentiation by 10 pares
- Initial cellular differentiation by 19 percent compared to SA surfaces (7 days)
 Initial stability increased by 34 percent compared to SA surfaces (RT at 4 weeks)
- Ossification rate Increased by 26 percent compared to SA surfaces (BIC at 4 weeks)

Premium high-crystalline HA-coated surface

· 30 to 60 µm thick high-crystalline
 · HA coating
 · HA coated onto a RBM surface
 to (Ra 3.0 to 3.5 µm)
 · High HA crystalline over 98 percent
 · Solved the problem with low-crystalline

HA resorption

In-vitro & In-vivo Bone Response

- Excellent biocompatibility in HA that is similar to bone
- Initial ossification by osteoblasts doubled
- compared to SA surfaces (5 days)
- 40% improvement in initial stability (RT, 4 weeks)
- in animal models compared to SA
- · Suitable for poor bone quality, tooth extraction sites or immediate implant insertion

Premium low crystalline nano-HA coated SA surface

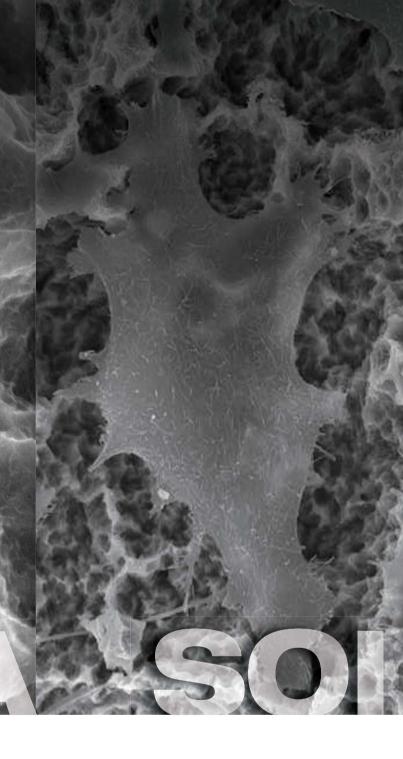
· SA surface (Ra 2.5 to 3.0 µm) coated with HA · 10nm ultra-thin HA coating

Dual function between titanium and HA

- HA is naturally resorbed during ossification

In-vitro & In-vivo Bone Response

- · Advantages of both SA and HA surfaces
- SA's ability to maintain an optimal surface - HA's ability to form high quality initial bone,
- even in a poor bone quality
- 40% improvement in ossification (BIC)
- compared to SA
- · It is applicable to all types of bone quality



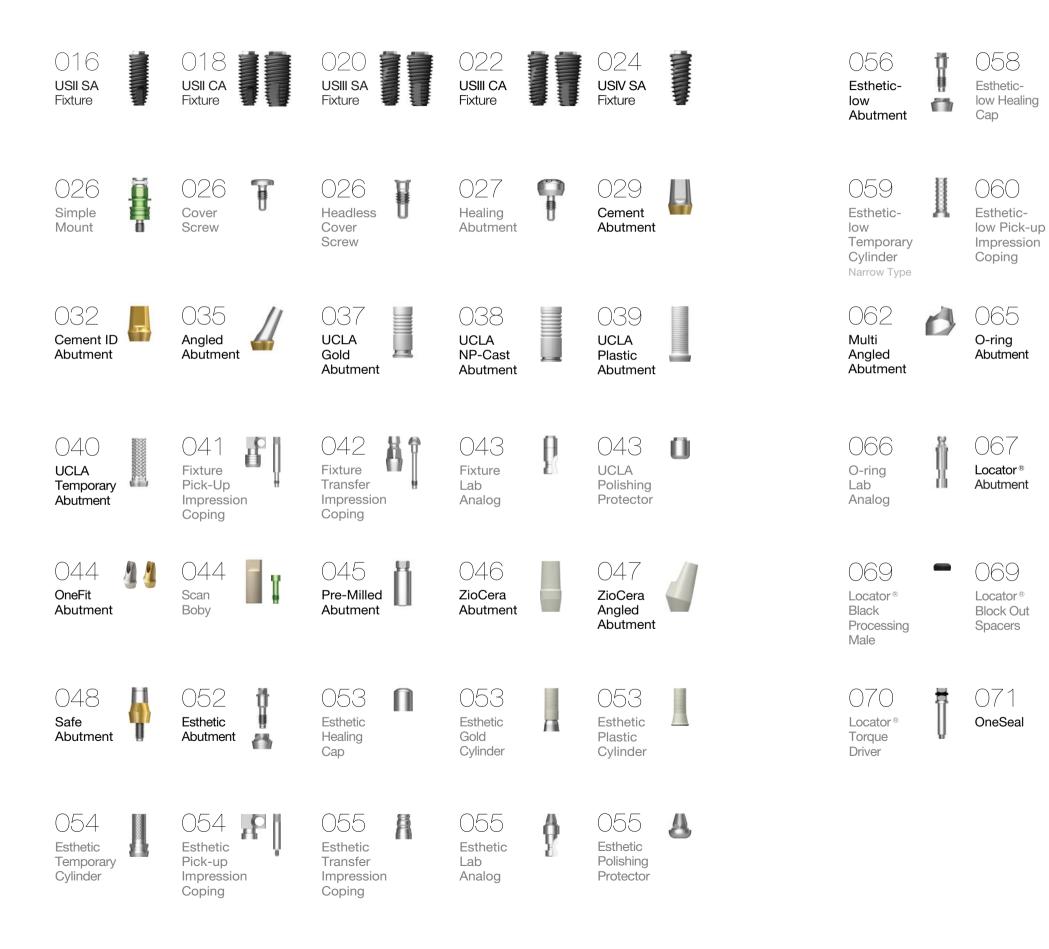
Next-generation surface coated with special material (K material)

- \cdot Activation of blood clot formation
- Avoid carbon adsorption in air
 Coating of K material on SA surface
- (Ra 2,0~3.0µm)
- Superior blood wettability with super hydrophilic surface.

In-vitro & In-vivo Bone Response

- Protain and cellular adhesion 130 times increase compared to SA surface
- Initial stability increased by 57 percent
- compared to SA surfaces (RT at 4 weeks)
- \cdot Surface with the shortest duration of surgery

US SYSTEM Contents





0

0

058

Esthetic-

low Gold

Cylinder

060

low

Esthetic-

Transfer

Coping

066

O-ring

Retainer

Cap Set

068

Locator[®]

069

Locator[®]

Coping

Impression

Male

Kit

Impression

Å

0

058 Estheticlow Plastic Cylinder

060

Esthetic-

low Lab

Analog

066

O-ring

Set

Retainer



Ô

8:333

0





Estheticlow Temporary Cylinder Standard Type

061





Estheticlow Polishina Protector



066 O-ring







Set





068 (mar.) Locator[®] Replacement Male



069 Locator[®]



Lab Analog

Locator[®] Extended Replacement Male

068

()	7	Ċ)
I	0	ca	tor	• (6

Core Tool







FIXTURE

016	USII SA Fixture
018	USII CA Fixture
020	USIII SA Fixture
022	USIII CA Fixture
024	USIV SA Fixture
026	Simple Mount
026	Cover Screw
026	Headless Cover Screw
027	Healing Abutment

COMPONENTS

028 PROSTHETIC FLOW DIAGRAM 1 **029** Cement Abutment **035** Angled Abutment 037 UCLA Gold Abutment **O38** UCLA NP-Cast Abutment **039** UCLA Plastic Abutment **040** UCLA Temporary Abutment **044** OneFit Abutment 045 Pre-Milled Abutment **046** ZioCera Abutment **047** ZioCera Angled Abutment **O48** Safe Abutment **050** PROSTHETIC FLOW DIAGRAM 2 **052** Esthetic Abutment **056** Esthetic-low Abutment 062 Multi Angled Abutment 064 PROSTHETIC FLOW DIAGRAM 3 065 O-ring Abutment **067** Locator[®] Abutment 071 OneSeal

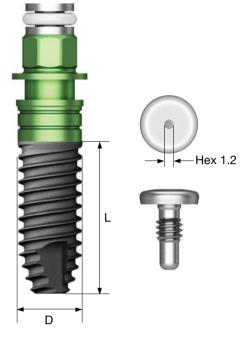
USII SA Fixture

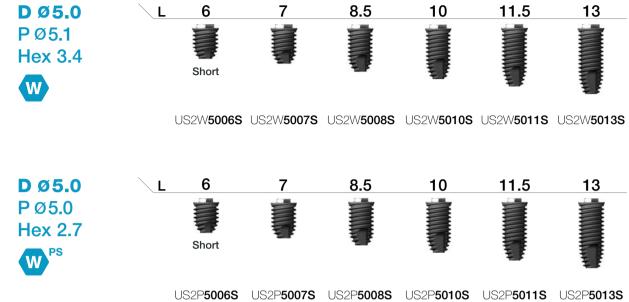
- Submerged type implant with external hex connection
- Optimized screw thread design with the ideal SA surface
- Straight body design allows easy insertion depth adjustments
- Corkscrew threading with excellent self-threading effect
- Recommended insertion torque : \leq 40 Ncm
- * Fixtures with a diameter of 4.5mm or more are recommended for the posterior area

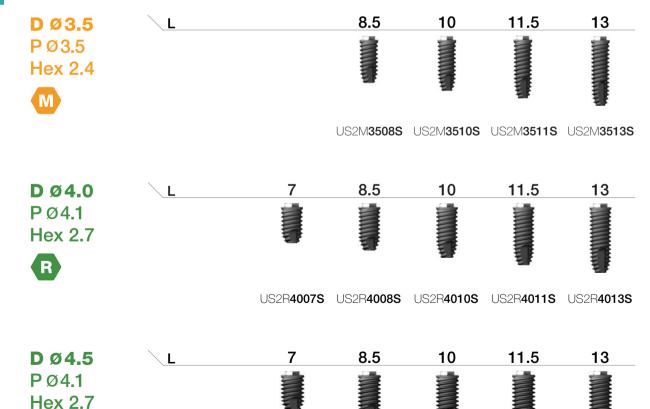
NoMount fixture order code

: fixture product code (ex : US2R4010S)

Pre-Mounted fixture (fixture + mount + cover screw) order code : A + fixture product code (ex : AUS2R4010S)







US2R4507S US2R4508S US2R4510S US2R4511S US2R4513S

Nominal and actual diameters may slightly differ Caution For a short implant, a sufficient healing period is strongly recommended. A short implant should be splinted with another implant when considering prosthetic options.

016

US SYSTEM

R



USII CA Fixture

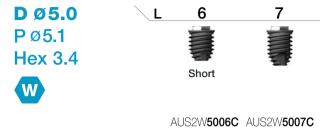
- Submerged type implant with an external hex connection
- Super-hydrophilic SA surface suspended in a calcium solution
- Straight body design allows easy insertion depth adjustments
- Corkscrew threading with excellent self-threading effect

Ultra-wide

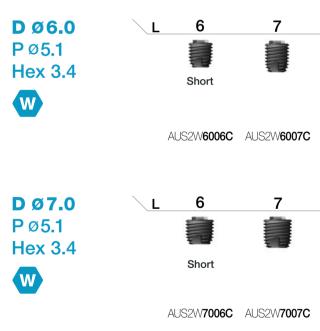
- Ideal for an extracted tooth site in the posterior area, for immediate placement, or for replacing a failed implant
- Recommended insertion torque : ${\leq}40~\text{Ncm}$
- % Fixtures with a diameter of 4.5mm or more are recommended for the posterior area

Pre-Mounted fixture (fixture + mount + cover screw) order code : A + fixture product code (ex : AUS2R4010C)





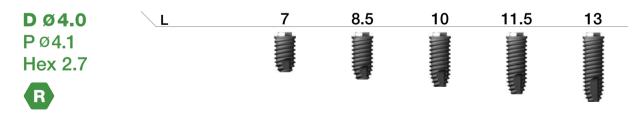
Ultra-wide

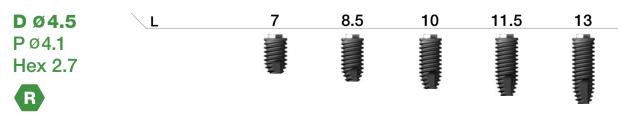


Nominal and actual diameters may slightly differ Caution For a short implant, a sufficient healing period is strongly recommended. A short implant should be splinted with another implant when considering prosthetic options.

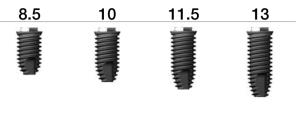


AUS2M3508C AUS2M3510C AUS2M3511C AUS2M3513C





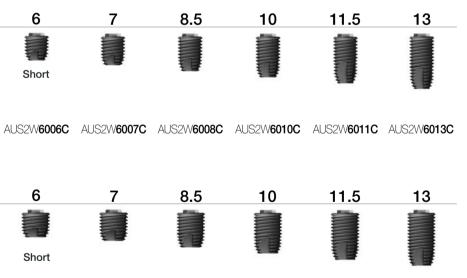
AUS2R4507C AUS2R4508C AUS2R4510C AUS2R4511C AUS2R4513C



 $\texttt{AUS2W5006C} \hspace{0.1cm} \texttt{AUS2W5007C} \hspace{0.1cm} \texttt{AUS2W5008C} \hspace{0.1cm} \texttt{AUS2W5010C} \hspace{0.1cm} \texttt{AUS2W5011C} \hspace{0.1cm} \texttt{AUS2W5013C}$



019



AUS2W7006C AUS2W7007C AUS2W7008C AUS2W7010C AUS2W7011C AUS2W7013C

USIII SA Fixture

• A submerged type Implant with external hex connection

- Optimal screw thread design for optimal SA surface implementation
- Taper body design with excellent initial fixation
- Powerful self-threading effect with corkscrew thread
- Acquired initial fixation force for immediate loading in soft bone Ultra-wide
- Useful for Posterior extraction and immediate implant placement case, and for replacement of failed implant case
- Optimized apex design ensures stable initial fixation force even at the extraction and bottom 3mm
- Recommended implant placement torque : below 40Ncm
- % In posterior single case, fixture with diameter of 4.5mm or more is recommended

NoMount fixture order code

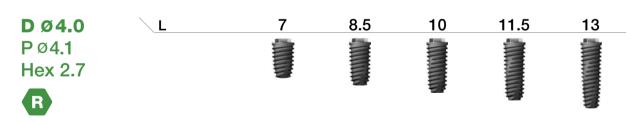
: fixture product code (ex : US3R4010S)

Pre-Mounted fixture (fixture + mount + cover screw) order code : A + fixture product code (ex : AUS3R4010S)

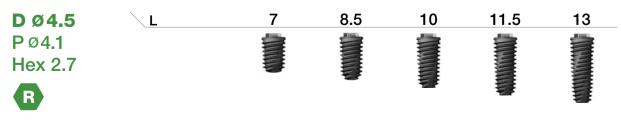




US3M3508S US3M3510S US3M3511S US3M3513S

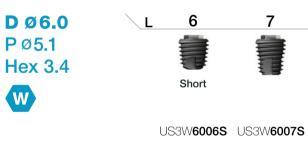


US3R4007S US3R4008S US3R4010S US3R4011S US3R4013S



US3R4507S US3R4508S US3R4510S US3R4511S US3R4513S

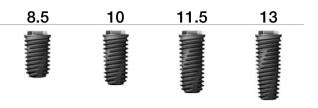




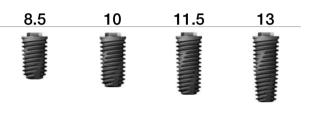


Nominal and actual diameters may slightly differ Caution For a short implant, a sufficient healing period is strongly recommended. A short implant should be splinted with another implant when considering prosthetic options.

US SYSTEM



US3W5006S US3W5007S US3W5008S US3W5010S US3W5011S US3W5013S



US3P5006S US3P5007S US3P5008S US3P5010S US3P5011S US3P5013S



SD

SYSTEM



US3W6006S US3W6007S US3W6008S US3W6010S US3W6011S US3W6013S



USIII CA Fixture

- A submerged type Implant with external hex connection
- Super-hydrophilic SA surface in calcium solution.
- Straight body design that can be easily adjusted in depth
- Powerful self-threading effect with corkscrew thread
- Acquired initial fixation force for immediate loading in soft bone Ultra-wide

DØ3.5

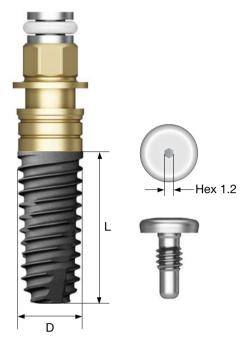
PØ3.5

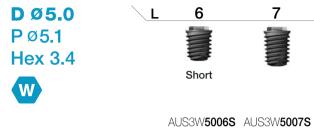
Μ

Hex 2.4

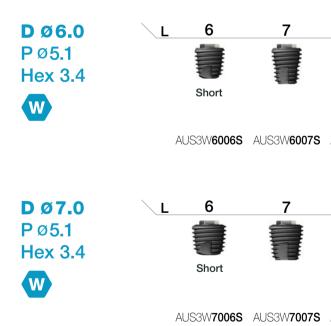
- Useful for Posterior extraction and immediate implant placement case, and for replacement of failed implant case
- Recommended implant placement torque : below 40Ncm
- * In posterior single case, fixture with diameter of 4.5mm or more is recommended

Pre-Mounted fixture (fixture + mount + cover screw) order code : A + fixture product code (ex : AUS3R4010S)





Ultra-wide



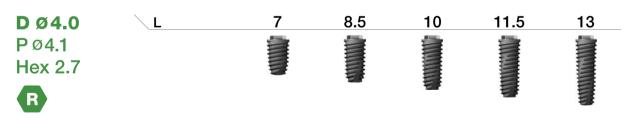
Nominal and actual diameters may slightly differ Caution For a short implant, a sufficient healing period is strongly recommended. A short implant should be splinted with another implant when considering prosthetic options.

$\setminus L$ 8.5 10

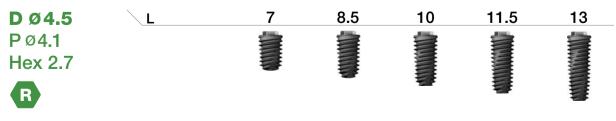
AUS3M3508S AUS3M3510S AUS3M3511S AUS3M3513S

11.5

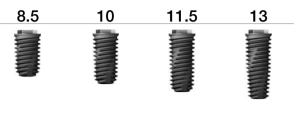
13



AUS3R4007S AUS3R4008S AUS3R4010S AUS3R4011S AUS3R4013S



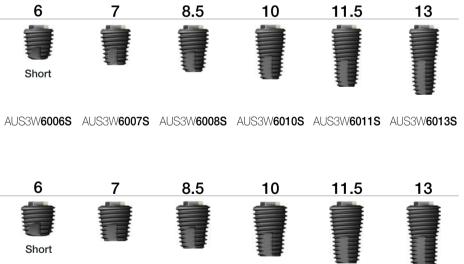
AUS3R4507S AUS3R4508S AUS3R4510S AUS3R4511S AUS3R4513S



AUS3W5006S AUS3W5007S AUS3W5008S AUS3W5010S AUS3W5011S AUS3W5013S







AUS3W7006S AUS3W7007S AUS3W7008S AUS3W7010S AUS3W7011S AUS3W7013S

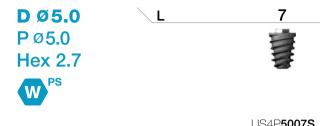
USIV SA Fixture

- · A submerged type implant with external hex connection
- Optimal screw thread design for optimal SA surface implementation
- Fixture for maxillary sinus and soft bone
- Powerful self-threading effect with corkscrew thread
- With a sharp apex design, it can be placed after D4 bone 2.0/3.0mm drilling
- Recommended implant placement torque : below 40Ncm
- * In posterior single case, fixture with diameter of 4.5mm or more is recommended
- * USIV fixture is recommended to be lowered to 15rpm or less because the pitch of the thread is large and the implant placement speed is fast

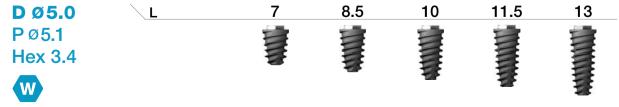
NoMount fixture (fixture + mount + cover screw) order code : fixture product code (ex : US4R4010S)

Pre-Mounted fixture (fixture + mount + cover screw) order code : A + fixture product code (ex : AUS4R4010S)





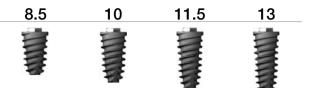
8.5 11.5 DØ4.0 \mathbf{L} 7 10 13 PØ4.1 Hex 2.7 R US4R4007S US4R4008S US4R4010S US4R4011S US4R4013S DØ4.5 7 8.5 11.5 13 10 PØ4.1 Hex 2.7 (\mathbf{R}) US4R4507S US4R4508S US4R4510S US4R4511S US4R4513S



US4W5007S US4W5008S US4W5010S US4W5011S US4W5013S

Nominal and actual diameters may slightly differ

024



US4P5007S US4P5008S US4P5010S US4P5011S US4P5013S

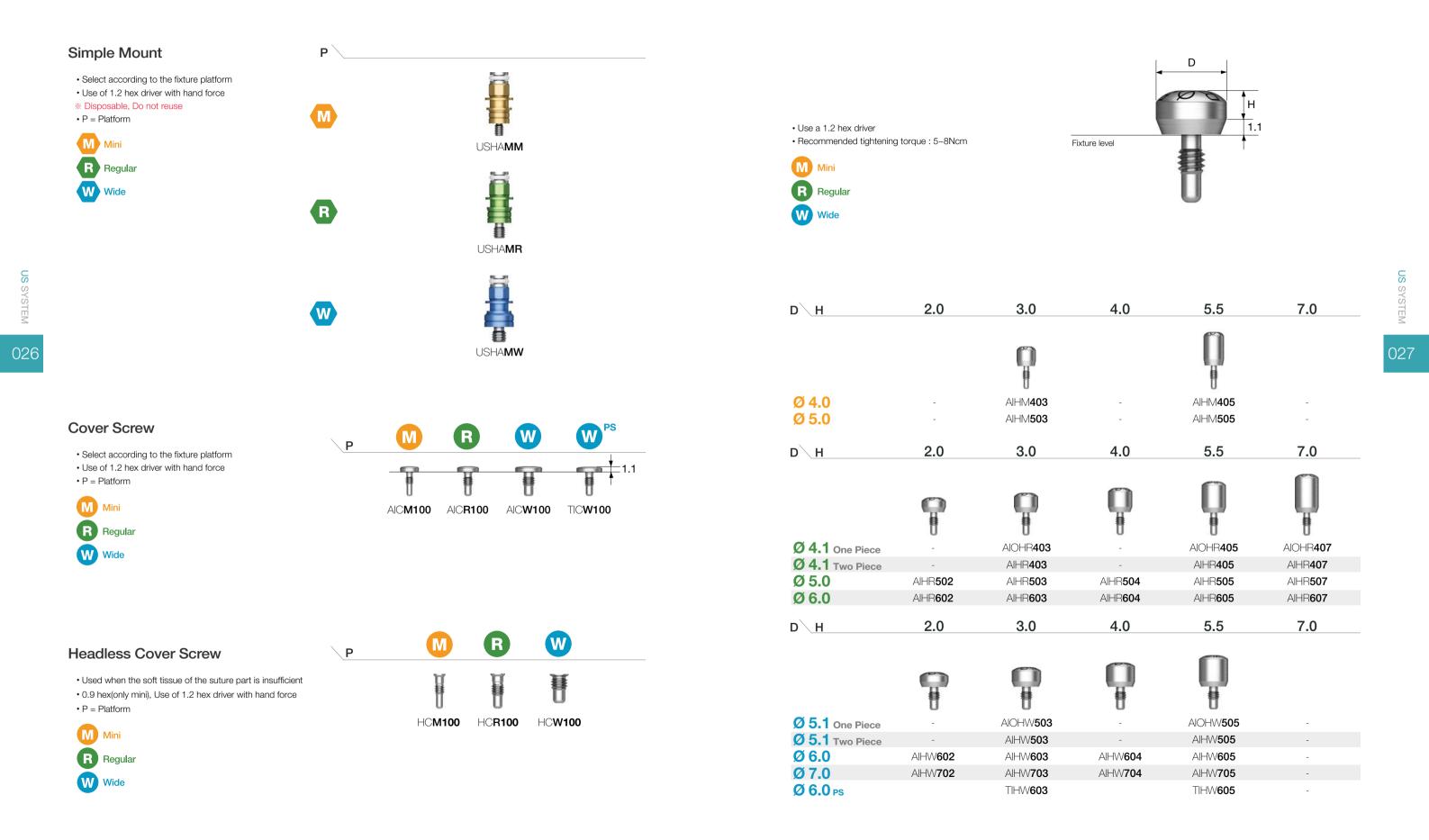


US SYSTEM



Mount & Screw

Healing Abutment

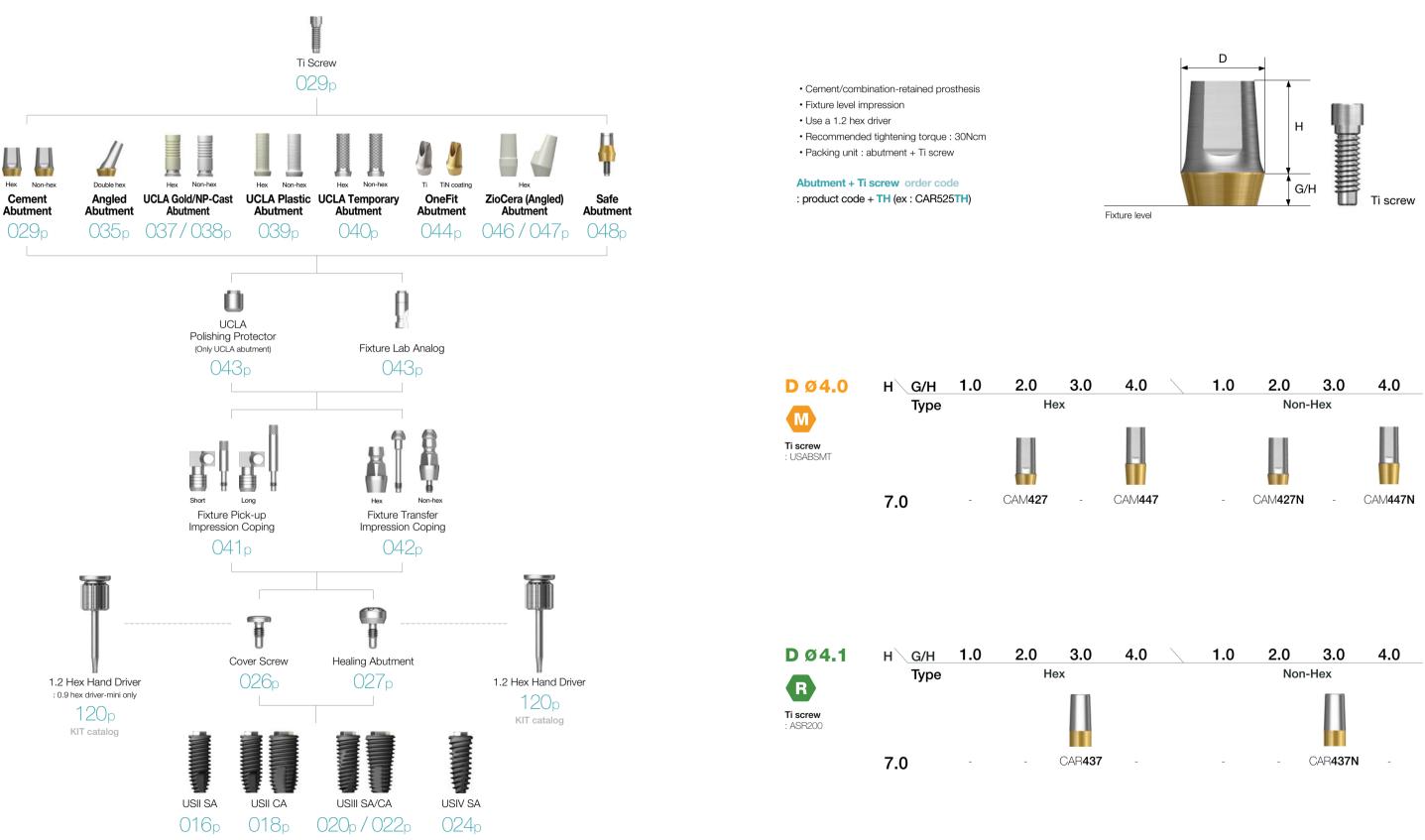


PROSTHETIC FLOW DIAGRAM 1

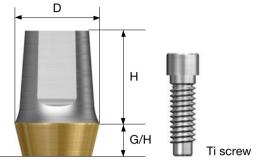
Cement / Angled / UCLA / OneFit / ZioCera / Safe

Cement Abutment





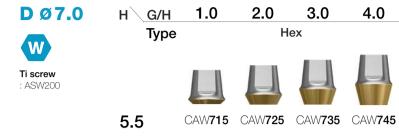






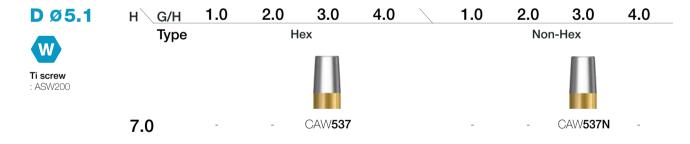
Cement Abutment

DØ5.0	H G/H	1.0	2.0	3.0	4.0	\backslash	1.0	2.0	3.0	4.0
	Туре		н	ex				Non	-Hex	
Ti screw : ASR200										
	4.0	CAR514	CAR 524	CAR 534	CAR 544		CAR514N	CAR524N	CAR534N	CAR544N
	5.5	CAR515	CAR 525	CAR 535	CAR 545		CAR 515N	CAR 525N	CAR 535N	CAR545N
	7.0	CAR517	CAR 527	CAR 537	CAR 547		CAR517N	CAR 527N	CAR 537N	CAR547N



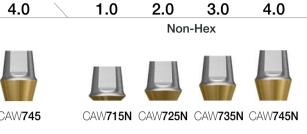
DØ6.0	H G/H	1.0	2.0	3.0	4.0	 1.0	2.0	3.0	4.0
R	Туре		Н	ex			Non	-Hex	
Ti screw : ASR200									
		-				-			
	5.5	CAR615	CAR 625	CAR 635	CAR645	CAR615N	CAR 625N	CAR635N	CAR645N



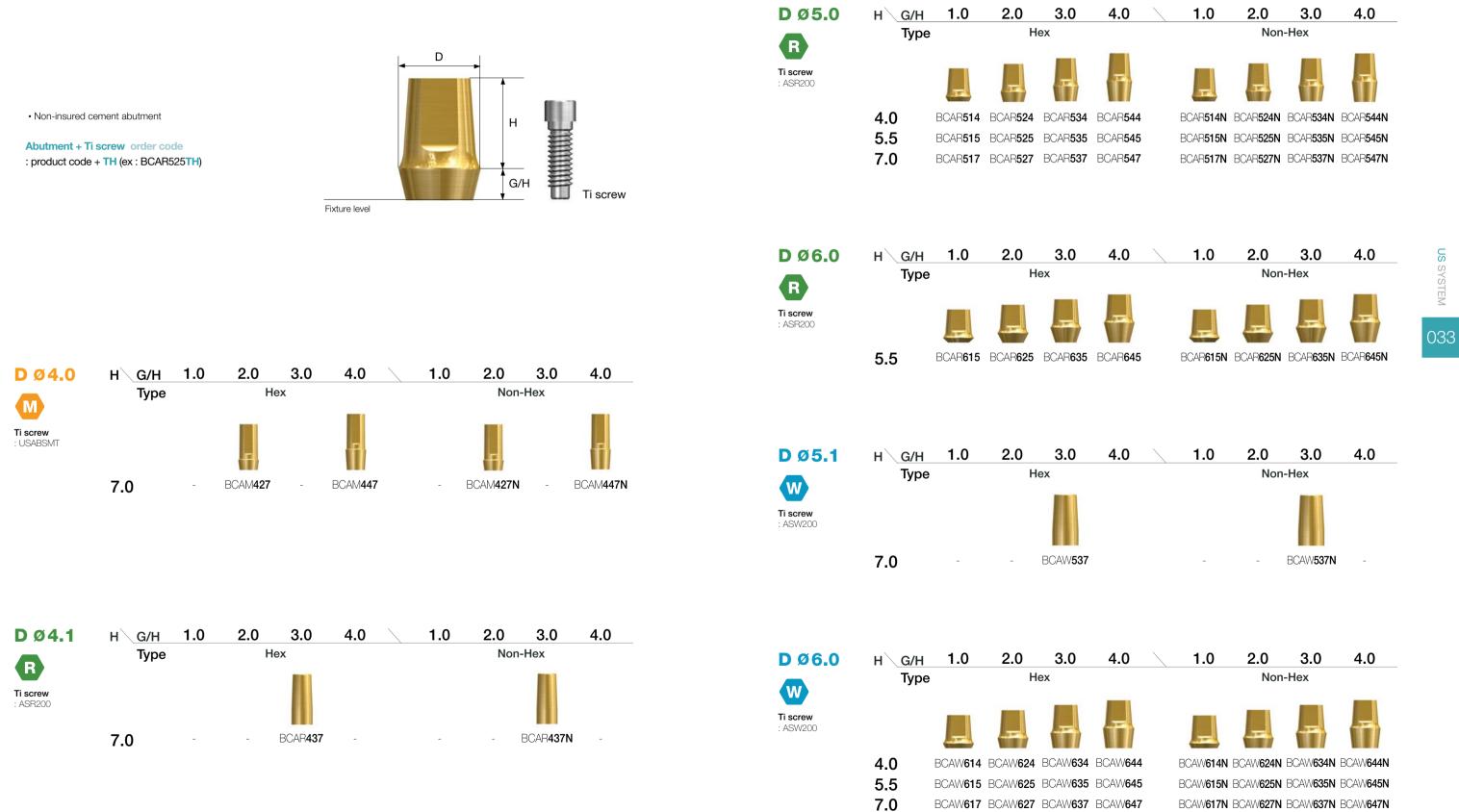


D Ø6.0	H <u>G/H</u> Type	1.0	2.0 н	3.0 ex	4.0	1.0	2.0 Non	3.0 -Hex	4.0
Ti screw : ASW200									
	4.0	CAW614	CAW624	CAW 634	CAW644	CAW614N	CAW624N	CAW634N	CAW 644N
	5.5	CAW615	CAW 625	CAW 635	CAW645	CAW615N	CAW 625N	CAW635N	CAW 645N
	7.0	CAW617	CAW 627	CAW 637	CAW 647	CAW617N	CAW 627N	CAW637N	CAW647N

030



Cement ID Abutment

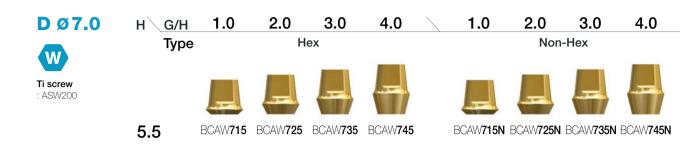


US SYSTEM

4.0	 1.0	2.0	3.0	4.0
		Non	-Hex	
ī	Ţ		F	đ
BCAR 544	BCAR514N	BCAR524N	BCAR534N	BCAR544N
BCAR 545	BCAR515N	BCAR525N	BCAR535N	BCAR545N
BCAR 547	BCAR517N	BCAR527N	BCAR537N	BCAR547N

Cement ID Abutment

Angled Abutment



- Cement/combination-retained prosthesis
- Angle compensation of 15/25°
- Double hex(dodecagon) connection allows 12 positions
- Fixture level impression
- Use a 1.2 hex driver
- Recommended tightening torque : 30Ncm
- Packing unit : abutment + Ti screw

Abutment + Ti screw order code

: product code + TH (ex : AAR5152CTH)

SN	DØ6.0	H <u>G/H</u>	1.0	2.0	3.0	4.0	 1.0	2.0	3.0	4.0
SYSTEM	W PS	Туре		H	ex			Non-	Hex	
034	Ti screw : ASR200					Ŧ		_		Ŧ
		7.0	-	BTCAW627	-	BTCAW647	-	BTCAW627N	-	BTCAW647N

DØ4.0	G/H	2.0		4.0
Ti screw : USABSMT	Angle	//	15°	4
		AAM 4152C		AAM 4154

D Ø 5.0 2.0 4.0 G/H 15° Angle R Ti screw : ASR200



AAR5152C

2.0

AAR5154C

DØ6.0 G/H Angle W Ti screw : ASW200

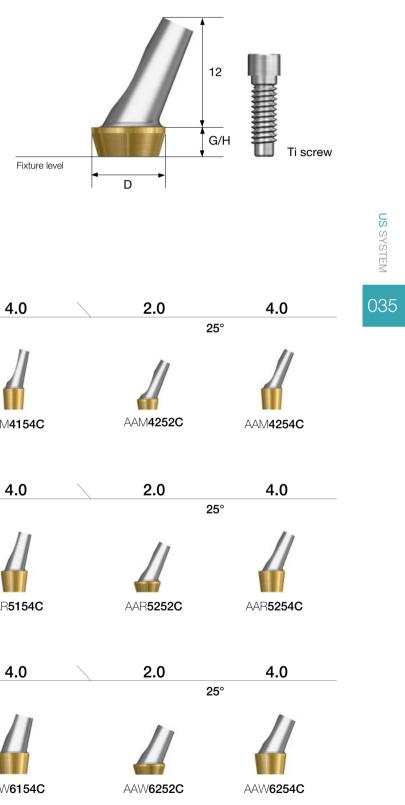


15°

AAW6152C

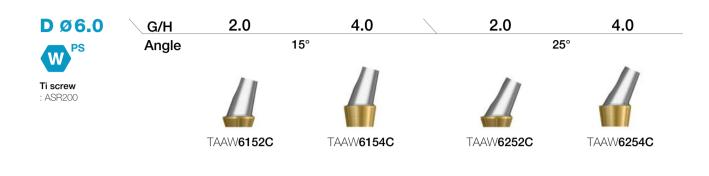
AAW6154C





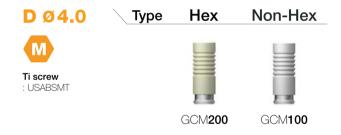
Angled Abutment

UCLA Gold Abutment



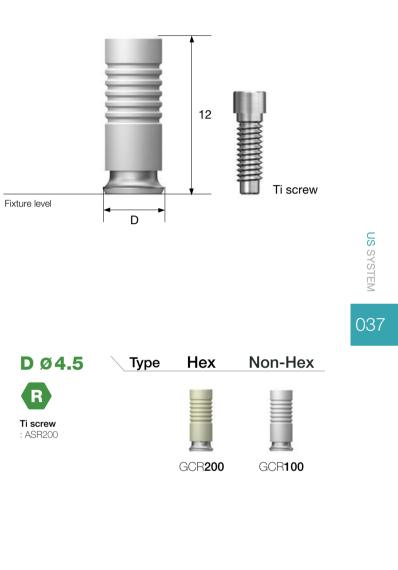
- Cement/combination/screw abutment for prosthesis
- manufacturing
- $\ensuremath{\cdot}$ Used to make customized prosthesis by casting with gold alloy
- Melting temperature of Abutment : 1,400~1,450 $^\circ\text{C}$
- Fixture level impression
- Use of 1.2 hex driver
- Recommended torque of tightening screw : 30Ncm
- Packing unit : abutment + Ti screw

Abutment + Ti screw order code : product code + TH (ex : GCR200TH)





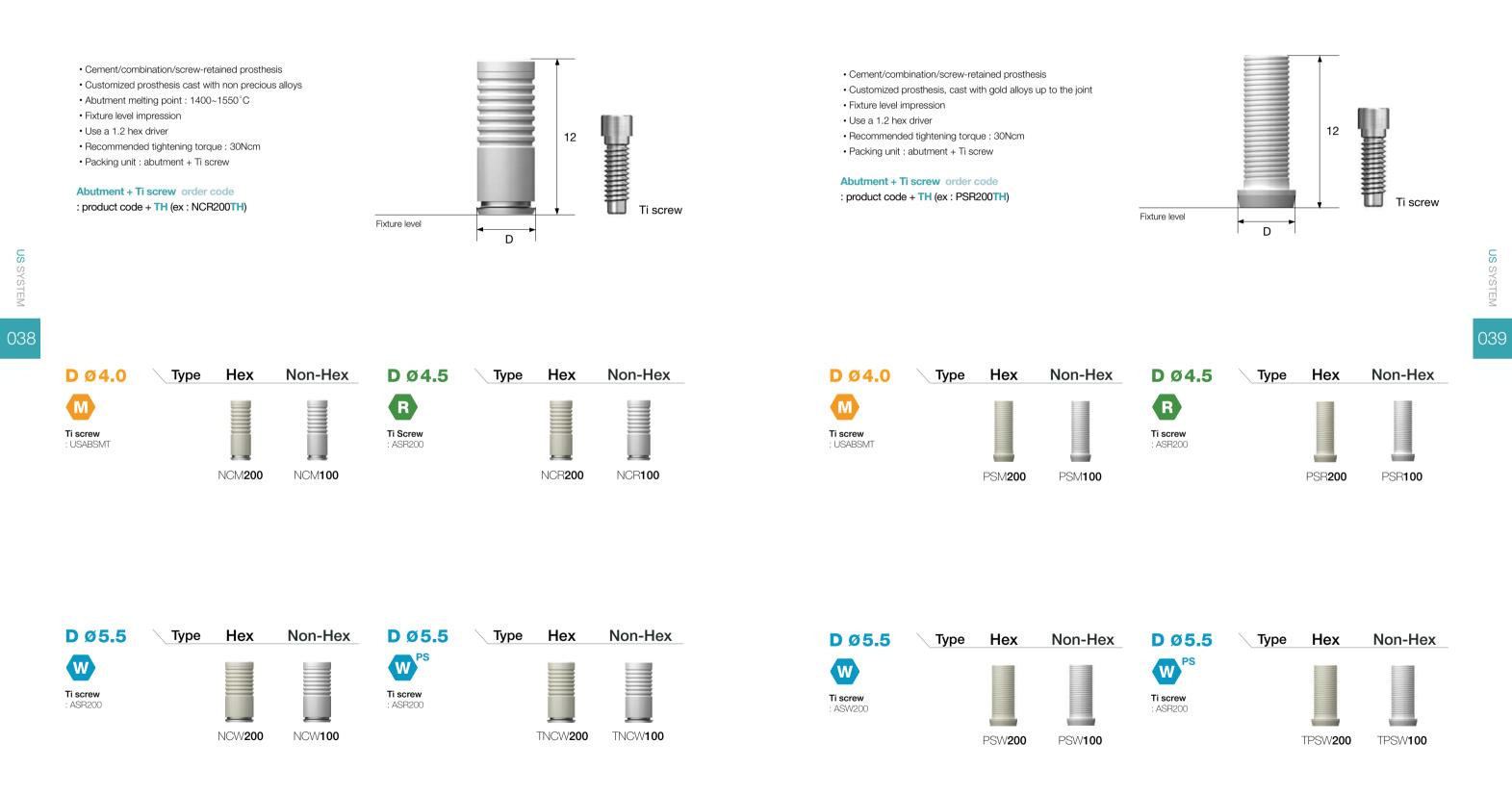






UCLA NP-Cast Abutment

UCLA Plastic Abutment



US SYSTEM

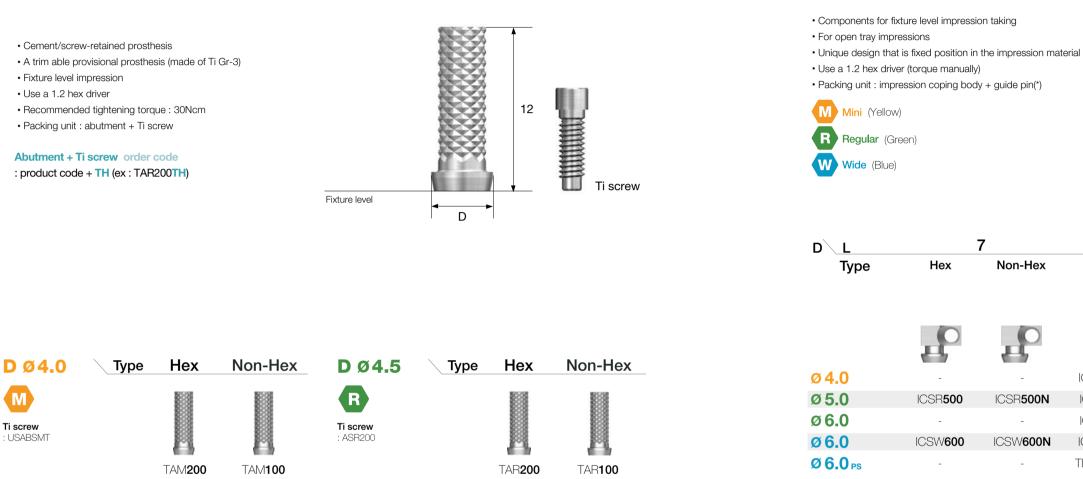
UCLA Temporary Abutment

UCLA Abutment Components

LO LO

-



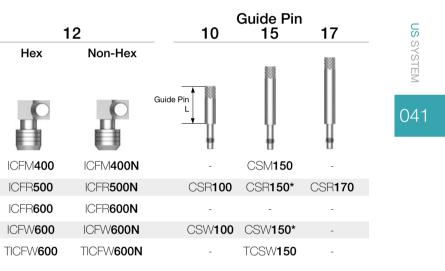




040

M





UCLA Abutment Components

UCLA Abutment Components

Fixture Transfer Impression Coping

- Components for fixture level impression taking
- For closed tray impressions
- Triangular arc ensures precise placement
- Use a 1.2 hex driver (torque manually)
- Packing unit
- Hex : impression coping body + guide pin - Non-hex : impression coping
- Mini (Yellow) R Regular (Green)



Fixture Lab Analog

• A lab analog for fixture level impressions Packing unit : lab analog



С

Μ R W W

US SYSTEM

D\L	10.5			13.5
Туре	Hex	Non-Hex	Hex	Non-Hex
	ð Î		Ä	
ø 4.0	ICPM 402S	ICPM401S	ICPM 402L	ICPM401L
Ø 5.0	ICPR 502S	ICPR501S	ICPR502L	ICPR501L
Ø 6.0	ICPW602S	ICPW601S	ICPW 602L	ICPW601L
Ø 6.0 PS	-	-	TICPW602	TICPW601

UCLA Polishing Protector

 Protects GoldCast/plastic cylinder joints during polishing process Use a 1.2 hex driver (torque manually)





M R W W W

R-type

C











UPCM**100**

UPCR**100**

UPCW100

TUPCW100

RUPCW**100**

OneFit Abutment

Pre-Milled Abutment

- Cement/combination abutment for prosthesis manufacturing
- Custom abutment manufactured by CAD/CAM
- Fixture level impression
- Abutment level impression when scan healing abutment is used
- Production period (based on working day)
- Titanium : 5 days
- Titanium + gold color : 7 days
- Use of 1.2 hex driver
- Recommended tightening torque : 30Ncm
- Packing unit : abutment + Ti screw





Manufacturing custom abutment with dental milling equipment

- Superior tightening accuracy compared to non-genuine
- Packing unit : pre-milled abutment + Ti

Pre-milled abutment + screw order code : product code + TH (ex : USPM10AGRTH)

044

US SYSTEM

Scan Boby

- Scan body for titanium custom abutment production
- Convenient specification classification through screw color
- Use of 1.2 hex driver with hand force
- Packing unit : scan body + Ti screw

Scan body + screw order code : product code + TH (ex : USSBMTH)









USSBWP

USSBR

Equipment	Implant	D	Specifications	;	Code
	Osstem US		Mini	Hex	USPM10AGMTH
		Ø10	Mini	Non-hex	USPM10AGMNTH
			Regular	Hex	USPM10AGRTH
DooWon ARUM			Regular	Non-hex	USPM10AGRNTH
			Wide	Hex	USPM10AGWTH
			Wide	Non-hex	USPM10AGWNTH









ZioCera Abutment



ZioCera Angled Abutment

 Cement/combination/screw-retained prosthesis Cement/combination/screw-retained prosthesis • Zirconium abutment for all ceramic prostheses ideal for • Zirconium abutment for an all ceramic prostheses ideal for the anterior esthetic zone anterior - esthetic zone Angle compensation up to 23° without the need for Н Fixture level impression additional adjustment • Use a 1.2 hex driver Fixture level impression Abutment screw included Use a 1.2 hex driver Recommended tightening torque : 30Ncm(regular) • Recommended tightening torque : 30Ncm(regular) Packing unit : abutment + Ti screw • Packing unit : abutment + Ti screw G/H Abutment + Ti screw order code Abutment + Ti screw order code : product code + TH (ex : ZAR537TH) Ti screw : product code + TH (ex : ZAAR5173TH) Fixture level D **D Ø5.0** Н <u>G/H</u> 3.0 5.0 D

046



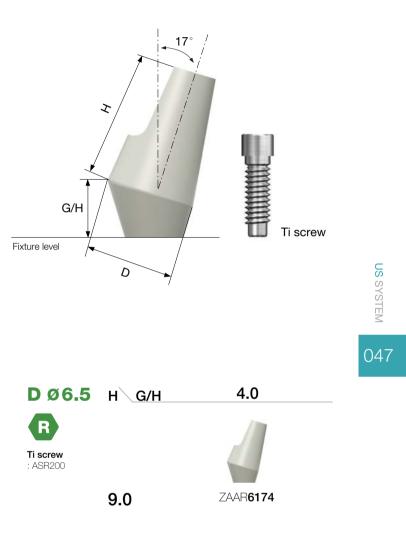
7.0

ZAM 537	ZAM 557

DØ5.0	H G/H	3.0	5.0
R			
Ti screw : ASR200			
	7.0	ZAR 537	ZAR 557

D Ø5.5	H G/H	3.0
R		///
Ti screw : ASR200		
	9.0	ZAAR 5173





Safe Abutment



- Cement-retained prosthesis
- Designed to minimize screw loosening
- No modification or trimming is required
- Fixture/abutment level impression
- Use a 1.2 hex driver
- Recommended tightening torque : 30Ncm
- Packing unit : abutment + Ti screw + carrier cap + protect cap



048

R

H G/H	1.0	2.5	4.0
4.0	SFAR514SC	SFAR524SC	SFAR544SC
5.5	SFAR515SC	SFAR525SC	SFAR545SC
7.0	SFAR517SC	SFAR527SC	SFAR547SC

D Ø6.0

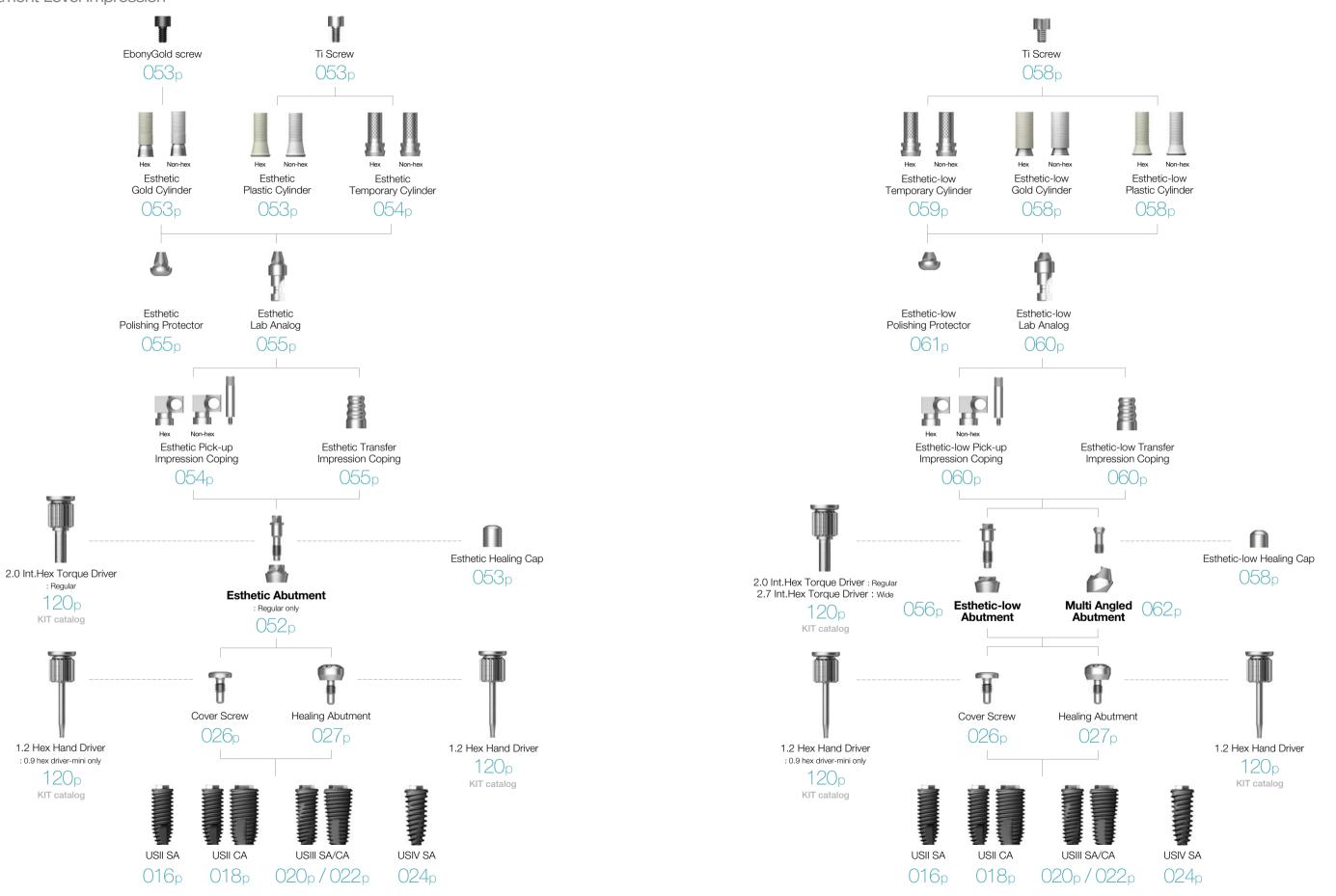






Esthetic / Esthetic-low / Multi Angled

Abutment Level Impression



US SYSTEM

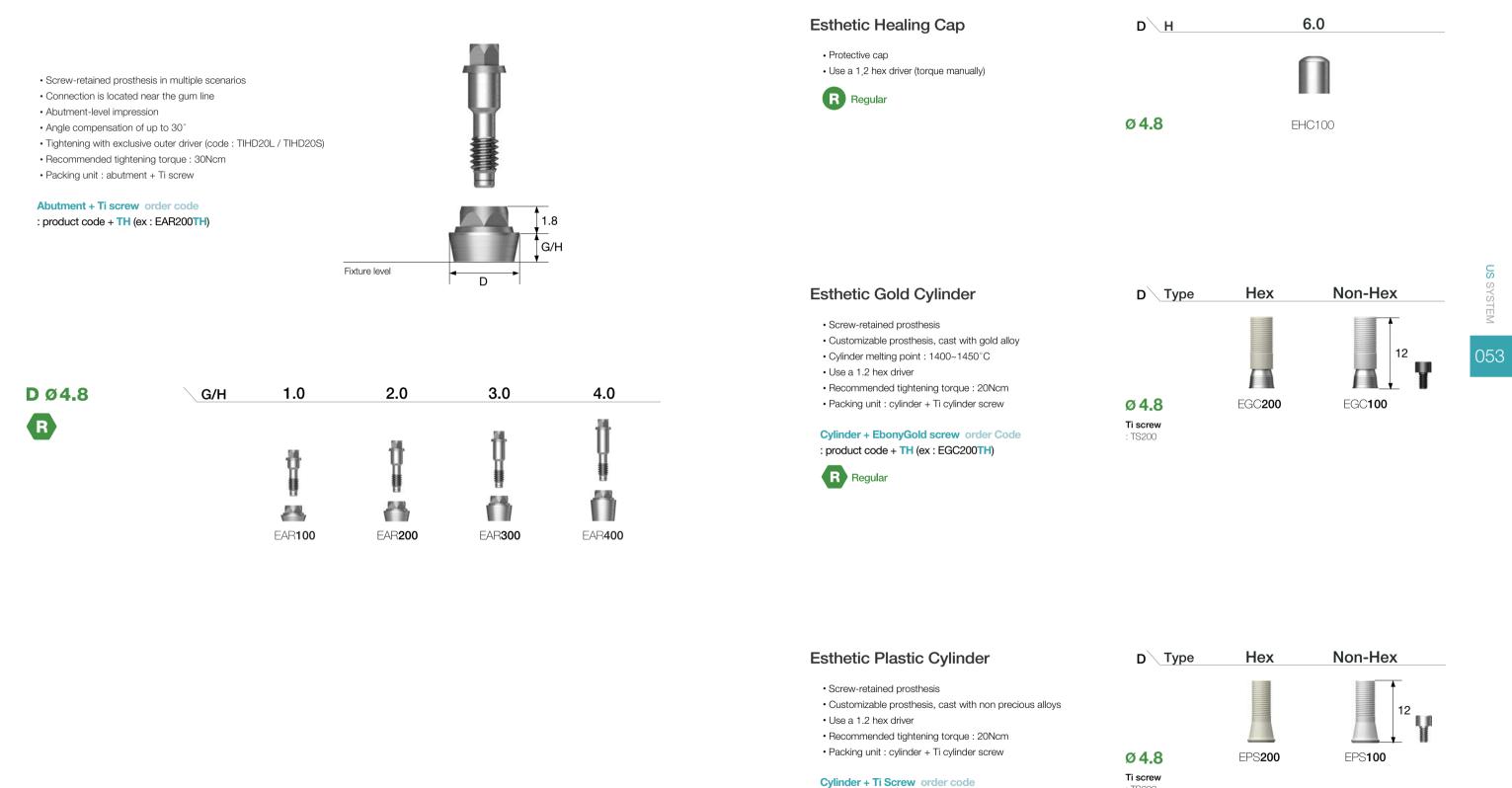
Esthetic Abutment

US SYSTEM

052



Esthetic Abutment Components



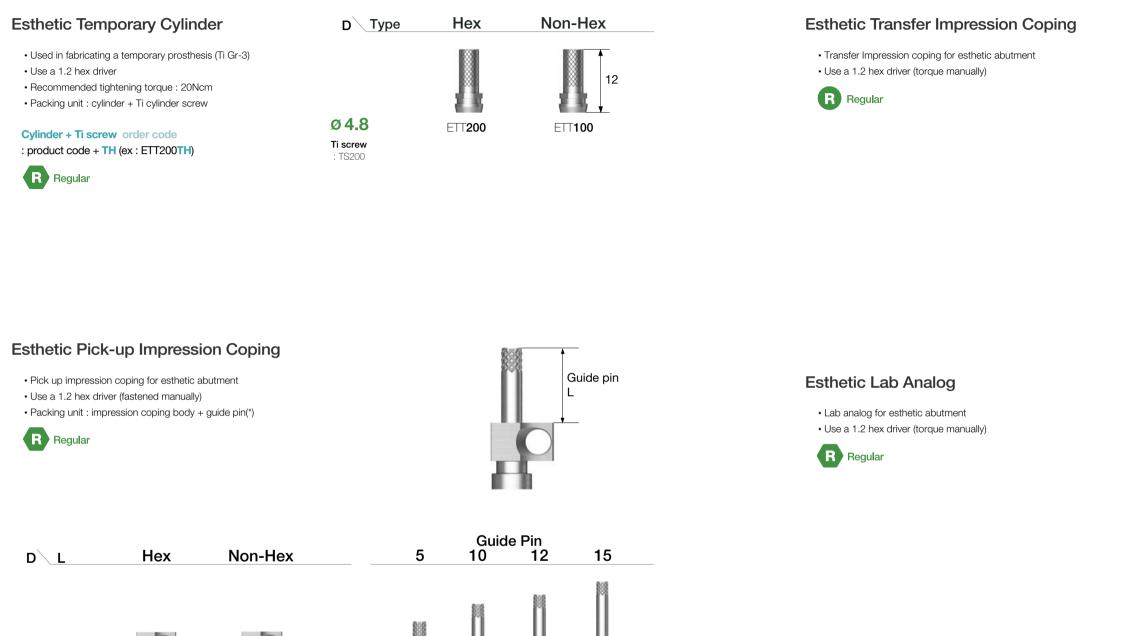
: product code + TH (ex : ETT200TH)

R Regular



: TS200

Esthetic Abutment Components



GP**200**

Ø4.8

ESR**200**

ESR100

GP**100** GP150* GP**170**

Esthetic Polishing Protector

 Protects GoldCast/plastic cylinder joints during polishing process

• Use a 1.2 hex driver (torque manually)



054

DH

8.0







055









ERR300





EPCR100

Ø4.8

Esthetic-low Abutment





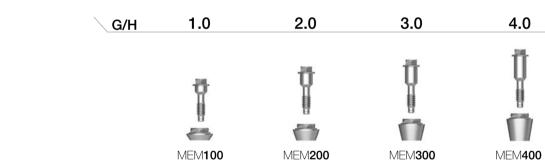
 The prosthetic connection matches the crest of the soft tissue Abutment level impression • Angle compensation of up to 48°

- Torque using a dedicated outer driver
- Regular : 2.0 internal hex driver (code : TIHD20S/TIHD20L)
- Wide : 2.7 internal hex driver (code : TIHD27)
- Recommended tightening torque : 30Ncm
- Packing unit : abutment + Ti screw

Abutment + Ti screw order code : product code + TH (ex : MER200TH)

DØ4.8

Μ









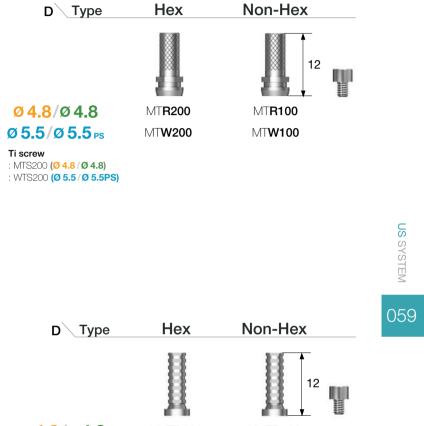




Esthetic-low Abutment Components

Esthetic-low Healing Cap	D		6.0	Esthetic-low Temporary Cylinder
A protective capUse a 1.2 hex driver (torque manually)		I	n	Standard Type
Mini Regular	Ø 4.8/Ø 4.8 Ø 5.5/Ø 5.5 _{PS}		CR100 CW100	 Used in fabricating a temporary prosthesis (Ti Gr-3) Use a 1.2 hex driver Recommended tightening torque : 20Ncm Packing unit : cylinder + Ti cylinder screw
Wide				Cylinder + Ti screw order code : product code + TH (ex : MTR200TH) Mini Regular
Esthetic-low Gold Cylinder	D Type	Hex	Non-Hex	Wide
 Screw-retained prosthesis Cast with gold alloys Cylinder melting point : 1400~1450°C Use a 1.2 hex driver Recommended tightening torque : 20Ncm Packing unit : cylinder + Ti cylinder screw Cylinder + Ti screw order code product code + TH (ex : MGR200TH) Mini Regular Wide 	Ø 4.8/Ø 4.8 Ø 5.5/Ø 5.5 Ps Ti screw : MTS200 (Ø 4.8/Ø 4.8) : WTS200 (Ø 5.5/Ø 5.5 PS)	MGR200 MGW200	hGR100 MGW100	 Narrow Type Used in fabricating a temporary prosthesis (Ti Gr-3) Ideal for overdenture cases due to its smaller diameter Use a 1.2 hex driver Recommended tightening torque : 20Ncm Packing unit : cylinder + Ti cylinder screw Cylinder + Ti screw order code : product code + TH (ex : NMTR200TH) Mini Regular Wide
Esthetic-low Plastic Cylinder	D Type	Hex	Non-Hex	
 Screw-retained prosthesis Cast with non-precious metal alloys Use a 1.2 hex driver Recommended tightening torque : 20Ncm Packing unit : cylinder + Ti cylinder screw Cylinder + Ti screw order code : Product code + TH (ex : MEPR200TH) Mini	Ø 4.8/Ø 4.8 Ø 5.5/Ø 5.5 PS Ti screw : MTS200 (Ø 4.8/Ø 4.8) : WTS200 (Ø 5.5/Ø 5.5PS)	MEP R200 MEP W200	12 MEPR100 MEPW100	
R Regular				

W Wide



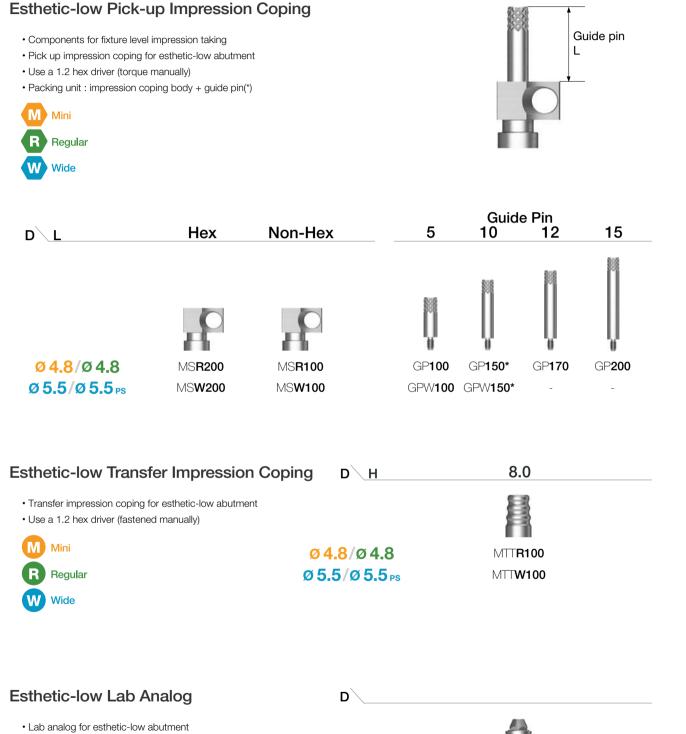
ø4.8/ø4.8 Ø 5.5/Ø 5.5_{PS}

Ti screw : MTS200 **(Ø 4.8 / Ø 4.8)** : WTS200 (Ø 5.5/Ø 5.5PS) NMT**R200**

NMT**W200**

NMT**R100** NMT**W100**

Esthetic-low Abutment Components



Esthetic-low Polishing Protector

 Protects GoldCast/plastic cylinder joints during polishing process • Use a 1.2 hex driver (torque manually)



• Use a 1.2 hex driver (fastened manually)

Mini R Regular W Wide



D



Ø4.8/Ø4.8 Ø 5.5/Ø 5.5 PS

MPC**R100** MPC**W100**

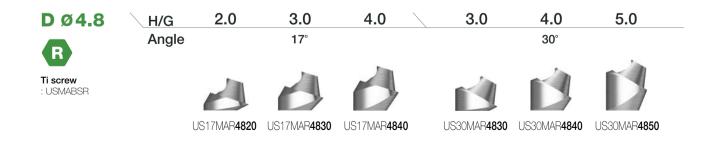


Multi Angled Abutment

• Used in the manufacture of screw retained prosthesis in Angle multiple cases • It compensates the angle of the fixture up to 108° The same platform as esthetic low abutment • Prosthetics production with US esthetic low cylinder (regular/non-hex) Use dedicated abutment screw G/H Use of 1.2 hex driver Ti screw • Recommended tightening torque : Fixture level 20Ncm(mini), 30Ncm(regular) • Packing unit : abutment + Ti screw 0 Abutment + Ti screw order code : product code + TH (ex : US17MAR4830TH)

062

DØ4.8	H/G	2.0	3.0	4.0	3.0	4.0	5.0
M	Angle		17 °			30°	
		100					
Ti screw : USMABSM							
	ί	JS17MAM 4820	US17MAM 4830	-	-	-	-









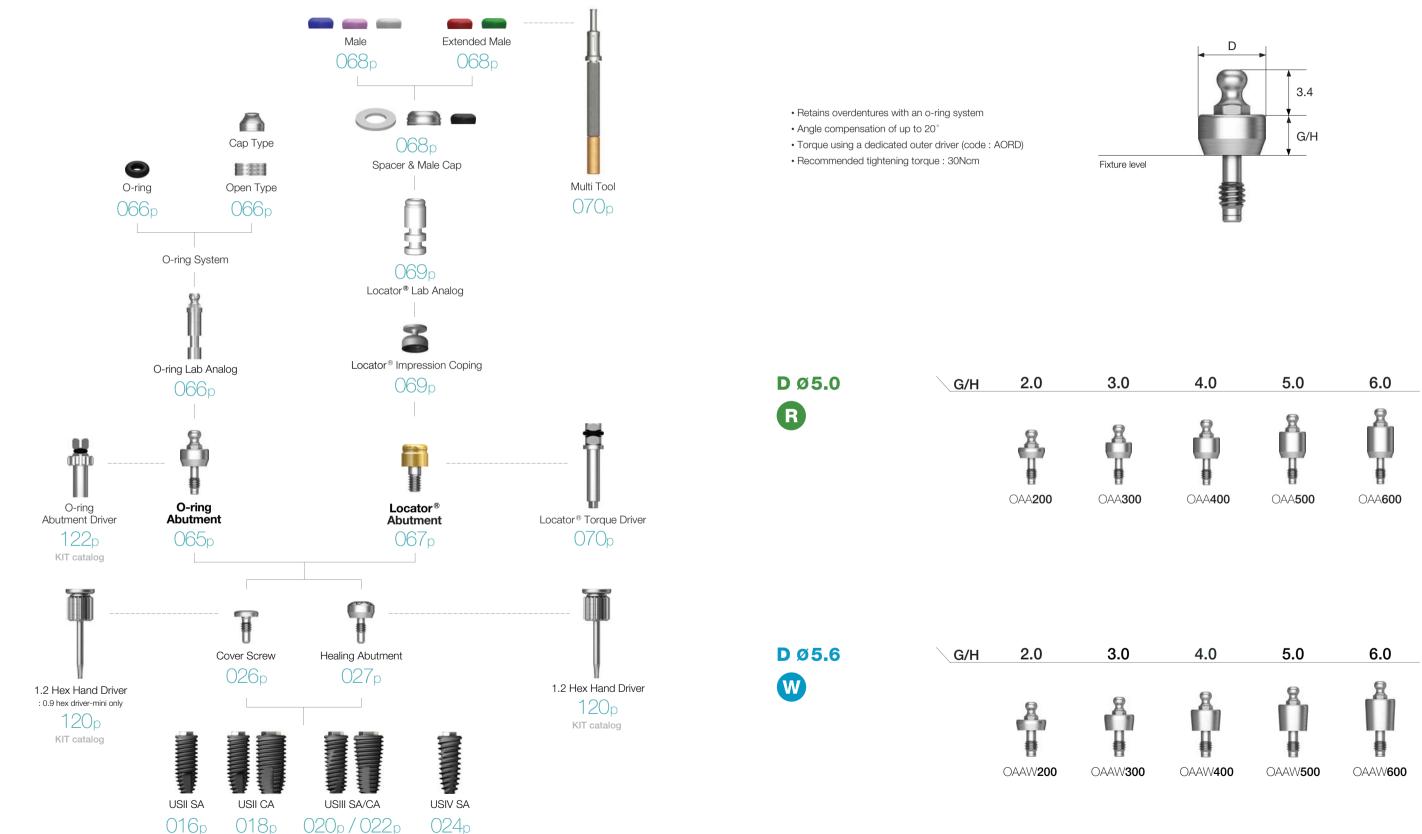
PROSTHETIC FLOW DIAGRAM 3

O-ring / Locator®

US SYSTEM

064

O-ring Abutment

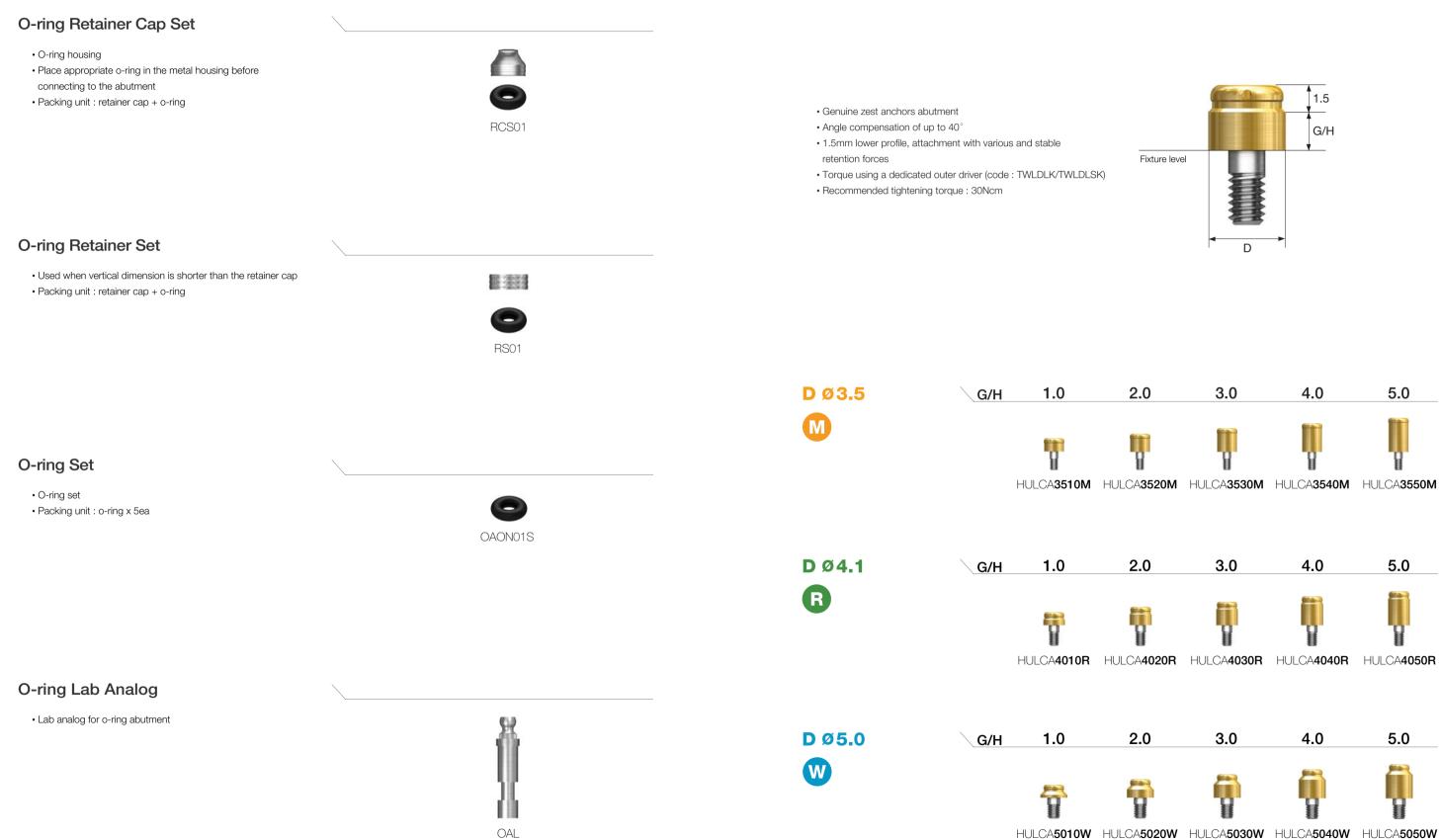






O-ring Abutment Components

Locator[®] Abutment



066





Locator[®] Abutment Components

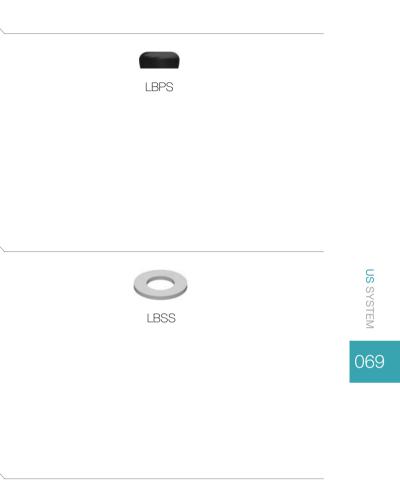
cator [®] Male Processing Kit		Locator [®] Black Processing Male
Components		A nylon male used in prosthesis fabrication process
Block out spacer / denture cap connected to black		Packing unit : 4ea
processing male		
- Replacement male blue/pink/clear A full range of retentive males are included with each		
denture cap to allow personalized retention for each	LMPS	
specific patient		
Locator core tool places and removes nylon		
retentive males		
Packing unit : 2set		
		Locator [®] Block Out Spacers
		Place block-out spacers on the heads of the locator
		abutments. Position denture cap with integrated black
		processing onto the locator abutments. If necessary, add
		additional block-out spacers until no gap is visible betwe
cator [®] Replacement Male		female, block-out spacer and gum.
Retention force : approx. 6N		• Packing unit : 20ea
Angle compensation of up to 20 $^\circ$		
Packing unit : 4ea	LRM06S	
Retention force : approx. 12N	(internet)	
Angle compensation of up to 20°		Locator [®] Impression Coping
Packing unit : 4ea	LRM12S	
		A pick up impression coping
Retention force : approx. 22N		Closed tray is usedPacking unit : 4ea
Angle compensation of up to 20°		• Packing unit . 46a
Packing unit : 4ea	LRM22S	
cator [®] Extended Replacement Male		Locator [®] Lab Analog
Retention force : approx. 6N		A lab analog for locator abutment
Angle compensation from 20~40°	LEMO6S	Packing unit : 4ea
Packing unit : 4ea	LEIVIUOS	

LEM12S

068

 \bullet Angle compensation from 20~40 $^{\circ}$

Packing unit : 4ea





LICS



LAL40S

Locator[®] Abutment Components

OneSeal

Locator[®] Core Tool

• Places and removes nylon retentive males in the denture cap • Separated into three different tools, includes a hand driver for locator abutment



OneSeal

D

 Disposable medical devices for internal filling of superstructure

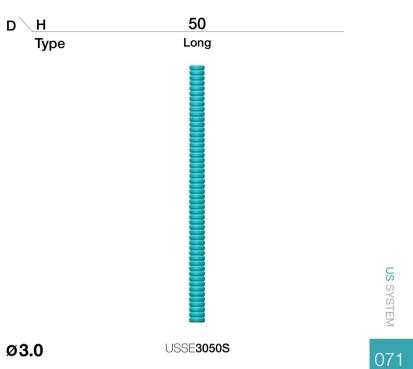
• Cut to desired length (medical silicone)

Packing unit : long 5ea

Locator[®] Torque Driver Туре Short Long 070 Torque driver H Ħ Ļ

TWLD**SK**

TWLD**LK**



Instructions for Use (AUG. 2017, Ver. 5.5)

Description of Osstem implant system

Osstem Implant is a brand for implant materials for dental practices, and the fixture is made mainly of titanium. The abutment, prosthetic components and tools for the Osstem Implant system are compatible with the Osstem Implant fixture only. Using this product in combination with products from other manufacturers may cause various problems including loosening and fracture due to incomplete locking and compatibility issues. Refer to the manual or the catalogue or our website (www.osstem.com) for details. See the product label for the product code, specifications, manufacturing date, and expiration date.

Sterility

The fixture, cover screw, and healing abutment are cleansed and sterilized with gamma radiation. This product is a disposable sterilized medical device intended for one-time use. In order to prevent contamination or infection of the product or operated site, the product must be used using a sterilized instrument in a sterilized environment. Damaged products, products with open packaging, or expired products must be discarded due to potential risks of contamination, infection, or osseointegration failure, Re-sterilization or re-use of the product may result in infection, osseointegration failure, or implant damage due to reduced accuracy.

Storage condition

Keep the product in a dry place at room temperature(1~30 $^\circ\!\mathrm{C}$). Keep away from direct sunlight.

General precautions

The surgical technology of dental implant involves an expert, complex procedure. Formal training is required to perform implant surgery. Careful considerations must be made before the operation in case of bone disorders (osteoporosis, osteomalacia) or metabolic disorders of the bone.

Precautions

Determine the local anatomy and suitability of the available bone for implant placement. Prepare the implant considering the expected situations and cautions. Excessive occlusal load may cause loosening or fracture of an implant. In order to avoid this condition, the implant must be placed in accurate location and direction considering the relationship between the implant and and opposing dentition. Visual inspection as well as panoramic and periapical radiographs are essential to determine anatomical landmarks, occlusal conditions, periodontal status, and the adequacy of the bone. Adequate radiographs, direct palpation, and visual inspection of the implant site are necessary prior to implant surgery.

Procedural precautions

Osstem Implant System is for single and two stage surgical procedures. As much as possible, try to minimize damage to the cell tissue and surgical trauma, pay special attention to maintaining the temperature at the implant site and removal of the source of contamination and infection. All drills and taps must be sufficiently and continuously irrigated for cooling during use. Implant placement should be accomplished at very low speed (25-30 rpm) or manually. Excessive torque (greater than 55Ncm) in the fixture placement can have adverse effects such as partial fracture or necrosis of the bone. Placing an implant titled by 30° or higher is not recommended due to possible fracture of implant. Immediate loading to the fixture right after the surgery should be avoided. The bone quality and initial stability after fixture placement are important elements in determining the appropriate loading time. Mini-diameter implant or implant with diameter of 4.0 or less and which integrates with angled abutment may be fractured due to limitations of structural rigidity. They are not recommended for use in a posterior area. The Ultra-Wide fixtures are intended to be used only to replace molar teeth and

that angled abutments are not to be used with the Ultra-Wide fixtures. Evaluate the quantity of bone and radiographs to assess any potential anatomical contraindications to use of the Ultra-Wide fixture. For the placement of the Short Implant (diameter is 5mm or more and length is shorter than 7mm) which is used on the molar region only, clinicians should closely examine the patients for any of the following conditions: 1) perimplant bone loss, 2) changes to implant's response to percussion, 3) radiographic changes in bone to implant contact along the implant's length. If a short implant shows mobility or greater than 50% bone loss, the implant should be considered for possible removal. And clinicians should consider a two-stage surgical approach, splinting a short implant to an additional implant, and placement of the widest possible fixture. Allow longer healing periods for osseointegration before fabrication of the prosthesis and avoid immediate loading. Products with diameter of 3.25mm or less must be used exclusively for mandibular anterior teeth in order to prevent fracture due to excessive occlusal load. It is recommended that you should avoid applying HA coated fixture to hard bone, and the insertion torque of the implant should be less than 35Ncm, because cracks or damages might occur in the coated layer during implant placement. The surfaces of CA and SOI have the same physical shape as the SA surface made through blasting and etching treatments. After the SA surface treatment, to prevent the products' exposure to the atmosphere, CA is stored in solution, whereas SOI is stored in water-film coating form; it is designed to maintain the chemically activated state of the SA surface. Thus, CA or SOI products should be implanted in the target region at least within 15 minutes of taking them out of the container

Warning

The selection of inappropriate patients and surgical methods can cause implant failure or loss of bone supporting the implant. Osstern implants must not be used for purposes other than the recommended use and must not be remodeled. Implant mobility, bone loss, and chronic infection can result in failure of the implant surgery.

Indications for use

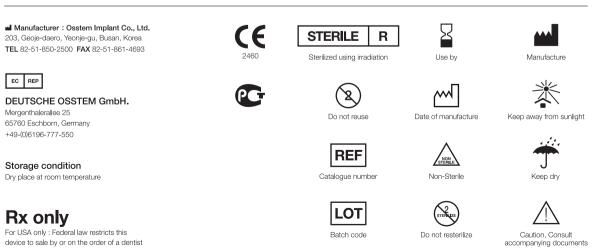
The Osstem Implant System is an artificial dental root that has been designed for use in dental implant treatment in order to recover lost teeth. The system is implanted via a surgical method in maxillary or mandibular bone to replace natural dental root. The Osstem Implant System is indicated for use in partially or fully edentulous mandibles and maxillae, in support of single or multiple-units restorations including; cemented retained, screw retained, or overdenture restorations, and final or temporary abutment support for fixed bridgework. It is intended for delayed loading. Products with diameter of 3.25mm or less must be used exclusively for mandibular anterior teeth in order to prevent fracture due to excessive occlusal load.

Side effects

A few problems may occur after the operation (loss of implant stability, damage of prosthesis, etc.). Deficient quality and quantity of the remaining bone, infection, allergic reaction, inferior oral hygiene or uncooperativeness of patient, implant mobility, partial deterioration of tissue, and improper position or arrangement of implants may cause the above mentioned problems

Contraindications

- Contraindications include the following, but are not limited to:
- Patients with hemophilia or difficulties related to bone or wound treatment
 Patients with uncontrollable diabetes, heavy smoker or alcoholic
- Patients whose immunity system is inactive due to chemical therapy or radiation therapy
- Patients with oral infection or inflammation (improper oral hygiene, bruxism)
 Patients with untreatable occlusion/igint disorder, insufficient dental arch space
- Any patient who is not suitable for an surgery





R MANUAL



