### Osstem Implant 2014-15 Comprehensive Catalog

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# KIT PRODUCT CATALOG

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# **CEO'S** Message

# **"Osstem - Future Technology and Superior Quality"**

Products that dentists can trust. That is the mission of **Osstem Implant.** 

We deeply appreciate all of our customers who use our products. We deeply appreciate all of our customers who use our products. With population aging, rising incomes, and increased interest in health and aesthetics, implants have become an essential treatment in dentistry around the world.

Today, implants are well-known as a safe and effective treatment option, and the leading treatment option for patients with no teeth. To satisfy this global trend, Osstem has invested heavily in R&D and continuously promotes innovative products, resulting in it becoming a global leader in technology and product quality.

Osstem is releasing new products including TSIII CA, TSIII BA, SSIII HA, and MS SA, and is strengthening its product line-up in order to enable application in a variety of clinical cases. Other products to be released that will enable safe, easy implant procedures include SMARTbuilder, AutoBone collector, 123 KIT, and ESSET KIT.

http://Shightak.com

TSIII CA in particular is expected to become a leading product in the global implant market after launching as a groundbreaking product with superior hydrophilic properties capable of at least 30% greater fusion than ordinary SA products due to its calcium ion solution encapsulation. Also, to improve our customers' convenience and foster reasonable purchasing, we have opened an online store, DenALL (www.denall.com), where dentistry materials can be purchased affordably and conveniently. Osstem leads the way in superior product quality and exports to over 50 countries including the USA, China, Japan, Germany, and India, and is the first company in Korea to record implant sales of over 30 million products and overseas subsidiary sales of over 100 billion won.





Osstem Implant CEO Gyu-ok Choi (DDS, Ph.D)

Choilysol



### 1997

- 01 OSSTEM Co., Ltd. Founded
- 12 Launched "Doobunae" (health insurance claiming software)

### 2000

- 06 Launched "Hanaro" (dentistry management software)
- 10 Acquired Korean company Sumin Comprehensive Dental Materials

# 2001

01 Obtained CE-0434 certification 03 Established AIC Training Center

## 2002

**01** Established Osstem Implant Research Center 08 Obtained US FDA certification Launched USII implant 10 Launched SSII implant

## 2006

- **03** Changed company name to Osstem Implant Co., Ltd. 04 Obtained GOST-R
- certification in Russia 12 Established the first incorporation stage of overseas subsidiaries in 12 countries
- 02 Listed on KOSDAQ stock exchange and

2007

- began trading 06 Obtained GOST-R certification in Russia
- 12 Selected nextgeneration products Obtained certification from Australia's Therapeutic Goods Administration

### 2008

- 01 Established Osstem's osteology research center
- 12 Selected as a National
- Strategic Leading Technology Company

http://Shttp://sh

### 2009

**10** Obtained permission Health, Labor, and

## 2010

- 03 Launched TSIII SA implant
- 06 Launched TSIII HA implant **08** Selected as WPM
- Biomedical National Policy Company
- 12 Exceeded 10,000 dentistry software members
- from Japan's Ministry of Welfare to produce and sell medical devices





**Headquart**ers Overseas Subsidiary

### EMEA

Albania Azerbaijan Bulgaria Croatia Czech Denmark Estonia Finland Germany Greece Italy Latvia Lithuania Norway Poland Portugal

Romania Serbia Slovakia Spain Ukraine United Kindom Jordan Kuwait Lebanon Pakistar Saudi Arabia Syria UAE Sudan

### ASIA / OCEANIA

Cambodia Papua New Guinea

### N/S. AMERICA

### 2011

- **06** Selected Osstem Implant Research Center as an ATC (Superior Technology Research Center)
- 07 Selected as a world champion business
- 10 Obtained Health Canada certification
- 12 Launched K2 unit chair Selected as "Global First-Class Product"

### 2013

- **01** Launched Osstem's xenograft "A-Oss"
- 09 Launched K3 unit chair
- **10** Selected as a hidden champion business

### 2014

05 Selected as a WorldClass 300 business

### 2012

- 06 Launched TSIII CA implant
- 07 Established Osstem Medical Equipment Research Center

# **OSSTEM° Implant** Design feature

### **Osstem Implant**,

the leader in popularizing implants in Korea! We stand out with our passion for strategic R&D and best products, creating globally trend-setting implants.



http://Shiterak.com



Packaging Color Information for Each System

- Submerged type implant with an Internal hex 11° taper connection structure
- Connection type and color Mini/Regular
- Highest initial stability in soft bone by using uppersection small thread
- Corkscrew thread & cutting edge
   Easy path adjustment through a superior self-threading
- effect - Acquires insertion torque with an increase in soft bone
- initial stability and without deviation according to the drill diameters
- The various body shape options are available according to the bone and patient's clinical condition
- TSII (straight body): Easily adjustable insertion depth TSIII (1.5° taper body): Able to acquire the initial stability
- needed for immediate loading even in soft bone - TSIV ( $6^{\circ}$  taper body): Able to acquire superior initial
- stability only in maxillary sinus and soft bone

 Non-submerged type implant with an Internal octa 8° taper connection structure based on one-time procedures

- Connection type and color Regular/Wide
- Corkscrew thread & cutting edge
   Easy path adjustment through a superior self-threading
   effect
- Acquires insertion torque with an increase in soft bone initial stability and without deviation according to the drill diameters
- The various body shape options are available according to the bone and patient's clinical condition
- SSII (straight body): Easily adjustable insertion depth - SSIII (1.5° taper body): Able to acquire the initial stability
- needed for immediate loading even in soft bone
- Applied Surface SA/CA/HA







Submerged type implant with an external hex connection structure

- Connection type and color
   Mini/Regular/Wide/Wide PS
- Corkscrew thread & cutting edge
- Easy path adjustment through a superior self-threading effect
- Acquires insertion torque with an increase in soft bone initial stability and without deviation according to the drill diameters
- The various body shape options are available according to the bone and patient's clinical condition
- USII (straight body): Easily adjustable insertion depth
- USIII (1.5° taper body): Able to acquire the initial stability needed for immediate loading even in soft bone
- USIV (6° taper body): Able to acquire superior initial stability only in maxillary sinus and soft bone
- Applied Surface SA

# **OSSTEM° Implant** Surface feature

**Osstem Implant** provides world-class surface technologies in surface treatment, the core implant technology for fast and safe procedures

### Provides optimum surface through acid treatment

- Provides Ra 2.5~3.0 $\mu$ m surface roughness
- However, upper section 0.5mm area is Ra 0.5~0.6  $\mu$ m
- Achieved uniform micro-pit  $1.3\,\mu\text{m}$  in size
- 46% greater surface area compared to RBM

### Bone reaction performance (in-vitro and in-vivo)

- 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)
- 20% improvement in ossification (BIC, 4 weeks)
- 20% Improvement in ossification (BIC, 4 weeks, compared to RBM

### Superhydrophilic SA surface encapsulated in calcium solution

- Maintains optimum surface identical to SA surface
- Surface activity maximized after encapsulated in
- calcium (CaCl<sub>2</sub>) solution
- Increased ossification surface area through excellent blood wettability
- Improved bone reaction performance in the early osseointegration stage compared to SA surface

### Bone reaction performance (in-vitro and in-vivo)

- 3x increase in protein, cell adhesion compared to SA
   19% increase in initial cell separation (7 days)
- compared to SA - 34% improvement in initial stability (RT, 2 weeks)
- compared to SA - 26% improvement in ossification (BIC, 2 weeks) compared to SA

## Surface coated with low crystalline Nano-HA in SA

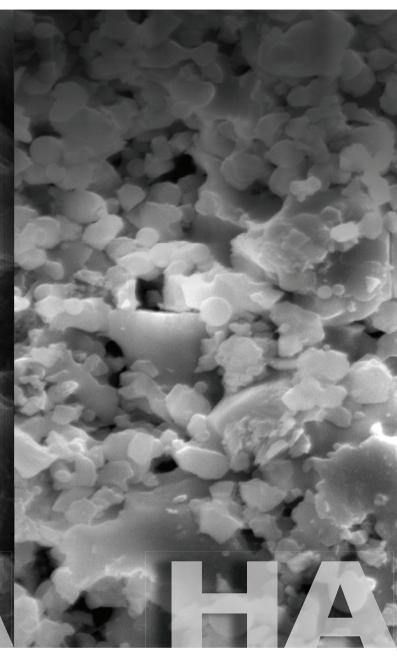
- Ultra-thin film with HA coating and 10nm or lower thickness
- HA coating on SA surface (Ra 2.5~3.0  $\mu$ m)
- Dual function of titanium and HA
- · HA is naturally removed during ossification process

# Bone reaction performance (in-vitro and in-vivo)

- Fused surface having advantages of both SA and HA
   Maintains advantage of SA optimum surface formation
- Superior early ossification of the HA in soft bone condition
- 30% improvement in ossification (BIC) compared to SA







### Premium surface coated with high crystalline HA

- High crystalline HA coating 30~60  $\mu m$  in thickness
- HA coating on RBM surface (Ra  $3.0 \sim 3.5 \,\mu m$ )
- Achieved at least 98% HA high crystallization
- Solves problem of interbody fusion in low crystalline HA

### Bone reaction performance (in-vitro and in-vivo)

- Excellent biocompatibility in HA that is similar to bone
   2x improvement in osteoblast ossification (5 days) compared to SA
- 40% improvement in initial stability (RT, 4 weeks) in animal models compared to SA
- Suitable for weak bone tissue, or tooth extraction or implant insertion







040 OSSTEM Torque Driver Path Probe for TS



**KIT** Contents 2/2







066 Osteo KIT



3333 



















078 Screw Removal Tip (SR Tip)

079

Transfer

Abutment

Separate Tool

081

Body

Remover

T

S

078 Screw Holder



079 Slot Driver



082 Torque Extension







# http://Shetak.com

018	Taper KIT
019	Taper Ultra KIT
020	123 KIT
021	123 Full KIT
022	123 KIT - IV TYPE
023	Ultra KIT
024	New Hanaro KIT
043	Prosthetic KIT
044	TS Prosthetic KIT
051	CAS-KIT
054	CAS-KIT Plus
055	LAS-KIT
058	LAS-KIT Plus
059	ESSET KIT



062	MS KIT
063	Ortho KIT
064	Bone Screw KIT
065	Custom KIT
066	Osteo KIT
067	Osteotome KIT
068	Sinus KIT
069	Bone Spreader KIT
071	Ridge Split KIT - Straight
072	Ridge Split KIT - Offset
072	OsstemGuide KIT
076	ESR KIT
080	EFR KIT

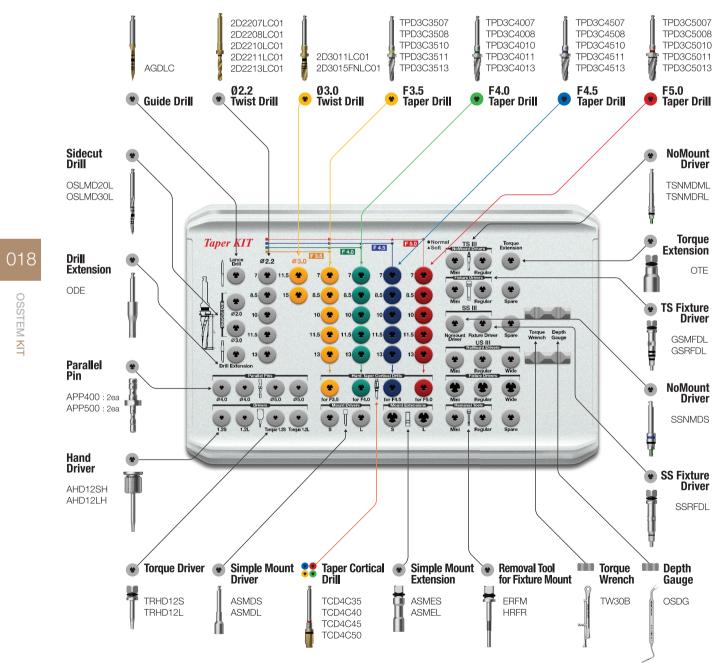


Available for use TSII

# Taper Ultra KIT (HULTPK)

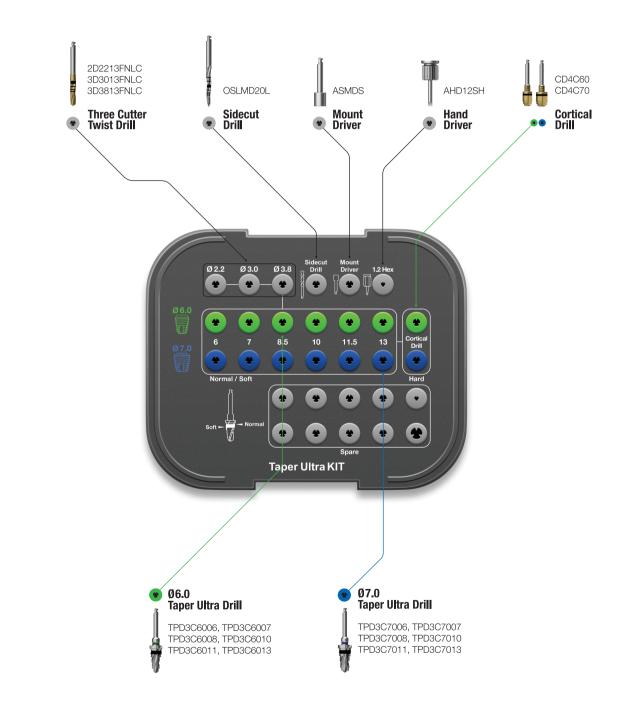
Available for use III Ultra-wide

http://Shitek.com



USI

SSII





019

OSSTEM KIT

Base component

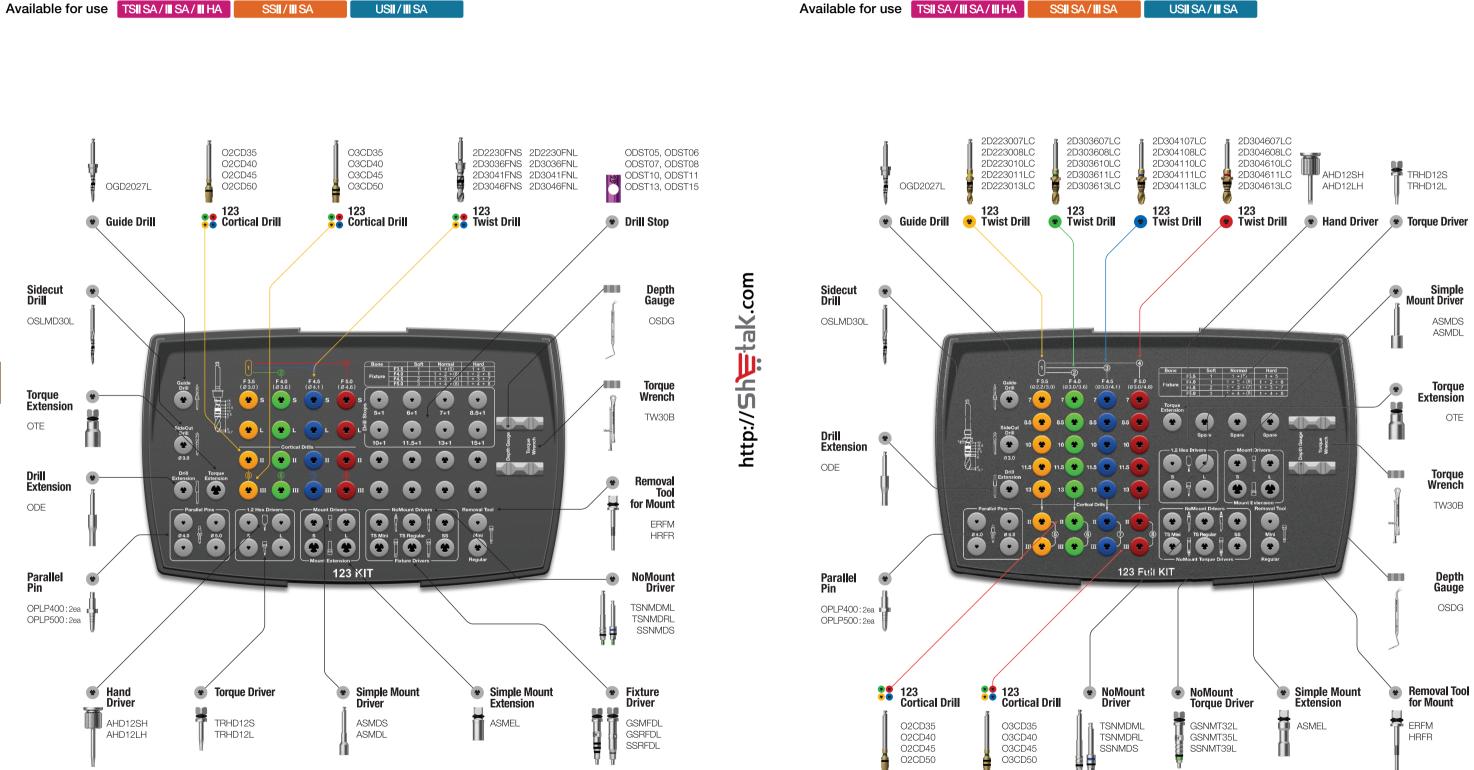
### **Open Wrench** SPOW



RCWC OSSTEM<sup>®</sup>IMPLANT



# 123 Full KIT (O123FK)





021

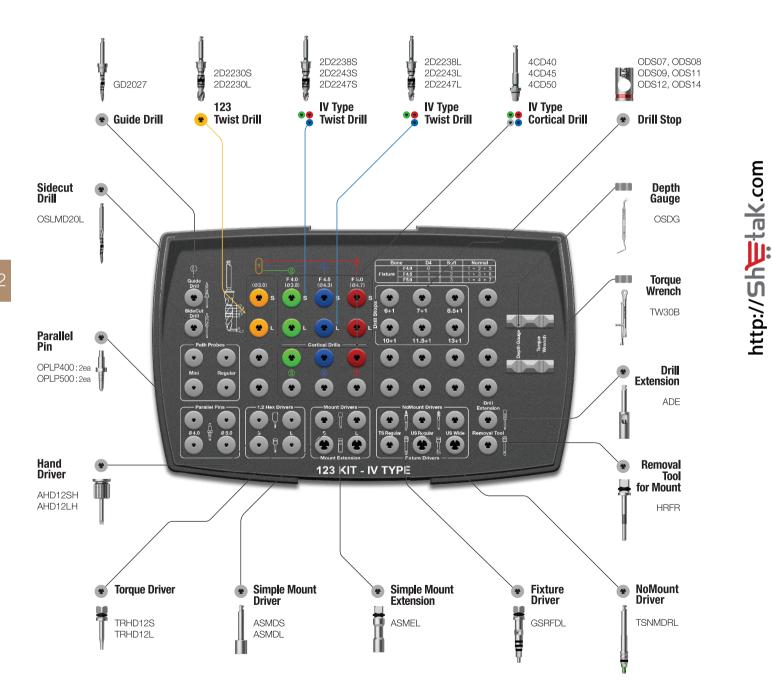
OSSTEM KIT

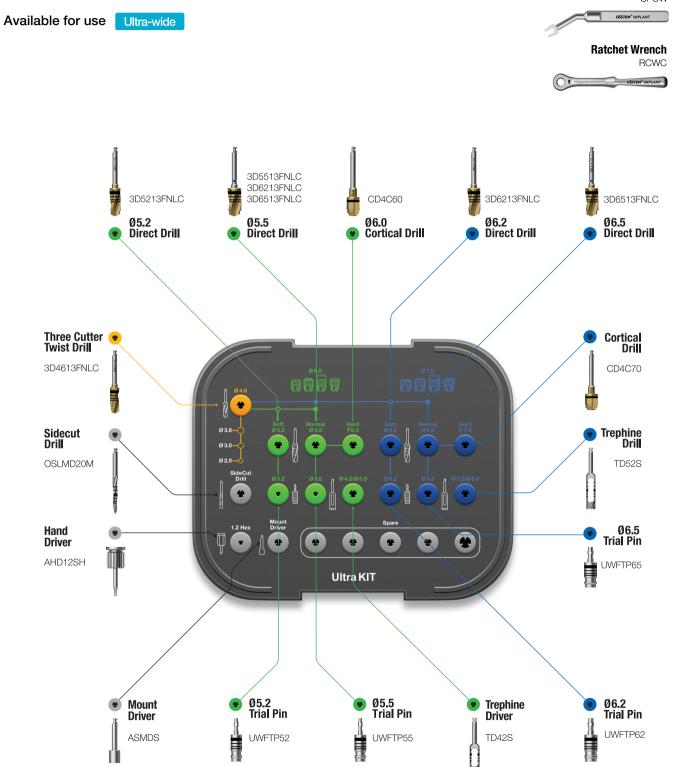
USIISA/IISA



Ultra KIT (HULTRK)









023

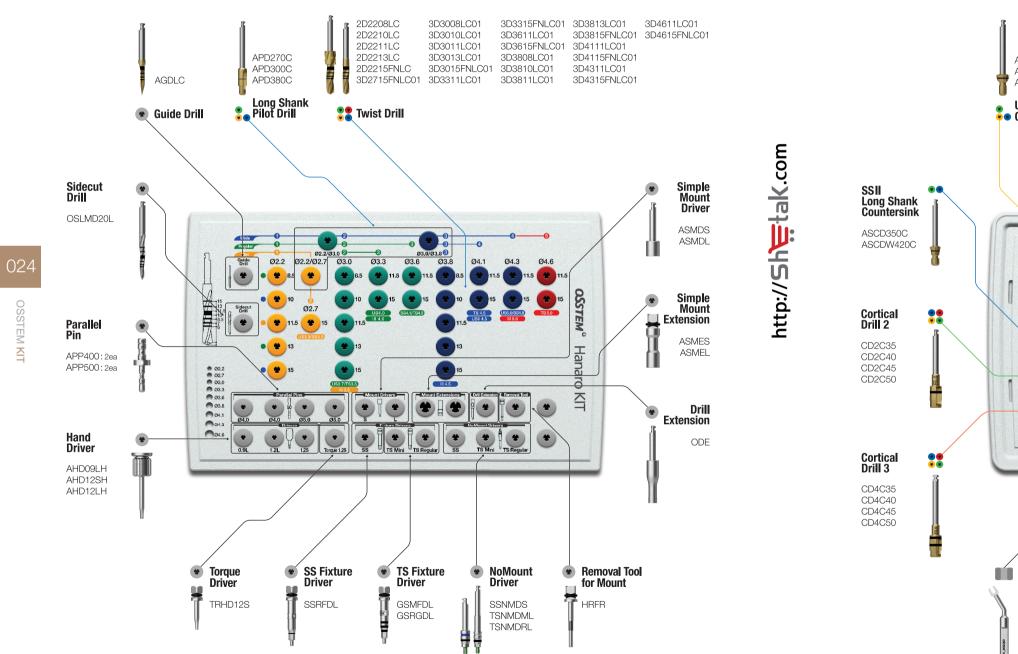
**OSSTEM KIT** 

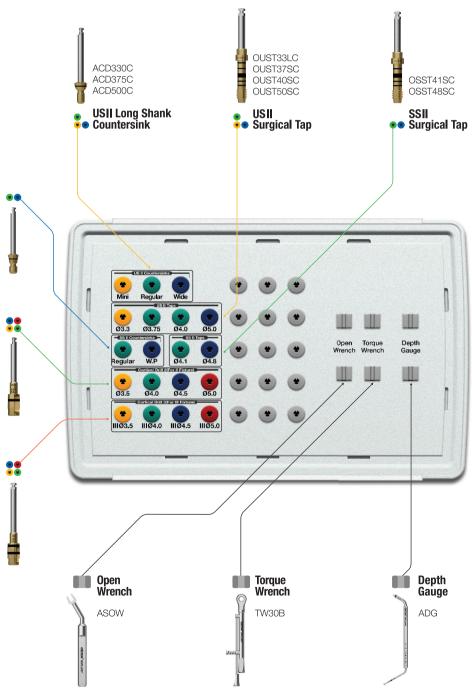
Base component

### **Open Wrench** SPOW

# New Hanaro KIT (HKA2)

Available for use TSII / III SSII / III USII / III



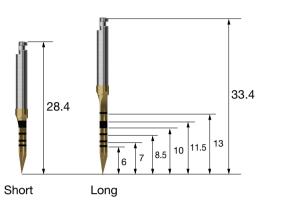






# **Lance Drill - Guide Drill**Mark the initial osteotomy position Bone density can be judged through drilling

L	Short	Long
	AGDSC	AGDLC



### Twist Drill - Stopper Drill

Long stopper(6mm)
Safety with built-in stopper
Procedure possible without drill extension when performing posterior procedures

Color coding on stopper indicates the drill length

### 123 Guide Drill

Drill that forms a hole in the bone to make initial drilling easyEasy to adjust the depth of drilling as desired by attaching drill stop



### Sidecut Drill

Correct the angle or position of the osteotomy cutting edge on its bodyUsed for removing furcation area of fresh extraction site

L D1/D2	Ø1.5/2.0	Ø2.0/2.5	Ø2.5/3.0	Ø3.0/3.5
13	OSLM <b>DS</b>	OSLMD20S	OSLMD25S	OSLMD30S
16.5	-	-	OSLMD <b>25L</b>	OSLMD <b>30L</b>
20	OSLM <b>DL</b>	OSLMD <b>20L</b>	-	-

### **Drill Extension**

- Tool used to extend the lengths of drills and other miscellaneous hand piece tools
- Be cautious of bending or fracture if excessive force is applied
- Drill length is extended by 16.9mm with drill extension



36.5

D2 -

D1 →

L 🔪	TL D	Ø2.2	Ø3.0	Ø3.3	Ø3.6	Ø3.8	Ø4.1	Ø4.3	Ø4.6
6.0	30.5	2D22 <b>06LC</b>	3D30 <b>06LC</b>	-	-	3D38 <b>06LC</b>	-	-	-
7.0	31.5	2D22 <b>07LC</b>	3D3007LC01	-	-	3D3807LC01	-	-	-
8.5	33	2D22 <b>08LC</b>	3D3008LC01	-	-	3D3808LC01	-	-	-
10.0	34.5	2D2210LC	3D3010LC01	-	-	3D3810LC01	-	-	-
11.5	34.5	2D22 <b>11LC</b>	3D3011LC01	3D33 <b>11LC01</b>	3D36 <b>11LC01</b>	3D38 <b>11LC01</b>	3D41 <b>11LC01</b>	3D43 <b>11LC01</b>	3D46 <b>11LC01</b>
13.0	36	2D22 <b>13LC</b>	3D3013LC01	-	-	3D38 <b>13LC01</b>	-	-	-
Y-Din	n.	0.6	0.9	1.0	1.0	1.0	1.0	1.0	1.0

### Twist Drill - Non Stopper Drill

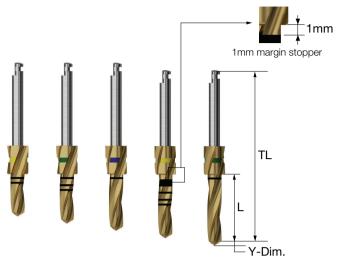
A drill that can be used when stopper drill's accessibility in the oral cavity is limited
Marking drill with short and long specifications
Refer to the image of non stopper drill for marking measurements

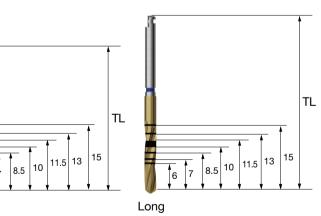


Short

TL D	Ø1.5	Ø2.0	Ø2.2	Ø2.7	Ø3.0	Ø3.3
33	2D15 <b>18FNLC</b>	2D2018FNLC	2D2218FNLC	3D2718FNLC	3D3018FNLC	3D3318FNLC
41	-	-	2D2215FNLC	3D27 <b>15FNLC01</b>	3D3015FNLC01	3D3315FNLC01
TL\D	Ø3.6	Ø3.8	Ø4.1	Ø4.3	Ø4.6	
tl <u>D</u> 33	<b>Ø3.6</b> 3D36 <b>18FNLC</b>	<b>Ø3.8</b> 3D38 <b>18FNLC</b>	<b>Ø4.1</b> 3D41 <b>18FNLC</b>	<b>Ø4.3</b> 3D43 <b>18FNLC</b>	<b>Ø4.6</b> 3D46 <b>18FNLC</b>	



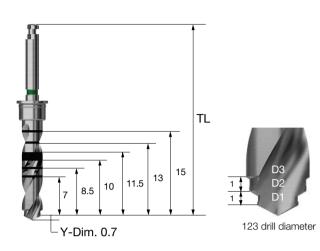




# 027

### 123 Twist Drill

- Straight drill (marking drill) that can reduce the amount of drilling
- Color coded with corresponding fixture sizes
- · Easy to adjust the depth of drilling with drill stopper
- Designed to be used with drill stopper
- F = Fixture





### 123 Twist Drill - Stopper Drill

 Straight drill that can reduce the amount of drilling (stopper available) Coloring on the grip part of 123 drill

indicates diameter and main fixture used • F = Fixture

*	

L	TL	F3.5(Ø2.2/3.0)	F4.0(Ø3.0/3.6
6.0	30.5	2D2230 <b>06LC</b>	2D3036 <b>06LC</b>
7.0	31.5	2D2230 <b>07LC</b>	2D3036 <b>07LC</b>
8.5	33	2D2230 <b>08LC</b>	2D3036 <b>08LC</b>
10.0	34.5	2D2230 <b>10LC</b>	2D3036 <b>10LC</b>
11.5	34.5	2D2230 <b>11LC</b>	2D3036 <b>11LC</b>
13.0	36	2D2230 <b>13LC</b>	2D3036 <b>13LC</b>
15.0	38	2D2230 <b>15LC</b>	2D3036 <b>15LC</b>
Color	r	Yellow	Green

# http://Sherlak.com

**IV Type Twist Drill** 

• Drill optimized exclusively for bone preparation to place

IV type fixture

Color coded with corresponding fixture sizes

· Designed to be used with drill stopper

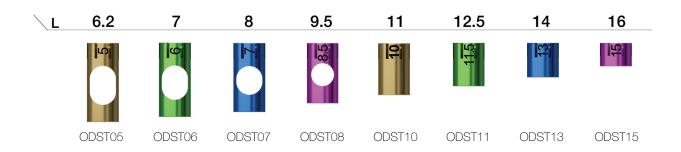
• F = Fixture

TL	F4.0 (Ø2.2/3.8)
34	2D2238S
40.4	2D2238L
Color	Green

	D1/D2/D3				
TL	F3.5(Ø2.2/3.0)	F4.0(Ø3.0/3.6)	F4.5(Ø3.0/3.6/4.1)	F5.0(Ø3.0/4.1/4.6)	
34	2D2230FNS	2D3036FNS	2D3041FNS	2D3046FNS	
40.4	2D2230FNL	2D3036FNL	2D3041FNL	2D3046FNL	
Color	Yellow	Green	Blue	Red	

### 123 Drill Stopper

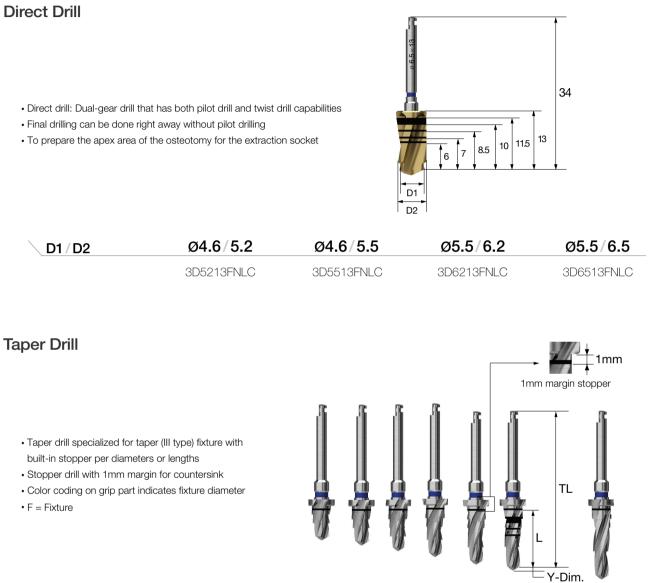
• The length of drill Stopper indicates the actual length left when drill stop is attached to 123 twist drill Coloring is applied to each length, so it is easy to figure out the lengths and relocate in KIT



028







L	TL	F3.5	F4.0	F4.5	F5.0
5.0	29.5	TPD3C <b>3505</b>	TPD3C4005	TPD3C4505	TPD3C <b>5005</b>
6.0	30.5	TPD3C <b>3506</b>	TPD3C4006	TPD3C4506	TPD3C <b>5006</b>
7.0	31.5	TPD3C <b>3507</b>	TPD3C4007	TPD3C4507	TPD3C5007
8.5	33	TPD3C <b>3508</b>	TPD3C4008	TPD3C4508	TPD3C <b>5008</b>
10.0	34.5	TPD3C <b>3510</b>	TPD3C4010	TPD3C4510	TPD3C5010
11.5	34.5	TPD3C <b>3511</b>	TPD3C4011	TPD3C4511	TPD3C5011
13.0	36	TPD3C <b>3513</b>	TPD3C4013	TPD3C4513	TPD3C5013
15.0	38	TPD3C <b>3515</b>	TPD3C4015	TPD3C4515	TPD3C5015
Y-Dim.		0.8	0.9	1.0	1.0
Color		Yellow	Green	Blue	Red

### Taper Ultra Drill

• Taper drill specialized for taper ultra-wide fixture with built- in stopper per diameters or lengths

Stopper drill with 1mm margin for countersink

Color coding on grip part indicates fixture diameter

• F = Fixture

L	F6.0	F7.0
6	TPD3C <b>6006</b>	TPD3C <b>7006</b>
7	TPD3C6007	TPD3C <b>7007</b>
8.5	TPD3C6008	TPD3C7008
10	TPD3C6010	TPD3C7010
11.5	TPD3C6011	TPD3C7011
13	TPD3C6013	TPD3C7013
Color	Green	Blue

http://Shitelk.com

### Long Shank Pilot Drill

• Guide drill for the next drill sequence • Used to revise the path in the drilled hole

### D1/D2 Ø2.0/2.7 Ø2.0/3.0 Ø3.0/3.8 Ø3.0/4.1

APD270C APD300C

### **123 Cortical Drill**

- Drill used to remove cortical bone at the crest
- Recommended to drill to the bottom marking line
- Marking line of II type cortical drill is for hard bone
- Bottom marking line of III type cortical drill is for normal bone, and top marking line is for hard bone
- Marking line of IV type cortical drill is for normal bone

 Coloring on the grip part indicates diameter and main fixture used • F = Fixture

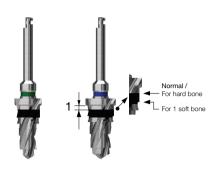
Туре	F3.5	F4.0	F4.5	F5.0
II	02CD <b>35</b>	02CD <b>40</b>	02CD <b>45</b>	02CD <b>50</b>
III	03CD <b>35</b>	03CD <b>40</b>	03CD <b>45</b>	03CD <b>50</b>
IV	-	4CD <b>40</b>	4CD <b>45</b>	4CD <b>50</b>
Color	Yellow	Green	Blue	Red

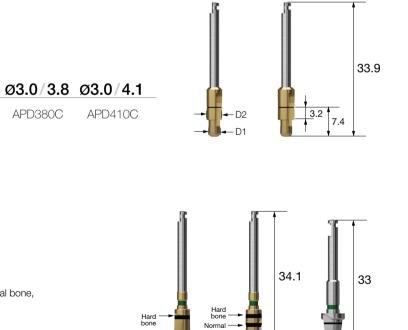
030



031

OSSTEM KIT





III type

IV type

II type

### Cortical Drill 2 for TSII, SSII SA

Drill used to remove cortical bone from hard bone (for II type)

- Equipped with drills applicable for different fixture diameters
- Recommended to drill to the bottom marking line
- F = Fixture

 F3.5
 F4.0
 F4.5
 F5.0

 CD2C35
 CD2C40
 CD2C45
 CD2C50



### Cortical Drill for Ultra-Wide

- Drill used to remove cortical bone from hard bone (for ultra-wide)
- Equipped with drills applicable for different fixture diameters
- Recommended to drill to the bottom marking line
- F = Fixture

F6.0	F7.0
CD4C60	CD4C70

### Cortical Drill 3 for Taper Fixture (TSIII, SSIII, USIII)

Drill used to remove cortical bone from hard bone (for III type)
Equipped with drills applicable for different fixture diameters

Bottom marking line is for normal bone, and top line is for hard bone
Recommended to drill to the bottom marking line

• F = Fixture

\	F3.5	F4.0	F4.5	F5.0
	CD4C35	CD4C40	CD4C45	CD4C50



http://Shetak.com

### Countersink for USIII, USII SA, USIII SA(Wide PS, Wide)

• Drill that can expand the hole entrance for US fixture

Specifications for wide PS and wide of USIII, USII SA, and USIII SA
Recommended drilling speed: 300rpm

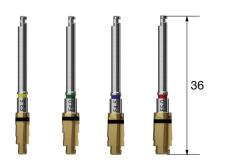
USSCS45W

### Taper Cortical Drill for Taper Fixture (TSIII, SSIII, USIII)

- Drill used to remove cortical bone from hard bone (used immediately after taper drill)
- Equipped with drills applicable for different fixture diameters
- Bottom marking line is for fixture insertion less than 8.5mm
- Top marking line is for fixture insertion more than 10mm
- Recommended to drill to the bottom marking line
  F = Fixture

 F3.5
 F4.0
 F4.5
 F5.0

 TCD4C35
 TCD4C40
 TCD4C45
 TCD4C50



# Tapered Fixture Tap for TSIII, USIII, SSIII SA

- Tap for tapered fixture (fixture of III type)
- Used for extra hard bones and forms the fixture's screw thread shape
  Use torque wrench after attaching engine (25rpm recommended) or mount extension
- Recommended to tap to the bottom marking line
- However, for F5.0, use fixture less than 8.5mm for the bottom line, and more than 10mm for the top line
- F = Fixture



032









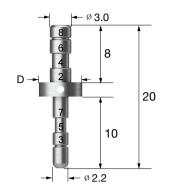


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### Parallel Pin

• Used to check the position and orientation of osteotomy in the initial drilling sequence

<b>D</b>	Ø4.0	Ø5.0	Ø6.0	Full Set	
	APP400	APP500	APP600	APPS	



### Trial Pin for Ultra-wide

 Checks the width and depth of the inside of extraction socket or failed implant socket

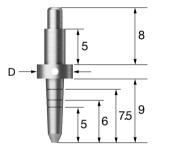
• Checks the depth of drilling after using direct drill as final drill



Parallel Pin for 123 Drill

- Parallel pin for 123 twist drill
- Used to check the position and orientation of osteotomy in the initial drilling sequence
- The bottom part is for initial drill, and the top part is for F3.5(  ${\rm \emptyset}\,2.2/3.0)$  drill

Ø4.0 ∖ D Ø5.0 OPLP400 OPLP500



15 13 11.5 10 8.5 7

### **Positioning Guide**

http://Sherlak.com

• To determine space around the implant site

- Used by inserting into hole after initial drilling
- Packing unit: Packaged by each components and sets

### W/L 2.5/21.5 6.0/17.5 11/17.5

APG201 APG202 APG203

### **Tissue Height Gauge for TS**

 Tool to measure the height of gingiva by inserting to the fixture connection to select appropriate healing abutment height for TS system.

GTHGS

### **Ratchet Wrench**

- Wrench for anti-backlashing procedure
- Please be cautious of damaging the bone or inside of fixture when applying excessive torque

CITQW-1185A

### Depth Gauge

- A: measure the depth of drilling (7~15mm)
- B: measure the height of gingiva after inserting external fixture

ADG

### **Depth Gauge**

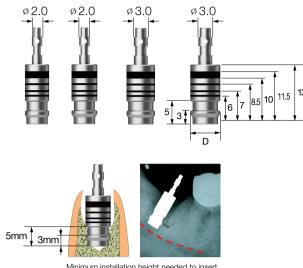
• Used to measure the depth of drilling (7~15mm) and as an open wrench

OSDG

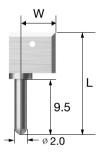


034





Minimum installation height needed to insert implant immediately after tooth extraction





8718 M OSSTEM<sup>®</sup>IMPLANT S 817

### L-Wrench

- $\bullet$  1.2 hex driver for the purpose of overcoming limited intermaxillary space
- Torque indication
- Apply torque of 5~8Ncm when wrench bending is recognized (about 10°)

LWC

### Torque Wrench - Spring Type

- Wrench that can apply consistent torque (10/20/30Ncm) on screw, abutment, etc.
- Can recognize the bending of the neck part of torque wrench when set torque is applied
- If force is continuously applied when the neck of torque wrench is bent, excessive torque is applied and there can be a screw fracture issue

TW30

- Torque Wrench Bar Type
  - Used to adjust the implant location or tighten abutment, screw, etc.Apply torque after pulling bar to the line indicating torque value to be applied

TW30B

### **NoMount Driver for TS**

Driver that can directly attach to fixture when inserting, using hand piece for procedure
C = Connection

L\C	Mini	Regular
Short	TSNMDMS	TSNMDRS
Long	TSNMDML	TSNMDRL
Ex.Long	TSNMDME	TSNMDRE



### **NoMount Driver for SS**

Driver that can directly attach to fixture when inserting, using hand piece for procedure
C = Connection

L\C	Regular/Wide
Short	SSNMDS
Long	SSNMDL
Ex Long	SSNMDE

### **NoMount Driver for US**

http://Shertak.com

Driver that can directly attach to fixture when inserting, using hand piece for procedure
C = Connection

L\C	Mini	Regular	Wide
Short	USNMD35MS	USNMD41RS	USNMD51WS
Long	USNMD35ML	USNMD41RL	USNMD51WL

### NoMount Torque Driver for TS

Driver that can directly attach to fixture when inserting, using wrench
Check the correct and complete fit of the fixture before placement.
Please note that it is impossible to remove when fracture occurs
C = Connection

L\C	Mini	Regular
Short	GSNMT32S	GSNMT35S
Long	GSNMT32L	GSNMT35L
Ex. Long	GSNMT32E	GSNMT35E



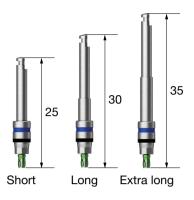
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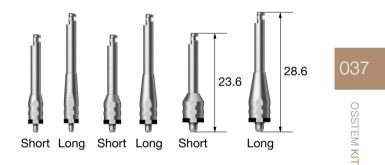
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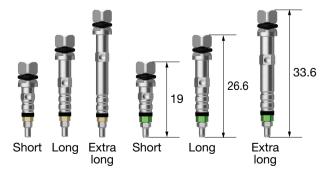
OSSTEM<sup>®</sup> IMPLANT

036









### NoMount Torque Driver for SS

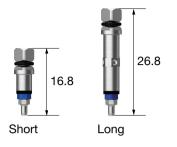
• Driver that can directly attach to fixture when inserting, using wrench

• Check the correct and complete fit of the fixture before placement.

• Please note that it is impossible to remove when fracture occurs

• C = Connection

L\C	Regular/Wide
Short	SSNMT39S
Long	SSNMT39L



### **Torque Extension**

• Extends the length of instrument used as connected to wrench by 10mm



### Simple Mount Driver

Used to insert fixture with mount using hand piece

L	
Short	ASMDS
Long	ASMDL
Ex.Long	ASMDE

http://Shitelk.com

### **Fixture Driver for TS**

• Directly attached to fixture, used to adjust final depth of insertion using wrench C = Connection

L\C	Mini	Regular
Short	GSMFDS	GSRFDS
Long	GSMFDL	GSRFDL
Ex.Long	GSMFDE	GSRFDE

038

### **Fixture Driver for SS**

• Directly attached to fixture, used to adjust final depth of insertion using wrench • C = Connection

L\C	Regular/Wide
Short	SSRFDS
Long	SSRFDL
Ex.Long	SSRFDE

### 31 Ī 14 Ų U Short Long Extra long

Short

long

Short Long Extra

H

Long

Extra

long

### **Fixture Driver for US**

• Directly attached to fixture, used to adjust final depth of insertion using wrench • C = Connection

<b>C</b>	Mini	Regular	Wide
	USMFDL	USRFDL	USWFDL



### Simple Mount Extension

• Used by attaching to wrench if it is desired to extend the length of simple mount or apply torgue manually

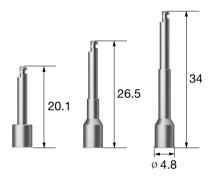
L	
Short	ASMES
Long	ASMEL

### Simple Open Wrench

- Used to remove simple mount when the initial stability is low or patient has weak bone tissue
- Intraoral usability with 30-degree neck angle







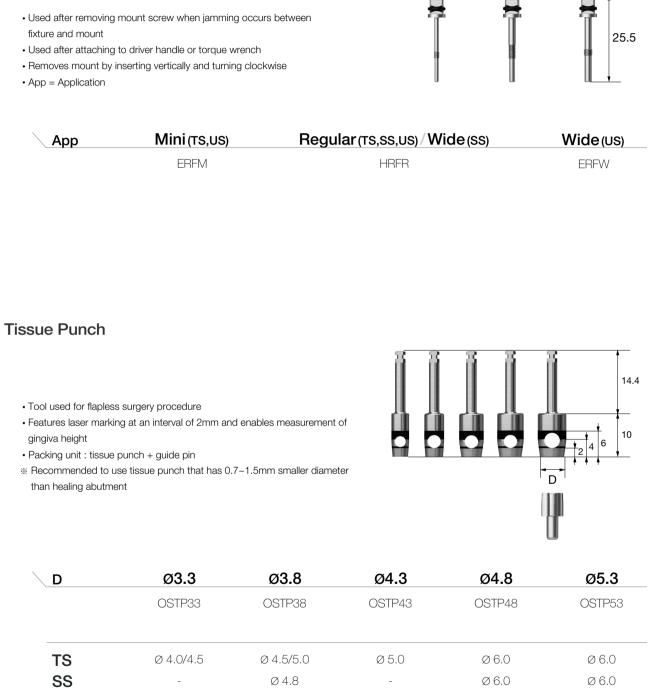
OSSTEM KIT

20.5 11.2

ø 4.8



### **Removal Tool for Fixture Mount**



The application of Healing abutment

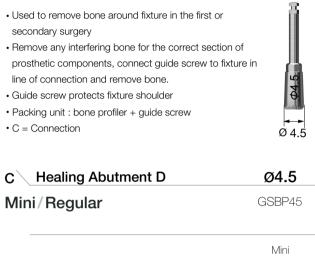
Ø 5.0

Ø 6.0

Ø 6.0

Ø 5.0

### **TS Bone Profiler**



http://Shetak.com

### **US Bone Profiler**

• Used to remove bone built around cover screw in the second procedure · Used to compensate for the angle of healing abutment after removing cover screw and connecting guide screw to fixture 24.4 • Guide screw protects hex of fixture Packing unit : bone profiler + guide screw • P = PlatformWide T-type ---TBPW600C ABPW600C ABPW700C -

D\P	Mini	Regular
Ø4.0	ABPM400C	-
Ø5.0	ABPM500C	ABPR500C
Ø6.0	-	ABPR600C
Ø7.0	-	-

US

Ø4.0





Mini Regular guide screw Regular guide screw Regular guide screw





# Prosthetic KIT (OPK)

• 0-ring ABT Driver

ABI DI

• Octa ABT Driver

<ul> <li>Trephine Drill</li> <li>Used to collect bone or rem</li> <li>Used to remove septal bond</li> <li>Available for use as initial drives</li> </ul>	e			31	7 85	36.4	Available for use TSII/III SSII/III USII/III Ultra-
L D (Inner / Outer) Short Long	<b>3.7/4.5</b> TD37S TD37	<b>4.2/5.0</b> TD42S TD42	<b>4.7/5.5</b> TD47S TD47	<b>5.2/6.0</b> TD52S TD52	<b>5.7/6.5</b> TD57S TD57	6.2/7.0 TD62S TD62	TRHD12S TRHD12L MSTH 1.2 Hex Torque Driver Handle
Bone Mill  • Forms particulate bone with	n autogenous bone	collected		ABMH ······			Torque Hand Engine Torque Torque Use 125 12L 0.9L 125 12L 125 12L TW30
Machine Driver Ha				ABMG ······		_	LI SS GS Rigid ALL SS GS Rigid Octa Solid E/Solid 04.0 04.5 05.

• Can turn by hand, connecting all operation tools for engine

042

OSSTEM KIT

OMDH

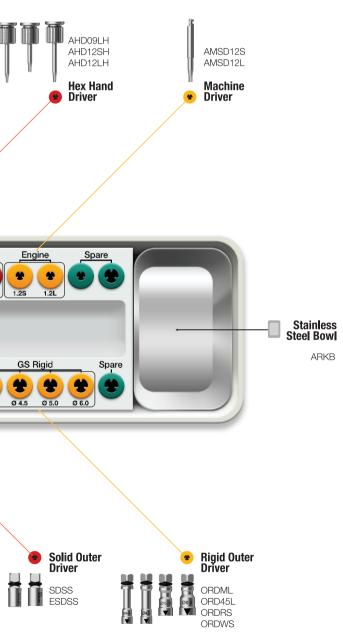




043

OSSTEM KIT

### a-wide

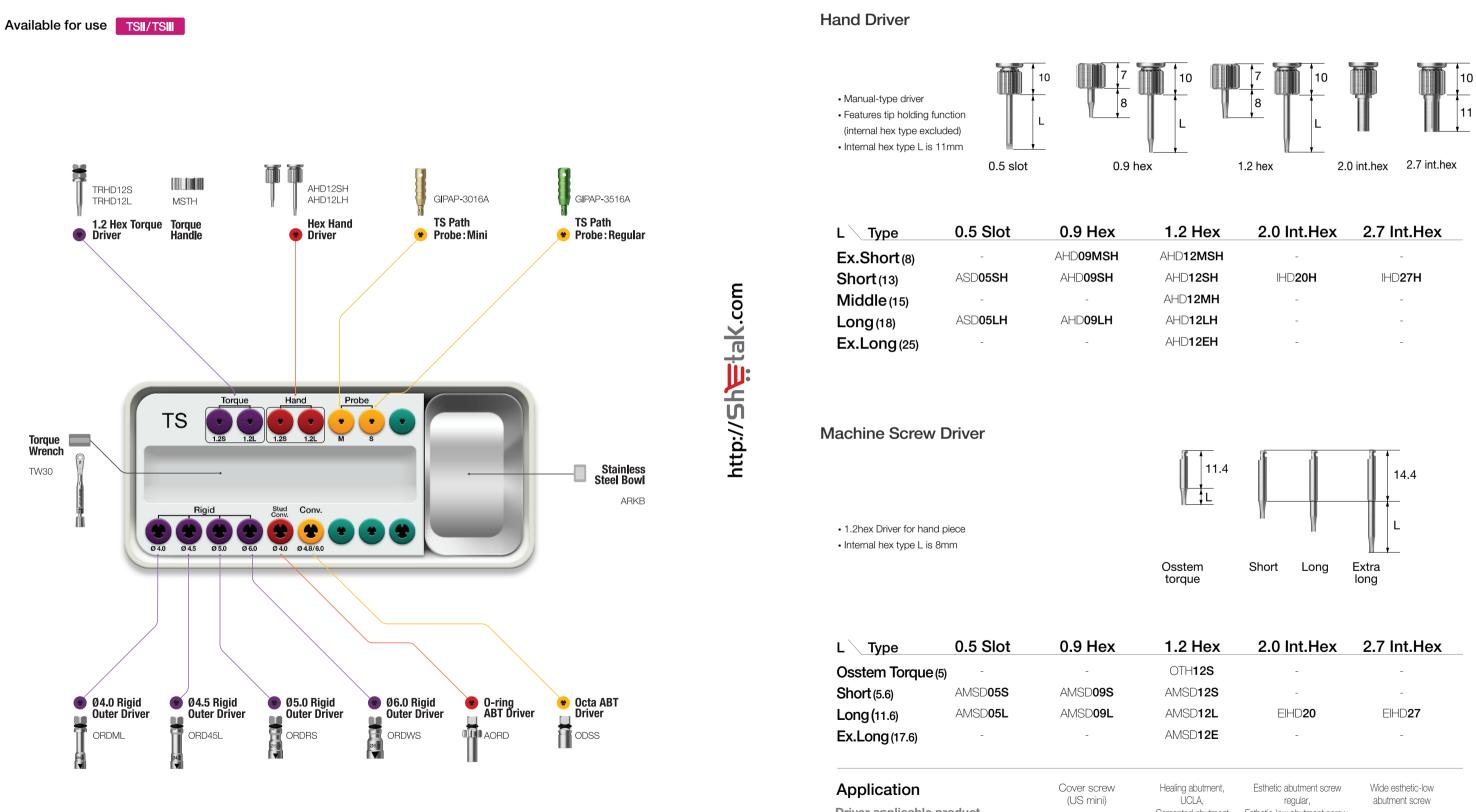


# TS Prosthetic KIT (GSPK)

044

OSSTEM KIT

**Prosthetic** Instruments



**Driver applicable product** (common for hand, machine screw, and torque driver)



1.2 Hex	2.0 Int.Hex	2.7 Int.Hex
AHD12MSH	-	-
AHD12SH	HD <b>20H</b>	IHD <b>27H</b>
AHD12MH	-	-
AHD12LH	-	-
AHD12EH	-	-

1.2 Hex	2.0 Int.Hex	2.7 Int.Hex
OTH <b>12S</b>	-	-
AMSD12S	-	-
AMSD12L	EIHD <b>20</b>	EIHD <b>27</b>
AMSD12E	-	-
Healing abutment,	Esthetic abutment screw	Wide esthetic-low

screw, Mount screw

Cemented abutment Esthetic-low abutment screw, standard

# **Prosthetic** Instruments

### **Torque Driver**

### • Driver for torque wrench (features tip holding function)

- Must conform to recommended torque, and be cautious of fracture if excessive torque is applied
- Fracture of torque driver can occur even on low torque if torque is applied after incomplete attachment
- When applying torque, insert vertically pressure (do not tilt)
- If tip is bent or stripped due to use for long period or excessive torque, it must be replaced



L Type	0.5 Slot	0.9 Hex	1.2 Hex	2.0 Int.Hex	2.7 Int.Hex
Ex.Short (8)	-	-	TRHD12MS	-	-
Short (13)	TRSD <b>05S</b>	TRHD <b>09S</b>	TRHD12S	TIHD <b>20S</b>	-
Middle (15)	-	-	TRHD12M	-	-
Long (20)	TRSD <b>05L</b>	TRHD <b>09L</b>	TRHD <b>12L</b>	TIHD <b>20L</b>	TIHD <b>27</b>
<b>Ex.Long</b> (25)	TRSD <b>05E</b>	-	TRHD <b>12E</b>	-	-

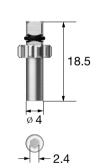
# 046

# OSSTEM KIT

### **O-ring Abutment Driver**



AORD



### **Rigid Outer Driver**

 Driver specialized for rigid abutment Recommended tightening torque : 30Ncm

L Abutment D	Ø4.0	Ø4.5	Ø5.0	Ø6.0
Short (16.5)	ORDMS	ORD45S	ORDRS	ORDWS
Long (21.5)	ORDML	ORD45L	ORDRL	ORDWL



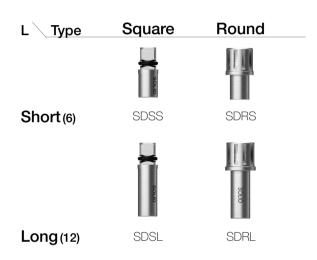
### Solid Abutment Driver

Driver specialized for solid abutment

· Apply torque after inserting groove of solid abutment into the driver part with triangle indication

Recommended tightening torque : 30Ncm

### Regular



### **Excellent Solid Abutment Driver**

Driver for excellent solid abutment

• Apply torque after inserting groove of excellent solid abutment into the driver part with triangle indication

• Recommended tightening torque : 30Ncm

### Regular

http://Sherlak.com







### Wide









Wide



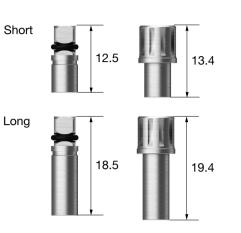
# **Prosthetic** Instruments

### **Octa Abutment Driver**

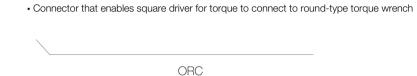
Driver for octa abutment

Recommended tightening torque : 30Ncm

L Type	Square	Round
Short	ODSS	ODRS
Long	ODSL	ODRL



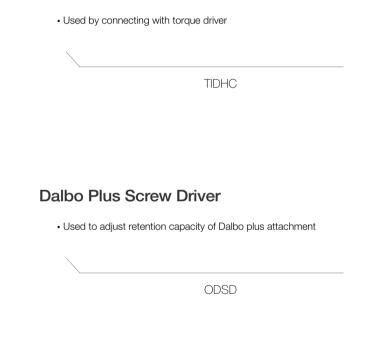
### Connector



**Driver Handle** 

http://Shetak.com

11.4



**Finishing Reamer Set** 

• Tool used to remove lip inside the cast after plastic coping is cast

FRSC

### **Osstem Torque Driver**

- $\ensuremath{\cdot}$  It is specialized to the Osstem torque so it may not match other low and high speed hand pieces
- Use after aligning triangle on the surface of driver and the groove or cross section of abutment
- Solid and excellent solid drivers are only compatible with ø 4.8
- 1.2 hex type L is 5

1.2 hex	Short	Long
 	<u>    .                                </u>	

L Type	1.2 Hex	Rigid 4.0	Rigid 4.5	Rigid 5.0	Rigid 6.0	Solid	<b>Excellent Solid</b>
Short (10)	OTH12S	OTR40S	OTR45S	OTR50S	OTR60S	OTS48S	OTE48S
Long (15)	-	OTR40L	OTR45L	OTR50L	OTR60L	OTS48L	OTE48L

### Path Probe for TS

 Check path and measure the height of gingiva after inserting TS fixture • C = Connection

C Mini Regular GIPAP-3016A GIPAP-3516A



048





ø 10





Reamer user guide

- 1. Reamer tip of the same size as abutment is selected and connected to burn-out cylinder after casting
- 2. Hold casting body and turn reamer bite with consistent force
- 3. Ream until cutting stops occurring



# **Prosthetic** Instruments

# **CAS-KIT** (HCRSNK)

### **Reamer Bite**

• Cutting edge part that removes lip inside the cast after plastic coping is cast

FRBC



Available for use TSII / III SSII / III USII/III

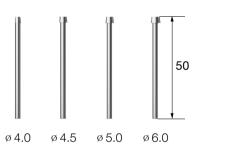


# SNDR3113TL Ø3.1 CAS-Drill Ø3.3 CAS-Drill \* -. • Ø2.2 • \* 🐨 Twist Drill • Stopper SNGD2027TL SNST3 SNST9 Blue 9

### **Reamer Tip for Rigid Abutment**

• Guide portion that enters inside when removing lip inside the cast after plastic coping is cast (for rigid abutment)





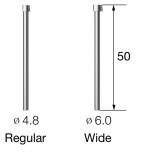
http://Sherlak.com

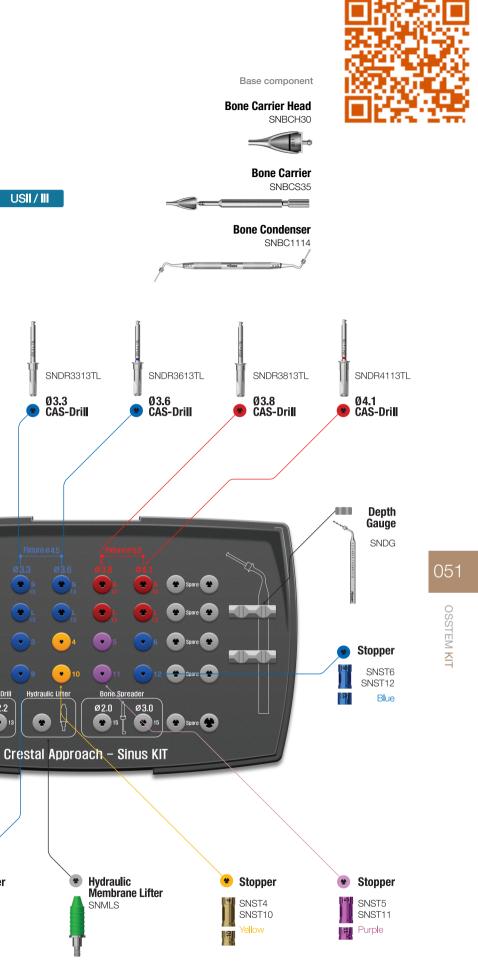
### Reamer Tip for Solid, Excellent Solid Abutment

· Guide portion that enters inside when removing lip inside the cast after plastic coping is cast

Solid Ø 6.0 type and excellent solid Ø 4.8 type are interchangeable

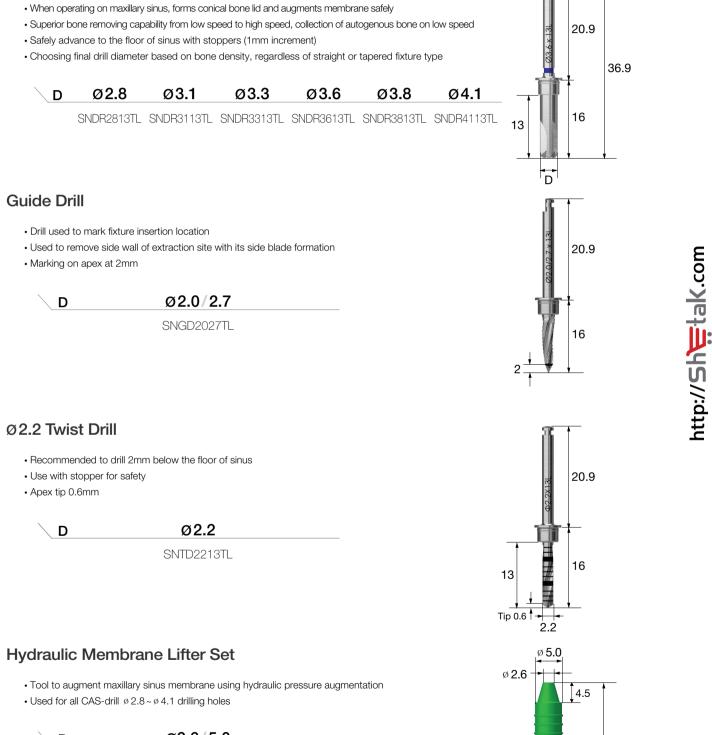
D	Ø4.8	Ø6.0
Solid	FRTS480	FRTS600
Ex.Solid	FRTE480	FRTE600





# **CAS-KIT** Surgical Instruments

### **CAS-Drill**



### Stopper

• The number on each stopper is the length of protruding apex when drill or tool is attached

- Color code per length
- Number of uses of drill and stopper: 50 times



### **Bone Carrier**

• Used to fill bone inside sinus

• Fixes head part by tightening the back of body part

Head(SNBCH30 or SNBCH35) can be replaced

SNBCS35

### **Bone Carrier Head**

• Used to fill bone inside sinus

• SNBCH30: Use after drilling with CAS-drill Ø 3.1/Ø 3.3

• SNBCH35: Use after drilling with CAS-drill Ø 3.6/Ø 3.8/Ø 4.1

• Fill in bone material to the back of marking line on head part, separate gradually with bone condenser to fill inside of sinus completely, and repeat the procedure

D	Ø3.1	Ø3.6
	SNBCH30	SNBCH35

### **Bone Condenser**

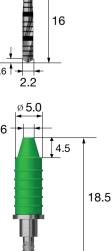
• Tool to push in when filling bone material inside sinus • SNBCH30: Uses Ø 1.1 / SNBCH35 : Uses Ø 1.4



SNBC1114

052

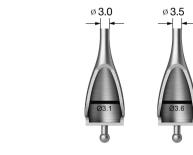










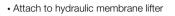




# **CAS-KIT** Surgical Instruments

# LAS-KIT (HLRSNK)

### Hydraulic Membrane Lifter Tube



SNMT



Check the opening of the sinus floor and measure the depth of remaining bone

SNDG

**OSSTEM KIT** 

# CAS-KIT Plus (HCRSNKP)

Crestal Approach - Sinus KIT Plus (CAS-KIT plus) is a KIT that includes 6 short types of CAS-drill in addition to CAS-KIT

### **CAS-Drill**

- When operating on maxillary sinus, forms conical bone lid ar augments membrane safely
- Superior bone removing capability from low speed to high speed to h collection of autogenous bone on low speed
- Safely advance to the floor of sinus with stoppers (1mm incr

Ø2.8

• Final drill diameter selected according to bone density, rega straight or tapered fixture type

Ø3.1

and speed,	03.3 × 135	14.9	30.9		20.9	36.9
crement) ardless of	13	16	<u></u>	13	16	
Ø3.3	Ø <b>3.6</b>		Ø3.8	D	Ø4.1	

1 2 3 4 5 6 7 8 9 10 11 12

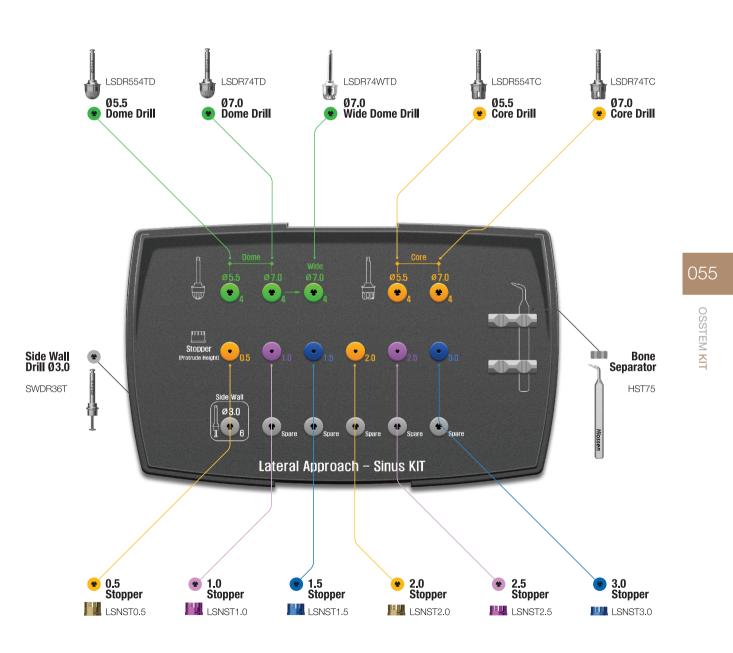
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Hiossen

http://Shitelk.com

L D	Ø2.8	Ø3.1	Ø3.3	Ø3.6	Ø3.8	Ø4.1
Short	SNDR2813TS	SNDR3113TS	SNDR3313TS	SNDR3613TS	SNDR3813TS	SNDR4113TS
Long	SNDR2813TL	SNDR3113TL	SNDR3313TL	SNDR3613TL	SNDR3813TL	SNDR4113TL

- Lateral Approach Sinus KIT (LAS-KIT) is a surgical tool optimized for lateral approach when operating on maxillary sinus
- Dome drill and core drill, which can safely form lateral window, are included and equipped with diameters of Ø 5.5 and Ø 7.0, depending on the size of window
- LAS drill is equipped with stopper(0.5mm increment), which enables adjustment of depth, and can safely form window without perforating membrane



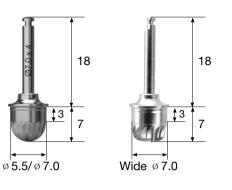


# LAS-KIT Surgical Instruments

### Dome Drill

- Forms window while collecting part of autogenous bone
- Improved cutting force due to the combination of macro cutting
- edge and micro cutting edge Stopper attachment enables adjustment of depth
- Cutting speed : 1,200~1,500rpm
- \* Excessive over drilling damages membrane

L D	Ø5.5	Ø7.0	Wide Ø7.0
25	LSDR554TD	LSDR74TD	LSDR74WTD



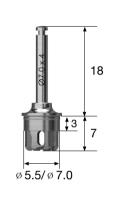
### **Bone Separator**



### **Core Drill**

- Create bone lid on the lateral window
- Same cutting edge design as CAS-KIT to enhance the safety of procedure
- Cutting speed : 1,200~1,500rpm
- \* Excessive over drilling damages membrane

L \ D	Ø5.5	Ø7.0
25	LSDR554TC	LSDR74TC



http://Sherlak.com

### Stopper

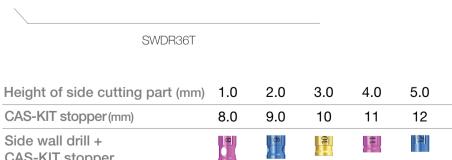
• The number on each stopper is the length of protruding apex when drill or tool is attached Color code per length

Number of uses of drill and stopper: 50 times

<u> </u>	0.5	1.0	1.5
	0.5	10	1 <mark>5</mark> 1
	LSNST0.5	LSNST1.0	LSNST1.
Color	Yellow	Purple	Blue

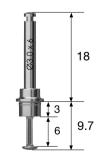
### Side Wall Drill

- Expands window after and trims the rough edges around the window
- Requires cutting at the 1mm upper part of the lowest part of drill blade
- Cutting speed : 1,500rpm



**CAS-KIT** stopper

% Used for all CAS-KIT stoppers and can adjust depth



056





	2.0	2.5	3.0	057
1.5	LSNST2.0 Yellow	LSNST2.5 Purple	LSNST3.0 Blue	OSSTEM KIT

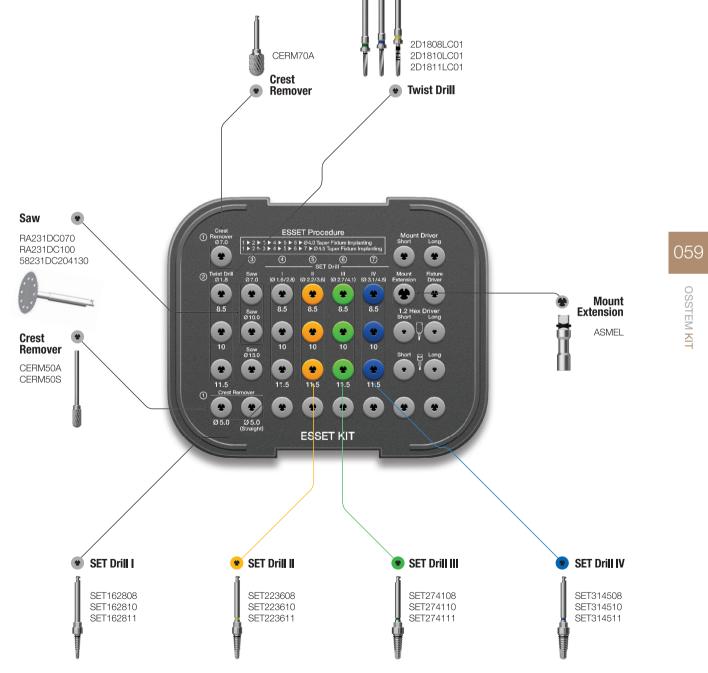
# LAS-KIT Plus (HLRSNKP)

• KIT A KIT that includes 6 types of sinus lift surgical tools in addition to LAS-KIT

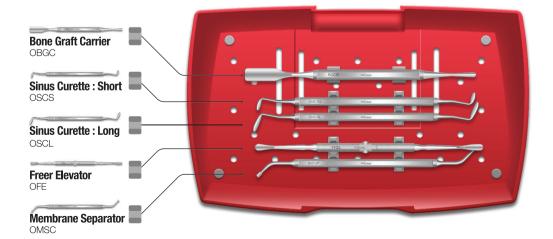
# ESSET KIT (HESEK)

LSDR74WTD LSDR554TD LSDR74TD LSDR554TC LSDR74TC • Ø5.5 Dome Drill ● Ø7.0 Dome Drill Ø7.0 Wide Dome Drill ● Ø5.5 Core Drill 🗩 Ø7.0 Core Drill . \* \* \* \* Stopper http://Sherlak.com Side Wall Drill Ø3.0 • • Bone Separator • \* . SWDR36T HST75 Spare Spare Spare Spare Spare Lateral Approach - Sinus KIT Plus • 0.5 Stopper • 1.0 Stopper 1.5Stopper 2.0 Stopper 2.5Stopper 3.0 Stopper LSNST0.5 LSNST1.0 LSNST2.0 LSNST1.5 LSNST2.5 LSNST3.0

# Available for use TSII/III SSII/III USII/III USII/III

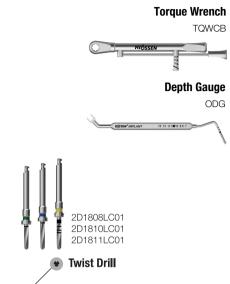


### LAS-KIT Plus Lower Plate





Base component

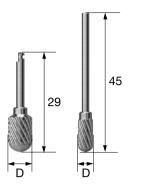


# ESSET KIT Surgical Instruments

### **Crest Remover**

- Removes the narrowed bone width horizontally, and marks the fixture insertion location
- Recommended speed for angled type : 1,200~1,500rpm
- Recommended speed for straight type : 15,000~30,000rpm

L 🔪 D	Ø5.0	Ø7.0
29	CERM50A	CERM70A
45	CERM50S	-



### SET Drill

Gradually expand the bone width

• SET drill is sequentially used according to the diameter of fixture F4.0 : I  $\rightarrow$  II  $\rightarrow$  III / F4.5 : I  $\rightarrow$  II  $\rightarrow$  III  $\rightarrow$  IV

Recommended speed : 25~35rpm

L 🔪 Туре	I	ll	III
D1/D2	Ø1.6/2.8	Ø2.2/3.6	Ø2.7/4.1
8.5	SET162808	SET <b>223608</b>	SET274108
10	SET162810	SET <b>223610</b>	SET274110
11.5	SET162811	SET <b>223611</b>	SET <b>274111</b>

### **Twist Drill**

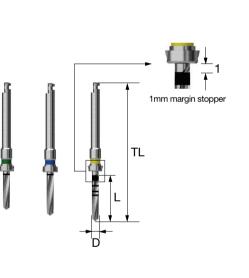
060

OSSTEM KIT

# Marks fixture insertion locationControls depth with built-in stopper

Recommended speed : 1,200~1,500rpm

L TL D	Ø1.8
8.5 33	2D1808LC01
10 34.5	2D1810LC01
11 36	2D1811LC01



### **Mount Extension**

http://Sherlak.com

• Used to apply torque in manual mode in the process of inserting /removing SET drill into alveolar bone

ASMEL

### **Torque Wrench**

• Used to apply torque to SET drill

TQWCB

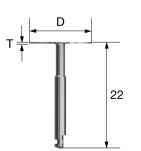
### Depth Gauge

 Used to remove excessive torque by turning hex part of SET drill, using open wrench, in case hand-piece does not move when fused with alveolar bone in the process of removing SET drill

### Saw

- $\ensuremath{\cdot}$  Used to split the bone from the crest
- Cut vertically and incise the whole part from mesial  $\rightarrow$  distal direction
- Recommended speed : 1,200~1,500rpm
- T = Thickness

T 🔪	Ø7.0	Ø10.0	Ø13.0
0.3	RA231DC070	RA231DC100	58231DC204130

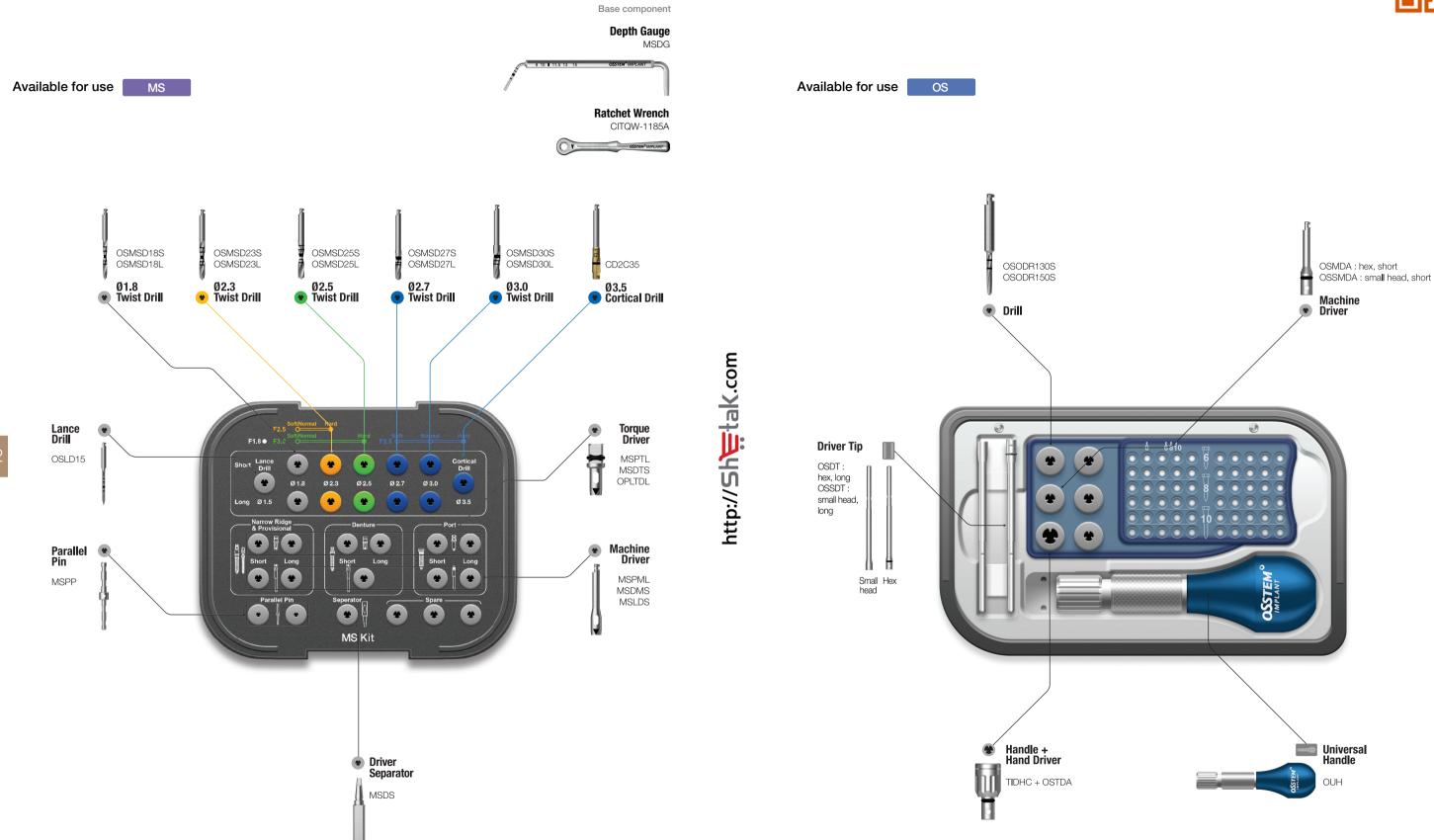








# Ortho KIT (OOKS)



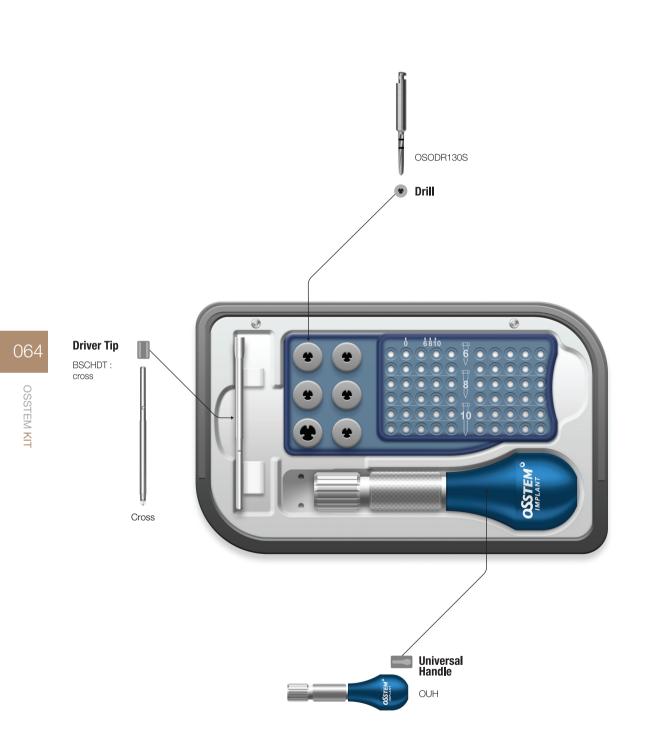
062 OSSTEM KIT



063

# Bone Screw KIT (BSSTKT)

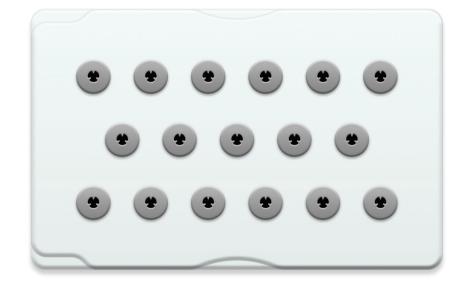
Available for use BS



# Custom KIT (OCTK)

KIT for disinfecting only part of operation tools or storing extra tools
3 extra types of rubber (large, medium, small) are included for user's preference
Features materials that can be sterilized (132°c, 15 minutes)



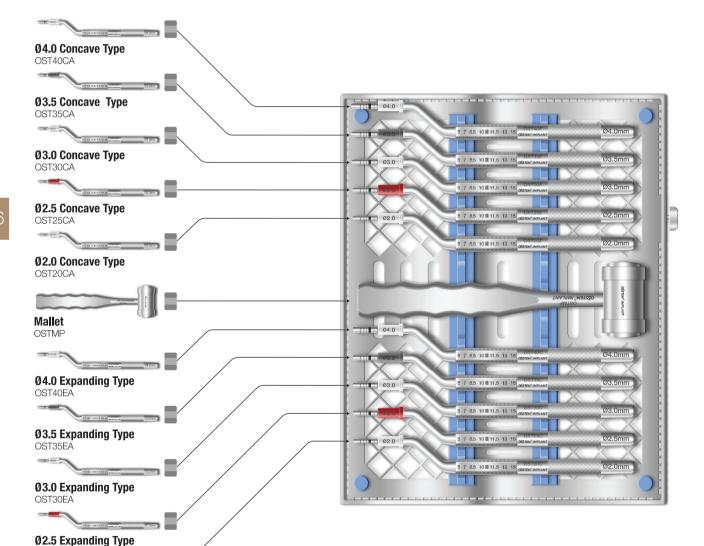






# Osteo KIT (OSTK)

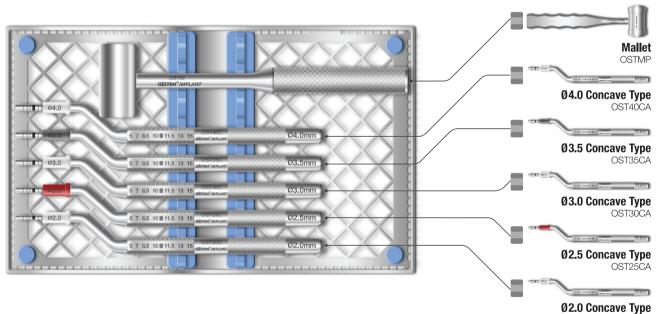
- KIT Concave osteotome: KIT used for maxillary sinus floor augmentation to increase the amount of alveolar bone that can be used within maxillary molar area vertically • KIT Expanding osteotome: KIT used to increase initial stability of implant by preserving bone and densifying trabecular bone to compensate for bone removal in
- poor bone condition
- Features stopper for adjusting depth of procedure



# **Osteotome KIT** (AOST)

- KIT KIT for maxillary sinus floor augmentation to increase the amount of alveolar bone that can be used within maxillary molar area vertically
- Only includes concave type
- Features stopper for adjusting depth of procedure







OST25EA

OST20EA

066 OSSTEM KIT



OST20CA

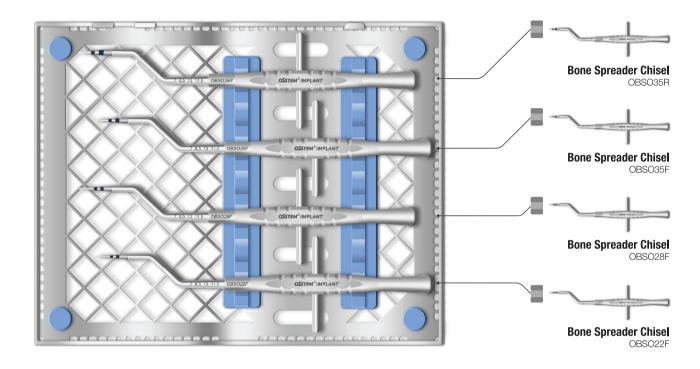
067

# Sinus KIT (ASLK)

- Various tools used for maxillary sinus membrane elevation and grafting procedure
- Sinus procedure tool for lateral approach
- Components (5 types)
- Freer elevator : OFE
- Bone graft carrier : OBGC
- Membrane separator (circle type) : OMSC
- Sinus currette-short : OSCS
- Sinus currette-long : OSCL

# Bone Spreader KIT (OBSOK)

- KIT used to expand the ridge of narrowed alveolar bone
- Offset type for convenient procedures
- Components (4 types)
- OBSO22F, OBSO28F, OBSO35F, OBSO35R

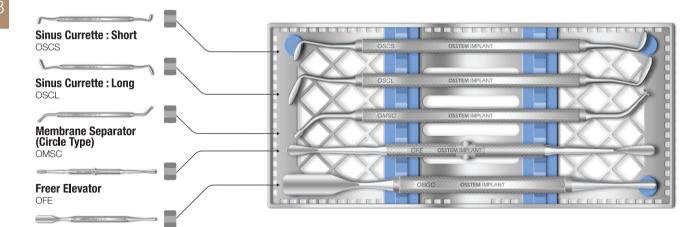




OSSTEM KIT

**Bone Graft Carrier** 

OBGC

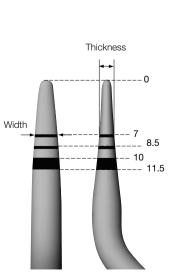


# http://Shiterak.com

• Use for alveolar bone expansion Offset type for easy operation • Depth marking corresponding to the

implant length.

	Tip length				
Code	Spec.	7	8.5	10	11.5
OBSO22F	Thickness	1.15	1.3	1.45	1.6
0630226	Width	2.1	2.2	2.2	2.2
OBSO28F	Thickness	1.15	1.3	1.45	1.6
063020F	Width	2.65	2.8	2.8	2.8
OBSO35F	Thickness	1.3	1.45	1.6	1.8
065030F	Width	3.3	3.5	3.5	3.5
OBSO35R	Thickness	1.85	2.1	2.3	2.55
(round type)	Width	3.3	3.5	3.5	3.5









OSSTEM KIT

(Linit : mm)



Direction for use : refer to the above schematic

# Ridge Split KIT- Straight (ORSSK)

# Ridge Split KIT- Offset (O

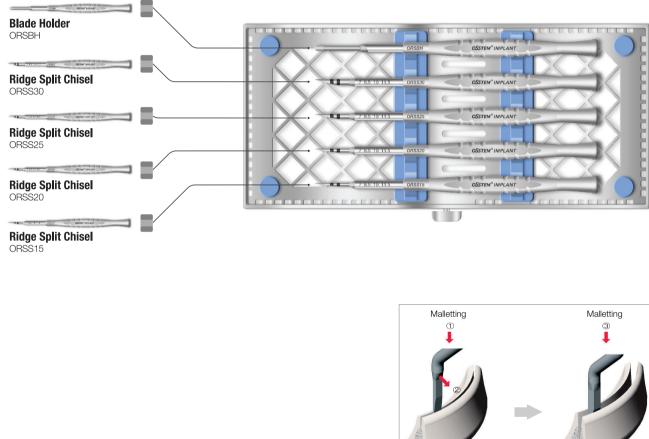
• Chisel: KIT used to expand the ridge of narrowed alveolar bone

• Blade holder: When it is difficult to incise bone using bur in case of poor bone condition, malletting can be done by attaching #15 blade Components

- Ridge split chisel : ORSS15, ORSS20, ORSS25, ORSS30
- Blade holder : ORSBH

070

OSSTEM KIT



Tip length

Thickness

Width

Thickness

Width

Thickness

Width

Thickness

Width

Spec.

7

1.1

4

1.45

4

1.8

4

2.15

4

2.15

4

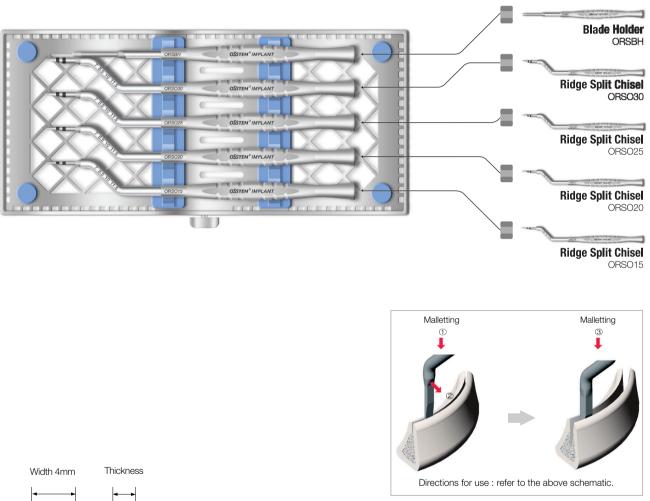
2.5

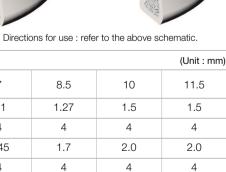
4

# http://Sherlak.com

Chisel: KIT used to expand the ridge of narrowed alveolar bone

- Blade holder: When it is difficult to incise bone using bur in case of poor bone condition, malletting can be done by attaching #15 blade Components
- Ridge split chisel : ORSO15, ORSO20, ORSO25, ORSO30
- Blade holder : ORSBH





2.5

4

3.0

4

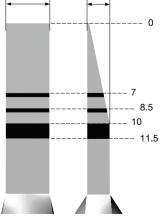
2.5

4

3.0

4

### Thickness Width 4mm



Code

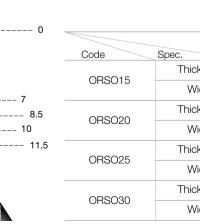
ORSS15

ORSS20

ORSS25

ORSS30

	Width 4mm
	<b></b>
ו)	
_	
_	
_	
_	
_	
_	

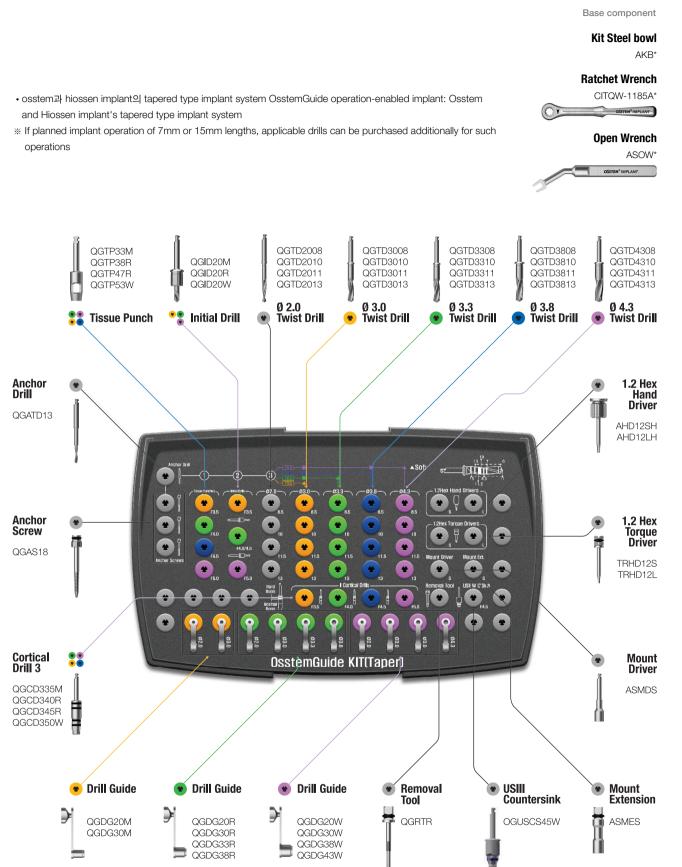




				(Unit : mm)
Tip length	7	8.5	10	11.5
ckness	1.1	1.27	1.5	1.5
Vidth	4	4	4	4
ckness	1.45	1.7	2.0	2.0
Vidth	4	4	4	4
ckness	1.8	2.15	2.5	2.5
Vidth	4	4	4	4
ckness	2.15	2.5	3.0	3.0
Vidth	4	4	4	4

# 071

# **OsstemGuide KIT** (OGDK)



# **OsstemGuide KIT** Components

### **OsstemGuide Twist Drill**

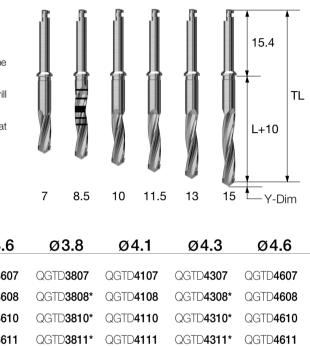
http://Shertak.com

- Includes stopper conforming to OsstemGuide drill auide
- · Applied design that does not damage gingiva even when side blade of the drill contacts gingiva in flapless operations
- · Conforming to the length of the attachment of surgical guide and drill
- guide, designed to be 10mm longer compared to regular procedure drills • 8.5mm drill is laser marked and can be used in regular procedures that do not use OsstemGuide
- \* Codes indicated are products included in OsstemGuide KIT

L(TL) \ <u>D</u>	Ø2.0	Ø3.0	Ø3.3	Ø3.6
7.0 (32.4)	QGTD <b>2007</b>	QGTD <b>3007</b>	QGTD <b>3307</b>	QGTD <b>3607</b>
<b>8.5</b> (33.9)	QGTD <b>2008*</b>	QGTD <b>3008*</b>	QGTD <b>3308*</b>	QGTD <b>3608</b>
10 (35.4)	QGTD <b>2010*</b>	QGTD <b>3010*</b>	QGTD <b>3310*</b>	QGTD3610
<b>11.5</b> (36.9)	QGTD <b>2011*</b>	QGTD <b>3011*</b>	QGTD <b>3311*</b>	QGTD <b>3611</b>
<b>13</b> (38.4)	QGTD <b>2013*</b>	QGTD <b>3013*</b>	QGTD <b>3313*</b>	QGTD <b>3613</b>
<b>15</b> (40.4)	QGTD <b>2015</b>	QGTD3015	QGTD <b>3315</b>	QGTD <b>3615</b>

072





QGTD4313\*

QGTD**4315** QGTD**4615** 

QGTD4613

QGTD**3813**\* QGTD**4113** 

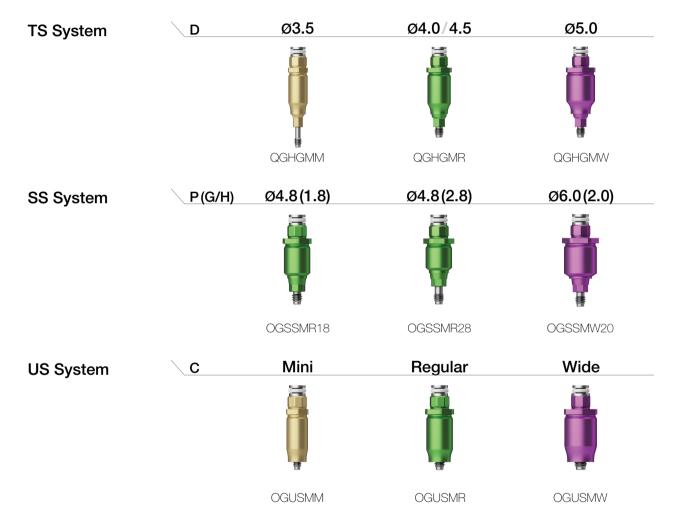
QGTD**3815** QGTD**4115** 

073

# **OsstemGuide KIT** Components

### **OsstemGuide Mount**

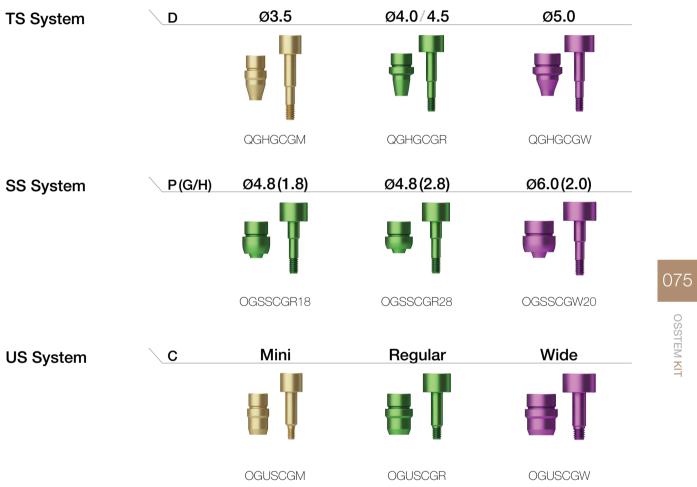
- Used to insert implant by attaching to fixture as a mount for OsstemGuide procedures
- Used in accordance with the color of the sleeve attached to surgical guide
- P = Platform
- C = Connection



### **OsstemGuide Cylinder (Pin)**

http://Shitelak.com

- Component for making dentures for OsstemGuide procedures
- Can make plaster cast by connecting to existing fixture lab analog
- Use in accordance with the color of the sleeve attached to OsstemGuide template

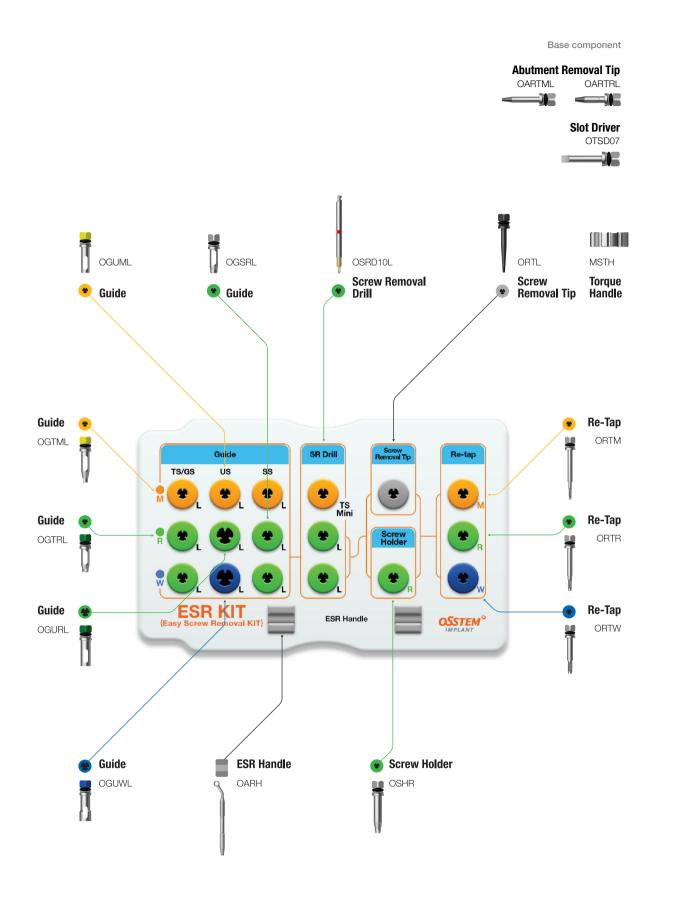


074



# ESR KIT Easy Screw Removal KIT (OESRK)

# ESR KIT Surgical Instruments



### **Reverse Driver**

- Tool used to remove fractured screw
- Must be used with a guide that fits the fixture
- When red marking indication of the reverse driver is displayed on the
- guide attached to fixture, use screw holder to remove fractured screw • For hand mode / Rotating direction: Reverse / Number of use: 10 times • F = Fixture

L 🔪 F	Mini	Regular/Wide
Short	-	ORVDRS
Long	ORVDML	ORVDRL

### Screw Removal Drill (SR Drill)

- Used to remove in order to form a hole in the fractured screw
- Must remove cut chip by suction after attaching guide and spraying water on window
- Short and long specifications suitable for different intermaxillary spaces
- Drill until the red band on the grip part cannot be seen
- Recommended speed: 1,200~1,500rpm in reverse
- Number of uses: 5
- \* Must be used as attached to guide / Do not apply excessive vertical force / Do not immerse in hydrogen peroxide

• F = Fixture

L\F	Mini (GS/TS)	Regular/Wide(GS/TS/SS/US)
Short	OSRD08S	OSRD10S
Long	OSRD08L	OSRD10L

### Guide

http://Sherlak.com

- Guide used for centering and preventing wobble of reverse driver,
- screw removal drill (SR drill), and re-tap
- Short and long used according to intermaxillary spaces • Used in combination with ESR handle
- F = Fixture

F Type	ΤS(	Hex)	SS	Octa)	US	He
	Short	Long	Short	Long	Short	L
Mini	OGTMS	OGTML	OGUMS	OGUML	OGUMS	00
Regular	OGTRS	OGTRL	OGSRS	OGSRL	OGURS	00
Wide	-	-	OGSRS	OGSRL	OGUWS	00









Regular/Wide

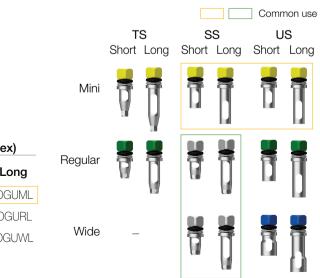












# ESR KIT Surgical Instruments

### **Torque Handle**

• Used by combining to the attaching part of torque driver, etc. and turning by hand

MSTH

### Screw Removal Tip (SR Tip)

• Removes fractured screw by turning screw removal tip in reverse in the hole of fractured surface of the screw formed by screw removal drill (SR drill) Rotating direction: Reverse

L	
Short	ORTS
Long	ORTL

### **Screw Holder**

• If part of fractured screw is protruding, remove in combination with screw holder Colors assigned for easily distinguishable specifications • F = Fixture

F	Mini	Regular	Wide
	OSHM	OSHR	OSHW

# $\bigcirc$ Mini

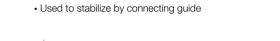
### Re-tap

- Tool that restores the initial state of thread when the thread inside fixture is damaged and screw cannot be attached
- Using torque wrench or ratchet wrench, forms thread by hand mode • F = Fixture





### **ESR Handle**



OARH

### **Abutment Removal Tip**

- Used in case where part of abutment and mount are fractured and jammed and left over in the fixture
- Combine to the fractured abutment hole, turn counterclockwise (in reverse), and, when fixed tightly, use forceps or other tools to sway and remove
- In case of mini, if hex of screw causes slips, use to remove screw
- After attaching to hex with slips and turning counterclockwise, combines with screw and removes
- \* Mini: Can remove screw when hex causes slips
- F = Fixture

http://Sherlak.com

F	Mini	Regular
	OARTML	OARTRL

### **Transfer Abutment Separate Tool**

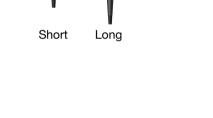
- Used to remove jamming due to contact between fixture and morse taper of non-hex type transfer abutment
- The end of body is for mini; regular can be inserted to the 2nd groove for common use • Remove abutment screw, insert separate tool body into the hole inside abutment,
- tighten clockwise with driver, and align body and abutment for easy separation. However, if there is difficulty separating, attach ratchet wrench and use

\	Driver	Body	Se
	TASD	TASB	TAS

### **Slot Driver**

• Tool used after forming slot by Ø 0.8 bur when driver cannot apply force due to the damage in hex of healing abutment, cover screw, and abutment screw

OTSD07











Mini



Regular



**OSSTEM KIT** 



ST



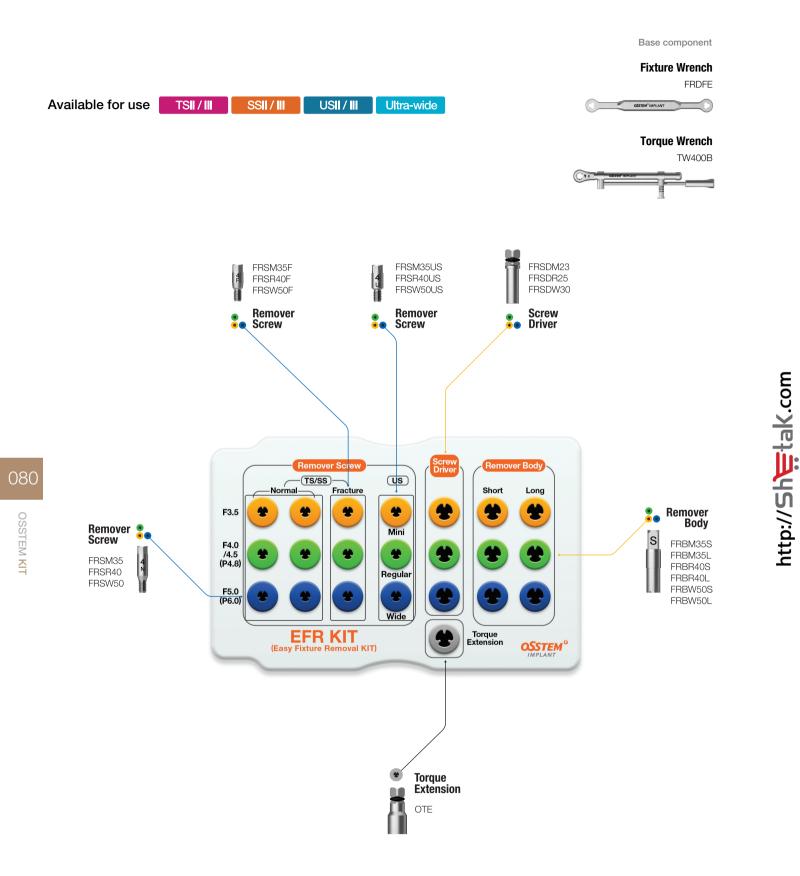
Driver





# EFR KIT Easy Fixture Removal KIT (OSFRK)

# EFR KIT Surgical Instruments



### **Remover Screw**

- Serves as supporting structure for connecting and stabilizing to fixture and enabling turning remover body in reverse
- Use accordingly with regards to type and diameter of the fixture to be removed (TS/SS/US, normal/fracture)
- Use fracture when removing fractured fixture
- Recommend tightening torque : 100Ncm
- F = Fixture

• P = Platform

	Mini	
Type F/P	Ø3.5/-	
TS/SS Normal	FRSM35	
Fracture	FRSM35F	
US	FRSM35US	

### **Screw Driver**

- Driver that can connect/fix remover screw to fixture Recommend tightening torque : remover screw 100Ncm
- F = Fixture

F	Mini	Regular	Wid
	FRSDM23	FRSDR25	FRSDV

### **Remover Body**

• Tool that can be connected to remover screw and apply loosening torque to fixture • Use accordingly with regards to diameter of the fixture to be removed • F = Fixture

F	Mini	Regular	Wi
Short	FRBM35S	FRBR40S	FRBW
Long	FRBM35L	FRBR40L	FRBV





### Regular Ø4.0~4.5/P4.8

FRSR40 FRSR40F FRSR40US



FRSW50 FRSW50F FRSW50US



OSSTEM KIT





06W

ide

W50S W50L



# EFR KIT Surgical Instruments

### **Torque Extension**

• Can extend the length (10mm) of screw driver and remover body

OTE

### **Torque Wrench**

- Used to tighten screw driver and remove fixture using remover body
- Can apply maximum torque of 400Ncm (scale marks on every 100Ncm)Apply torque after pulling bar to set the center of the bar to the torque
- value to be applied
- After use, store after washing and sterilizing

TW400B

# 082 083

### **Fixture Wrench**

Wrench used to remove fixture from remover body after removing fixture

FRDFE



**OSSTEM**<sup>°</sup>IMPLANT

http://Shrink.com









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9	Evaluation of peri-implant tissue in nonsubmerged dentallmplants: a multicenter retrospective study	Clin Implant Dent Relat Res. 2011 Dec;13(4):324-9 <b>/ Young-Kyun Kim et al.</b>	ht
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# Evaluation of sinus bone resorption and marginal bon sinus bone grafting and implant placement Evaluation of peri-implant tissue response according presence of keratinized mucosa Study on radiographic evaluation of marginal bone lo osseonintegrated implant after functional loading Four-year survival rate of RBM surface internal connection

### **19** Four-year survival rate of RBM surface internal connection nonsubmerged implants and the change of the peri-implant crestal bone

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Biology		
No.	Title	Reference / Author
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g to the	Oral Surg Oral Med Oral Pathol OralRadiol Endod. 2009;107:e24-8 / Young-Kyun Kim et al.
loss around	J Kor Oral Maxillofac Surg. 2009;35:240-7 / Young - Deok, Chee
nection non- plant crestal bone	J Korean Assoc Maxillofac Plast Reconstr Surg. 2009;31(3):237-42

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# User Manual 2013.02 ver.4.0 Disposable, re-use prohibited, medical appliance

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	immediately loaded implants in the dog mandible		

- Effects of different depths of gap on healing of surgically created 11 coronal defects around implants in dogs: a pilot study
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J Biomed Mater Res A. 2008;86:1122-7 / Su-Gwan Kim et al.

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No.	Title	Reference / Author
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/ Chang-Mo Jeong et al.

### Osstem Implant product information

Osstem Implant dental fixtures and products are manufactured using medical grade Titanium. Osstem Implant abutments, denture material and surgical tools are only compatible with Osstem fixtures. For more detailed information about each product, please refer to the user manuals, catalogs or please visit our corporate website (www.osstem.com). Please check all product labels for product codes. specifications, manufactured dates and expiration dates.

### Sterility

http://Shetak.com

Fixtures, cover screws and healing abutments are cleansed and gamma-sterilized. These products are disposable sterile medical appliances, and must be used in a sterile field. If the package is damaged or has expired, it must not be used. If the product package has been opened but not used, there is a risk of contamination and it is not recommended that the product resterilized and therefore should be discarded.

### Storage conditions

Store all products in a dry place at room temperature (30oC). Avoid direct sunlight.

### General precautions

Dental implant surgery require proper and formal training and education.

### Cautions before dental surgery

Before dental implant surgery, a through patient health history review, oral and radiographic examinations must be completed to determine bone quality and proper treatment planning.

### Cautions during dental implant surgery

Osstem Implant System are for single or two stage dental implant procedures. In order to minimize damage to the patient's tissue, special attention to temperature surgical lesions and eliminating all sources of contamination and infection are needed. Any deviation from the standard surgical protocol increases the risk of failure. When inserting the dental implant, sufficient cooling must be introduced (water or saline) and excessive torque (greater than 55Ncm) can result in dental implant fracture or possibly bone necrosis. Placing dental implants greater than 300 has a very high risk of implant fracture. Direct pressure to the fixture should be avoided right after surgery. Immediate or delayed loading of the fixture must be determined after proper examination of the patient's bone condition and initial stability after placement.

"Mini" implants or implants with a diameter less than 4.0mm are not recommended for the posterior region.

Ultra-wide dental implants are recommended for the posterior region but should not be used with angled abutments. If considering an Ultra-wide dental implant, proper radiographic evaluation must be made to determine the bone mass and potential anatomical restrictions. Short dental implants (diameter greater than 5mm and shorter than 7mm) are only used for the posterior region. The clinician must

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Storage condition Dry place at room temperature

**Rx only** For USA only : Federal law restricts this device to sale by or on the order of a dentist





thoroughly evaluate the patient's condition and recognized the following issues: 1) bone loss due to peri-implantitis. 2) changes to the dental implant condition. 3) proper ossepintegration determined by a x-ray examination. If there is movement or if there is bone loss more than 50% removing the dental implant should be a course of action. Wide diameter implants should be performed as a two stage surgery. Sufficient healing time must be given before splinting with other implants or when loading. Immediate loading is not recommended.

Take care when placing dental implants with HA coating. The coating is prone to cracking or fracturing under high torque, therefore hard bone should be avoided and be inserted under 35Ncm of force.

CA and SOSI treated dental implants are encased in a solution to prevent the chemically treated surface from reacting with air. After removing the CA or SOSI dental implant, place the implant within 15 minutes to avoid degradation of the surface.

### Warning

Improper patient selection and treatment planning may result in dental implant failure or loss of bone. Osstem Implants must not be used for purpose other than prescribed and must not be alter in any shape or form. Implant movement, bone loss, and chronic infections can result in implant failure.

### Indications

Osstem Implant Systems are designed to replace a patient's tooth or teeth. They can be placed in both the maxillary and submaxillary alveolar bones and after full osseointegration can be restored prosthetically. Osstem Implant Systems offer both temporary and final prosthesis and can be retained by cement, screw, overdenture or fixed bridge

### Side effects

There are possible side effects after implant surgery (lost of implant stability, damage to dentures). These issues can be due to the lack of bone or poor bone quality, an infection, patient's poor oral hygiene, non compliance with post op procedures, movement of the implant, degradation of surrounding tissue, or improper placement of the dental implant.

### Contraindications

- Patients with the following contraindications are not eligible for dental implants:
- Patients with blood clotting issues or issues with wound healing.
- Diabetic patients
- Patients that smoke or drink excessively
- Patient's with compromised immune systems due disease or chemo and radiation therapy.
- Patients with an oral infection or inflammation (improper oral hygiene or teeth grinding)
- Patients with an incurable malocclusion/arthropathia and insufficient arch space.







Catalogue number









Non-Sterile



Do not resterilize





Keep away from sunlight





Caution, Consult accompanying documents



http://Shtak.com

