



# MS Implant System

2013 Product Catalog

**OSSTEM<sup>®</sup>**  
IMPLANT



# MS Implant System

2013 PRODUCT CATALOG

**OSSTEM<sup>®</sup>**  
IMPLANT

<b>MS Implant</b> 	 <b>8</b> MS SA Implant (Narrow Ridge)	 <b>9</b> MS Implant (Narrow ridge)	 <b>9</b> Impression Coping (Narrow ridge)	 <b>9</b> Temporary Cap (Narrow ridge)
 <b>9</b> Lap Analog (Narrow ridge)	 <b>10</b> MS Implant (Provisional)	 <b>11</b> Lap Analog (Provisional)	 <b>12</b> MS SA Implant (Denture)	 <b>13</b> MS implant (Denture)
 <b>13</b> O-ring Retainer Cap Set	 <b>13</b> Lab Analog (Denture)	 <b>14</b> HM KIT (MS KIT)	 <b>14</b> Drill for MS Implant	 <b>15</b> Driver for Narrow Ridge & Provisional type
 <b>15</b> Driver for Denture type	 <b>15</b> Gauge for MS Implant	 <b>15</b> Torque Handle	 <b>15</b> Driver Separator	<b>Orthodontic Screw</b> 
 <b>18</b> Orthodontic Screw	 <b>20</b> Ortho KIT	 <b>20</b> Drill	 <b>21</b> Universal Handle	 <b>21</b> Driver Tip
 <b>21</b> Machine Driver	 <b>22</b> Driver Handle	 <b>22</b> Hand Driver	 <b>22</b> Driver Separator	

# OSSTEM HISTORY

## 2012

- Nov Hosts 'OSSTEM ATC Forum 2012 Seoul'
- Jul Registers and obtains approval from FDA in Mexico  
Established OSSTEM Dental Equipment Research Institute
- Jun Develops and begins commercial production of TSIII CA  
Develops and begins commercial production of ESSET Kit for Ridge Split
- May Develops and begins commercial production of MS SA
- Apr Hosts 'OSSTEM World Meeting 2012 Taipei'  
Develops and begins commercial production of TSIII BA  
Registers and obtains approval from Ministry of Health in Indonesia  
Develops and begins commercial production of USIII SA
- Mar Develops and begins commercial production of USIII SA  
Develops and begins commercial production of SSIII HA  
Registers and obtains approval from Ministry of Health and Welfare in Kazakhstan

## 2011

- Dec Introduces and commences commercial production of K2 Unit & Chair
- Nov Develops and begins commercial production of Smart Membrane
- Oct Registers and obtains approval from Health Canada  
Develops and begins commercial production of USII SA and 123 Kit
- Sep Establishes subsidiary offices in Dacca , Bangladesh and Ho Chi Minh City, Vietnam [OSSTEM Bangladesh Ltd. and OSSTEM IMPLANT Vina Co., Ltd.]  
Develops and begins commercial production of SSIII SA  
Registers and obtains approval from the Ministry of Health and Society in Vietnam
- Aug Establishes subsidiary offices in Manila, Philippines and Vancouver, Canada [OSSTEM Philippines Inc. and HiOssen Implant Canada Inc.]
- Jul Develops and begins commercial production of CustomFit Abutment  
Establishes subsidiary offices in Almaty, Kazakhstan [OSSTEM IMPLANT LLP]
- Jun Develops and begins commercial production of TSII SA  
Hosts 'OSSTEM World Meeting 2011 in Seoul'
- Apr Develops and begins commercial production of LAS Kit  
Establishes subsidiary offices in Jakarta, Indonesia [PT OSSTEM Indonesia]
- Mar Establishes subsidiary offices in Guadalajara, Mexico [HiOssen de Mexico]
- Feb Develops and begins commercial production of TSIV SA

## 2010

- Nov Develops and begins commercial productions of SSII SA
- Aug Develops and begins commercial productions of TSIII Ultra-wide
- Jun Develops and begins commercial productions of TSIII HA and CAS Kit  
Opens 'OSSTEM World Meeting 2010 in Beijing'
- Apr Develops and begins commercial productions of Osstem Guide
- Mar Develops and begins commercial productions of TSIII SA

## 2009

- Oct Registers and obtains approval from Health, Labor and Welfare in Japan
- May Hosts 'OSSTEM World Meeting 2009 in Bangkok'
- Jan Certifies PEP7 (the world's first new Osseo-inductive compound)

## 2008

- Nov Develops and begins commercial productions of SS Ultra-wide
- Jun Develops and begins commercial productions of GSIII
- Apr Holds 'OSSTEM World Meeting 2008 in Seoul'

## 2008

- Mar Opens ATC Training Center
- Jan Establishes OSSTEM Bone Science Institute

## 2007

- Oct Establishes subsidiary offices in Sydney, Australia [Osstem Australia PTY Ltd.]
- Jun Registers and obtains approval from the TGA in Australia
- May Develops and begins commercial production of US Ultra-wide
- Apr Hosts 'OSSTEM World Meeting 2007 in Seoul'  
Begins commercial production of V-ceph
- Mar Develops and begins commercial production of MS Lists on KOSDAQ (KRX: Korea Exchange)

## 2006

- Dec Establishes subsidiary offices in Bangkok, Thailand and Kuala Lumpur, Malaysia [OSSTEM Thailand Co., Ltd. and OSSTEM Malaysia SDN, BHD]
- Nov Registers and obtains approval from the SFDA in China
- Sep Establishes subsidiary office in Philadelphia, U.S.A [HiOssen Inc.]
- Aug Establishes subsidiary offices in Beijing, China / Singapore and Hong Kong [OSSTEM China Co., Ltd. / OSSTEM Singapore Pte Ltd. and OSSTEM Hong Kong Ltd.]
- Jul Establishes subsidiary office in Tokyo, Japan [OSSTEM Japan Corp.]
- Apr Registers and obtains the GOST-R certification in Russia  
Opens 'OSSTEM World Meeting 2006 in Seoul'  
Publishes the '2006 OSSTEM IMPLANT SYSTEM' - Introduction and particulars of implant system
- Jan Establishes the subsidiary offices in Moscow, Russia and Mumbai, India [OSSTEM LLC. and OSSTEM IMPLANT India Pvt Ltd.]

## 2005

- Dec Registers and obtains approval by the DOH in Taiwan  
Establishes the subsidiary office in Ashborn, Germany [OSSTEM Germany GmbH]
- May Develops and begins commercial production of GSII
- Apr Hosts 'OSSTEM World Meeting 2005 in Seoul'
- Mar Obtains KGMP(Korean Good Manufacturing Practice) in Korea
- Jan Establishes the subsidiary office in Taipei, Taiwan [OSSTEM Corporation]

## 2004

- Nov Develops and begins commercial production of SSIII
- Jul Develops and begins commercial production of USIII
- Apr Opens 'OSSTEM World Meeting 2004 in Seoul'

## 2002

- Oct Develops and begins commercial production of SSII
- Aug Registers and obtains approval by the FDA in the USA  
Develops and begins commercial production of USII
- Jan Establishes OSSTEM Implant R&D Center

## 2001

- Mar Establishes AIC(Apsun Dental Implant Research & Education Center)
- Jan Obtains CE-0434 certification

## 1999

- Dec Obtains ISO-9001 certification

## 1997

- Dec Begins commercial production under the brand name of OSSTEM
- Jan Establishes OSSTEM IMPLANT Co., Ltd. in Seoul, Korea

## 1995

- Develops dental implants and acquires industrial license

## 1992

- Initiates the development of dental implant system

# OSSTEM Implant System Flow

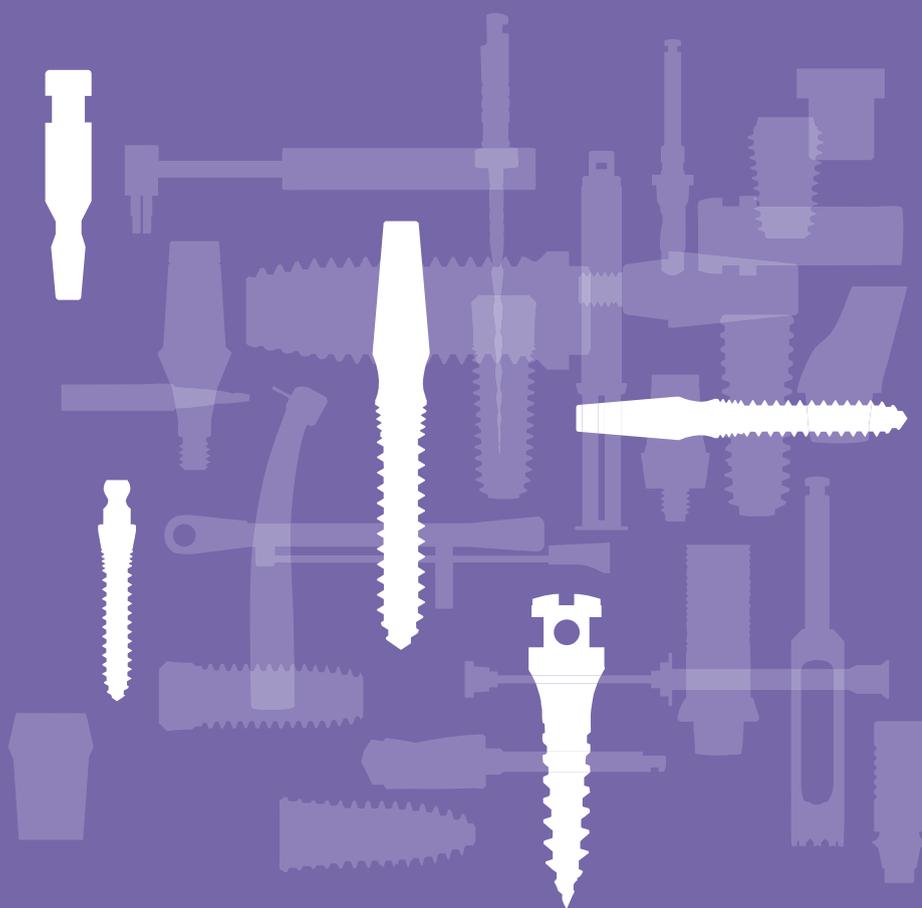
MS Implant		Orthodontic Screw
<p><b>Narrow ridge</b></p> <ul style="list-style-type: none"> <li>• Implant adequate for narrow space such as the mandibular anterior jaw</li> <li>• Fixture and abutment in one enabling support against masticatory pressure; micro thread design enhances the distribution of masticatory force</li> </ul> <p><b>Provisional</b></p> <ul style="list-style-type: none"> <li>• Implant to be used for the immediate mounting of temporary prosthesis for completely or partially edentulous patients</li> <li>• Neck designed for path compensation and intensity support</li> </ul> <p><b>Denture</b></p> <ul style="list-style-type: none"> <li>• Denture-type implant to be used in case of small bone width for edentulous patients or if regular implant is inappropriate</li> <li>• Micro thread on top helps distribute masticatory pressure to the alveolar bone; more advantageous for immediate prosthetic mounting</li> </ul>	<p><b>Orthodontic Screw</b></p> <ul style="list-style-type: none"> <li>• Good Initial Stability</li> <li>• Excellent Self Drilling &amp; Tapping Function</li> <li>• Good Feeling of Screw Implantation</li> <li>• Enhanced Body Strength</li> <li>• Small Head Size</li> <li>• Simple Gingival Shape</li> </ul>	
SA Surfac	RBM Surfac	
<p>(Narrow ridge)</p> <p>L: 8.5 10 11.5 13</p>	<p>(Narrow ridge)</p> <p>L: 10 11.5 13 15</p>	<p>(Simple Head)</p> <p>L: 6 8 10</p>
	<p>(Provisional)</p> <p>L: 10 13 15</p>	<p>(Through Hole)</p> <p>L: 6 8 10</p>
<p>(Denture)</p> <p>L: 8.5 10 11.5 13</p>	<p>(Denture)</p> <p>L: 10 11.5 13 15</p>	

MS SYSTEM

# OSSTEM IMPLANT SYSTEM

## MS SYSTEM

Fixture and Restorative Components



# MS SYSTEM

## EARLY & ESTHETIC OSSTEM IMPLANT

### **08 MS Implant Components**

Narrow ridge Components

Provisional Components

Denture Components

### **14 Drilling Sequence for MS Implant**

### **16 Orthodontic Components**

Simple Head

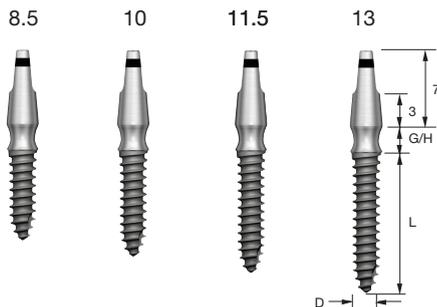
Through Hole

# MS Implant Components

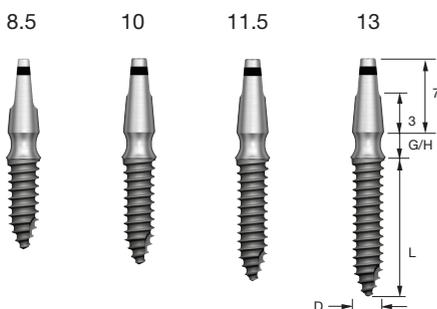
※ The following labeled dimension may differ from the actual dimension.

## MS SA Implant (Narrow ridge)

∅ 2.5



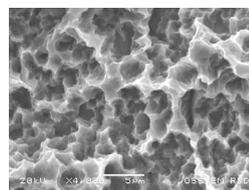
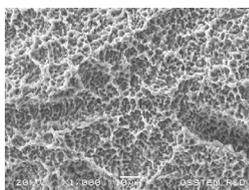
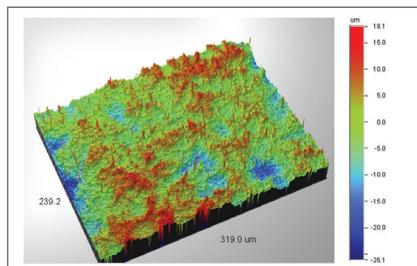
∅ 3.0



D		∅ 2.5	
L	G/H	2.5	4.0
8.5		MSN2508S25	MSN2508S40
10		MSN2510S25	MSN2510S40
11.5		MSN2511S25	MSN2511S40
13		MSN2513S25	MSN2513S40

D		∅ 3.0	
L	G/H	2.5	4.0
8.5		MSN3008S25	MSN3008S40
10		MSN3010S25	MSN3010S40
11.5		MSN3011S25	MSN3011S40
13		MSN3013S25	MSN3013S40

- Implant adequate for narrow space such as the mandibular anterior jaw
- Fixture and abutment in one enabling support against masticatory pressure; micro thread design enhances the distribution of masticatory force
- SA : Sand blasted with alumina and Acid etched surface
  - Optimal morphology : Combination of crater and micro-pit
  - Optimal surface roughness : Ra 2.5~3.0 $\mu$ m
  - Early cell response : 20% faster than RBM
  - Early bone healing : 20% faster than RBM
  - Early loading possible after 6 weeks of placement.
  - Optimized design for SA surface
- Optimized shape and size of abutment enabling cutting-free prosthetic work
- Optimal design of body, thread, and drilling to enhance initial bonding and bone penetration
- Packing unit : MS SA Implant (Narrow ridge)
- Recommended torque : 30Ncm



※ The following labeled dimension may differ from the actual dimension.

### MS Implant (Narrow ridge)

∅ 2.5

10



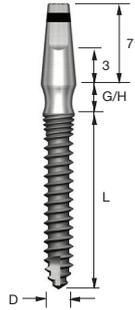
11.5



13



15



∅ 3.0

10



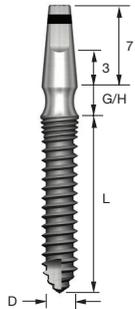
11.5



13



15



D		∅ 2.5	
L	G/H	2.5	4.0
10		MSP25103R	MSP25104R
11.5		MSP25113R	MSP25114R
13		MSP25133R	MSP25134R
15		MSP25153R	MSP25154R

D		∅ 3.0	
L	G/H	2.5	4.0
10		MSP30103R	MSP30104R
11.5		MSP30113R	MSP30114R
13		MSP30133R	MSP30134R
15		MSP30153R	MSP30154R

- Implant adequate for narrow space such as the mandibular anterior jaw
- Fixture and abutment in one enabling support against masticatory pressure; micro thread design enhances the distribution of masticatory force
- RBM surface design for quick osseointegration
- Optimized shape and size of abutment enabling cutting-free prosthetic work
- Optimal design of body, thread, and drilling to enhance initial bonding and bone penetration
- Packing unit : MS Implant (Narrow ridge)
- Recommended torque : 30Ncm

### Impression Coping (Narrow ridge)



Code	MSPIC
------	-------

- Use for precise impression work
- In case of non-modification of abutments : after taking an impression using an impression cap, make the prosthesis after creating a model using an analog
- In case of modification of abutment height only: after taking an impression using an impression cap, create a model using an analog and make the prosthesis by modifying the model shape according to the modification of abutment
- Packing unit : Impression Coping

### Temporary Cap (Narrow ridge)



Code	MSPTC
------	-------

- Use for making temporary prosthesis
- One-touch locking design
- Packing unit : Temporary Cap (Narrow ridge)

### Lab Analog (Narrow ridge)



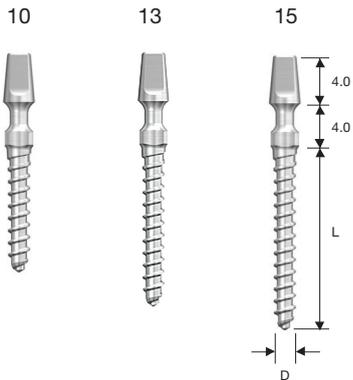
Code	MSPLA
------	-------

- Make an MS Implant (narrow ridge) abutment of the oral cavity onto a working model
- Packing unit : Lab Analog

# MS Implant(Provisional) Components

## MS Implant (Provisional)

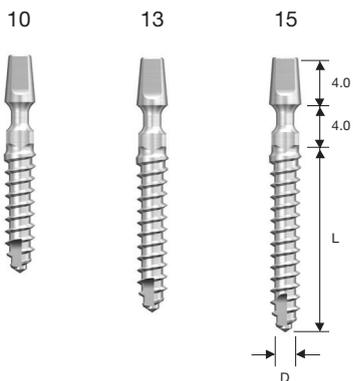
∅ 1.8



L	D	∅ 1.8
10		MST18104
13		MST18134
15		MST18154

- Recommended torque : 25Ncm

∅ 2.5



L	D	∅ 2.5
10		MST25104
13		MST25134
15		MST25154

- Implant to be used for the immediate mounting of temporary prosthesis for completely or partially edentulous patients
- Neck designed for path compensation and intensity support
- Simple system to make temporary prosthesis using titanium provisional caps and lab analogs
- Provisional cap facilitating prosthetic work on the chairside
- Rectangular structure to connect a driver to the bottom of the neck, thereby facilitating removal
- Optimized design of body, thread, and drilling to enhance initial bonding and bone penetration
- Packing unit : MS Implant (Provisional)
- Recommended torque : 30Ncm

**Provisional Cap** (Provisional)



Code	MSTPC
------	-------

- Use for making temporary prosthesis (Titanium)
- Packing unit : Provisional Cap

**Lab Analog** (Provisional)



Code	MSTLA
------	-------

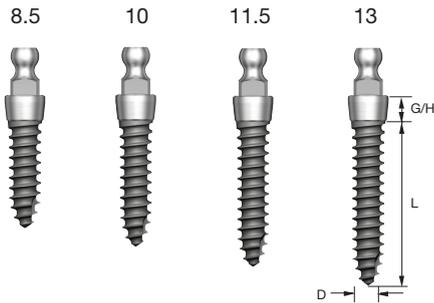
- Make an MS Implant (provisional) abutment of the oral cavity on a working model
- Packing unit : Lab Analog

# MS Implant(Denture) Components

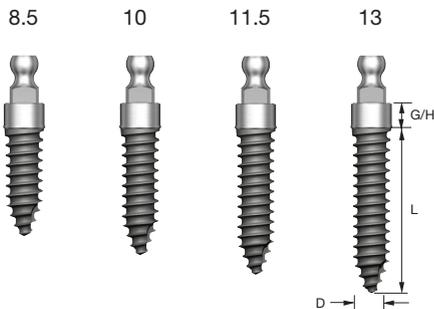
※ The following labeled dimension may differ from the actual dimension.

## MS SA Implant (Denture)

∅ 2.5



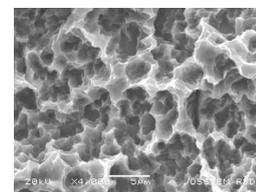
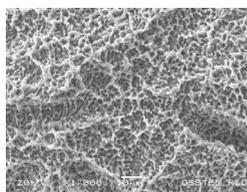
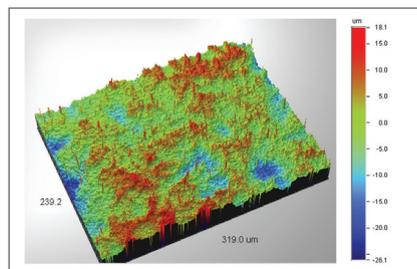
∅ 3.0



D		∅ 2.5	
L	G/H	2.0	4.0
8.5		MSD2508S20	MSD2508S40
10		MSD2510S20	MSD2510S40
11.5		MSD2511S20	MSD2511S40
13		MSD2513S20	MSD2513S40

D		∅ 3.0	
L	G/H	2.0	4.0
8.5		MSD3008S20	MSD3008S40
10		MSD3010S20	MSD3010S40
11.5		MSD3011S20	MSD3011S40
13		MSD3013S20	MSD3013S40

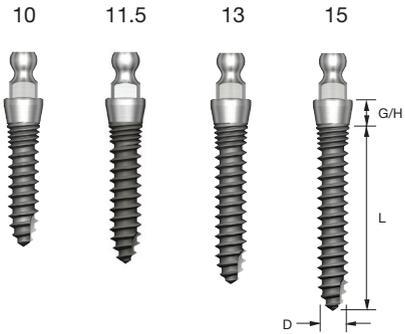
- Denture-type implant to be used in case of small bone width for edentulous patients or if regular implant is inappropriate
- SA : Sand blasted with alumina and Acid etched surface
  - Optimal morphology : Combination of crater and micro-pit
  - Optimal surface roughness : Ra 2.5~3.0 $\mu$ m
  - Early cell response : 20% faster than RBM
  - Early bone healing : 20% faster than RBM
  - Early loading possible after 6 weeks of placement.
  - Optimized design for SA surface
- Micro thread on top helps distribute masticatory pressure to the alveolar bone; more advantageous for immediate prosthetic mounting
- Easy and convenient denture work through the possible use of retainer and lab analogs
- Ball-type structure for the connection of the O-ring attachment
- Use by selecting 2/4mm depending on the gingival height
- Packing unit : MS SA Implant (Denture)
- Recommended torque : 30Ncm



※ The following labeled dimension may differ from the actual dimension.

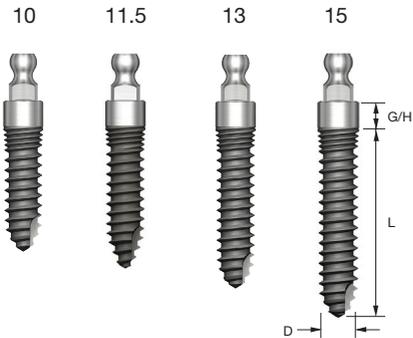
### MS Implant (Denture)

∅ 2.5



D		∅ 2.5	
L \ G/H	2.0	4.0	
10	MSD25102R	MSD25104R	
11.5	MSD25112R	MSD25114R	
13	MSD25132R	MSD25134R	
15	MSD25152R	MSD25154R	

∅ 3.0



D		∅ 3.0	
L \ G/H	2.0	4.0	
10	MSD30102R	MSD30104R	
11.5	MSD30112R	MSD30114R	
13	MSD30132R	MSD30134R	
15	MSD30152R	MSD30154R	

- Denture-type implant to be used in case of small bone width for edentulous patients or if regular implant is inappropriate
- Micro thread on top helps distribute masticatory pressure to the alveolar bone; more advantageous for immediate prosthetic mounting
- Easy and convenient denture work through the possible use of retainer and lab analogs
- Ball-type structure for the connection of the O-ring attachment
- Use by selecting 2/4mm depending on the gingival height
- Packing unit : MS Implant (Denture)
- Recommended torque : 30Ncm

### O-ring Retainer Cap Set



Name	Code
O-ring Retainer cap set	RCS01
O-ring set	OAON01S

- Use for making stud-type overdenture
- Packing unit : Retainer Cap+ O-ring

### Lab Analog (Denture)



Code	MSDLA

- Make an MS Implant (denture) abutment of the oral cavity on a working model
- Packing unit : Lab Analog

## HM KIT (MS KIT)



Code

HMISLK

### • HM Implant KIT

#### • KIT Components (basic)

5-drill set

- $\varnothing$  1.5mm Lance Drill
- $\varnothing$  1.8mm Twist Drill Long
- $\varnothing$  1.8mm Twist Drill Short
- $\varnothing$  2.3mm Twist Drill Long
- $\varnothing$  2.3mm Twist Drill Short

4-driver set

- Machine Driver Long (Narrow Ridge)
- Torque Driver Long (Narrow Ridge)
- Machine Driver Short (Denture)
- Torque Driver Short (Denture)

4-etc

- Depth Gauge
- Parallel Pin
- Driver Separator
- Ratchet Wrench

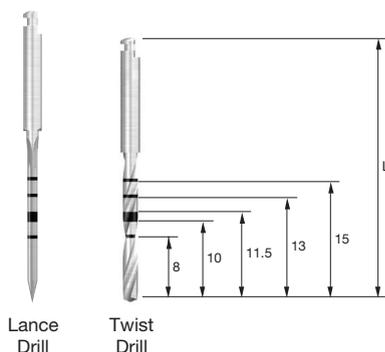
#### • KIT Components (optional)

- Machine Driver Short (Narrow Ridge)
- Torque Driver Short (Narrow Ridge)
- Torque Driver Long (Denture)

1-etc

- Torque Handle

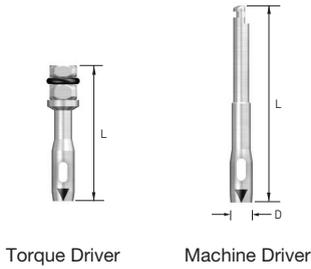
## Drill for MS Implant



Name	D	L	Code
$\varnothing$ 1.5mm Lance Drill	$\varnothing$ 1.5	35	OSLD15
$\varnothing$ 1.8mm Twist Drill Long	$\varnothing$ 1.8	42	OSMSD18L
$\varnothing$ 1.8mm Twist Drill Short	$\varnothing$ 1.8	32	OSMSD18S
$\varnothing$ 2.3mm Twist Drill Long	$\varnothing$ 2.3	42	OSMSD23L
$\varnothing$ 2.3mm Twist Drill Short	$\varnothing$ 2.3	32	OSMSD23S
$\varnothing$ 2.5mm Twist Drill Long	$\varnothing$ 2.5	42	OSMSD25L
$\varnothing$ 2.5mm Twist Drill Short	$\varnothing$ 2.5	32	OSMSD25S

- Same specification as implant length for easy identification ; laser marking on 8/10/11.5/13/15mm for lance drilling, drilling only the cortical bone is recommended; enables drilling up to the laser marking line depending on the surgeon's work environment

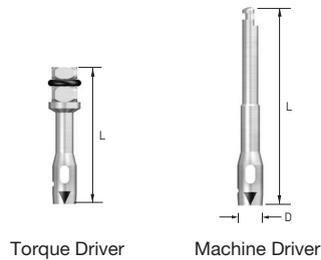
### Driver for Narrow Ridge & Provisional Type



Name	D	L	Code
Torque Driver (Short)	∅ 3.4	16.5	MSPTS
Torque Driver (Long)	∅ 3.4	21.5	MSPTL
Machine Driver (Short)	∅ 3.4	24.4	MSPMS
Machine Driver (Long)	∅ 3.4	29.4	MSPML

- Special-purpose driver for MS Implant (Narrow Ridge and Provisional)  
The triangle mark is used by aligning with the implant cross section

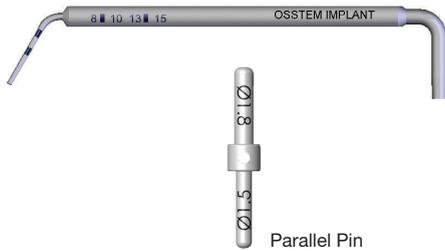
### Driver for Denture type



Name	D	L	Code
Torque Driver (Short)	∅ 3.8	13.5	MSDTS
Torque Driver (Long)	∅ 3.8	18.5	MSDTL
Machine Driver	∅ 3.8	21.4	MSDMS

- Special-purpose driver for MS Implant (denture)  
The triangle mark is used by aligning with the implant cross section

### Gauge for MS Implant



Name	Code
Depth Gauge	MSDG
Parallel Pin	MSPP

- Depth gauge  
Left : For depth checking upon drilling  
Right : Use for MS implant bending
- The parallel pin is used for path checking upon drilling

### Torque Handle



Code	MSTH
------	------

- Use for manual torque after connecting to the connected part of a torque driver

### Driver Separator



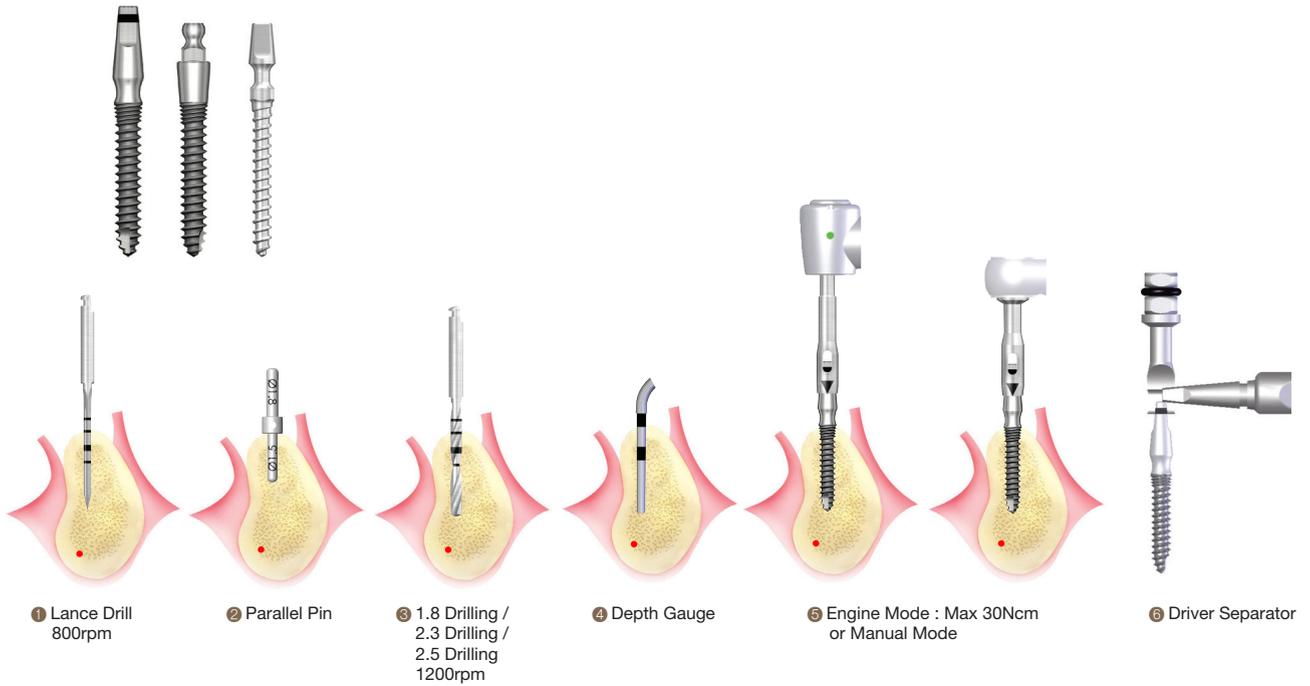
Code	MSDS
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- In case a driver is stuck during grafting, separate based on the lever principle (inserting a driver separator into the driver groove)

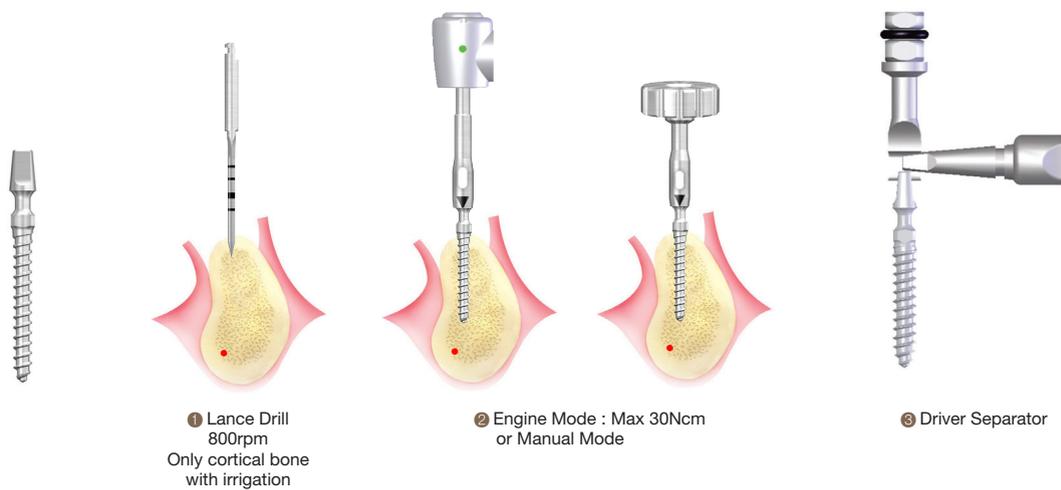
# Drilling Sequence for MS Implant

## MS Fixture

### ∅ 2.5mm / ∅ 3.0mm Fixture



### ∅ 1.8mm Fixture



**OSSTEM<sup>®</sup>**  
**IMPLANT**







**OSSTEM Germany GmbH**  
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Tel: +82 51 850 25 00  
Fax: +82 51 861 46 93