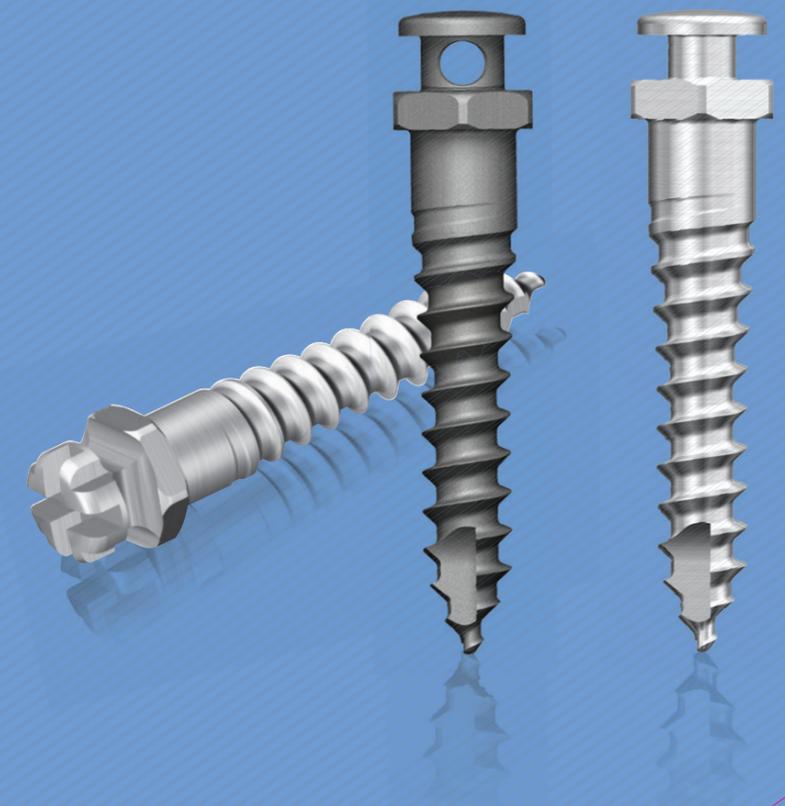


Orthodontic Screw

for Effective Orthodontic Treatment

Excellent Self Drilling & Self Tapping

High Initial Stability



Osstem Orthodontic Screw for Effective Orthodontic Treatment

Osstem Implant's orthodontic screws provide not only superior initial fixation with their excellent implant torque but also the most stability and effectiveness for orthodontic treatments with their high fracture Toughness.



High Initial Stability

Provides superior primary stability to the cortical bone with its tapered upper part



Excellent Self Drilling & Self Tapping

Applied with high, stable implant torque



High Fracture Toughness

Produced with high-strength titanium material



Various Screw Line Up

Enables use of three additional types for diverse orthodontics



Simple Head



Through Hole



Small Head



Bracket Head



Etching Surface

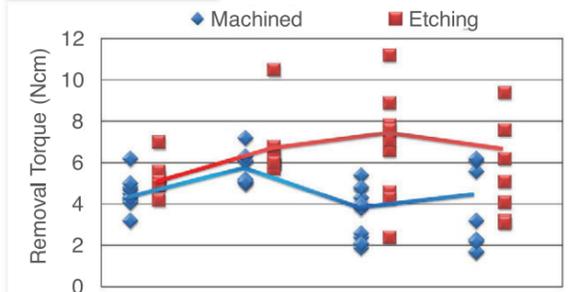
Initial stability is greatly secured with a 0.7mm pitch upper taper

With a low head height of 1.95mm, patients do not feel the implant

With an etching surface option, early failures are reduced

Made of high-strength titanium (Ti-6Al-4V), fractures are minimized

The result of machines vs. etching in animal tests



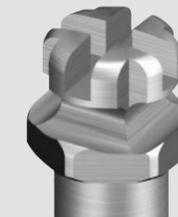
3 New type Launching

Small Head Type



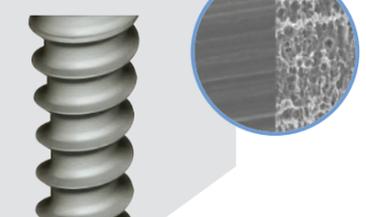
Now, coil spring can be used!
With a small, soft curved head, patients do not feel the implant.

Bracket Head Type



Ligation wire is usable!
Superior wire compatibility through cross-shaped slot and easy path adjustment.

Etching Surface Type



NO worries over screws failure!
With Low-SA surface treatment, 20% lower failures rate compared to existing products.

Specification

Orthodontic Screw & Tool Line up

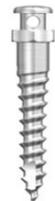
Simple Head



D	φ 1.4	φ 1.6	φ 1.8			
L	G/H	1.5	1.5	4.0	1.5	4.0
6	OSSH1406	OSSH1606	OSSH16064	OSSH1806	OSSH18064	
8	OSSH1408	OSSH1608		OSSH1808		
10		OSSH1610		OSSH1810		

- Low, Soft Head: Minimizes foreign body sensation
- Hex Design: Delivers stable torque
- Machined surface, G/H 4.0 is an item made to order

Through Hole



D	φ 1.4	φ 1.6	φ 1.8			
L	G/H	1.5	1.5	4.0	1.5	4.0
6	OSTH1406	OSTH1606	OSTH16064	OSTH1806	OSTH18064	
8	OSTH1408	OSTH1608		OSTH1808		
10		OSTH1610		OSTH1810		

- Low, Soft Head: Minimizes foreign body sensation
- Hole capable of connecting a wire (0.22") (Hole size: φ 0.8)
- Machined surface, G/H 4.0 is an item made to order

Small Head



D	φ 1.4	φ 1.6	φ 1.8	
L	G/H	1.5		
6	OSSH1406	OSSH1606	OSSH1806	
8	OSSH1408	OSSH1608	OSSH1808	
10		OSSH1610	OSSH1810	

- Small, low head design and size
- Optimized for use in Ni-Ti coil springs
- Head diameter: φ 1.48

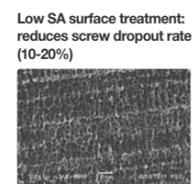
Bracket Head



D	φ 1.4	φ 1.6	φ 1.8	
L	G/H	1.5		
6	OSBH1406	OSBH1606	OSBH1806	
8	OSBH1408	OSBH1608	OSBH1808	
10		OSBH1610	OSBH1810	

- Superior compatibility with various wires
- Easy path adjustment through the cross wire slot
- Enables ligation of the ligature wire and O-ring
- Enables attachment of various components (power chain, arch wire, etc.)

Etching Surface



D	φ 1.6	
L	G/H	1.5
6	OSTH1606E	
8	OSTH1608E	
10	OSTH1610E	

- Same design as the through hole (Hole size: φ 0.8)
- Acid etching surface treatment: Gains superior initial stability
- Maintains insertion features at a level equal to machine types

Driver Handle



Code	TIDHC
------	-------

- Used when connecting to a hand driver and tightening a screw by hand

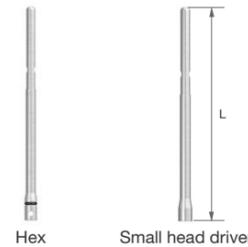
Universal Handle



Code	OUH
------	-----

- Used after being attached to driver tip, and enables easier procedures due to slippage-prevention treatment on the center of the handle

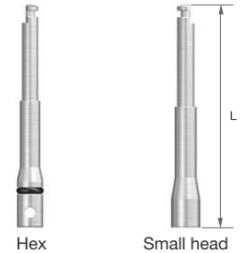
Driver Tip



Type	Hex		Small Head	
	Short	Long	Short	Long
L	48	70	44	66
Code	OSDTS	OSDT	OSSDTS	OSSDT

- Used during orthodontic screw procedures when connected to universal handle
- Includes two driver tips specialized for normal hex drivers and small heads
- Compatible with other companies' universal drivers (Company J, Company D, Company O)

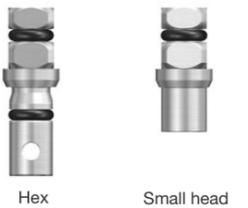
Machine Driver



Type	Hex		Small Head	
	Short	Long	Short	Long
L	23.4	33.4	21.4	31.4
Code	OSMDA	OSMDB	OSSMDA	OSSMDB

- Used during orthodontic screw procedures when attached to engine
- Includes two driver tips specialized for normal hex drivers and small heads

Hand Driver



Type	Hex	Small Head
Code	OSTDA	OSSTDA

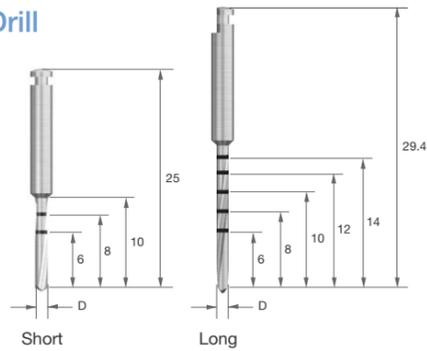
- Used during orthodontic screw procedures when connected to a driver handle and ratchet wrench
- Includes two driver tips specialized for normal hex drivers and small heads
- Hand driver specialized for small heads is optional (not included in KIT)



Specification

Orthodontic Screw & Tool Line up

Drill



D	ø 1.3	ø 1.5
Short	OSODR130S	OSODR150S
Long	OSODR130C	OSODR150C

- Used when connected to a hand-piece (engine)
- Laser marking: Marked as 6/8/10/12/14mm
- ø 1.3 drills - Used in procedures for ø 1.4, ø 1.6 screws
- ø 1.5 drills - Used in procedures for ø 1.8 screws
- Recommended drilling speed is below 800 rpm
- Implant insertion is recommended only after removal of cortical bone
However, when cortical bone is very thick, drilling may be to the same length as the screw

Hand Drill



D	ø 1.3
Code	OSHDR130

- Used when connected to universal handle
- Capable of removing only cortical bone
- Drilling depth: Up to 4mm
- Optional product (not included in KIT)

[Warning] Maintain drilling direction to avoid applying a curved loading

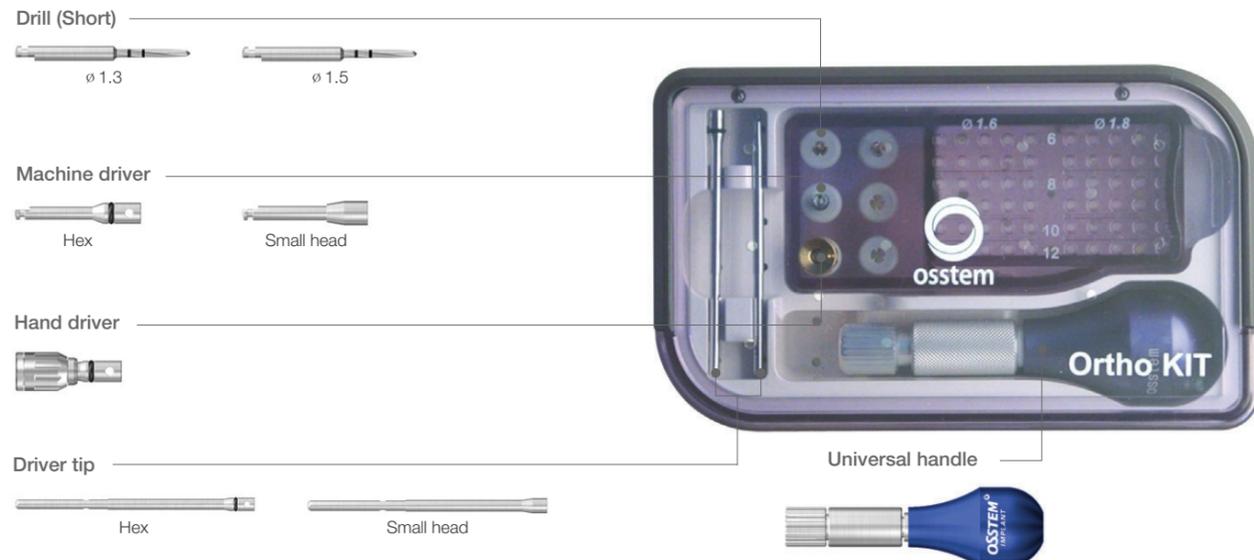
Driver Separator



Code	OSST75
------	--------

- After screw insertion, if the hex driver is not separated, then a driver separator can be inserted into a hole in the first part of the driver to use the lever principle to separate it
- Optional product (not included in KIT)

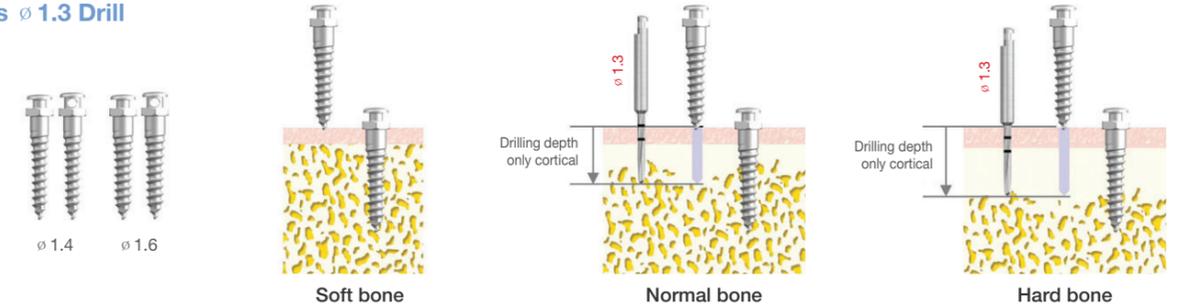
Orthodontic Screw KIT (OOKS)



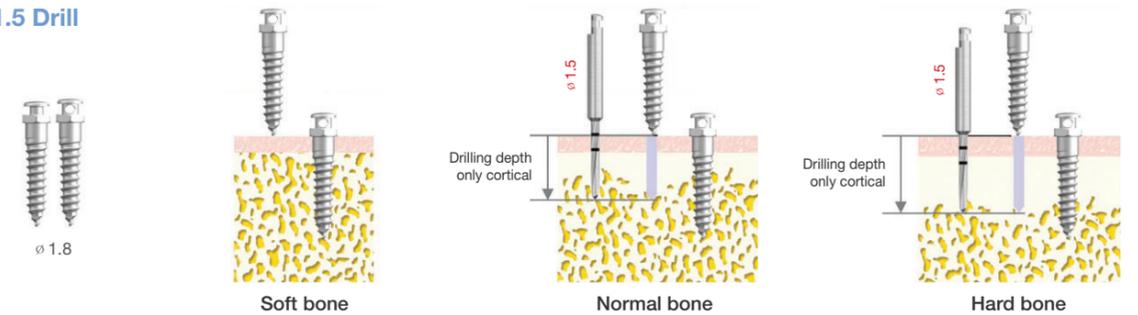
Direction

Orthodontic Screw User Guide

Uses ø 1.3 Drill

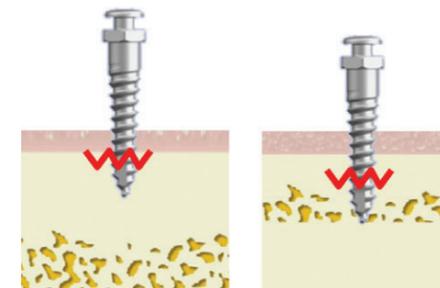


Uses ø 1.5 Drill



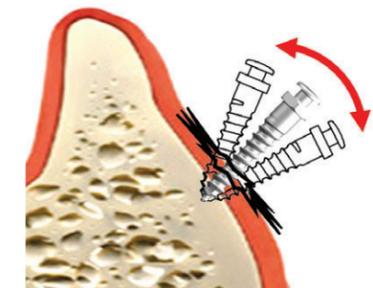
Osstem orthodontic screws are made of a titanium alloy (Ti-6Al-4V), so they have stronger material properties than ordinary implants but fracture is possible due to their very small diameter. In a regular operation process, fractures happen mostly due to two situations as follows.

1. Excessive insertion torque occurring in hard osseous tissue



- If the patient's osseous tissue is very hard or very hard osseous tissue is encountered during implant insertion, it is recommended to continue only after a pilot drill.

2. Lateral pressure when an excessive slope is formed during implant insertion (wobbling)



- During implant insertion, pay careful attention and insert slowly so that the planned path is followed.
- When an engine is used during implant insertion, the procedure must be performed at a speed of 25 rpm or lower.

* Drilling and insertion torque settings for orthodontic screw when engine is used

Diameter	Drilling RPM	Insertion torque settings	Insertion RPM
ø 1.4	800RPM	15Ncm	20~30RPM
ø 1.6		20Ncm	
ø 1.8		30Ncm	

