



**Educational  
System**



**Kyung's Indirect  
Bracket  
Positioner**



**Orthodontic  
Accessories**

**Bracket  
System**



# Dentos Inc.

For better orthodontic solutions

41, Seongseo-ro 68-gil, Dalseo-gu, Daegu, Korea 704-900  
telephone. +82-(0)53-424-5947, +82-(0)53-592-5908  
fax. +82-(0)53-592-5909

E-mail. [webmaster@dentos.co.kr](mailto:webmaster@dentos.co.kr)  
[www.dentos.co.kr](http://www.dentos.co.kr)

*Dentos*



Kyung's Indirect  
Bracket  
Positioner



Bracket  
System

Lingual  
Orthodontic  
System



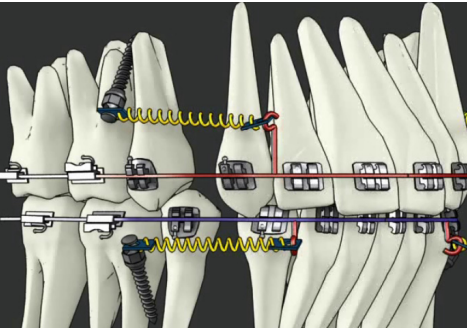
Orthodontic  
Accessories

Educational  
System



# Orthodontic Microimplant (AbsoAnchor<sup>®</sup>) System

Microimplant  
- 9th ed (January. 2014)



## Shift of Paradigms in Orthodontics

Microimplant (AbsoAnchor®) for orthodontic anchorage.

AbsoAnchor microimplant is a titanium screw for orthodontic anchorage that is used by implanting on maxillary and mandibular bone, and acts as a fixing agent, providing a fixed anchorage point for attachment of orthodontic appliances to facilitate the orthodontic movement of teeth.

## The 1st Pioneers in Microimplant Anchorage (MIA)



### Dr. Seong-Min Bae : DDS, MS, PhD

1984~90 : DDS, College of Dentistry, Kyungpook National University, Daegu, Korea  
1990~93 : Intern & Orthodontic residency, Infirmary Hospital, Kyungpook Natl. Univ  
1997~99 : Full time instructor, Dept. of Dentistry, Catholic Univ., Daegu, Korea  
2000.2~present : Visiting Assistant Professor, Dept. Of Orthodontics, School of Dentistry, Kyungpook Natl. Univ.  
Holding private clinic.

Contact : anchor94@chol.com Tel : +82-(0)53-252-8898 CP : +82-(0)10-3803-8263 Fax : +82-(0)53-431-7799



### Prof. Hyo-Sang Park, DDS, MS, PhD

Prof. Hyo-Sang Park, DDS, MS, PhD  
1982~88 : DDS, Dental college, Kyungpook Natl. Univ., Daegu, Korea  
1988~91 : Intern & Orthodontic Residency, Infirmary Hospital, Kyungpook Natl. Univ.  
1994~2003 : Full time instructor, Associate professor, Dept. of Ortho. and Dentistry, Medical college, Keimyung.Univ., Daegu, Korea.  
2001.11~2006.10 : Visiting Associate Professor, Dept. of Ortho. Univ. of Oklahoma, Oklahoma, USA  
2003.3~present : Professor, Department of Orthodontics. School of Dentistry, Kyungpook Natl. Univ.

Contact : parkhs@knu.ac.kr Tel : +82-(0)53-200-7373 CP : +82-(0)10-3080-5948 Fax : +82-(0)53-421-4925



### Prof. Hee-Moon Kyung, DDS, MS, PhD

1974~1980 : DDS, College of Dentistry, Kyungpook National University, Daegu, Korea  
1980~1983 : Intern & Orthodontic residency, Infirmary Hospital, Kyungpook Natl. Univ.  
1986~Present : Full time instructor, Professor, Dept. of Ortho. School of Dent., Kyungpook Natl. Univ.  
1991~92 : Visiting Professor, Dept. of Ortho. Faculty of Dent., Osaka Univ., Japan  
1996~97 : Visiting & Clinical Associate Professor, Dept. of Ortho., Faculty of Dent., The Univ. of British Columbia, Canada  
2001.1~2003.1 : Dean, College of Dent., Kyungpook Natl. Univ.  
2007.11~2010.04 : President, Korean Association of Lingual Orthodontists  
2010.04~present : Active member of Angle Society (East Branch)  
2012.04~present : Vice president of Korean Association of Orthodontists  
2015~2017 : President-elect (2015~2017) of World Society of Lingual Orthodontics

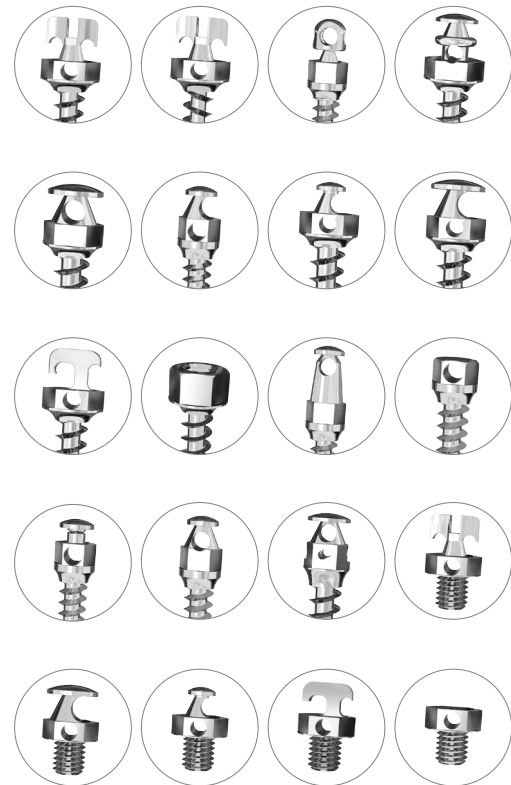
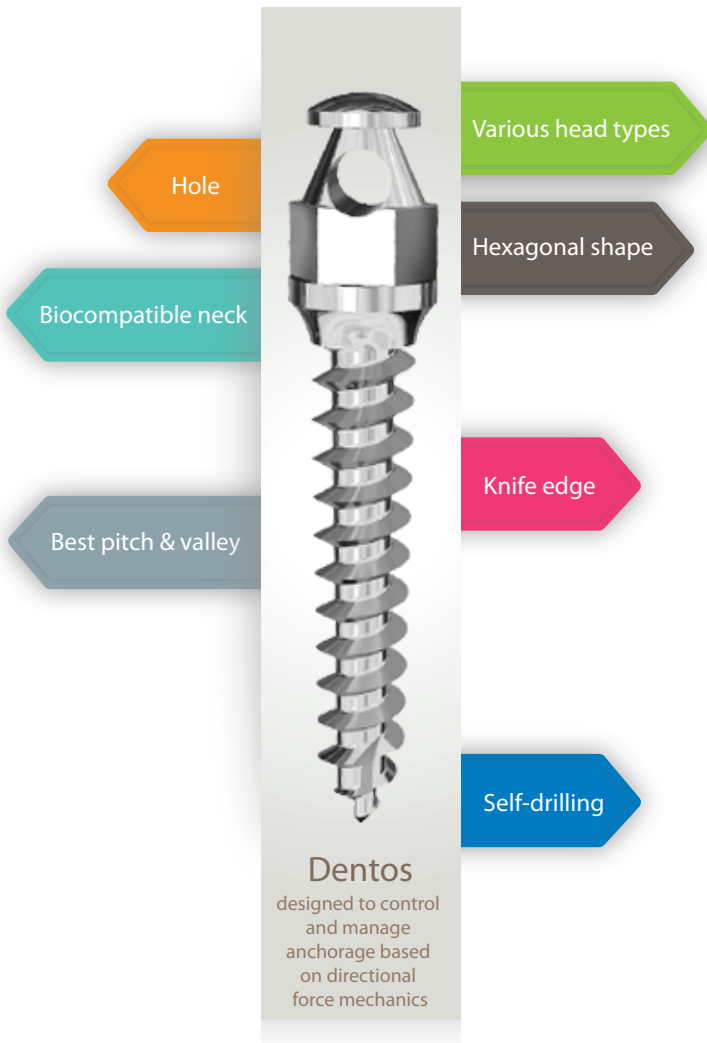
Contact : hmkyung@knu.ac.kr Tel : +82-(0)53-420-5947 CP : +82-(0)10-2504-7996 Fax : +82-(0)53-421-7607



### Prof. Jae-Hyun Sung, DDS, MS, PhD

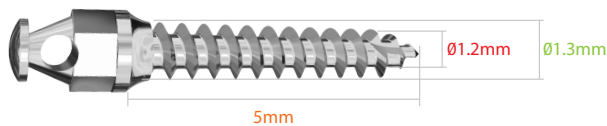
1972 : Seoul National University, DDS.  
1973~80 : KyungHee University, MSD, Ph.D  
1985~6 : Visiting Scholar, University of Michigan USA  
1978~2004, Professor, Department of Orthodontics, Dean, Dental school Kyungpook National University(KPNU)  
1998-2000: president of Korean association of Orthodontists.  
2004~ Professor Emeritus KPNU and Private practice  
2010~14 : president of Korean Orthodontic Research Institute Inc.

Contact : jhsung47@gmail.com, jhsung@knu.ac.kr Tel : +82-(0)53-752-2455 CP : +82-(0)10-4507-7227 Fax : +82-(0)53-752-2451

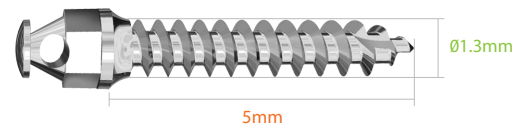


## Nomenclature of AbsoAnchor® Microimplant codes

Tapered type - **SH 1312 - 05**



Cylinder type - **SH 13 - 05**



Raw Material : Titanium Alloy (Ti6Al4Va)

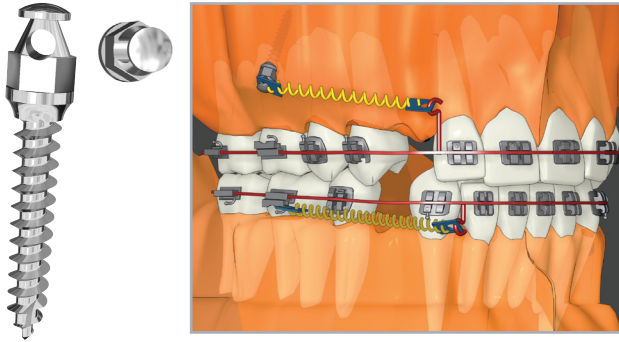
## Variable Clinical applications include

1. Six anterior en masse retraction
2. Molar intrusion, extrusion, distalization, protraction & uprighting
3. Whole maxillary and mandibular dentition retraction
4. Midline correction
5. Anterior intrusion, extrusion and torque control
6. Intermaxillary elastics
7. Intermaxillary fixation during orthognathic surgery
8. Combination use of Transpalatal Arch
9. Perfect for lingual orthodontic treatment
10. Various direct and indirect skeletal anchorage



## Types of Absoanchor Microimplant (Non-Sterilized and **Sterilized**)

Several types of Absoanchor microimplants are available for different tasks and sites.



### Absoanchor **Small Head(SH) Type**

**Recommended Sites**  
Maxillary and mandibular attached gingiva including the palate.

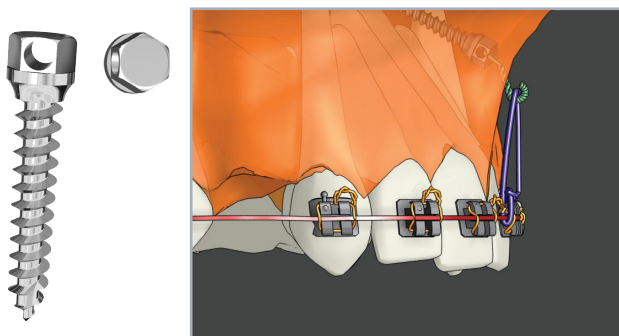
**Recommended Elastomers**  
Nickel titanium coil spring, elastomeric thread, etc.



### 01. Small Head Type

\* Commonly used sizes

Series	Diameter (Ø)	Code					
		5mm	6mm	7mm	8mm	10mm	12mm
13 Series	Ø1.3	SH 1312-05	SH 1312-06	SH 1312-07	SH 1312-08	SH 1312-10	SH 1312-12
14 Series	Ø1.4	SH 1413-05	SH 1413-06	SH 1413-07	SH 1413-08	SH 1413-10	SH 1413-12
15 Series	Ø1.5	SH 1514-05	SH 1514-06	SH 1514-07	SH 1514-08	SH 1514-10	SH 1514-12
16 Series	Ø1.6	SH 1615-05	SH 1615-06	SH 1615-07	SH 1615-08	SH 1615-10	SH 1615-12
20 Series	Ø2.0	SH 2018-05	SH 2018-06	SH 2018-07	SH 2018-08	SH 2018-10	SH 2018-12
13 Series	Ø1.3	SH 13-05	SH 13-06	SH 13-07	SH 13-08	SH 13-10	SH 13-12
14 Series	Ø1.4	SH 14-05	SH 14-06	SH 14-07	SH 14-08	SH 14-10	SH 14-12



### Absoanchor **No Head(NH) Type**

**Recommended Sites**  
Maxillary and mandibular movable soft tissue.

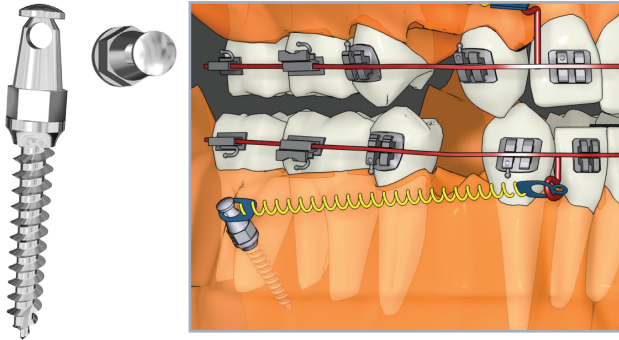
**Recommended Elastomers**  
Elastomeric thread with ligature wire hook, etc.



### 02. No Head Type

\* Commonly used sizes

Series	Diameter (Ø)	Code		
		5mm	6mm	7mm
13 Series	Ø1.3	NH 1312-05	NH 1312-06	NH 1312-07
14 Series	Ø1.4	NH 1413-05	NH 1413-06	NH 1413-07



### Absoanchor Long Head(LH) Type

**Recommended Sites**  
Border area between mandibular attached gingiva and movable soft tissue.

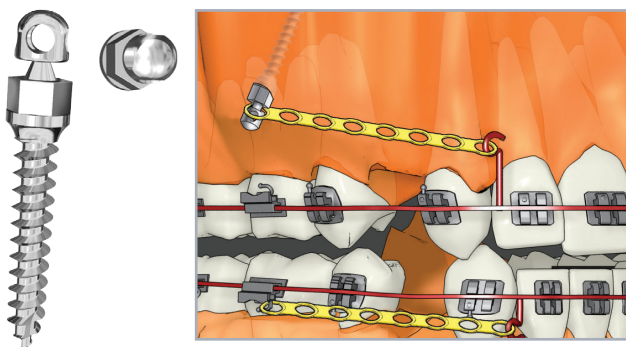
**Recommended Elastomers**  
Nickel titanium coil spring, elastomeric thread, etc.



## 03. Long Head Type

\* Commonly used sizes

Series	Diameter (Ø)	Code					
		5mm	6mm	7mm	8mm	10mm	12mm
13 Series	Ø1.3	LH 13-05	LH 13-06	LH 13-07			
14 Series	Ø1.4	LH 1413-05	LH 1413-06	LH 1413-07	LH 1413-08	LH 1413-10	LH 1413-12
15 Series	Ø1.5	LH 1514-05	LH 1514-06	LH 1514-07	LH 1514-08	LH 1514-10	LH 1514-12
16 Series	Ø1.6	LH 1615-05	LH 1615-06	LH 1615-07	LH 1615-08	LH 1615-10	LH 1615-12



### Absoanchor Circle Head(CH) Type

**Recommended Sites**  
Maxillary and mandibular attached gingiva including palate.

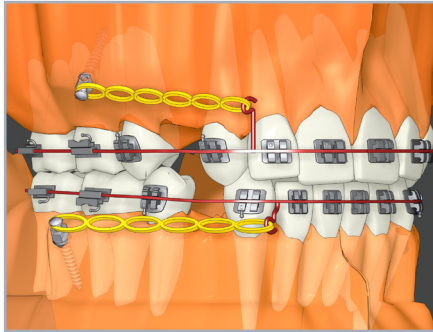
**Recommended Elastomers**  
Power chains, elastomeric thread, nickel titanium coil spring, etc.



## 04. Circle Head Type

\* Commonly used sizes

Series	Diameter (Ø)	Code				
		6mm	7mm	8mm	10mm	12mm
13 Series	Ø1.3	CH 1312-06	CH 1312-07	CH 1312-08	CH 1312-10	CH 1312-12
14 Series	Ø1.4	CH 1413-06	CH 1413-07	CH 1413-08	CH 1413-10	CH 1413-12
15 Series	Ø1.5	CH 1514-06	CH 1514-07	CH 1514-08	CH 1514-10	CH 1514-12
16 Series	Ø1.6	CH 1615-06	CH 1615-07	CH 1615-08	CH 1615-10	CH 1615-12



### Absoanchor Power Head (PH) Type

**Recommended Sites**  
Maxillary and mandibular attached gingiva including the palate.

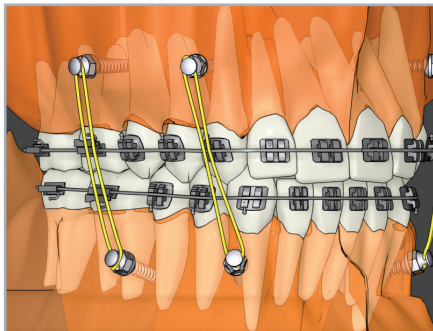
**Recommended Elastomers**  
Power chain,  
Nickel titanium coil spring, etc.



## 05. Power Head Type

\* Commonly used sizes

Series	Diameter (Ø)	Code					
		5mm	6mm	7mm	8mm	10mm	12mm
13 Series	Ø1.3	PH 1312-05	PH 1312-06	PH 1312-07	PH 1312-08	PH 1312-10	PH 1312-12
14 Series	Ø1.4	PH 1413-05	PH 1413-06	PH 1413-07	PH 1413-08	PH 1413-10	PH 1413-12
15 Series	Ø1.5	PH 1514-05	PH 1514-06	PH 1514-07	PH 1514-08	PH 1514-10	PH 1514-12
16 Series	Ø1.6	PH 1615-05	PH 1615-06	PH 1615-07	PH 1615-08	PH 1615-10	PH 1615-12



### Absoanchor Fixation Head(FH) Type

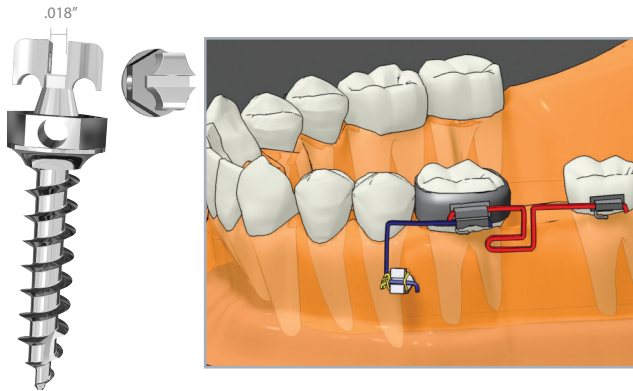
**Recommended Sites**  
Maxillary and mandibular buccal area for intermaxillary fixation during orthognathic surgery. Also, palate including mid-palatal suture area.

**Recommended Elastomers**  
Ligature wire and/or rubber band for intermaxillary fixation. Also, power chains, elastomeric thread and nickel titanium coil spring, etc.

## 06. Fixation Head Type

\* Commonly used sizes

Series	Diameter (Ø)	Code				
		6mm	7mm	8mm	9mm	10mm
17 Series	Ø1.7	FH 1716-06	FH 1716-07	FH 1716-08	FH 1716-09	FH 1716-10
18 Series	Ø1.8	FH 1817-06	FH 1817-07	FH 1817-08	FH 1817-09	FH 1817-10



Absoanchor **Bracket Head (BH) Type**  
- Right Handed Screws

**Recommended Sites**

Maxillary and mandibular attached gingiva including palate. Also midpalatal suture area including para-midpalatal suture area.

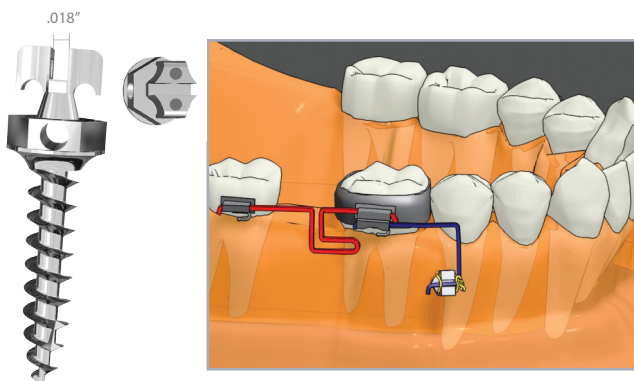
**Recommended Elastomers**

Power chains, elastomeric thread and nickel titanium coil spring, etc. Archwire insertion is possible.

**07. Bracket Head (Right handed screw) Type**

\* Commonly used sizes

Series	Diameter (Ø)	Code					
		5mm	6mm	7mm	8mm	10mm	12mm
14 Series	Ø1.4		BH 1413-06	BH 1413-07	BH 1413-08	BH 1413-10	BH 1413-12
15 Series	Ø1.5		BH 1514-06	BH 1514-07	BH 1514-08	BH 1514-10	BH 1514-12
16 Series	Ø1.6		BH 1615-06	BH 1615-07	BH 1615-08	BH 1615-10	BH 1615-12
17 Series	Ø1.7		BH 1716-06	BH 1716-07	BH 1716-08	BH 1716-10	BH 1716-12
18 Series	Ø1.8		BH 1817-06	BH 1817-07	BH 1817-08	BH 1817-10	BH 1817-12
27 Series	Ø2.7	BH 2722-05	BH 2722-06	BH 2722-07			



Absoanchor **Bracket Head (BH-L) Type**  
- Left Handed Screws

**Recommended Sites**

Maxillary and mandibular attached gingiva including palate. Also midpalatal suture area including para-midpalatal suture area.

**Recommended Elastomers**

Power chains, elastomeric thread and nickel titanium coil spring, etc. Archwire insertion is possible.

**08. Bracket Head (Left handed screw) Type**

\* Commonly used sizes

Series	Diameter (Ø)	Code					
		5mm	6mm	7mm	8mm	10mm	12mm
14 Series	Ø1.4		BH 1413-06-L	BH 1413-07-L	BH 1413-08-L	BH 1413-10-L	BH 1413-12-L
15 Series	Ø1.5		BH 1514-06-L	BH 1514-07-L	BH 1514-08-L	BH 1514-10-L	BH 1514-12-L
16 Series	Ø1.6		BH 1615-06-L	BH 1615-07-L	BH 1615-08-L	BH 1615-10-L	BH 1615-12-L
17 Series	Ø1.7		BH 1716-06-L	BH 1716-07-L	BH 1716-08-L	BH 1716-10-L	BH 1716-12-L
18 Series	Ø1.8		BH 1817-06-L	BH 1817-07-L	BH 1817-08-L	BH 1817-10-L	BH 1817-12-L
27 Series	Ø2.7	BH 2722-05-L	BH 2722-06-L	BH 2722-07-L			

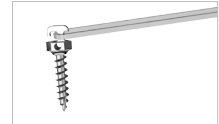




### Absoanchor Hook Head(HH) Type

**Recommended Sites**  
Maxillary and mandibular attached gingiva including palate.

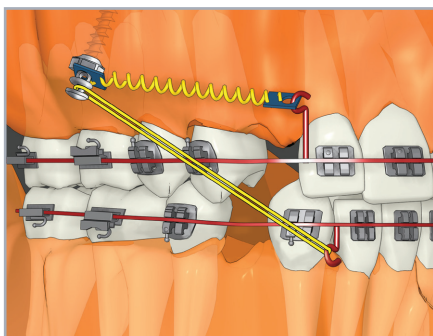
**Recommended Elastomers**  
Power chains, elastomeric thread, nickel titanium coil spring, etc.



## 09. Hook Head Type

\* Commonly used sizes

Series	Diameter (Ø)	Code					
		5mm	6mm	7mm	8mm	10mm	12mm
15 Series	Ø1.5	HH1514-05	HH1514-06	HH1514-07	HH1514-08	HH1514-10	HH1514-12
16 Series	Ø1.6	HH1615-05	HH1615-06	HH1615-07	HH1615-08	HH1615-10	HH1615-12
17 Series	Ø1.7	HH1716-05	HH1716-06	HH1716-07	HH1716-08	HH1716-10	HH1716-12
18 Series	Ø1.8	HH1817-05	HH1817-06	HH1817-07	HH1817-08	HH1817-10	HH1817-12
20 Series	Ø2.0	HH2018-05	HH2018-06	HH2018-07	HH2018-08	HH2018-10	HH2018-12



### Absoanchor Double Head(DH) Type

**Recommended Sites**  
Maxillary buccal attached gingiva.

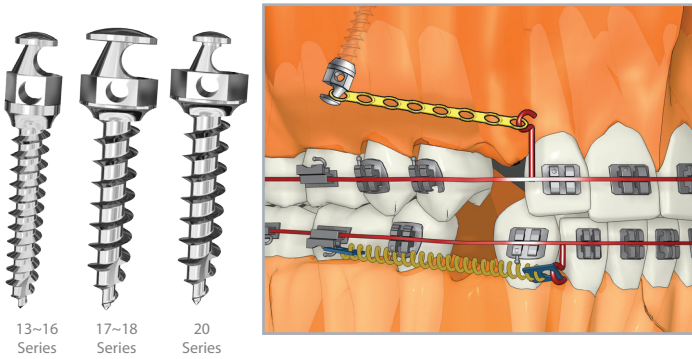
**Recommended Elastomers**  
Intermaxillary elastic with nickel titanium coil spring, power chain and elastic thread, etc.



## 10. Double Head Type

\* Commonly used sizes

Series	Diameter (Ø)	Code					
		5mm	6mm	7mm	8mm	10mm	12mm
15 Series	Ø1.5	DH1514-05	DH1514-06	DH1514-07	DH1514-08	DH1514-10	DH1514-12
16 Series	Ø1.6	DH1615-05	DH1615-06	DH1615-07	DH1615-08	DH1615-10	DH1615-12
17 Series	Ø1.7	DH1716-05	DH1716-06	DH1716-07	DH1716-08	DH1716-10	DH1716-12
18 Series	Ø1.8	DH1817-05	DH1817-06	DH1817-07	DH1817-08	DH1817-10	DH1817-12
20 Series	Ø2.0	DH2018-05	DH2018-06	DH2018-07	DH2018-08	DH2018-10	DH2018-12



### Absoanchor Golf Head(GH) Type

**Recommended Sites**  
Maxillary and mandibular attached gingiva including the palate.



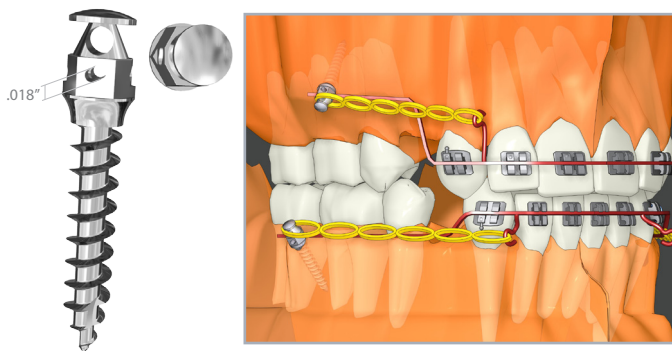
**Recommended Elastomers**  
Power chain, nickel titanium coil spring, elastic thread, etc.



## 11. Golf Head Type

\* Commonly used sizes

Series	Diameter (Ø)	Code					
		5mm	6mm	7mm	8mm	10mm	12mm
13 Series	Ø1.3	GH 1312-05	GH 1312-06	GH 1312-07	GH 1312-08	GH 1312-10	GH 1312-12
14 Series	Ø1.4	GH 1413-05	GH 1413-06	GH 1413-07	GH 1413-08	GH 1413-10	GH 1413-12
15 Series	Ø1.5	GH 1514-05	GH 1514-06	GH 1514-07	GH 1514-08	GH 1514-10	GH 1514-12
16 Series	Ø1.6	GH 1615-05	GH 1615-06	GH 1615-07	GH 1615-08	GH 1615-10	GH 1615-12
17 Series	Ø1.7	GH 1716-05	GH 1716-06	GH 1716-07	GH 1716-08	GH 1716-10	GH 1716-12
18 Series	Ø1.8	GH 1817-05	GH 1817-06	GH 1817-07	GH 1817-08	GH 1817-10	GH 1817-12
20 Series	Ø2.0	GH 2018-05	GH 2018-06	GH 2018-07	GH 2018-08	GH 2018-10	GH 2018-12



### Absoanchor Tube Head (TH) Type

**Recommended Sites**  
Maxillary and mandibular attached gingiva including the palate.  
Archwire insertion is possible.



**Recommended Elastomers**  
Nickel titanium coil spring, Elastomeric thread, etc.



## 12. Tube Head Type

\* Commonly used sizes

Series	Diameter (Ø)	Code							
		5mm	6mm	7mm	8mm	9mm	10mm	11mm	12mm
18 Series	Ø1.8	TH 1817-05	TH 1817-06	TH 1817-07	TH 1817-08	TH 1817-09	TH 1817-10	TH 1817-11	TH 1817-12
20 Series	Ø2.0	TH 2018-05	TH 2018-06	TH 2018-07	TH 2018-08	TH 2018-09	TH 2018-10	TH 2018-11	TH 2018-12

**Lower Part**



Absoanchor **Joint Head(JH) Type**

**Recommended Sites**

Maxillary and mandibular attached gingiva including the palate.

**Recommended Elastomers**

Depends on the upper part.  
Non-invasive mini-plate.

**13. Joint Head Type - Lower**

\* Commonly used sizes

Series	Diameter (Ø)	Code						
		5mm	6mm	7mm	8mm	10mm	12mm	
Lower Type	16 Series	Ø1.6	JL 1615-05	JL 1615-06	JL 1615-07	JL 1615-08	JL 1615-10	JL 1615-12
	17 Series	Ø1.7	JL 1716-05	JL 1716-06	JL 1716-07	JL 1716-08	JL 1716-10	JL 1716-12
	18 Series	Ø1.8	JL 1817-05	JL 1817-06	JL 1817-07	JL 1817-08	JL 1817-10	JL 1817-12
	20 Series	Ø2.0	JL 2018-05	JL 2018-06	JL 2018-07	JL 2018-08	JL 2018-10	JL 2018-12

**14. Joint Head Type - Upper**

Series	Diameter (Ø)	Code					
		17mm					
Upper Type	16 Series	Ø1.6	JBH 16-17	JHH 16-17	JFH 16-17	JGH 16-17	JNH 16-17

**Upper Part**



Absoanchor **Joint Bracket Head(JBH) Type**



Absoanchor **Joint Hook Head(JHH) Type**



Absoanchor **Joint Fixation Head(JFH) Type**



Absoanchor **Joint Golf Head(JGH) Type**



Absoanchor **Joint No Head(JNH) Type**



## Long Hand Driver

**LHD-B**

TWO piece type



## Driver Tip

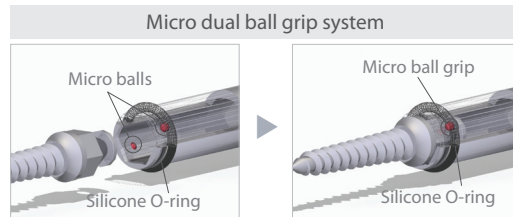
**DT-S**

use  
SH, NH, LH, CH, PH  
GH 13 Series, GH 14 Series  
GH 15 Series, GH 16 Series



**DT-L**

use  
FH, BH, HH, DH, JH, TH  
GH 17 Series, GH 18 Series, GH 20 Series, SH 20 Series



## New Long Hand Driver

**NLHD**



## Driver Tip

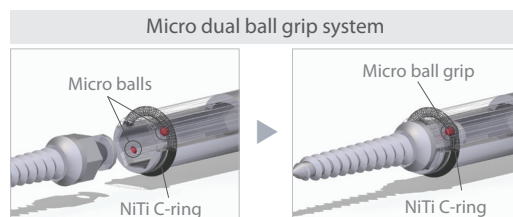
**ST-S**

use  
SH, NH, LH, CH, PH  
GH 13 Series, GH 14 Series  
GH 15 Series, GH 16 Series



**ST-L**

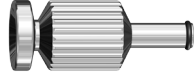
use  
FH, BH, HH, DH, JH, TH  
GH 17 Series, GH 18 Series, GH 20 Series, SH 20 Series





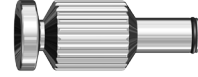
## Short Hand Driver

### SHD-S

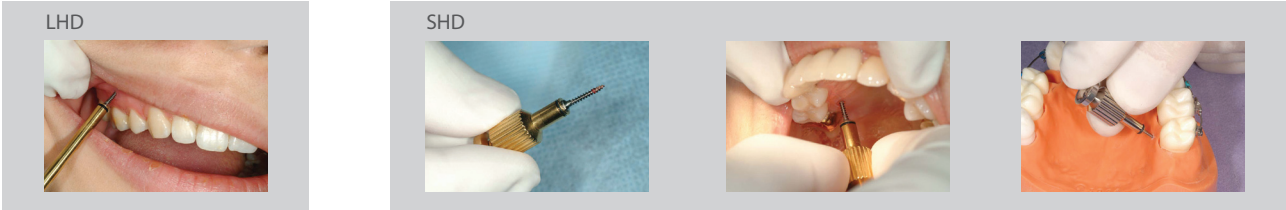


use  
SH, NH, LH, CH, PH  
GH 13 Series, GH 14 Series, GH 15 Series, GH 16 Series

### SHD-L

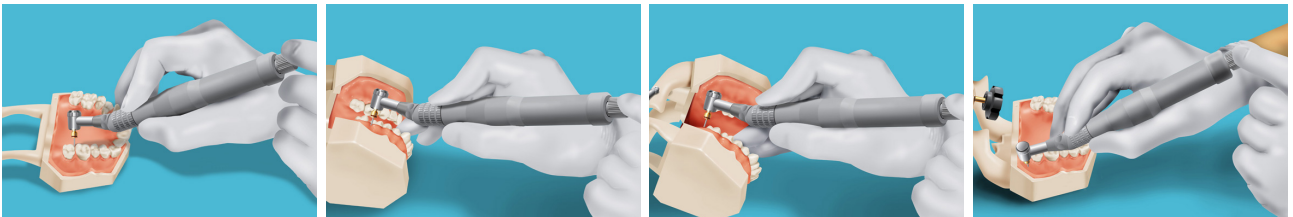


use  
FH, BH, HH, DH, JH, TH  
GH 17 Series, GH 18 Series, GH 20 Series, SH 20 Series



## Hand Contraangle Driver

### HCD



1. Hand Contraangle Driver(HCD) is designed to place Absoanchor microimplant using hands without low speed motor.
2. Any kind of common (1:1) low speed contraangle handpiece(CH) can be attached to the HCD. Various size of Engine Driver(ED) should be inserted into the contraangle handpiece.
3. HCD with contraangle handpiece is easy to access on the limited sites which are difficult to access with straight long and short hand driver.
4. For examples, retromolar area, tuberosity, palate, maxillary and mandibular buccal posterior area are easy to access for removal as well as driving.
5. When we use Hand Contraangle Driver, the operator can feel the resistance easily during driving and removal of microimplant compare to electric motor driving.

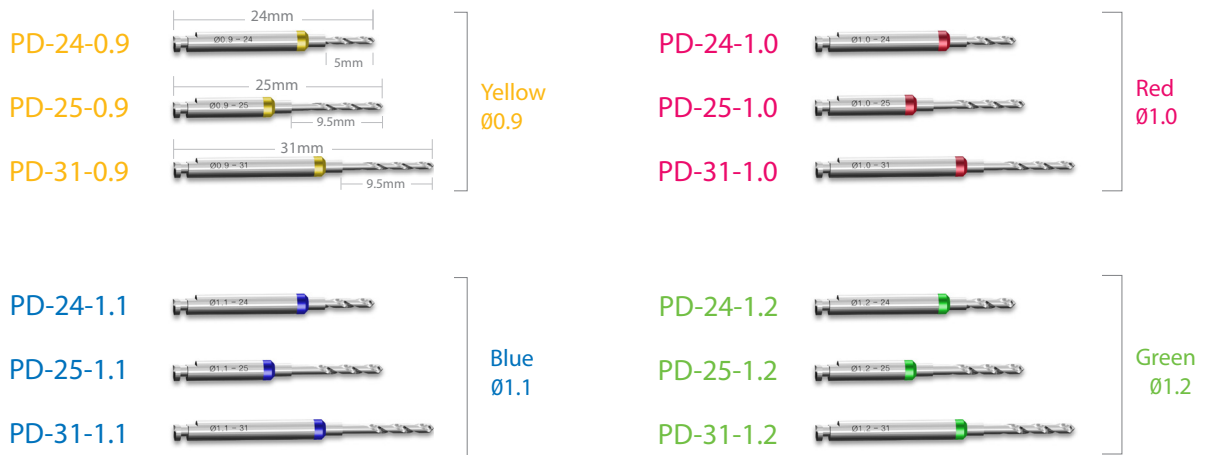
## Engine Driver



use  
SH, NH, LH, CH, PH  
GH 13 Series, GH 14 Series, GH 15 Series, GH 16 Series

use  
FH, BH, HH, DH, JH, TH  
GH 17 Series, GH 18 Series, GH 20 Series, SH 20 Series

## Pilot Drill



0.2mm-0.3mm smaller Pilot Drill than Microimplant diameter is recommended.

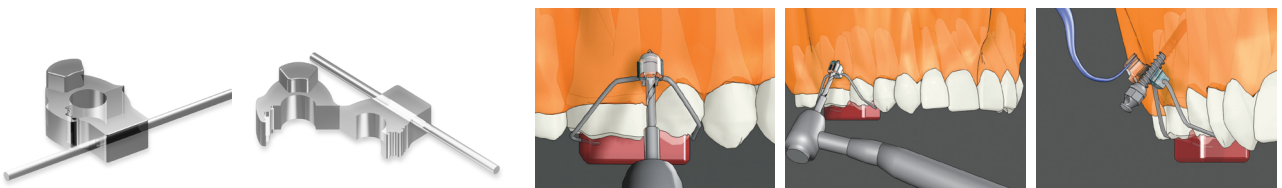
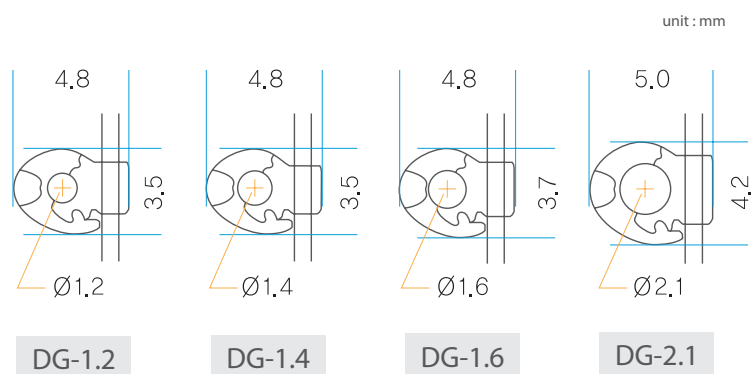
Ex) SH1312-07 → PD-25-0.9, SH1413-06 → PD-25-1.0

Recommended depth of drilling is length of Microimplant to be placed.

24mm is very useful to use on the buccal area.

25mm & 31mm are designed for palate.

## Drill Guide



## Sample Model



### Components of a sample model

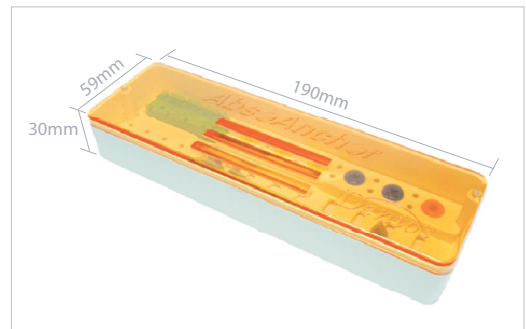
- Typodont 1ea
- Labial Brackets 1 set
- Micro-Implants
- Nickel titanium Closed Coil Spring
- Variable Crimpable Hook
- Elastomeric Threads
- Power Chain



## Regular Case



## Mini Case



### Regular case with Mini case



## Kinds of Start Kit

You can choose specific size of the pilot drills & microimplants what you want.

### Start Kit

#### Components

1. NLHD+ST-S : 1ea
2. HCD : 1ea
3. ED19-S : 1ea
4. PD-25-1.0 : 1ea
5. PD-31-1.0 : 1ea
6. Microimplants : 6 pkg  
(SH1312-06, 07, 08 & SH1413-06, 07, 08)

#### Free

7. Regular Case : 1ea
8. Brochure & Guide-CD



### Mini Kit

#### Components

1. NLHD+ST-S : 1ea
2. SHD-S : 1ea
3. PD-25-1.0 : 1ea
4. Microimplants : 4 pkg (SH1312-07, 08 & SH1413-06, 07)

#### Free

5. Mini Case : 1ea
6. Brochure & Guide-CD



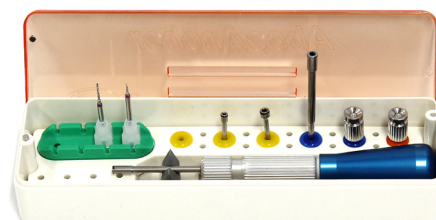
### Instrument Kit

#### Components

1. NLHD+ST-S : 1ea
2. ST-L : 1ea
3. SHD-S : 1ea
4. SHD-L : 1ea
5. ED19-S : 1ea
6. ED19-L : 1ea
7. PD-24-1.0 : 1ea
8. PD-25-1.0 : 1ea

#### Free

9. Mini case : 1ea
10. Brochure & Guide-CD







# Cleaning and Sterilization

## 1. Conventional cleaning

All the Absoanchor instruments must be cleaned thoroughly according to the cleaning material manufacturer's instructions just after disinfection. This will prevent any deposits from drying on the surface of the instruments which will make cleaning even more difficult. In order to avoid corrosion and discoloration, please follow the cleaning material manufacturer's instructions carefully regarding concentration, duration and temperature.

In general the following points should be observed :

- 1) Concentration : the concentrate must be entirely dissolved before the instruments are added.
- 2) Duration : never overnight, never over the weekend
- 3) Temperature : maximum 25°C/77°F

Any deposits, soiling etc. must be entirely removed using a soft brush (never use a metal brush, scouring agent, scouring pads or too much force). Movable instruments must be cleaned in opened position. The cleaning material must be renewed daily in order to avoid corrosion of the instruments and evaporation and contamination of the solution.

## 2. Ultrasonic cleaning

When using ultrasonic unit for cleaning, please follow the manufacturer's instructions for use.

In general the following points should be observed :

- 1) The unit must be filled to the marked level with water and a suitable disinfectant and or cleaning liquid. Please follow the cleaning material manufacturer's directions regarding concentration, duration and temperature.
- 2) The instruments must be completely covered with the cleaning liquid.
- 3) The instruments must be placed into a special basket inside the ultrasonic unit for cleaning (in order to prevent damage, the instruments must never be placed loosely into the unit).
- 4) Movable instruments must be placed into the unit in opened position for cleaning.
- 5) The cleaning solution should be renewed in short intervals as a dirty cleaning solution can cause corrosion damage to the instruments.

Please note : When using a combination of disinfectant and cleaning liquid together the points describing disinfection and cleaning may be combined.

## 3. Rinsing and drying

With any type of disinfectant and cleaning method the same rule applies; any residues of disinfectant and cleaning materials as well as other deposits must be removed entirely from the surface and from the instrument joints. If there are still residues left on the instruments the whole cycle must be repeated in order to avoid damage. The instruments must be thoroughly rinsed immediately after disinfection and cleaned using clear water, free of any salt content, or distilled water (no tap water).

In order to avoid water marks, the instruments must be dried carefully. It is advisable to dry them with compressed air. If rinsing is missed or not all the residue is entirely removed and the instruments are not dried adequately, it may lead to discoloration and corrosion on the instruments during the next sterilization process.

## 4. Sterilization

Hot air sterilization is not recommended due to the wear and tear on the instruments and the case, resulting in blunt and unsightly equipment.

Apart from following the steam sterilizer's instructions for use, the following points should be observed :

- 1) Sterilize at a temperature of 121°C/249°F for a minimum duration of 20minutes. (or 135°C/275°F, 3minutes etc.)
- 2) A sterilization temperature of over 180°C/356°F can cause discoloration of the instruments.

Only carefully cleaned, dried corrosion-free instruments may be sterilized. Badly cleaned and poorly dried instruments can result in corrosion damage. If rusty instruments are sterilized together with instruments which are in a good condition, the spotless instruments will become ruined (flash rust). Such instruments must be sorted out and these defects removed. Movable instruments must be sterilized in an opened position. Only distilled water and water free of any salts may be used in the steam sterilizer. If tap water is used, the tiniest contamination (such as rust particles) can cause discoloration and result in damage to the instruments and sterilizing unit. The instruments must not be held in a moist condition for too long. The door to the sterilizing unit must be opened immediately after the process has ended and if necessary the instruments dried using sterile cloths. The instruments must be stored sterile.

## 5. Step by step sterilization procedures including Microimplants using the kit case

1. Cut the plastic envelope with scissors (Fig. 1).
2. Take out the microimplant sterilization package (Fig. 2).
3. Place the microimplant sterilization package into the kit case with other instruments including metal scissors (Fig. 3).
4. Insert the kit case into the cotton package (Fig. 4).
5. Insert the kit case into the autoclave (Fig. 5) or EO gas sterilizer (Fig. 6). Follow the instruction of manufacturer.



Fig. 1



Fig. 2



Fig. 3

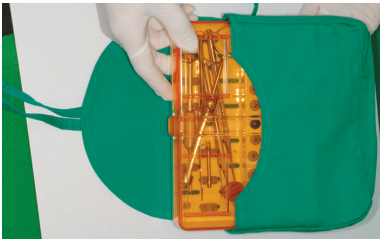


Fig. 4



Fig. 5



Fig. 6

### 6. Microimplant installation procedures into driver

1. Cut the microimplant sterilization package just above the microimplant head area (Fig. 7).
2. Grip the screw portion of microimplant using microimplant sterilization package and Insert the driver tip into the microimplant sterilization package (Fig. 8).
3. Take out the microimplant using hand driver (Fig. 9).



Fig. 7



Fig. 8



Fig. 9

### 7. Sterilized Package - No need sterilization

1. Detach clear plastic film from paper sheet (Fig. 10 & 11).
2. Remove the silicone cap of microimplant containing bottle (Fig. 12).
3. Grip the narrow part of the bottle with fingers and insert driver tip to the head of microimplant (Fig. 13).
4. Take out the microimplant attached with the driver (Fig. 14).



Fig. 10



Fig. 11

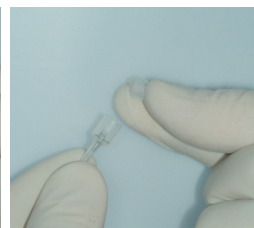


Fig. 12

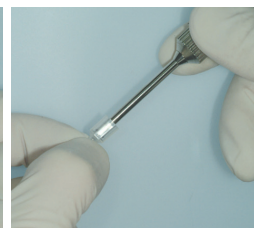


Fig. 13



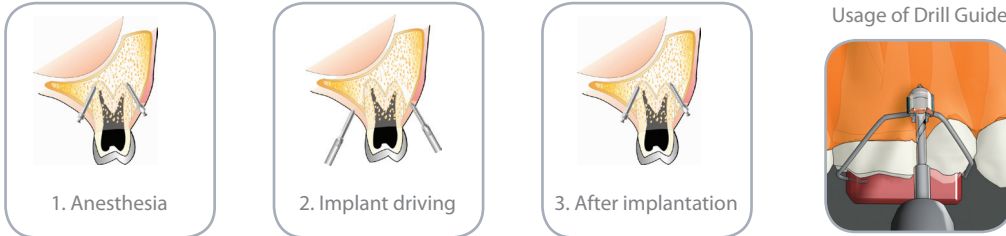
Fig. 14

### 8. Miscellaneous

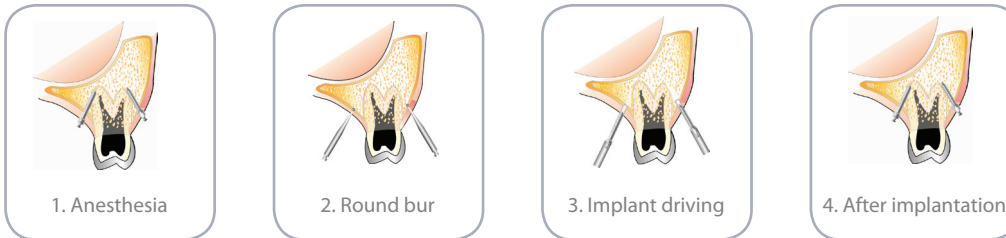
BATCH CODE	DO NOT REUSE	USE BY	DATE OF MANUFA	STERILIZED USING IRRADIATION	CATALOGUE NUMBER	CONSULT INSTRUCTIONS FOR USE	CAUTION	MANUFACTURER	DO NOT USE IF PACKAGE IS DAMAGED

## Surgical Procedures

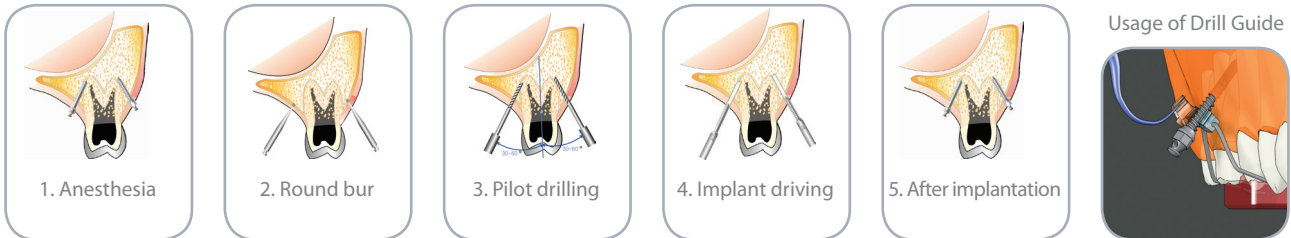
### A. One-Step Self Drilling (Drill-Free) Method (Attached Gingival Area)



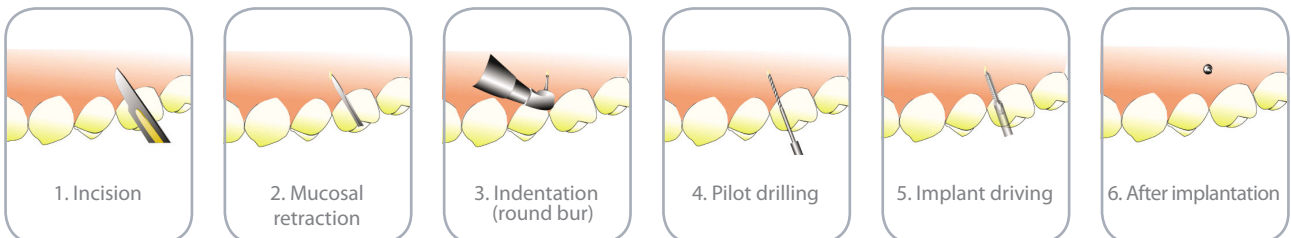
### B. Two-Step Self Drilling (Drill-Free) Method (Attached Gingival Area)



### C. Self-Tapping (Pre-Drilling) Method (Attached Gingival Area)



### D. Self-Tapping (Pre-Drilling) Method (Movable Mucosal Area)



Self drilling method is possible when the cortical bone is not so hard. Must never apply unreasonable press down because there is possibility of fracture of screw tip if resistance is strong when using self drilling method.

**Just try to rotate the screw using driver with gentle pressure and speed of less than 20 RPM.**

Method for removal.

- 1) Perform topical local anesthesia.
- 2) Unscrew the microimplant from the bone using hand or engine driver.

## Dentos Distributors

### Japan

Shofu Inc.  
33rd floor 3-16-2 Yushima, Bunkyo-ku, Tokyo [ 113-0034 ], JAPAN  
Tel : +81-3-3832-1824 Fax : +81-3-3832-7682  
info@shofu.co.jp

### Taiwan

Shin Yean Trading Co., Ltd.  
No 2, Alley 2, Lane 147, Sec.1, Nan Chang RD, Taipei, TAIWAN  
Tel : +886-2-2391-8481 Fax : +886-2-2321-6986  
shinyean@ms18.hinet.net

### China

BEIJING FOCUS CORPORATION.  
6F Fairyland Plaza, 83# Fuxing Rd, Haidian District, Beijing  
100039, P.R. CHINA  
Tel : +86-10-8861-2661 Fax : +86-10-8861-2690  
wanglei@bjfjc.com

### Thailand

Dentapex Co., Ltd.  
128/146 Payatai Plaza BD 13F, Payatai Road, Rajtheevee,  
Bangkok, 10400, THAILAND  
Tel : +66-(0)2-216-1688 Fax : +66-(0)2-612-9042  
walaiporn.g@dentapex.co.th

### HongKong

Forever Green Dental Products Ltd.  
Rm 1301, Manulife Provident Funds Place, 345 Nathan Road,  
Kowloon, HONG KONG  
Tel : +852-2388-2798 Fax : +852-2332-8183  
forevergreendental@gmail.com

### India / UAE

Dentos India Pvt. Ltd.  
301, Lavlesh Court, Pandit Varde Road, Bandra (West) Mumbai,  
400 050 INDIA  
Tel : +91-22-4250-5100 Fax : +91-22-4250-5101  
mail@dentosindia.com

### Singapore / Indonesia

Fondaco Pte. Ltd.  
7 Kaki Bukit Road 1, #03-06, Eunos Technolink 415937  
SINGAPORE  
Tel : +65-6392-2806 Fax : +65-6392-1296  
fondaco@fondaco.sg

### Malaysia

Denta Medic Technology  
No. 38A, Jalan Renang 13/26, Section 13, 40100 Shah Alam,  
Selangor, MALAYSIA.  
Tel : +60-3-5510-4346 Fax : +60-3-5510-4345  
info@denta-medic.com

### Philippines

Ahescor Inc.  
No. 5029 Filmore St., Palanan, 1235, Makati City, Manila,  
PHILIPPINES  
Tel : +63-2-551-4679 Fax : +63-2-551-4747  
ahescor@gmail.com

### Vietnam

D.O.E (Dentistry Of Excellence)  
199 Nguyen Thi Minh Khai, Dist 1, Ho Chi Minh City, VIETNAM  
Tel : +84-8-3925-3703 Fax : +84-8-3925-3700  
doevietnam@gmail.com

### Azerbaijan

RealDent LLC.  
Senyushkin Str. 13, AZ 1025, Baku, AZERBAIJAN Republic  
Tel : +99-412-490-6845 Fax : +99-412-490-2389  
info@realdent.net

### Pakistan / Afghanistan

SPIRAL INTERNATIONAL  
Flat # 12-A, 2nd Floor, HBL Bldg, Agro flats, Shadman Market,  
Lahore, 54000, PAKISTAN  
Tel : +92-42-7597320 Fax : +92-42-7503699  
spiralkp@yahoo.com

### UK

Torque Orthodontics Ltd.  
The Tannery, Home Farm, Esholt, Bradford, West Yorkshire, BD17  
7RH, U.K.  
Tel : +44-1274-581058  
john@torqueorthodontics.com

### Spain

IMPER-ORTHO  
Plaza Mayor, 40 - 2º - 2ª, 46600-Alzira (Valencia), SPAIN  
Tel : +34-962-415-647 / 962-404-600  
Fax : +34-962-401-289  
info@imperortho.com

### France / Israel / Belgium / Tunisia / Morocco

DENTAL FORCE  
32, bd Paul Vaillant-Couturier, F-93100 MONTREUIL, FRANCE  
Tel : +33-(0)1-4360-7708 Fax : +33-(0)1-4360-7905  
info@dentalforce.fr

### Netherlands

Dentsply Lomberg B.V.  
Vredehofstraat 3-5, 3761 HA SOEST, [Post box 164],  
NETHERLANDS  
Tel : +31-(0)35-609-4753 Fax : +31-(0)35-602-5480  
lomberg.order@dentsply.com

### Swiss / Liechtenstein

FEANRO Ltd.  
Gottfried Keller-Strasse 7, CH-8001, Zurich, SWITZERLAND  
Tel : +41-44-562-1862 Fax : +41-44-562-1861  
info@feanro.com

### Poland

ORTO TRADING  
ul. Husarii 11 B, 02-951, Warszawa, POLAND  
Tel : +48-22-651-8409 Fax : +48-22-842-5368  
ortotrading@ortotrading.com.pl

### Turkey

Mediko Dental  
Tevsikiye Cad. No:47 3/3, 34365, Nisantasi, Istanbul, TURKEY  
Tel : +90-212-219-9755 Fax : +90-212-219-9760  
info@medikodental.com

### Greece / Cyprus

MULTIADIS VITSARPOULOS S.A.  
348 MESOGION AVENUE, 153 41 AGIA, PARASKEVI, ATHENS,  
GREECE  
Tel : +30-210-65-41-340 Fax : +30-210-65-41-618  
info@vitsaropoulos.gr

### Hungary

Dr. Volom Dental & Medical Kft  
1055 Budapest, Nyugati ter 9. I/3. Hungary  
Tel : +36-1-311-6584 Fax : +36-1-489-3709  
shop@drvolomdental.hu

### Bulgaria

DENTALAB.BG Ltd.  
33, Gen.Totleben Blvd. Sofia, 1606 Bulgaria  
Tel : +359-2-423-4856 / +359-87-8725185  
Fax : +359-2-423-4856 office@dentallab.bg

### Argentina / Chile

PRODENTOS S.A  
Terrero 1960 5º piso A, C.P. 1416 BMR, Capital Federal Buenos  
Aires, ARGENTINA  
Tel : +54-11-4139-4274 (4139-4295) mhprodent@yahoo.com.ar

### Colombia

DENTOS COLOMBIA SAS  
CRA 17 # 108 - 29 AP 100, BOGOTA - COLOMBIA  
Tel : +57-(1)-4953673 / +57 (300) 4873039  
juanderosabalén@gmail.com

### Uruguay

Pro3implant S.R.L.  
Colonia 2099, Floor 1st C.P. 11200, Montevideo, URUGUAY  
Tel : +598-2408-3003 Fax : +598-2403-4163  
info@pro3implant.com.uy

### Panama

ImpOrt Corp.  
Plaza Mont Blanc. Local #5, Avenida Abel Bravo Y Calle 60  
Urbanizacion Obarrio, Panama, PANAMA  
Tel : +507-263-0200 Fax : +507-264-5188  
rm@frenos.cc

### Dominican Rep.

Selladores Cobian S.A.  
Gustavo Mejia Ricart #37, Edif. Boyero III, Apto. 202, Ensanche  
Naco, Santo Domingo, República DOMINICANA  
Tel : +1-809-547-1220 Fax : +1-809-549-3595  
franciscmartino@gmail.com

### Peru / Bolivia

SERVICIOS ODONTOLÓGICOS DEL PLATA E.I.R.L.  
Ave. DE LAS ARTES 1482, San Borja, Lima 41, PERU  
Tel : +51-1-436-4432 rafaelberenguel@gmail.com

### Venezuela

L.V.M Dental Product C.A  
Calle Rio Caroni, edificio El Moruco, piso 4,  
apartamento 4-B. Cumbres de Curumo, Caracas 1080,  
VENEZUELA  
Tel : +58-414-030-0537 Fax : +58-414-125-0197  
lucyperez30@yahoo.com

### USA

Great Lakes Orthodontics  
200 Cooper Ave. Tonawanda, N.Y 14150, USA  
Tel : +1-800-828-7626 / 866-781-5075 Fax : +1-716-871-0550  
joepanara@greatlakesortho.com

### Australia

Dentos Australia  
3/14 ETHEL ST. EASTWOOD, NSW 2122, AUSTRALIA  
Tel : +61-(0)2-9874-6117 Mob.: 0416-028-014  
Fax : +61-(0)2-9874-8922  
dentos1@optusnet.com.au

### Russia

NORTA Co. Ltd.  
212, entr. № 5, 50A, Dibunovskaya str., Saint-Petersburg,  
197183, RUSSIA  
Tel : +7-812-935-8448 Fax : +7-812-640-2840  
info@nortonline.com

### Ukraine

Ortho-Medina  
1013, 172 Gorkogo str. 03680 KIEV, UKRAINE  
Tel : +38-(0)44-219-1503 Fax : +38-(0)44-219-1504  
rezai\_hamid@yahoo.com

### Kazakhstan / Uzbekistan

NUR RAFFA Co.,Ltd  
Altyn Gasyr Business Center office 112, Shevchenko street, 118,  
Almaty, KAZAKHSTAN  
Tel : +7-727-244-0459  
uzshin@hanmail.net

### Lebanon

Star Science Lebanon S.A.L  
Gema Center, 3rd Floor, Dbayah highway, Beirut, LEBANON  
Tel : +961-3-10-1211 Fax : +961-4-54-3496  
starsciencelb@gmail.com

### Syria

Al Lahham Corp.  
P.O. box 3727, karameh street, Abou Rummaneh, Damascus,  
SYRIA  
Tel : +963-11-33-33719 Fax : +963-11-33-13719  
laham.cntr@yahoo.com

### Kuwait

Dental Tech  
Block# 9, Street# 3, Unit#16, Al-Jabriya, KUWAIT  
Tel : +965-901-0185 Fax : +965-787-8704  
leosin72@hotmail.com

### Jordan

Al-Eiman Drug Store  
7th circle, Airport st. beside city terminal, Amman, 11810.  
JORDAN  
Tel : +962-6-581-0108 Fax : +962-6-581-8850  
samerissa@eiman-eds.com

### Bahrain

Transalign Trading  
Building 1135, Flat NO:11, STROAD: 3433, Block:734,  
AALII TOWN,  
[ P.O Box 1282 - Manama ] KINGDOM OF BAHRAIN  
Tel : +973 13 631631 Fax : +973 17 911599  
info@transalign.net

### Oman

AL FARSI MEDICAL SUPPLIES  
Office No.4, Ground Floor, Al Khuwair Str. Muscat, Boshier, Postal  
Code 133, (P.O. BOX 158) Sultanate of OMAN  
Tel : +968-2448-5625 Fax : +968-2448-5675  
sales@alfarsi.me

### Iraq

ECHO For Dental Equipments  
Hospital Roundabout, Mosul, IRAQ  
Tel : +964 7481752665 (Mob. 7707488499)  
echodent@echodent.com

### Egypt

ELMO Medical  
511 Haram St , Nasr building, Giza Square, Giza, EGYPT  
Tel : +20-1001031119 / +20-1111801107  
Fax : +20-643345325  
elmotayammed@gmail.com