

New Generation Dental Magnetic Attachment

**MAGFIT™**

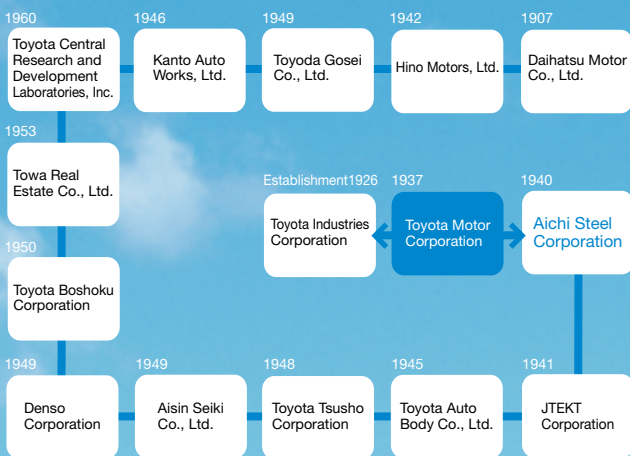
Full Product Line-up Catalogue

**AICHI STEEL**

# ONE AND ONLY TECHNOLOGY



## The Toyota Group



## New Materials & Technology Lead the Way to a Brighter Future

Since our establishment as the specialty steel and forged products supplier for Toyota Motor Corporation in 1940, we have operated with the premise that "Great society are made with great material."

To that end, we have researched a wide variety of specialty steel products, and put our research into practical applications.

We are proud of the contributions we have made to the advancement of the automobile industry.

These innovative core technologies have lead to the expansion of magnetic applications in the dental field.



**AICHI STEEL CORPORATION**  
A Toyota Group Company

IRPMD  
Distributor

Accessories

Applications  
Procedures

V series  
A series

I series  
F series

Introduction  
B series

For Implant

Procedures  
S X R K

Applications  
Procedures DX

S X  
R K

DX  
EX

For Natural tooth

Content  
Introduction

Introduction of

# MAGFIT™ Technologies

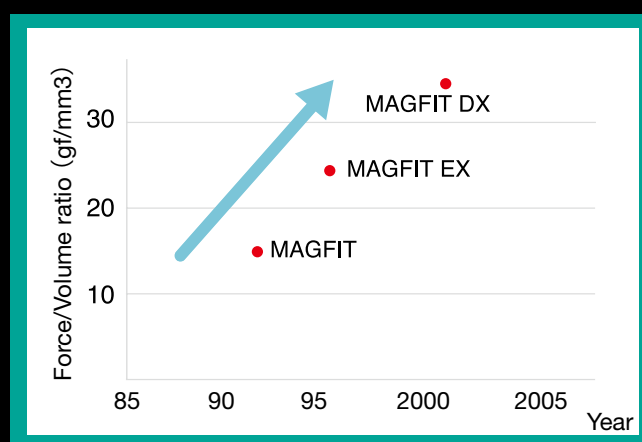
## MAGFIT - New Generation Magnetic Attachment

MAGFIT magnetic attachments employ several innovative core technologies developed by Aichi Steel Corporation for the Toyota Group. We are a leader in magnetic materials technology which not only allows for the continued advancement of magnetic attachments but for the research and development of new applications of magnetics in the dental field.

Magnetic Field Analysis Technology

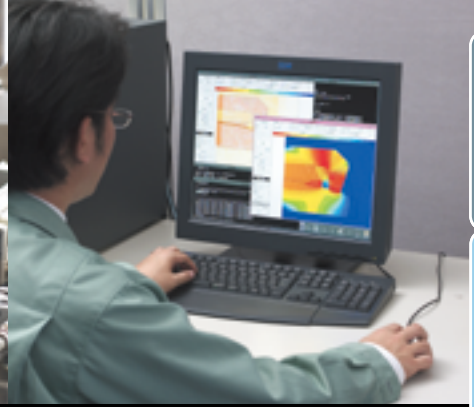
### 1 Strongest Retention in its class with an ultra- compact size

With the optimal magnetic circuit design using 3D computer simulation, the attractive force of MAGFIT have been improved twice over the last decade.



Total sales exceeded  
over 2.6 million pcs!

Magfit is a long seller product since its launch of 1992. Over 10,000 dentists have used Magfits now and it is available in 17 countries worldwide!



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Introduction

DX  
EX

SX  
RK

Applications  
Procedures DX

Procedures  
SX RK

Introduction  
B series

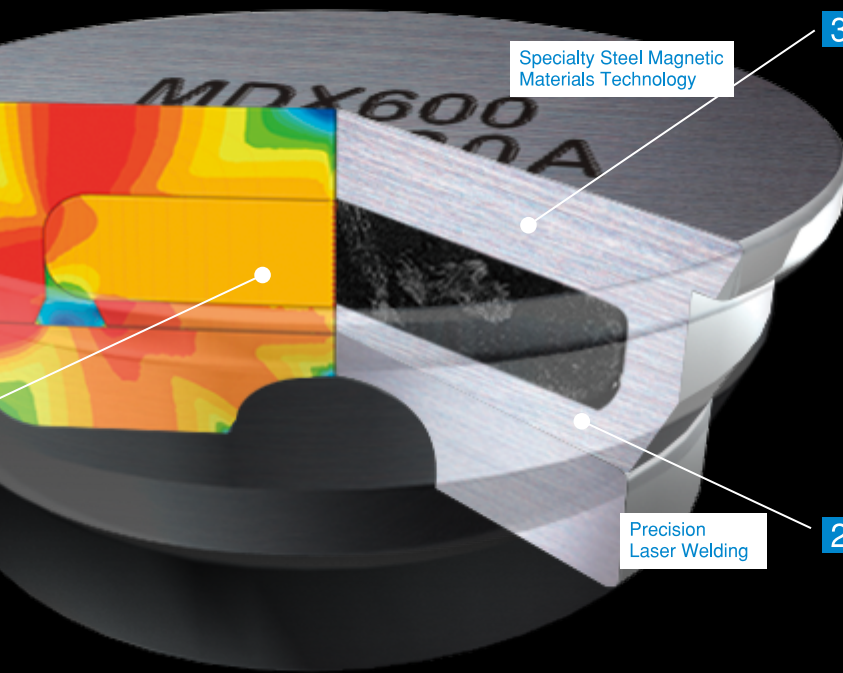
I series  
F series

V series  
A series

Applications  
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Accessories

IRPMD  
Distributor

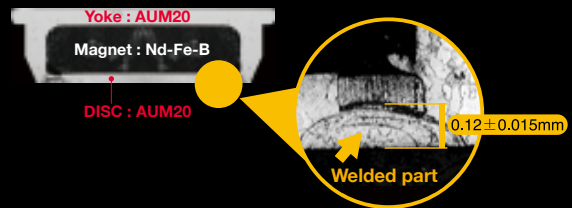


### 3 New Magnetic Materials Technology

The success of MAGFIT was also built upon the development of AUM20, Aichi Steel's proprietary soft magnetic stainless steel developed for the dental field (Patent No. JP26227026), which has superior magnetic properties and corrosion resistance, and the use of the world's strongest NdFeB magnet. Closed circuit design assures the patients' safety without harmful bio-magnetic effects.

### 2 No Corrosion

Aichi Steel's precision micro-laser welding technology enables a perfect hermetic seal of the stainless steel outer casing which protects the magnet from corrosion in the oral environment.



## Magnet- retained implant supported overdentures

With the increasing number of the clinical application of implants, magnet- retained implant supported overdentures are highly anticipated for edentulous patients. MAGFIT IP magnetic attachments are compatible with major implant systems making it possible to apply this practical treatment.



## Product Quality Assurance

All MAGFIT products are CE approved and manufactured in Japan with ISO13485 certification. Controlled lot numbers are laser- etched on all MAGFIT magnetic assemblies for traceability. The MAGFIT Service Network has been set up to provide fast and reliable service to all of our MAGFIT customers.



Laser-etched Lot Number

# MAGFIT™

## Series full products line-up catalogue

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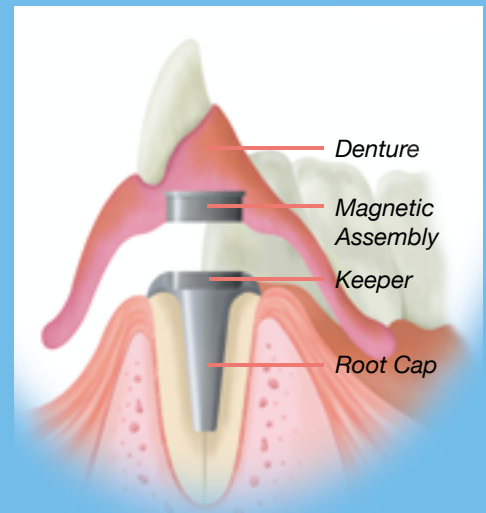
Dental Magnetic Attachments for Natural Tooth Roots

# MAGFIT™ Series

A wide range of products are available to expand your clinical applications and make good use of existing abutment tooth root instead of extracting the tooth.

## Advantages

- Protection of the abutment tooth from excess stress
- Easy instrumentation and easy maintenance
- Superior aesthetics



## Principle

MAGFIT is an innovative dental magnetic attachment system consisting of a powerful yet ultra-compact embedded magnet which retains a prosthesis onto a magnetic attractive keeper set on the abutment tooth.

### Cast Coping type

### Resin Coping type

#### MAGFIT™ DX

#### MAGFIT™ EX

#### MAGFIT™ RK



## Feature

Shortest height  
Suitable for Molars  
Round contact face  
Ellipsoidal outer lip

Smallest size  
Suitable for Incisors and Canines  
Elliptical contact face

Eliminates casting  
Suitable for one-day treatment

## Attractive Force (gf)

1000/800/600/400

600/400

	Flat	Dome
L	800	600
S	600	

## Width (mm)

Ø5.0/4.4/4.0/3.4

2.8/2.4

	Flat	Dome
L	Ø4.0	Ø4.4
S	Ø3.6	

## Height (mm)

1.7/1.3/1.2/1.0

1.8/1.5

	Flat	Dome
L	5.8	6.0
S	5.7	

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# MAGFIT™ DX

## 1000/800/600/400



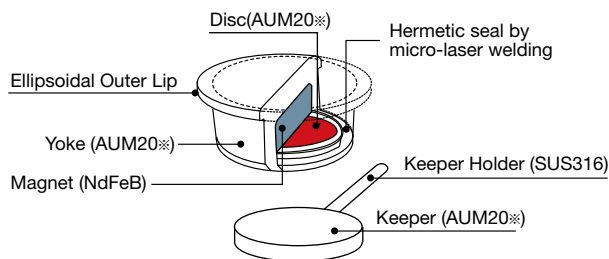
The MAGFIT DX Series is suitable for a wide range of cases, especially for molars where vertical space is limited. It has a thin disk-type design with improved wear resistance. The ellipsoidal outer lip of the magnetic assembly prevents rotation to ensure firm fixation to the denture base. It is 30% shorter than the EX series. Durability has been enhanced by increasing the hardness of the magnet casing. Applicable to a wide range of clinical cases.

### Specifications

#### Basic Performance

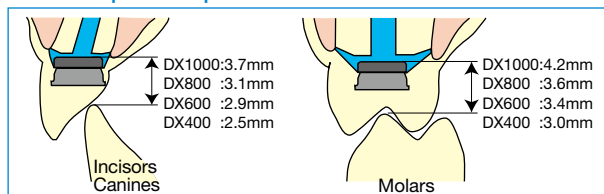
	MAGFIT DX 1000	MAGFIT DX 800	MAGFIT DX 600	MAGFIT DX 400
Attractive Force (gf)	1000	800	600	400
Height (mm)	1.7	1.3	1.2	1.0
Keeper Diameter (mm)	Ø4.6	Ø4.0	Ø3.6	Ø3.0
Dimension of parts (mm)				

#### Structure and Materials



※AUM20 is our proprietary Soft Magnetic Stainless Steel.

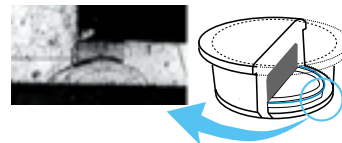
#### Vertical space required for MAGFIT DX



### Reliability

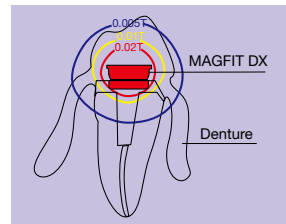
#### Corrosion Prevention

MAGFIT DX utilizes a stainless steel casing hermetically sealed by micro-laser welding to ensure excellent corrosion resistance.



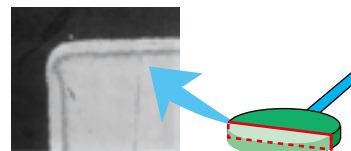
#### Magnetic Field Leakage

Magnetic field leakage at the gingival margin is substantially below the accepted U.S. Safety Standard of 0.02T.



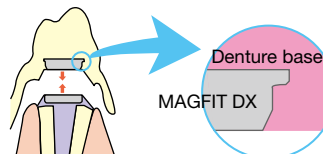
#### Oxidization resistant Keeper

The surface of the keeper is coated with a Cr-rich layer to protect it from oxidization during the casting process.



#### Detachment Prevention

The unique ellipsoidal outer lip is designed with an anti-rotation feature to ensure firm fixation in the denture base.





# MAGFIT™ EX

## 600W/400W



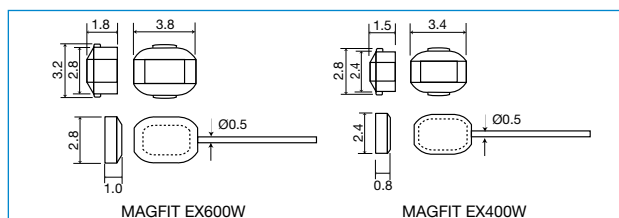
MAGFIT EX has a "sandwich type" structure with attractive forces ranging from 400 to 600gf, which is comparable to the spring method. MAGFIT EX600W is recommended for cases with regular space requirements. MAGFIT EX400W is suitable for cases with minimal space conditions as well as cases requiring lower retention.

### Specifications

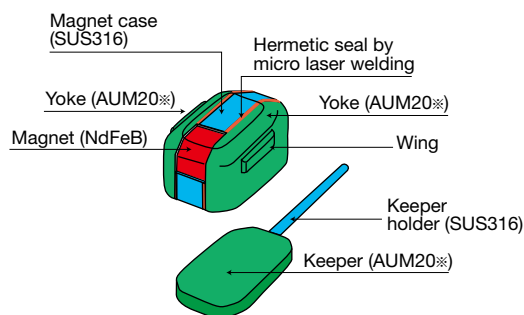
#### Basic Performance

	MAGFIT EX600W	MAGFIT EX400W
Attractive force (gf)	600	400
Height (mm)	1.8	1.5
Smallest diameter (mm)	3.8×2.8	3.4×2.4

#### Dimensions of MAGFIT EX

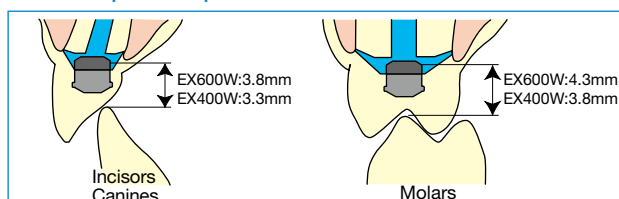


#### Structure and materials of MAGFIT EX



※AUM20 is our proprietary Soft Magnetic Stainless Steel.

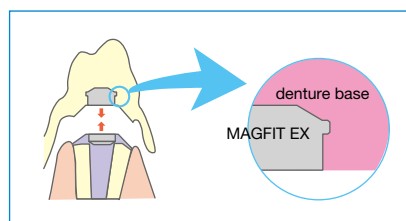
#### Vertical space required for MAGFIT



### Reliability

#### Firm fixation to the denture base

The unique "wing" design on both sides of the magnetic assembly ensures firm fixation, preventing detachment problems from denture base.

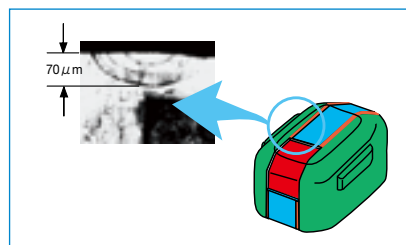


Improved fixation with unique "wing" design

#### No corrosion

MAGFIT EX utilizes a high grade stainless steel outer casing to encapsulate the magnetic assembly.

The seams of the cap are hermetically sealed by precision micro laser welding.



Perfect seal by micro laser welding

# MAGFIT™ SX



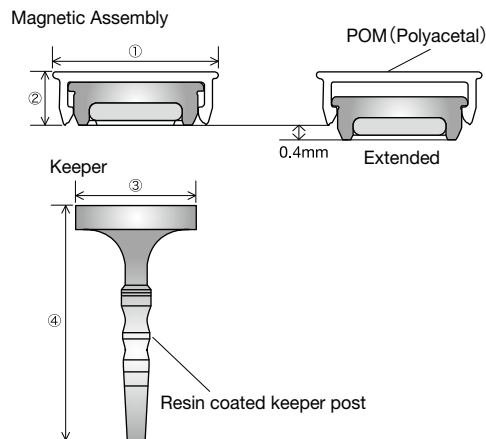
Magfit SX is a magnetic attachment which gives the magnetic assembly a slide mechanism for adjusting the difference in the settlement amount of soft tissue and hard tissue. It became easier to deal with correction of vertical settlement amount of denture and composite movement. In addition, even at the lab side it is possible to attach the magnetic assembly to the denture. The magnetic assembly have L type and S type. Since the keeper can be cemented directly to the tooth root, the casting operation can be omitted and treatment can be done immediately.

## Specifications

### Basic Performance

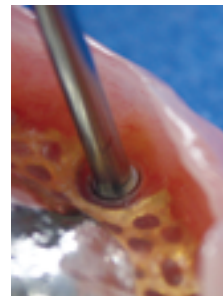
		MAGFIT SX-S	MAGFIT SX-L	
Attractive force		400 gf	600 gf	
Leakage Magnetic field		0.002T	0.003T	
Dimensions (mm)	Magnetic Assembly	outer diameter ①	Ø4.7	Ø5.2
		Height ②	1.4	1.6
	Keeper	Asorption area ③	Ø3.3	Ø3.7
		Height ④	7.5	7.7

### Structure and Materials

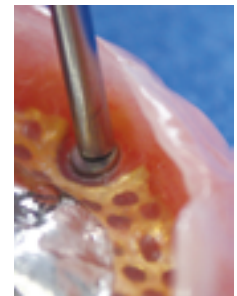


## Reliability

It can move up to 0.4mm vertically or tilt 8° with the movement of the denture. The cap has an interlocking force (force required to separate) of about 15 kgf.



Compressed



Extended

Movement of Magnetic Assembly

## Notice

Plastic caps may deteriorate due to long-term use in the oral cavity.  
Accessory metallic spacers are required when relining.

### Accessories

- The following accessories are included in the package.
1. Plastic dummy: Ensure space for attachment of the magnetic assembly.
  2. Washer type spacer: Secure the settlement gap for the denture.
  3. Metal spacer: Secure space for vertical settlement of magnet



# MAGFIT™ RK



MAGFIT RK makes it possible for the direct adhesion of the keeper to the tooth root with a resin coping. This system eliminates the casting process allowing for one-day treatment, which is particularly effective for home visit with elderly patients. The patients keep using their denture. You can choose the shape of the attractive face, Flat, or Dome with L size or S size.

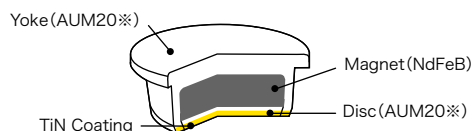
## Specifications

### Basic Performance

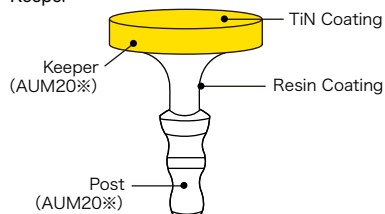
Feature	MAGFIT RK-DXFL			MAGFIT RK-DXFS		MAGFIT RK-DXD	
	Attractive face	Flat				Dome	
SIZE	L	S					
Dimensions (mm)	Magnetic Assembly						
	Keeper						
Attractive face	TiN Coated						
Attractive force	800 gf	600 gf		600 gf			
Leakage Magnetic field	0.003 T	0.002 T		0.003 T			

### Structure and Materials

#### Magnetic Assembly



#### Keeper

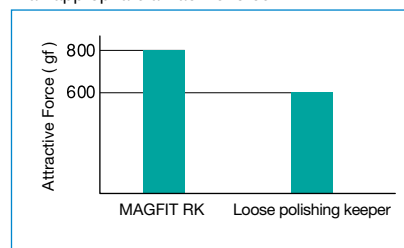


※AUM20 is our proprietary Soft Magnetic Stainless Steel.

## Reliability

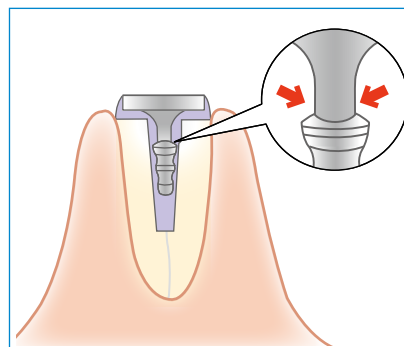
### Strength of no-cast adhesion

With the elimination of casting, polishing to remove the oxidation layer is no longer necessary, resulting in an appropriate attractive force.



### Keeper detachment prevention

Special designed steps have been applied to the MAGFIT RK post to ensure pulling strength of more than 12kgf.



# Clinical Applications for Natural Tooth Roots

## Guideline for choosing best MAGFIT

Product		For Cast Coping						For Resin Coping		
		MAGFIT'DX				MAGFIT'EX		MAGFIT'RK		
		1000	800	600	400	600	400	Flat		Dome
						L	S			
Features		<ul style="list-style-type: none"> <li>Shortest height</li> <li>Suitable for Molars</li> <li>Round contact face</li> <li>Ellipsoidal outer lip</li> </ul>				<ul style="list-style-type: none"> <li>Small sectional diameter</li> <li>Suitable for anterior teeth</li> <li>Ellipsoidal shape</li> </ul>		<ul style="list-style-type: none"> <li>One-day castless treatment is available</li> <li>Available to the case with difficulty of impression taking</li> <li>Suitable for free end saddle denture (Dome)</li> </ul>		
Compatibility Teeth	Front teeth									
	Canine									
	Molar									

Please select and use the products depending on the patient's oral environment

## Recommended cases

### Complete Overdenture

- Retention enhancement



### Partial Denture

- Replacement of deteriorated clasps
- Insertion-path free design



Bilateral overdenture



Unilateral overdenture

# BASIC Clinical Procedures for MAGFIT™ DX

※MAGFIT EX procedure is as same as this procedure.

## Advantages

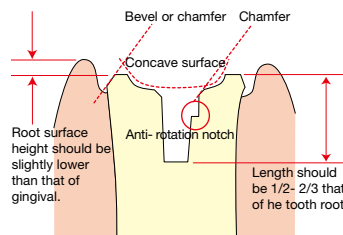
The clinical procedure for MAGFIT magnetic attachments is very simple and easy. Abutment tooth preparation and dental lab processing consists of basic procedures such as root canal treatment, root surface preparation, root cap fabrication, and magnetic assembly pick-up in the overdenture without the need for special tools. MAGFIT is a highly advanced dental treatment which allows an extension of clinical application possibilities using relatively simple procedures.

### 01 Examination



In this case, a lower canines-supported overdenture will be fabricated. MAGFIT will be used as the retainers on the abutment teeth.

### 02 Abutment tooth preparation



Root canal treatment and root surface preparation are carried out. Insert a notch into root canal to avoid root cap rotation. Root cap preparation should be carried out in the usual manner.

### 03 Selection of magnetic attachment



Place the MAGFIT Space Gauge on top of the abutment tooth to check that the diameter is sufficient and then choose the suitable magnet size and strength.

### 04 Waxing up with keeper



The heated keeper should be placed on the wax pattern parallel to the occlusal plane.

### 05 Cementing the root cap



After pickling and polishing the root cap, cement the root cap onto the abutment tooth.

### 06 Preparation for magnet pick-up



After positioning the magnetic assembly on the keeper, install the denture with a hole to confirm that there is sufficient space between the magnetic assembly and the denture base.

### 07 Sandblasting



Sandblast the magnetic assembly with alumina and then apply metal primer on the surface to increase the adhesion strength for the self-curing resin.

### 08 Magnetic assembly pick-up



Place the magnetic assembly on the keeper in the oral cavity. Apply self-curing resin between magnetic assembly and the denture base through the hole. After curing, remove the denture. Magnetic assembly pick-up should be carried out 1-2 weeks after the denture adjustment is finished.

### 09 Completion of magnet-denture



Installed finished magnet-denture is shown.

# BASIC Clinical Procedures for MAGFIT™ SX

## Advantages

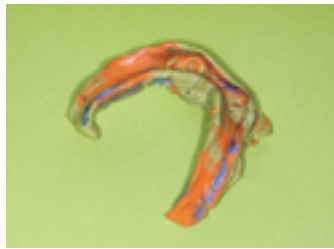
0.4mm slide mechanism adjust the settlement gap between abutment and tissue. This system makes installation of the magnet on the denture at the laboratory possible. 3 kinds of accessories are included in the package, Plastic dummy, Washer type spacer, and Metal spacer.

### 01 Abutment tooth formation and Root coping fabrication



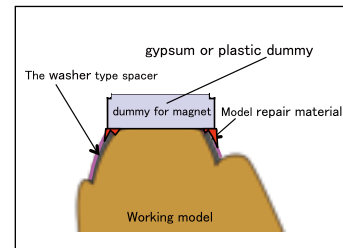
Prepare the root coping referring MAGFIT RKR clinical procedure.

### 02 Impression collection



Collect the impression for the abutment tooth with keeper attached by using the personal tray.

### 03 Plastic dummy and Washer type spacer installation



Make a working model. Fix the plastic dummy on the surface of the root coping, by using the instant adhesive material, and press the washer type spacer to the keeper. Then, undercut area between the dummy and the coping should be blocked out with a model repair material.

### 04 Denture Fabrication



Polymerize according to a conventional method, remove it, and then polish the burr.

### 05 Removal of plastic dummy



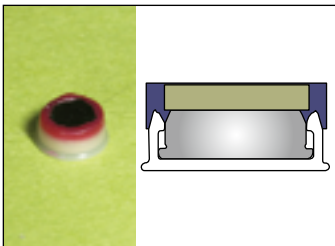
Remove the plastic dummy with a groove such as a fissure bur. At this time, do not scratch the space for the magnetic assembly (particularly the side).

### 06 Removal of washer type spacer



Using an instrument such as Evans, remove the washer type spacer and tidy the inside.

### 07 Preparation of the magnetic assembly



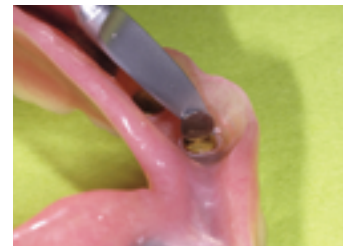
Prepare the magnetic assembly. Attach the metal spacer to the attractive face and seal it with wax.

### 08 Mounting of the magnetic assembly



After temporarily attaching the magnetic assembly with cyanoacrylate, fill the space of the denture and the magnet assembly with self-curing resin by brush filling.

### 09 Removal of metal spacer



Remove the wax with a steamer and clean, then remove the spacer.

# BASIC Clinical Procedures for MAGFIT™ RK

## 01 Preparatory treatment



After endodontic treatment, check the root canal in terms of the length, filling condition, curvature shape and the teeth arrangement through the radiograph.

## 02 Root surface preparation



Remove all the softened dentin to leave well-conditioned dentin on the surface of the tooth root.

## 03 Completion of root surface preparation



For easy installation of the MAGFIT RK please set the root surface parallel to the occlusal plane.

## 04 Root canal treatment



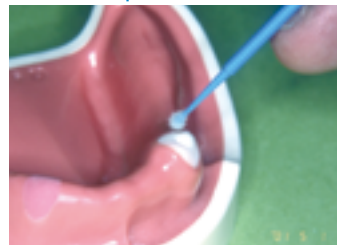
Standard root canal treatment is carried out using a Peeso's reamer. The dentin surface should be the same level as the gingival margin. The length of blockade area should be more than 3mm from the root apex.

## 05 Keeper trial



Trial fit the keeper post into the root canal.

## 06 Preparation for keeper insertion



Apply resin to the outside surface of the root post. Fill the root canal with composite resin before inserting the MAGFIT RK.

## 07 Inserting the MAGFIT RK



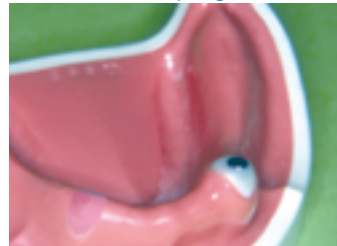
Apply composite resin to the outside surface of the keeper excluding the attractive face for a firm fit to the root canal. Insert the MAGFIT RK into the root canal.

## 08 Forming the resin copings



Polish and form the resin coping taking care not to damage the keeper.

## 09 Completion of resin coping



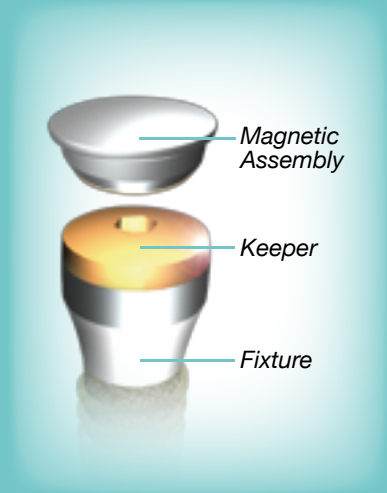
Remove excess resin to prevent gingivitis.

Dental Magnetic Attachments for Implants Use

# MAGFIT™ IP

Compatible with Major Implant Systems

By using a magnet for the implant, harmful lateral forces can be released, reducing the burden on the abutment. Dome type with a spherically shaped attraction face or resin capped SX type respond to the oscillation of the free end denture at the time of occlusion.



## Advantages

- Suitable for edentulous cases
- The number of implants required can be minimized
- A simpler superstructure design can be achieved
- Magnet Type variation expands the application possibilities
- Can be used in conjunction with MAGFIT magnetic attachments for natural tooth roots

## Product Lineup

Flat type



Dome type



SX type



### Features

- Firm retention force
- Standard specification

- Rotation Function
- Suitable for Free and Saddle denture

- Slide with Rotation Function
- Suitable for Free and Saddle denture

### Attractive forces (gf)

750

600

550

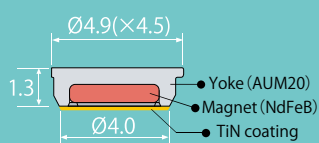
### Leakage Magnetic Field

0.004T

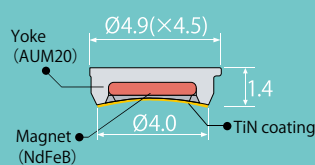
0.003T

0.003T

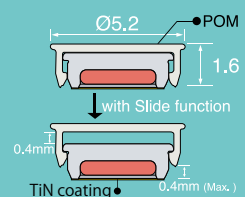
### Dimension (mm)



DXFL



DXD



SXFL



# MAGFIT™ IP-B Series



MAGFIT IP-B series is compatible with Branemark Implant system.

- There are three length to be able to adapt to each patient's gingival condition.
- It has TiN-coating at the attractive face not to be worn.
- It is tightened by using the JIS standard 1.3mm hexagonal driver.

## Specifications

### Product Lineup

Keeper Construction									
	30 type	40 type	55 type	30 type	40 type	55 type	30 type	40 type	55 type
Magnetic Assembly [Flat]	BFD30	BFD40	BFD55	BDD30	BDD40	BDD55	750 gf		
DXFL							600 gf		
Attractive force									
Keeper Construction <th colspan="3"> </th> <th colspan="3"> </th> <th colspan="3"> </th>									
	30 type	40 type	55 type	30 type	40 type	55 type	30 type	40 type	55 type
Magnetic Assembly [Dome]	BFX30	BFX40	BFX55				550 gf		
SXFL									
Attractive force									

### Materials

- Keeper Screw : AUM20
- Keeper attractive face is coated by TiN for wear resistance.
- Abutment ring : Ti

### Compatible implant models

- Branemark: Regular Platform  $\phi 3.75$ ,  $\phi 4.0$
  - 3i: External type  $\phi 3.75$ ,  $\phi 4.0$
- For more detail information, please make an enquiry

### Tightening torque Recommendation

25 to 30N·cm

### Tools

To tighten the keeper, it requires a specialized tool or JIS Standard 1.3mm hexagonal driver.

# MAGFIT™ IP-I Series



MAGFIT IP-I series is compatible with ITI Implant system.

- There are three length to be able to adapt to each patient's gingival condition.  
A taper is added to the fitting part of the fixture to prevent loosening of the screw
- It has TiN-coating at the attractive face not to be worn.
- It is tightened by using the JIS standard 1.3mm hexagonal driver.

## Specifications

### Product Lineup

Keeper Construction	Magnetic Assembly [Flat]			Keeper Construction	Magnetic Assembly [Dome]		
	14 type	30 type	45 type		14 type	30 type	45 type
Magnetic Assembly [Flat]	14 type	30 type	45 type	Magnetic Assembly [Dome]	14 type	30 type	45 type
DXFL	IFD14	IFD30	IFD45	DXD	IDD14	IDD30	IDD45
Attractive force	750 gf			Attractive force	600 gf		
SXFL	IFX14	IFX30	IFX45				
Attractive force	550 gf						

### Materials

- Keeper Screw: AUM20
- Keeper attractive face is coated by TiN for wear resistance.
- Abutment ring: Ti

### Compatible implant models

- Branemark: Standard Implant, No.043.030S-035S, 043.131S-135S, 043.230S-234S(SLA)  
Standard plus implant, No.043.050S-054S, 043.151S-154S, 043.250S-234S(SLA)
  - Swiss Plus:  $\phi$ 4.8mm D platform, No.SP8-14, SPWB8-14, OPB8-14, OPWB8-14
- For more detail information, please make an enquiry

### Tightening torque Recommendation

25 to 30N·cm

### Tools

To tighten the keeper, it requires a specialized tool or JIS Standard 1.3mm hexagonal driver.

# MAGFIT™ IP-F Series



MAGFIT IP-F series is compatible with Frialit2 Implant system.

- This is compatible with 3.8mm, 4.5mm type.
- There are three length to be able to adapt to each patient's gingival condition.
- It has TiN-coating at the attractive face not to be worn.
- It is tightened by using the JIS standard 1.3mm hexagonal driver.

## Specifications

### Product Lineup

Keeper Construction (mm)			
	Ø3.8/Ø4.5	Ø3.8/Ø4.5	Ø3.8/Ø4.5
Magnetic Assembly[Flat]	17type	30type	50type
	FFD17S FFD17L	FFD30S FFD30L	FFD50S FFD50L
Attractive force	750 gf		
	FFX17S FFX17L	FFX30S FFX30L	FFX50S FFX50L
Attractive force	550 gf		

Keeper Construction (mm)			
	Ø3.8/Ø4.5	Ø3.8/Ø4.5	Ø3.8/Ø4.5
Magnetic Assembly[Dome]	17type	30type	50type
	FDD17S FDD17L	FDD30S FDD30L	FDD50S FDD50L
Attractive force	600 gf		

### Materials

- Keeper Screw : AUM20
- Keeper attractive face is coated by TiN for wear resistance.
- Abutment ring : Ti

### Compatible implant models

Frialit2(Zive) φ4.5, φ3.8

### Tightening torque Recommendation

20 to 25N·cm

### Tools

To tighten the keeper, it requires a specialized tool or JIS Standard 1.3mm hexagonal driver.

# MAGFIT™ IP-V Series



MAGFIT IP-V series is compatible with Replace select Implant system.

- This is compatible with only regular platform.
- There are three length to be able to adapt to each patient's gingival condition.
- It has TiN-coating at the attractive face not to be worn.
- It is tightened by using the JIS standard 1.3mm hexagonal driver.

## Specifications

### Product Lineup

Keeper Construction	30 type	40 type	55 type	Keeper Construction	30 type	40 type	55 type
Magnetic Assembly [Flat]				Magnetic Assembly [Dome]			
DXFL	VFD30	VFD40	VFD55	DXD	VDD30	VDD40	VDD55
Attractive force	750 gf			Attractive force	600 gf		
SXFL	VFX30	VFX40	VFX55				
Attractive force	550 gf						

### Materials

- Keeper Screw: AUM20
- Keeper Screw attractive face is coated by TiN for wear resistance.
- Abutment ring: Ti

### Compatible implant models

NB Replace Select Straight / Tapered  
Regular Platform (Ø4.3mm)  
For more detail information, please make an enquiry.

### Tightening torque Recommendation

25 to 30N·cm

### Tools

To tighten the keeper, it requires a specialized tool or JIS Standard 1.3mm hexagonal driver.

# MAGFIT™ IP-A Series



MAGFIT IP-A series is compatible with Astratech Implant system.

- It is compatible with regular platform
- It has 3 lengths for matching to the gingivar thickness
- It has TiN-coating at the attraction face not to be worn.
- To tighten the keeper, it requires a specialized tool or JIS Standard 1.3mm hexagonal driver.

## Specifications

### Product Lineup

Keeper Construction	L type		S type	
	Ø4.7	1.0	Ø4.8	2.5
Magnetic Assembly [Flat]	Ø4.7	2.5	Ø4.8	4.0
	Ø4.7	4.0		
Magnetic Assembly [Dome]	L type		S type	
	Ø4.7	1.2	Ø4.8	2.7
	Ø4.7	2.7	Ø4.8	4.2
	Ø4.7	4.2		
DXFL	AFD10L AFD25L AFD40L		AFD25S AFD40S	
Attractive force	750 gf			
SXFL	AFX10L AFX25L AFX40L		AFX25S AFX40S	
Attractive force	550 gf			
Compatible implant models	OsseoSpeed 4.5 / 5.0		Osseo Speed 4.0S	
DXD	ADD10L ADD25L ADD40L		ADD25S ADD40S	
Attractive force	600 gf			
Compatible implant models	OsseoSpeed 4.5 / 5.0		Osseo Speed 4.0S	

### Materials

- Keeper Screw : AUM20
- Keeper Screw attractive face is coated by TiN for wear resistance.

For more detailed information, please make an enquiry.

### Compatible implant models

- Astratech: Osseo speed (Please see the chart)
- For more detailed information, please make an enquiry

### Tightening torque Recommendation

- S type 20 to 25N·cm
- L type 25 to 30N·cm

### Tools

To tighten the keeper, it requires a specialized tool or JIS Standard 1.3mm hexagonal driver.

## Clinical cases



## Hex driver for keeper assembling

MAGFIT IP Keeper is available to tight with the following driver.

Manufacture	Driver
Astratech	Hex driver 0.05inch
Calcitek	Hex driver 0.05inch
SwissPlus / Screw-Vent	Hex driver 1.25mm

## Hex driver for MAGFIT IP

JIS 1.3mm hex driver is required. keeper should be tightened with the recommended torque.

For pre-tightening	For torque controller	
1.3HDI	1.3MDI	1.3MDB
<p>Tip (JIS 1.3mm hex※1)</p> <p>24 (mm)</p>	<p>Tip (JIS 1.3mm hex※1)</p> <p>21 (mm)</p> <p>Connecting part</p>	<p>Tip (JIS 1.3mm hex※1)</p> <p>26 (mm)</p> <p>Connecting part</p> <p>※1) Equivalent to the 0.05 inch hex driver</p>
<p>※1) Equivalent to the 0.05 inch hex driver</p>	<p>Torque wrench for Straumann implant (No.046.119)</p>	<p>-Torque wrench for Branemark system (Nobel Biocare) -Contra angle and Torque driver for 3i Implant system (No.CATDB) (Can be attached to the other common hand pieces)</p>

# BASIC Clinical Procedures for MAGFIT™ IP

## 01 Implantation



Follow standard procedures for implantation.

## 02 Confirmation of oral condition



Through full mouth radiograph, confirm the condition of the jawbone.

## 03 Install the keeper



Screw the keeper / abutment ring into the fixture.  
Note : Please use the MAGFIT IP specific driver at the recommended torque setting.

## 04 Denture design



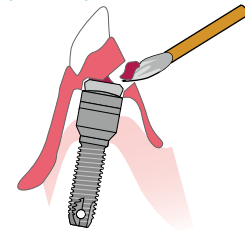
Place the magnetic assembly on the keeper, take the impression, and fabricate the working denture model. Denture design should be carried out in the usual manner.

## 05 Denture making



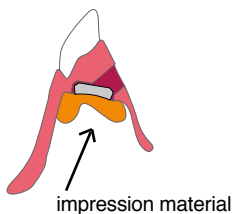
Denture fabrication is done according to standard procedure.  
Note : Please keep enough space in the denture base for the magnetic assembly.

## 06 Magnetic assembly pick-up



Fabricate a hole into the denture base. Through the hole, apply adhesive resin carefully between the magnetic assembly and the denture taking care not to move the magnetic assembly out of alignment.

## 07 Magnetic assembly cementing



After lifting the denture base with magnetic assembly out of the oral cavity, cement the magnetic assembly completely.  
Note : Please block out excess resin with use of impression material.

## 08 Completion of denture making



Completion of the final magnet-denture.

## 09 Fitting of the denture



Installed finished magnet-denture is shown.

# MAGFIT™

## Magnetic Attachments for Natural Tooth Roots

### MAGFIT™ DX 1000/800/600/400



Space gauge



Housing pattern



Rubber mold



Keeper setter



Keeper carrier

### MAGFIT™ EX 600W/400W



Space gauge



Housing pattern



Rubber mold



Keeper setter



Keeper carrier

### MAGFIT™ RK



Keeper carrier



Housing pattern



Rubber mold








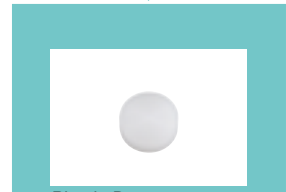


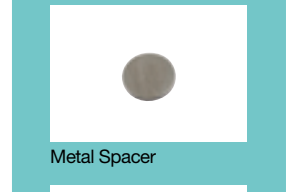

Tweezers



# Accessories

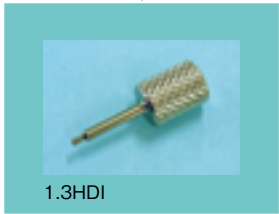


## Magnetic Attachment for Implants

### Magnetic assembly

Flat type	Dome type	SX type
		
		
<p>Housing pattern</p>	<p>Housing pattern</p>	<p>Plastic Dummy</p>
		
<p>Rubber mold</p>	<p>Rubber mold</p>	<p>Metal Spacer</p>
		
		<p>Washer type Spacer</p>

\* These accessories are packed with SX type.

### Keeper

For pre-tightening	For torque controllers Exclusive for Straumann torque wrench	For torque controllers
		
<p>1.3HDI</p>	<p>1.3MDI</p>	<p>1.3MDB</p>

\*Attention Please use Aichi 1.3mm JIS driver tip which is compatible with Implant-maker specific torque drivers and torque controllers. Aichi 1.3mm JIS hexagonal driver for hand-tightening use is also available.



# IRPMD

International Research Project of  
Magnetic Dentistry

## Sponsored by Aichi Steel Corporation

The IRPMD was established in 1996 to help foster the research and education for magnetic applications for the dental field. The IRPMD continues to expand its scope with the cooperation of a group of dedicated researchers from 16 countries all over the world. We have held 8 IRPMD symposiums so far and expect to hold more in the near future.



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## Academic books about magnetic attachments



- Basic Clinical Manual of Magnetic Overdenture  
(2010, Quintessence Publishing Co., Ltd.)

\*Available in English, Chinese, Taiwanese and Japanese  
Includes DVD showing the procedure for installing Magfit



- New Magnetic Applications in Clinical Dentistry  
(2004, Quintessence Publishing Co., Ltd.)

- Implant Dentistry with New Generation Magnetic Attachment  
(2005, Quintessence Publishing Co., Ltd.)

# MAGFIT™

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