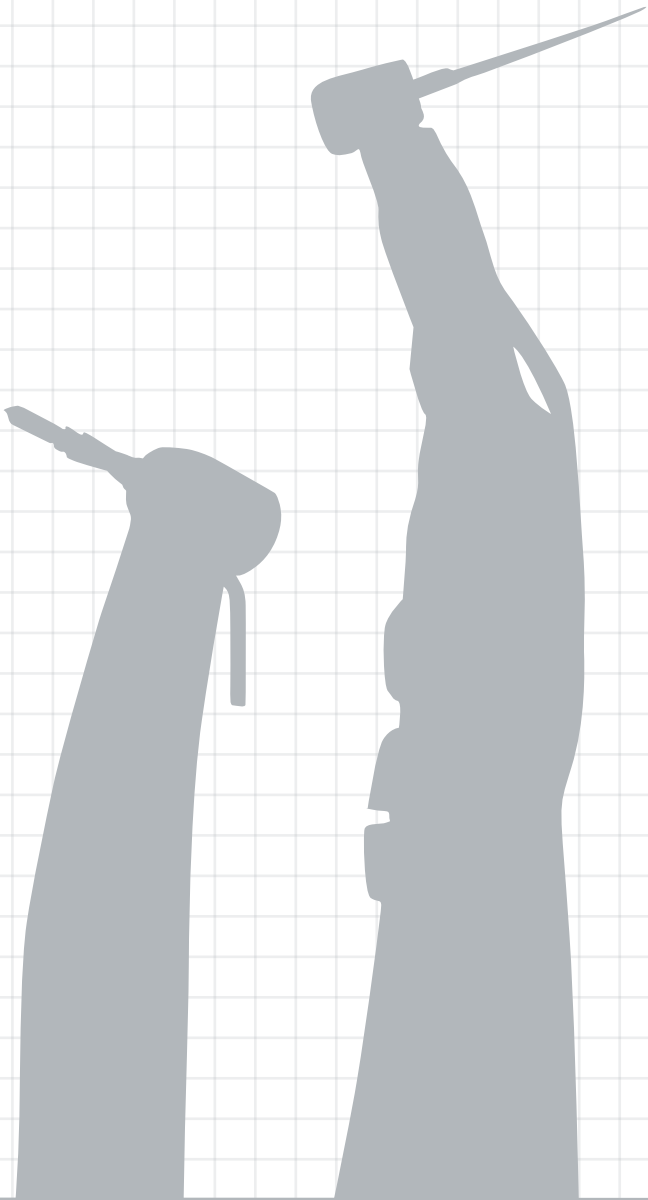




Made in KOREA

krafit

2019 / 2020



saeyang

Welcome to SAEYANG

Thank you for your interest and support for our products.

We, Saeyang Microtech, has continued to grow since its foundation in 1976 specialized in manufacturing micro-handpieces for laboratory and dental field with enjoying a good reputation from overseas more than 100 countries as well as Korea.

The most important thing is superior quality of our products and through this, we always do our best for customer satisfaction as our top priority. Also we focus on developing new products by advanced technical innovation in R&D center and launching at least more than two models in the market with ongoing investments for new facilities each year.

We exhibit at overseas famous exhibitions more than 18 times in the United States, Germany, France, Spain, UK, Italy, H.K and China. During those exhibitions, we have a good opportunity to establish mutual trust and confidence with our buyers over 100 countries.

Saeyang will always do our best to listen to any needs and requirements of the customer.

Thank you for your continued support.

President & CEO
Jung Pil Shin



SAEYANG History

- 1976 Company Established
- 1977 Registered manufacturing of medical equipment.
- 1987 Registered trading business
- 1989 Registered Korea medical equipment cooperative association
- 1991 Registered of designs for engine for dental laboratory
- 1998 Certified ISO 9001 from TUV (Germany)
- 1999 Certified CE Mark from TUV (Germany)
- 2000 Certified Venture enterprise for high technology
- 2001 Awarded official Superior Exporting Firm
- 2001 Awarded Leading Enterprise
- 2002 Certified CE Mark of New item "Escort"
- 2003 Registered manufacturing Brushless motor
- 2003 Certified CE Mark of "Marathon Multi 600" Brushless motor
- 2004 Established R&D center
- 2004 Certified CE Mark of New item "Marathon N7&N2"
- 2005 Certified CE Mark of New item "Marathon HANDY700 Series" Brush/Brushless motor
- 2005 Awarded official best Exporting Firm
- 2006 Moved into a new factory
- 2006 Certified PSE from TUV
- 2006 Opening Ceremony of a new factory as well as the 30th anniversary
- 2008 Certified ISO 9001 : 2000 from SGS (U.K)
- Certified ISO 13485 : 2003 from SGS (U.K)
- Certified Directive 93/42/EEC from SGS (U.K)
- 2010 Certified CE Mark of New item "Endo e class"
- 2011 Development of Endo a class
- 2012 Dental contra angle
- 2013 Developed Implant Motor
- 2013 Certified FDA (Endo Motor)
- 2014 60,000RPM Handpiece Developed
- 2014 20:1 Optic Handpiede Developed
- 2015 Certified FDA CFDA(Implant Motor)
- 2015 Awarded Grand Prize for 2015 Best Company in Daegu City
- 2016 Awarded for Exporting US\$ 20 million
- Awarded for Daegu Star Company
- 2017 Factory expansion
- Development of Endo E plus
- Development of Ki-20 Advance
- Development of K35 cube
- 2018 Development of Endo A Class (APX)
- Development of MINI cro
- Korean World-class Product Award 2018

Contents

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Krafit Products Line-up

General Application Handpiece



NEW ES-100N ES-6 SP-CE

Surgical Handpiece



KI-AG20 solid type KI-AG20L solid type NEW SGC-S101 NEW SGS-R

Implantology



Ki-20 Advance (Single) Ki-20 Advance (Dual) Ki-20

Endodontics



Endo A Class (APX) Endo A Class (LED) Endo A Class Endo E plus Apex Locator Endo E Class SP-RA16N SP-RA16 SP-RE16

Others



K38 + E Type motor Handy 700 + E Type motor SD-T Driver & Adaptor

Upcoming Products

Dental Air turbines



KT-500NL KT-500N KT-600N KT-600NL KT-500KL KT-500K KT-600KL KT-600K

Straight & Surgical & Saw Handpieces



ES-6L ES-04 KI-DAG20L KI-DAG20L SGC-S102 SGC-A101 SGC-A102 SGS-O SGS-S



ES-100N
Krofil
MADE IN KOREA
NO. 18100002



ES-B
Krofil
MADE IN KOREA
FA.18020024

ES-B
Krofil
MADE IN KOREA
FA.18020024

ES-B

General Application Handpiece

Contra & Straight Handpiece

Washable in the thermoisinfectior  Autoclavable up to 135°C 

ES-100N 1:1 External water spray



- Dimensions : L88 x Ø17.5 (mm)
- Weight : 75g
- Speed : Max 40,000 rpm
- **Able to use for hair transplant surgery**

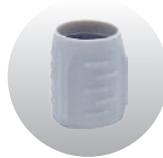
ES-6 1:1

<ES-6 Handle>

metal ring



plastic handle



- Easy to open & close collect chuck
- **Long durability**



- Dimensions : L85 x Ø20 (mm)
- Weight : 71g
- Speed : Max 40,000 rpm

SP-CE(Ø2.35) 1:1 Push Type



- Dimensions : L81 x Ø20 (mm)
- Weight : 58g
- Speed : Max. 40,000 rpm

Washable in the
thermodisinfecteur



Autoclavable
up to 135°C



ES-6L

1 : 1

Water spray

DEVELOPING



- Dimensions : L84 x Ø20 (mm)
- Weight : 87g
- Speed : Max 40,000 rpm

ES-6L

1 : 1

Water spray

Optic

DEVELOPING



- Dimensions : L84 x Ø20 (mm)
- Weight : 87g
- Speed : Max 40,000 rpm

ES-04

4 : 1

DEVELOPING



- Dimensions : L99 x Ø20 (mm)
- Weight : 86g
- Speed : Max 10,000 rpm

Surgical Handpiece



Implant Handpiece

Washable in the thermosinfector  Autoclavable up to 135°C 

Ki-AG20L

20 : 1

Optic

Solid Type



Dust shield



- Dimensions : L98 x Ø20 (mm)
- Weight : 87g
- Speed : Max. 2,000 rpm
- Torque : 80Ncm

Ki-AG20

20 : 1

NON-Optic

Solid Type



- Dimensions : L95 x Ø20 (mm)
- Weight : 85g
- Speed : Max. 2,000 rpm
- Torque : 80Ncm

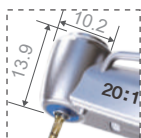
Ki-DAG20L

20 : 1

Optic

Detachable Type

DEVELOPING



- Dimensions : L98 x Ø20 (mm)
- Weight : 86.5g
- Speed : Max. 2,000 rpm
- Torque : 80Ncm

Ki-DAG20

20 : 1

NON-Optic

Detachable Type

DEVELOPING



- Dimensions : L98 x Ø20 (mm)
- Weight : 85.5g
- Speed : Max. 2,000 rpm
- Torque : 80Ncm

Saw Handpiece

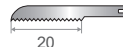
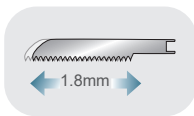
Washable in the thermodisinfecteur  Autoclavable up to 135°C 

SGS-R 3 : 1 Reciprocating



- Dimensions : L110 x Ø20 (mm)
- Weight : 94.5g
- Strokes : Max 12,600 strokes/min

Blades for SGS-R



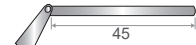
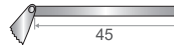
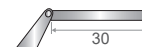
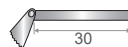
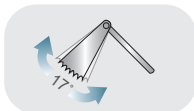
SGS-O 3 : 1 Oscillating



- Dimensions : L107 x Ø20 (mm)
- Weight : 89.5g
- Strokes : Max 12,800 strokes/min

DEVELOPING

Blades for SGS-O



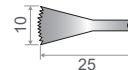
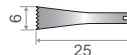
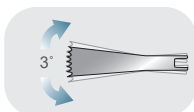
SGS-S 3 : 1 Sagittal



- Dimensions : L109 x Ø20 (mm)
- Weight : 92g
- Strokes : Max 12,600 strokes/min

DEVELOPING

Blades for SGS-S



Surgery Handpiece

Washable in the
thermodisinfectors



Autoclavable
up to 135°C



SGC-S101

1 : 1

Straight Type



- Dimensions : L110 x Ø20 (mm)
- Weight : 74g
- Speed : Max 40,000 rpm

SGC-S102

1 : 2

Straight Type

DEVELOPING



- Dimensions : L127 x Ø20 (mm)
- Weight : 94g
- Speed : Max 80,000 rpm

SGC-A101

1 : 1

Contra type

DEVELOPING



- Dimensions : L120 x Ø20 (mm)
- Weight : 94g
- Speed : Max 40,000 rpm

SGC-A102

1 : 2

Contra type

DEVELOPING



- Dimensions : L124 x Ø20 (mm)
- Weight : 105g
- Speed : Max 80,000 rpm

memo



Implantology





Ki-20 Advance

Features

- Optic LED Control
- Compact Micro motor 40,000 rpm (1:1)
- 9 memory programs can be stored on single motor
- Record medical records on USB
- Displaying the torque graph in real time
- Large LCD display
- Torque Calibration
- Dual irrigation pumps (optional)
- Dual motor (optional)



Torque calibration

Calibrates the micromotor & the handpiece to the rotational resistance of each individual handpiece. During the operation, high torque accuracy offered.



Data management

Treatment data can be easily accessed and downloaded using a USB stick. Files can be transferred and added to patient records. *USB memory stick not included



Advanced irrigation pump

The pump allows easy set-up of irrigation tubes and is extremely quiet during operation.



▲ Open



▼ Close

Foot control

- ① Coolant button(4 steps) ③ F/R change button
- ② Program change button ④ Foot pedal(speed control)



Complete sets



MODEL **Ki-20 Advance (Single)**

Specifications control box only

- Power supply : AC100-120 or AC220-240V 50/60 Hz
- Speed : 10-2,000 (20:1), 7-1,200 (32:1)
- Torque : 80Ncm (20:1), 90Ncm (32:1)
- Weight : 3.5 kg
- Dimensions : W292 x D230 x H104(mm)
- Contents : Control unit, E-type motor, Handpiece, Foot control, Handpiece stand



MODEL **Ki-20 Advance (Dual)**

Specifications control box only

- Power supply : AC100-120 or AC220-240V 50/60 Hz
- Speed : 10-2,000 (20:1), 7-1,200 (32:1)
- Torque : 80Ncm (20:1), 90Ncm (32:1)
- Weight : 3.9 kg
- Dimensions : W324 x D230 x H104(mm)
- Contents : Control unit, E-type motor, Handpiece, Foot control, Handpiece stand

Ki-20

Features

- Optic LED Control
- Compact Micro motor 40,000 rpm (1:1)
- 9 memory programs can be stored on single motor
- Light & compact optic motor for speedy and accurate surgery.



E-type Motor

Optic



Non-optic



Advanced irrigation pump

The pump allows easy set-up of irrigation tubes and is extremely quiet during operation



▲ Open

▼ Close



Foot control

- ① Coolant button(4 steps) ③ F/R change button
- ② Program change button ④ Foot pedal(speed control)



Complete sets



MODEL Ki-20(Optic)

Specifications control box only

- Power supply : AC100-120 or AC220-240V 50/60 Hz
- Speed : 20-2,000 (20:1), 13-1,200 (32:1)
- Torque : 70Ncm (20:1), 90Ncm (32:1)
- Weight : 2.6 kg
- Dimensions : W240 x D225 x H108(mm)
- Contents : Control unit, E-type motor, Contra angle
Foot control, Handpiece stand



MODEL Ki-20(Non-optic)

Specifications control box only

- Power supply : AC100-120 or AC220-240V 50/60 Hz
- Speed : 20-2,000 (20:1), 13-1,200 (32:1)
- Torque : 70Ncm (20:1), 90Ncm (32:1)
- Weight : 2.6 kg
- Dimensions : W240 x D225 x H108(mm)
- Contents : Control unit, E-type motor, Contra angle
Foot control, Handpiece stand



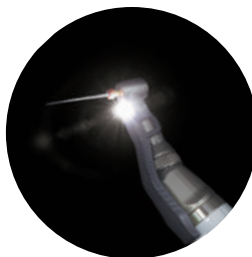


Endodontics

Endo A Class (APX) **Apex Locator**

Features

- **Apex Locator**
- Suitable for endodontic procedures with LED light
- Wider LCD display
- Reciprocating system (Angle adjustable)
- Auto stop reverse feature
- 9 Memory programs
- Li-ion battery
- Operatable for 90 min



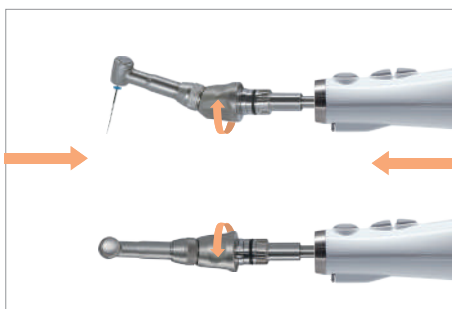
LED Light



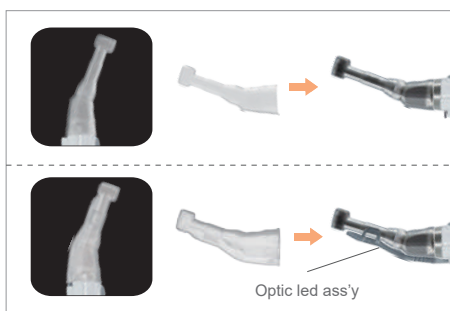
Specifications

- Power supply : AC100-240V 50/60 Hz
- Speed : 50 - 600 rpm
- Weight : 310g
- Dimensions : W100 x D100 x H228(mm)
- Contents : Endo motor, Contra angle, Handpiece Stand
Lip clip, Apex cable

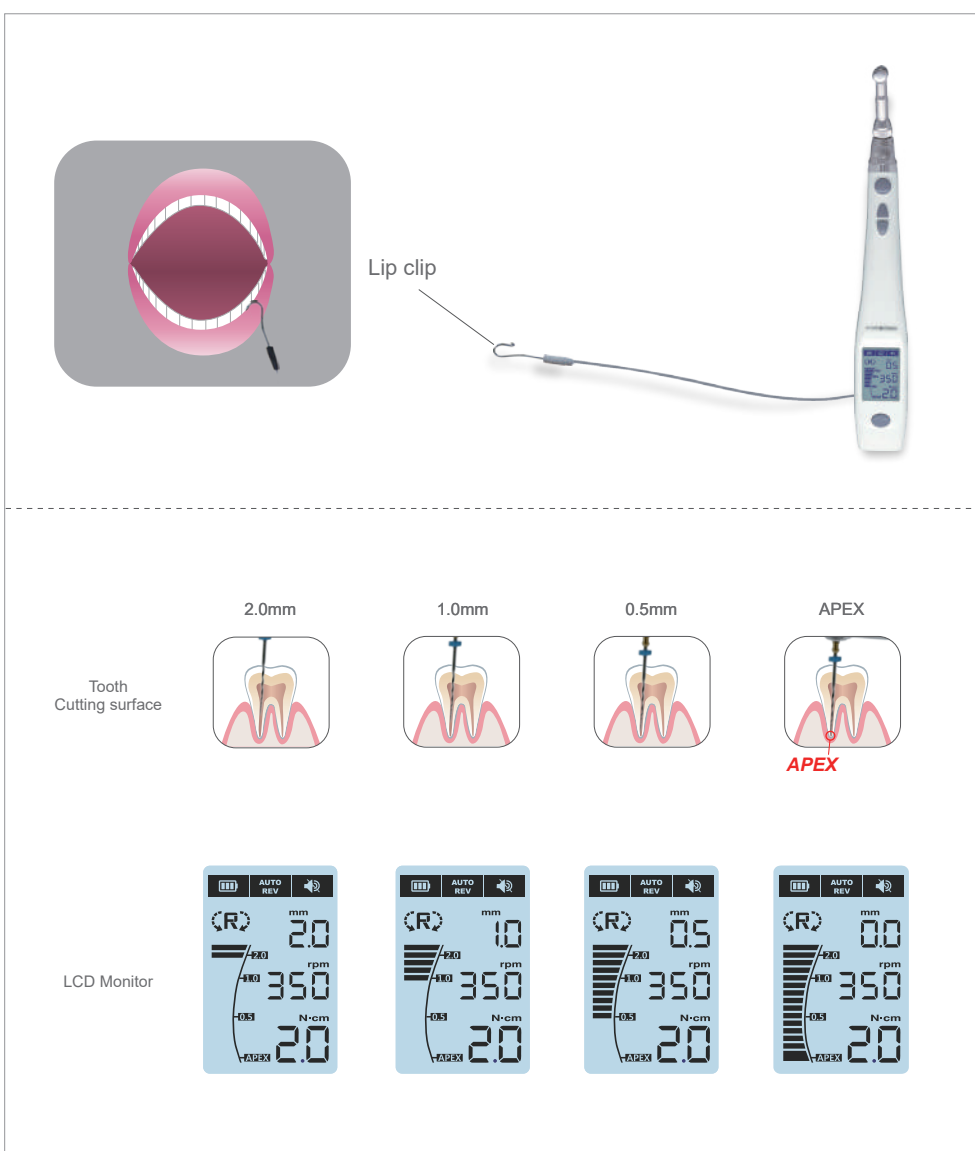
360 degree connectable contra angel



Insulation Sleeve



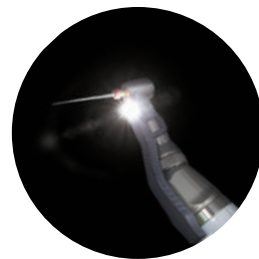
Apex Locator



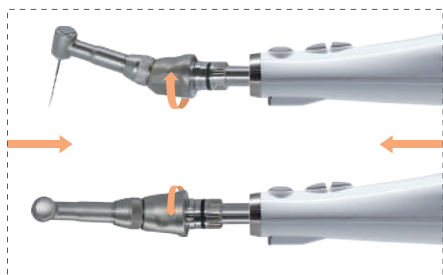
Endo A Class (LED)

Features

- Suitable for endodontic procedures with LED light
- Wider LCD display
- Reciprocating system
- Auto stop reverse feature
- 9 Memory programs
- Li-ion battery
- Operatable for 90 min
- Real time torque level



LED Light



▲ 360 degree connectable contra angel

Specifications

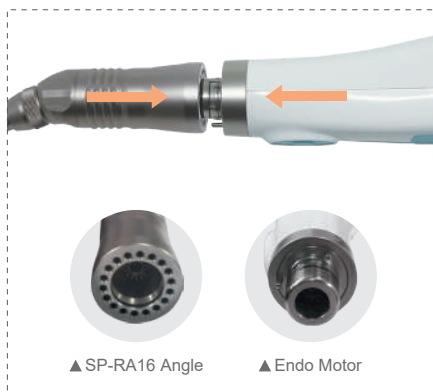
- Power supply : AC100-240V 50/60 Hz
- Speed : 150 - 600 rpm
- Weight : 310g
- Dimensions : W100 x D100 x H228(mm)
- Contents : Endo motor, Contra angle, Charger



Endo A Class

Features

- Suitable for endodontic procedures
- Reciprocating system
- Auto stop reverse feature
- 6 Memory programs
- Ni-MH battery
- Operatable for 90 min



Specifications

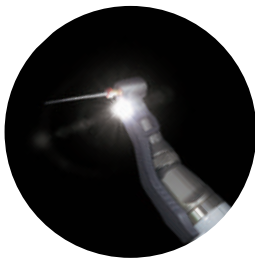
- Power supply : AC100-240V 50/60 Hz
- Speed : 140 - 500 rpm (16:1)
- Weight : 366g
- Dimensions : W112 x D147 x H77(mm)
- Contents : Endo Motor, Contra angle, Charger



Endo E plus Apex Locator

Features

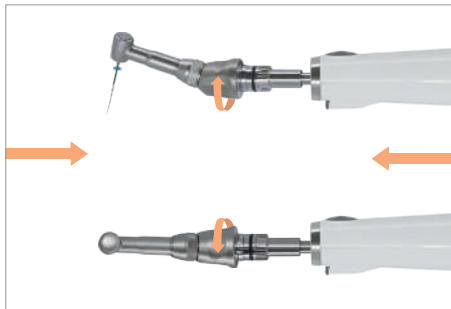
- Apex Locator
- Suitable for endodontic procedures with LED light
- Reciprocating system
- Auto stop reverse feature
- Automatic power saving
- 9 Memory programs
- Li-ion battery
- Real time torque level



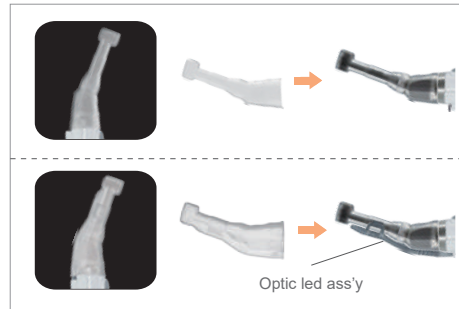
LED Light



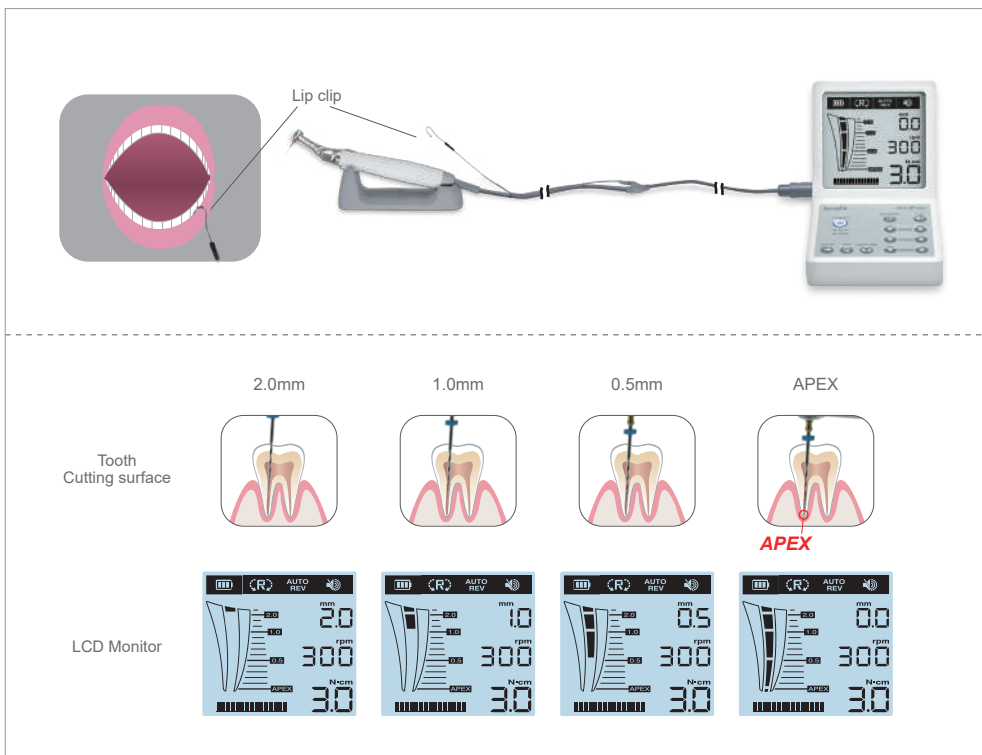
360 degree connectable contra angel



Insulation Sleeve



Apex Locator



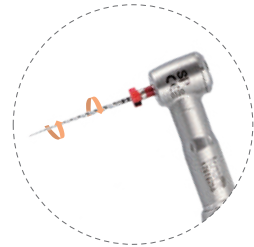
Specifications control box only

- Power supply : DC 12V (Adaptor)
- Speed : 50 - 600 rpm
- Torque : 0.5 - 4.0 Ncm
- Weight : 507 g
- Dimensions : W105 x D179 x H110(mm)
- Contents : Endo Control Unit, Endo motor, Contra angle
Handpiece Stand, Lip clip, Apex cable

Endo E Class

Features

- Suitable for endodontic procedures
- Auto stop reverse feature
- 15 Memory programs
- E-Type(SDE-EM24E) Endo Handpiece
- On/off foot switch



Auto Stop Reverse



SDE-EM24E for Endo E class is the E-Type Motor that can be widely compatible with other contra angles.



Specifications control box only

- Power supply : AC100-120 or 220-240V 50/60 Hz
- Speed : 70 - 1,100 rpm (16:1)
- Torque : 0.5 - 9.9 Ncm (16:1)
- Weight : 910 g
- Dimensions : W175 x D125 x H90(mm)
- Contents : Endo Control Unit, E-type motor, Contra angle, Foot control, Handpiece

Endodontic Handpiece

Washable in the thermosinfector  Autoclavable up to 135°C 

PM(mini) Head ass'y

1 : 1

Contra Head



- Dimensions : L41 x Ø8 (mm)
- Weight : 11.5g
- Speed : Max. 20,000 rpm

SP-RA16N

1 : 1



- Dimensions : L86 x Ø16 (mm)
- Weight : 34.5g
- **For Endo A Class(LED)**

SP-RA16

16 : 1



- Dimensions : L76 x Ø18 (mm)
- Weight : 56g
- **For Endo A Class**

SP-RE16

16 : 1



- Dimensions : L95 x Ø20 (mm)
- Weight : 62g
- **For Endo E Class**



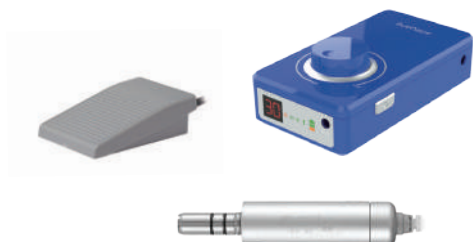


Others

K38 standard / clip

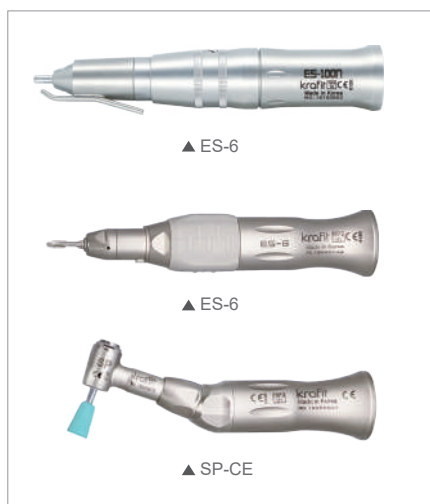
Features

- MAX 8hours (MH20E)
- LI-ION battery (rechargeable)
- Digital speed display window
- LED display for battery charging level
- Automatic System
 - power save / FWD-REV
 - overload protection, warning LED
- On/Off Foot Switch (SFP-27)



Specifications

- Power supply : DC 12V
- Speed : Max. 30,000 rpm
- Weight : 285g
- Dimensions : W67 x D128 x H30(mm)
- Contents : Control unit, E-type motor, Angel Foot control, Handpiece stand



Handy700 50K

Features

- Digital speed display window
- Maximum speed set mode possible
- Excellent durability
- Self-diagnosis function
- Auto-cruise function
- Variable speed control pedal (FS60N)
- Easy-carry with handle



Specifications control box only

- Power supply : AC100 - 120V or 200 - 240V 50/60 Hz
- Speed : MAX 50,000 RPM
- Weight : 2.7 kg
- Dimensions : W137 x D232 x H180(mm)
- Contents : Control unit, E-type motor, Angle Foot control, Handpiece stand



▲ SGC-S101



▲ BS50E

SD-T Driver Implant Screw Driver

Features

- Universal manual screw driver
- Contra angle type (easy to access in mouth)
- 3 torque values (∞ or 20,35Ncm)
- Good to use maxilla, mandible jaw surgery



Complete set



Specifications

- Weight : 57g
- Dimensions : L119 x Ø11
- Contents : SD-T Driver, Adaptor, Spray nozzle

Spare parts

Lubricant Oil

- Lubricant Oil is a specially formulated, highly effective general handpiece lubricant. Frequent application of Lubricant Oil will assure handpiece performance and durability. Apply Lubricant Oil every time before autoclaving any handpiece.



Specifications

- For Dental Handpiece
- Alcohol-contained lubricant
- Volume : 300ml



Contra angle spray nozzle



<SP-RA16N only>

Spare parts

Implant Engine

Ki-20 / Ki-20 Advance



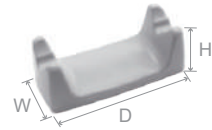
Foot control



Power cord



E-Type motor



Handpiece stand
60(W) x 130(D) x 47(H)



Irrigation tube



Coolant hanger



Ki-20
Advance
only



Calibration bur



Wrench



Nozzle pin



Spray nozzle

Maintenance & Repair tool box



Endo Engine

Endo A Class / Endo A Class (LED) / Endo A Class (APX) / Endo E Class / Endo E plus

Endo A Class



Charger cord



Spray nozzle

Endo A Class (LED)



Charger cord



Optic LED ass'y



Spray nozzle

Endo A Class (APX) Apex locator



Charger cord



Optic LED ass'y



Spray nozzle



Canal measurement module cable



Lip clip



Insulation sleeve



Insulation sleeve(LED)

Endo E Class



Foot switch



Power cord



E-Type motor



Handpiece stand
50(W) x 128(D) x 49(H)



Spray nozzle

Endo E plus Apex locator



Charger cord



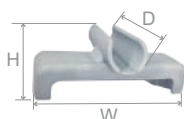
Handpiece motor



Canal measurement module cable



Handpiece stand
50(W) x 128(D) x 49(H)



Handpiece holder
110(W) x 60(D) x 50(H)



Optic LED ass'y



Spray nozzle



Lip clip



Insulation sleeve



Insulation sleeve(LED)

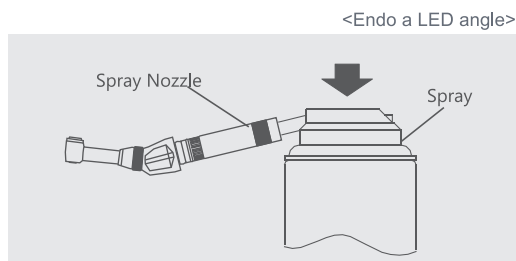
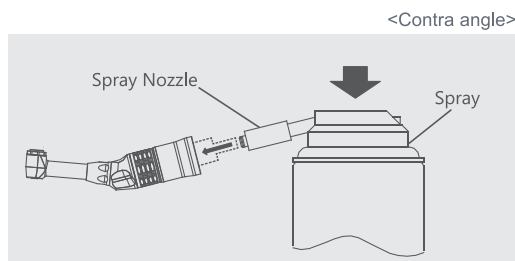
User guide

(For safety & efficiency)

Lubrication I Oil

- ※ After each use, please lubricate the contra angle handpiece and keep it under normal condition.
- ※ The contra angle handpiece detached from air motor or micromotor should be lubricated as following order.

- 1) Shake the oil spray about 10 times to mix the contents enough, and install the enclosed spray nozzle on the spray.
- 2) Clean the entrance of spray nozzle.
- 3) Insert the spray nozzle into the inserting part of the contra angle handpiece.
- 4) Spray for 2~3 seconds.

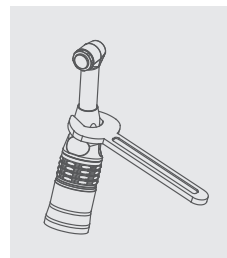


- 5) If the contra angle handpiece is contaminated by blood or etc., please unscrew the nut and disassemble the contra head by using a spanner
- 6) Clean the detached contra head with flowing water or ultrasonic cleaner.
- 7) After cleaning the contra head, dry it out completely and lubricate enough to remove the water inside of it.

Autoclave I Dry

- ※ Autoclaving is recommended.
- ※ The contra angle handpiece should be sterilized after each use.
- ※ Autoclaving sequence

- 1) Clean the dust using the brush, and wipe off the contra angle with the soft cloths wet by alcohol.
- 2) After detaching the contra angle from micromotor, and lubricate it.
- 3) Put the contra angle handpiece without a micromotor into the autoclave.
- 4) Set the temperature of the autoclave. (e.g. about 4 minutes at 132℃)
- 5) Keep the contra angle handpiece under normal condition after autoclaving and drying it out. (drying 30 minutes)



Caution

- 1) Place the contra angle handpiece on the upper or middle tray of the autoclave. If there is the heat generator at the bottom of it, placing the contra angle handpiece at the bottom could cause the possibility that the temperature exceeds a set point.
- 2) Do not place the contra angle handpiece into the autoclave with other contaminated instruments by chemical substances to prevent discoloration or corrosion of its plating.
- 3) It is necessary for the users to operate our products by following the maintenance requirements in this manual. The manufacturer is not responsible for any accident or problem caused by not following the manual.
- 4) The device consists the durability of at least 250 sterilization cycles.
- 5) In case of anything wrong with products, please stop using the products and contact your local dealer.
- 6) Do not try to disassemble or convert the contra angle handpiece except for instructions mentioned on the manual.
- 7) Be careful not to drop the contra angle handpiece and be away from any impact.
- 8) Please pay attention to the condition of a contra angle handpiece such as vibration, heat generation and instability of the file.
- 9) Do not push the button while the file is rotating.
- 10) The contra angle handpiece should be disconnected from micromotor after rotation of a file completely stops.
- 11) If the head part inside is contaminated, please detach the gear-shift and do the cleaning inside of it, and then lubricate the contra angle handpiece and try to reassemble carefully.

since 1976

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