

since 1976

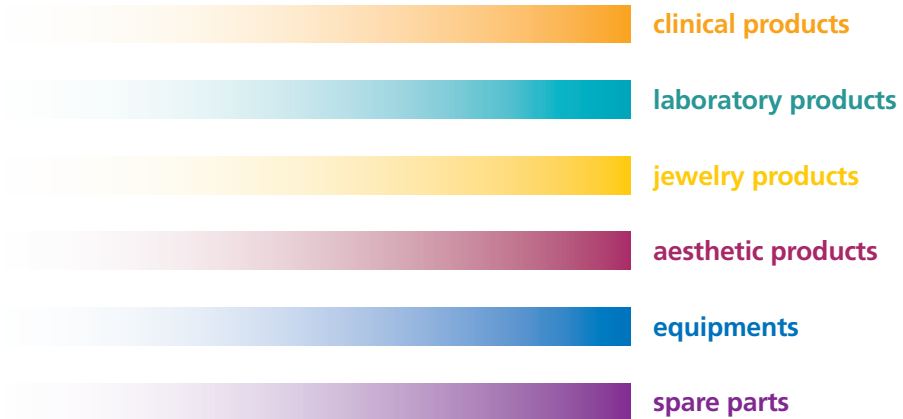
krafit

marathon

CRAFIEN

quality & promise

index



krafit contra angle



krafit contra angle



krafit straight nose cone



krafit air motor



krafit E-Type motor



krafit implant control box



Ki-20 Dual



Ki-20

krafit endo control box



New endo A



endo A class
Reciprocating



endo A class



endo e class

krafit UBM-400, H105



UBM-400
(dental unit chair module)



Ke-40
(high speed control unit)

marathon Laboratory air turbine



mat-300L
LED



mat-300W
Water



mat-300A
Air

marathon brushless micromotor



BM50S1



BM40S1



BS50C



BS40E
(autoclave)

marathon brush micromotor



SM45C



SH37LN



SH37L
(M45)



H37L1



H35SP1



H37LSP



H37SP



SM110

marathon brushless control box



Multi 600
(60,000 rpm)



Multi 600



Handy 700
(60,000 rpm)



Handy 700



Handy Eco

marathon brush control box



Eco 450



New N7



New N2



Champion



Marathon-4



Escort III



Escort II Pro



Mighty



Handy 702

CRAF IEN *line of products*

crafien the lightest micromotor



MH20
(silver)



MH24
(silver)



MH24
(red)

crafien lighter micromotor



SH250
(12V)



SH300
(12V)



SH30N
(30V)



SH30N
(12V)

crafien light micromotor



SH20N
(white)



SH20N
(pink)



H200



H20

crafien portable control box

K38 (12V)



K-38 dial
(Digital)



K-38 dial
(Digital)



K-38 dial
(Digital)

crafien portable control box



K-35
(Digital)



K-35
(Digital)



Combi 24
(white)

crafien control box



Champion
(pink)



Mighty



Escort II Pro
(blue)



20:1

saeyang
KRAFT
Ki-Ag20



implant handpiece

endodontics handpiece

contra angle

straight nose cone

dental unit chair module

Ki-AG20 Implant Handpiece Reduction

20 : 1

optic



- **Speed: 30 - 2,000 rpm**
- Max torque: **70 Ncm**
- Stainless steel body
- Push button chuck
- Double sealing system
- External & Internal cooling

Ki-AG32 Implant Handpiece Reduction

32 : 1

optic



- **Speed: 20 - 1,200 rpm**
- Max torque: **90 Ncm**
- Stainless steel body
- Push button chuck
- Double sealing system
- External & Internal cooling

Ki-AG20 Implant Handpiece Reduction

20 : 1

32 : 1



- Speed: 30 - 2,000 rpm (20:1)
20 - 1,200 rpm (32:1)
- Max torque: 70 Ncm (20:1)
- Stainless steel body
- Push button chuck
- Double sealing system
- External & Internal cooling

Ki-AG20 Implant Handpiece Reduction

20 : 1

32 : 1



- Speed: 30 - 2,000 rpm (20:1)
20 - 1,200 rpm (32:1)
- Max torque: 70 Ncm (20:1)
- Stainless steel body
- Push button chuck
- Double sealing system
- External & Internal cooling

SP-RA16 (endo a class)

16 : 1



- **Speed: 140 - 500 rpm**
- Max torque: 3.0 Ncm
(When using 16:1 head)
- Stainless steel body
- Push button chuck
- For Ni-Ti files (Ø2.35)

SP-RE16 (endo e class)

16 : 1



- **Speed: 70 - 1,100 rpm**
- Max torque: 9.9 Ncm
(When using 16:1 head)
- Stainless steel body
- Push button chuck
- For Ni-Ti files (Ø2.35)

PM (mini) Endo Head Assy

miniature-head

Push button



- **Speed: 200 - 600 rpm**
- Max torque: 3.0 Ncm
- Stainless steel body
- Push button chuck
- For Ni-Ti files (Ø2.35)
- **Miniature head**

LM (mini) Endo Head Assy

miniature-head

Latch head



- **Speed: 200 - 600 rpm**
- Max torque: 3.0 Ncm
- Stainless steel body
- Latch head
- For Ni-Ti files (Ø2.35)
- **Miniature head**

SP-CE Contra Angle

1 : 1

Push button



- **Max.speed: 40,000 rpm**
- Stainless steel body
- Push button
- Ball bearing

LP-CE Contra Angle

1 : 1

Latch head



- **Max.speed: 40,000 rpm**
- Stainless steel body
- Latch head
- Handle stainless
- Ball bearing

ES6 Straight Nose Cone

1 : 1



- **Max.speed: 40,000 rpm**
- Stainless steel body
- Handle stainless

ES04 Reduction Straight Nose Cone

4 : 1



- **Max.speed: 10,000 rpm**
- Stainless steel body
- Handle stainless

BS40E E-Type Micro motor & Cord

brushless

1:5

LED

Water spray

Air

NON LOAD R.P.M	DIMENSION(mm)		WEIGHT(g)
	L	D	
1,000-40,000	97.7	20	110



- Speed: 1,000 - 40,000 rpm
- Max torque: 2.0 Ncm
- Autoclavable

BS40E E-Type Micro motor & Cord

brushless

NON LOAD R.P.M	DIMENSION(mm)		WEIGHT(g)
	L	D	
1,000-40,000	97.7	20	110



- Speed: 1,000 - 40,000 rpm
- Max torque: 2.0 Ncm
- Autoclavable

M40Es brush

DIMENSION(mm)		WEIGHT(g)
L	D	
98.4	25.4	160



- Max.speed: 40,000 rpm
- Max torque: 2.2 Ncm

M33E brush



- Max.speed: 30,000 rpm



LP-CE (1:1) Latch head



SP-CE (1:1) Push button



ES6 (1:1)



ES04 (4:1) Reduction



M40Es

M300Es (12V)

brush



- **Max.speed: 30,000 rpm**
- Max torque: 2.4 Ncm
- Slim type

M30Es (30V)

brush



- **Max.speed: 30,000 rpm**
- Max torque: 2.4 Ncm
- Slim type



LP-CE (1:1) Latch head



SP-CE (1:1) Push button



ES6 (1:1)



ES04 (4:1) Reduction



M300Es (12V)



M30Es

M33Es

brush

DIMENSION(mm)		WEIGHT(g)
L	D	
98.4	25.4	160



- Max.speed: 35,000 rpm
- Max torque: 2.6 Ncm
- Slim type

M33Es-B

brush

NON LOAD R.P.M	DIMENSION(mm)		WEIGHT(g)
	L	D	
0~35,000	104	25.7	142



- Max.speed: 35,000 rpm
- Max torque: 2.6 Ncm
- Autoclavable



LP-CE (1:1) Latch head



SP-CE (1:1) Push button



ES6 (1:1)



ES04 (4:1) Reduction



M33Es



M33Es-B (Autoclave)

MH20E (12V)

brush

NON LOAD R.P.M	DIMENSION(mm)		WEIGHT(g)
	L	D	
0~20,000	96	20	70



- Max.speed: 20,000 rpm
- Max torque: 2.2 Ncm

MH24E (24V)

brush

NON LOAD R.P.M	DIMENSION(mm)		WEIGHT(g)
	L	D	
0~20,000	96	20	70



- Max.speed: 20,000 rpm
- Max torque: 2.4 Ncm

M25Es (12V)

brush

DIMENSION(mm)		WEIGHT(g)
L	D	
98.4	25.4	160



- Max.speed: 25,000 rpm
- Max torque: 2.4 Ncm



LP-CE (1:1) Latch head



SP-CE (1:1) Push button



ES6 (1:1)



ES04 (4:1) Reduction



MH20E (12V)



MH24E (24V)



M25Es (12V)

AMI (internal) air motor



AME (external) air motor





LP-CE (1:1) Latch head



SP-CE (1:1) Push button



ES6 (1:1)



ES04 (4:1) Reduction



AMI (internal)



AME (external)

1:5 high speed

optic



1:5 high speed

non-optic

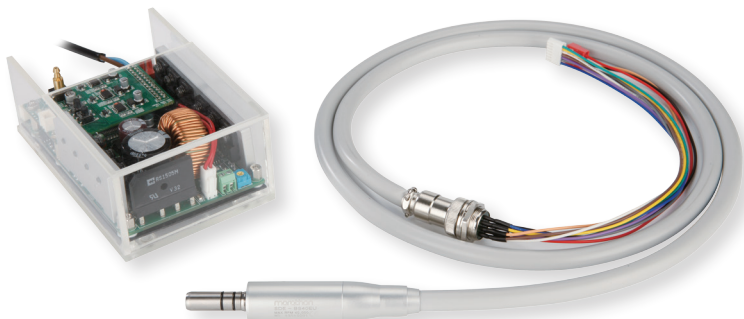


Ke-40 (high speed control unit)



GEAR	MAX.SPEED
16:1	2,500 rpm
1:1	40,000 rpm
1:5	200,000 rpm

UBM 400 (dental unit chair module)



▲ BS40E (Brushless)

ES6 + Air motor (AME)



ES6 + BS40E



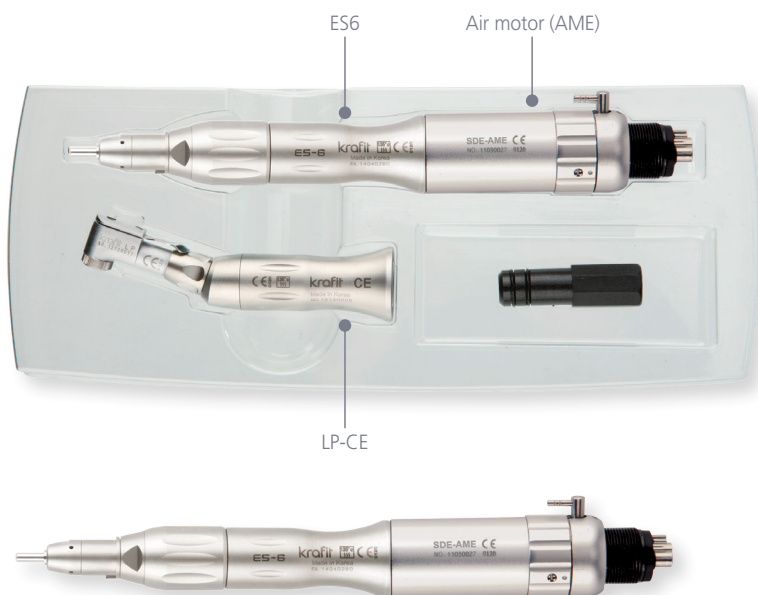
ES6 + M300Es (12V)



ES6 + M33E (30V)



Student kit (air motor + ES6 + LP-CE)





krafit

Ki-20

PROGRAM

9



2,000 rpm

20:1



70 N.cm



GEAR



COOLANT



FWD/REV



LIGHT



MEMORY



SPEED



TORQUE



PROGRAM



implant motor

endodontics motor



krofit implant motor complete set (Dual)

Ki-20 (dual)



- **Dual** Motor Connector Ports System
- **Optic LED** Control
- Compact Micro motor 40,000 rpm (1:1)
- **Torque range: 70 Ncm (20:1)**
- Gear ratio: 1:1, 20:1, 32:1, 1:2
- Program Selection
- LCD Display
- Connection to Coolant Pump
- Forward / Reverse Operation
- Variable Speed Pedal
- Up to **90 Ncm** on the rotary instrument (32:1)
- Micro Motor with Cable is sterilizable and thermo washer is disinfect able
- **Speed range: 20 - 2 ,000 rpm (20:1)**

Ki-20



- **Optic LED** Control
- Compact Micro motor 40,000 rpm (1:1)
- **Torque range: 70 Ncm (20:1)**
- Gear ratio: 1:1, 20:1, 32:1, 1:2
- Program Selection
- LCD Display
- Connection to Coolant Pump
- Forward / Reverse Operation
- Variable Speed Pedal
- Up to **90 Ncm** on the rotary instrument (32:1)
- Micro Motor with Cable is sterilizable and thermo washer is disinfect able
- **Speed range: 30 - 2 ,000 rpm (20:1)**

Ki-AG 20

optic

20:1

32:1



- Optic
- Speed: 30 - 2,000 rpm (20:1)
- Max torque : 70 Ncm (20:1)

Ki-AG 20

non-optic

20:1

32:1



- Speed: 30 - 2,000 rpm (20:1)
- Max torque: 70 Ncm (20:1)

Ki-AG 20

non-optic

20:1

32:1



- Speed: 30 - 2,000 rpm (20:1)
- Max torque: 70 Ncm (20:1)

krafit endo motor (cordless)

endo@class (optic)



- Cordless
- **Optic**
- **Reciprocating**
- Speed: 200 - **600 rpm**
- Torque: 0.5 - 3.0 Ncm
- 1:1 Endo handpiece
- Reduction motor
- Auto Stop Revesce
- Wide LCD
- Li-Ion battery

endo class



- **Reciprocating**
- Speed: 140 - 500 rpm (16:1)
- 0.3 - 3.0 Ncm
- 6 Programs Memory
- **Auto stop Reverse**
- Ni-MH Battery
- 90min. useable

Suitable for use with the most major brands of Ni-Ti files

Speed Range (min)	Gear Ratio	Torque Level (Ncm)
550 - 2000	4 : 1	0.1 - 1.0
230 - 800	10 : 1	0.2 - 2.0
140 - 500	16 : 1	0.3 - 3.0
120 - 400	20 : 1	0.4 - 4.0

endo e class



- Auto Stop Reverse
- 15 Program Memory
- Speed: 70 - 1,100 rpm (16:1)
- Torque: 0.5 - 9.9 Ncm (16:1)
- E-Type Endo Handpiece

SP-RE16 (endo e class)

16 : 1



- **Speed: 70 - 1,100 rpm**
- Max torque: 9.9 Ncm
(When using 16:1 head)
- Stainless steel body
- Push button chuck
- For Ni-Ti files (Ø2.35)



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

Auto Stop Reverse

Endo e Class has the function of Auto Stop Reverse that is absolutely essential for patients to guarantee the safety while endodontic treatments.

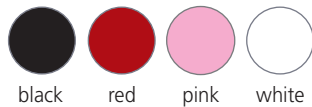






clinical control box

K38 dial type (12V)



- Max speed: 30,000 rpm
- Rechargeable battery
- LI-ION battery
- Max 8 - 4.5hrs
- 12V, 25W



▲ MH20E



▲ M300Es



LP-CE
(1:1) Latch



SP-CE
(1:1) Push

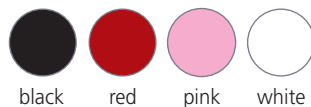


ES6
(1:1)



ES04
(4:1)

K38 button type (12V)



black red pink white

- Max speed: 30,000 rpm
- Rechargeable battery
- Li-ION battery
- Max 8 - 4.5hrs
- 12V, 25W



▲ MH20E



▲ M300Es



LP-CE
(1:1) Latch



SP-CE
(1:1) Push



ES6
(1:1)



ES04
(4:1)

K-35 (Digital)



- Max speed: 35,000 rpm
- 35W



▲ M30Es



LP-CE
(1:1) Latch



SP-CE
(1:1) Push

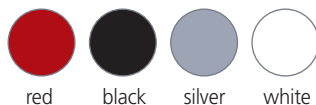


ES6
(1:1)



ES04
(4:1)

Combi 24 (24V)



- Max speed: 20,000 rpm
- Compact size
- 25W



▲ MH24E



LP-CE
(1:1) Latch



SP-CE
(1:1) Push



ES6
(1:1)



ES04
(4:1)

Champion



- Max.speed: 35,000 rpm
- 2.9 Ncm
- Compact size
- 45W



▲ M30Es



▲ M33Es



LP-CE
(1:1) Latch



SP-CE
(1:1) Push



ES6
(1:1)



ES04
(4:1)

Mighty



- Max speed: 35,000 rpm
- 2.9 Ncm
- Compact size
- 45W



▲ M30Es



▲ M33Es



LP-CE
(1:1) Latch



SP-CE
(1:1) Push



ES6
(1:1)



ES04
(4:1)





marathon

laboratory brushless

air turbine

LED



- **Max.speed: 300,000 rpm**
- **LED**
- Water Spray
- Air

It is compact and slim type laboratory turbine. In case of water function, It is simple and easy removal of water bottle. The on-off function of LED light and water coolant spray is specialized for user. The cooling system is excellent and while on it has a positive effect on the life span of many materials.

air turbine

Water

- **Max.speed:** 300,000 rpm
- Water Spray
- Air



air turbine

Air

- **Max.speed:** 300,000 rpm
- Air Spray



BM50S1

brushless

- Max.speed: 50,000 rpm
- 7.8 Ncm



BM40S1

brushless



- **Max.speed: 40,000 rpm**
- 8.5 Ncm
- Excellent motor
- Ceramic ball bearing

BS50C

brushless



- **Max.speed: 60,000 rpm**
- 4.0 Ncm
- Excellent motor
- Ceramic ball bearing
- Slim type

Multi 600

brushless

60,000rpm



▲ FS60N



▲ BS50C

- Speed: 1,000 - 60,000 rpm
- 4 Ncm
- Digital speed display window
- Lowest noise, lowest vibration
- Excellent durability
- Ceramic ball bearing
- Knee-control type
- Self-diagnosis function
- Error code display
- Auto-cruise function
- Variable speed control pedal (FS60N)
- 230W

Multi 600

brushless



▲ FS60N



▲ BM50S1

- **Speed: 1,000 - 50,000 rpm**
- 7.8 Ncm
- Digital speed display window
- Lowest noise, lowest vibration
- Excellent durability
- Ceramic ball bearing
- Knee-control type
- Self-diagnosis function
- Error code display
- Auto-cruise function
- Variable speed control pedal (FS60N)
- 230W

Handy 700

brushless

brush

60,000rpm



▲ FS60N



▲ BS50C

- Speed: 1,000 - 60,000 rpm
- 4 Ncm
- Digital speed display window
- Maximum speed set mode possible
- Lowest noise, lowest vibration
- Excellent durability
- Self-diagnosis function
- Ceramic ball bearing
- Error code display
- Auto-cruise function
- Variable speed control pedal (FS60N)
- Handpiece cradle attached
- Magnetic bur holder attached
- Vertical & easy-carry system
- 230W

Handy 700

brushless

brush



▲ FS60N



▲ BM50S1

- **Speed: 1,000 - 50,000 rpm**
- 7.8 Ncm
- Digital speed display window
- Maximum speed set mode possible
- Lowest noise, lowest vibration
- Excellent durability
- Self-diagnosis function
- Ceramic ball bearing
- Error code display
- Auto-cruise function
- Variable speed control pedal (FS60N)
- Handpiece cradle attached
- Magnetic bur holder attached
- Vertical & easy-carry system
- 230W

Handy Eco

brushless

- Speed: 1,000 - 50,000 rpm
- 7.8 Ncm
- Automatic Safety Overload Protection System
- Digital speed display window
- Variable speed control pedal
- 140W



▲ FS60N



▲ BM50S1



▲ BS40E

Excel 800

brushless

- Max.speed: 1,000 - 50,000 rpm
- 7.8 Ncm
- Floor type (foot lever attached)
- Auto-cruise function
- Variable speed control foot lever
- Less heat operation
- 230W



Floor type Foot lever System ►



▲ BM50S1



As a specific brushless controller only for a floor type work attached with its foot lever system, Excel 800 provides performers with very convenience. Through its auto-cruise function, Excel 800 guarantees convenience and perfect work. Especially, Excel 800 doesn't have an over-heat problem even after a long hour performance through its effective ventilation design.



BM50S1



Multi 600



BM40S1



Handy 700



BS40E



Handy Eco



BS50C



Excel 800







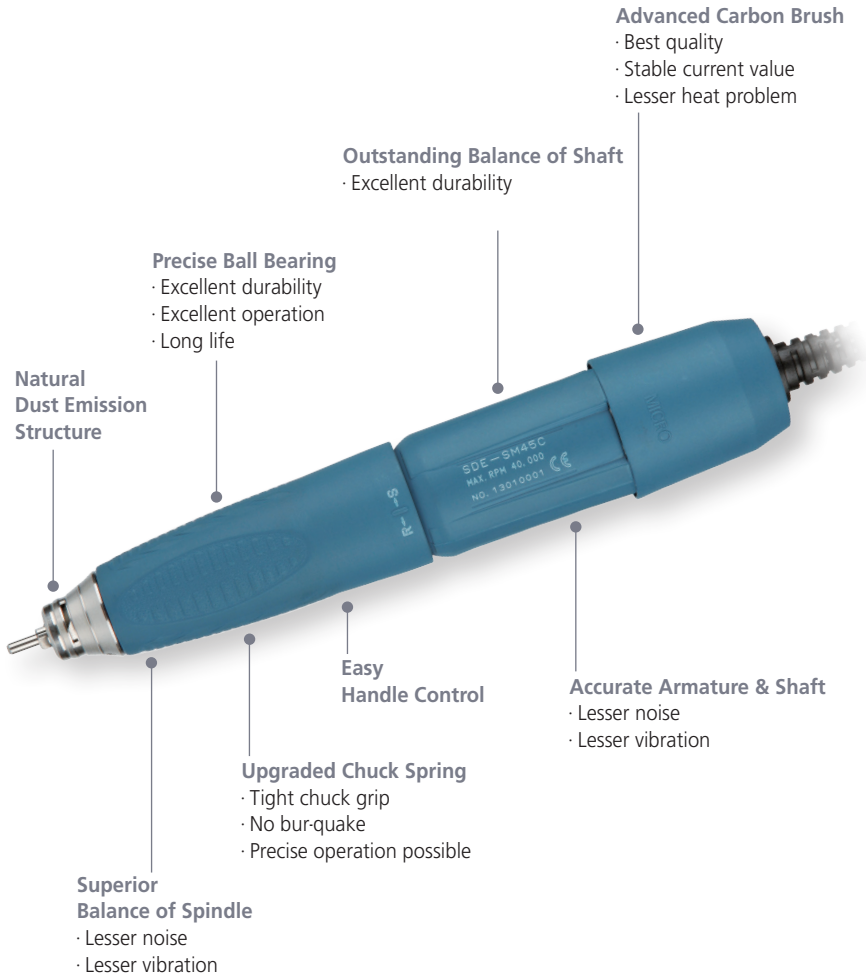
marathon

laboratory brush

SM45C

brush

- Max.speed: 40,000 rpm
- 4.5 Ncm



SH37LN

brush



- **Max.speed: 40,000 rpm**
- 4.5 Ncm
- Lesser noise
- Lesser vibration
- Outstanding ball bearing
- Durational armature
- Perfect balance

SH37L(M45)

brush



- **Max.speed: 40,000 rpm**
- 4.5 Ncm
- Lesser noise
- Lesser vibration
- Outstanding ball bearing
- Durational armature
- Perfect balance

Multi 600 Duo brushless brush



▲ FS60N



▲ BM50S1

- Speed: 1,000 - 50,000 rpm
- 7.8 Ncm
- Brushless & Brush both available
- 100W



▲ SM45C



▲ SH37LN



▲ SH37L (M45)

Handy 702

brush



▲ FS60N



▲ SM45C

- **Speed: 1,000 - 45,000 rpm**
- 4.5 Ncm
- Digital speed display window
- Lesser noise, Lesser vibration
- Excellent durability
- Self-diagnosis function
- Error code display
- Variable speed control pedal (FS60N)
- Vertical & easy-carry system
- Auto-cruise function
- 100W



▲ SH37LN



▲ SH37L (M45)

Eco 450

brush



▲ FS60N



▲ SM45C

- Max. speed: **40,000 rpm**
- 4.5 Ncm
- Automatic Safety Overload Protection System
- Variable Speed Foot Control Pedal: FS60N
- Lesser noise
- Lesser vibration



▲ SH37LN



▲ SH37L (M45)

New N7

brush



▲ FS60



▲ SH37LN

- Max. speed: 40,000 rpm
- 4.5 Ncm
- Automatic Safety Overload Protection System
- Dust-Proof Cover for Switch
- Variable Speed Foot Control Pedal: FS60
- Lesser noise
- Lesser vibration



▲ SM45C



▲ SH37L (M45)

D.C



SM45C



Handy 702

BLDC



BM50S1



Multi 600 Duo

D.C



SH37LN



Eco 450



SH37L (M45)



New N7

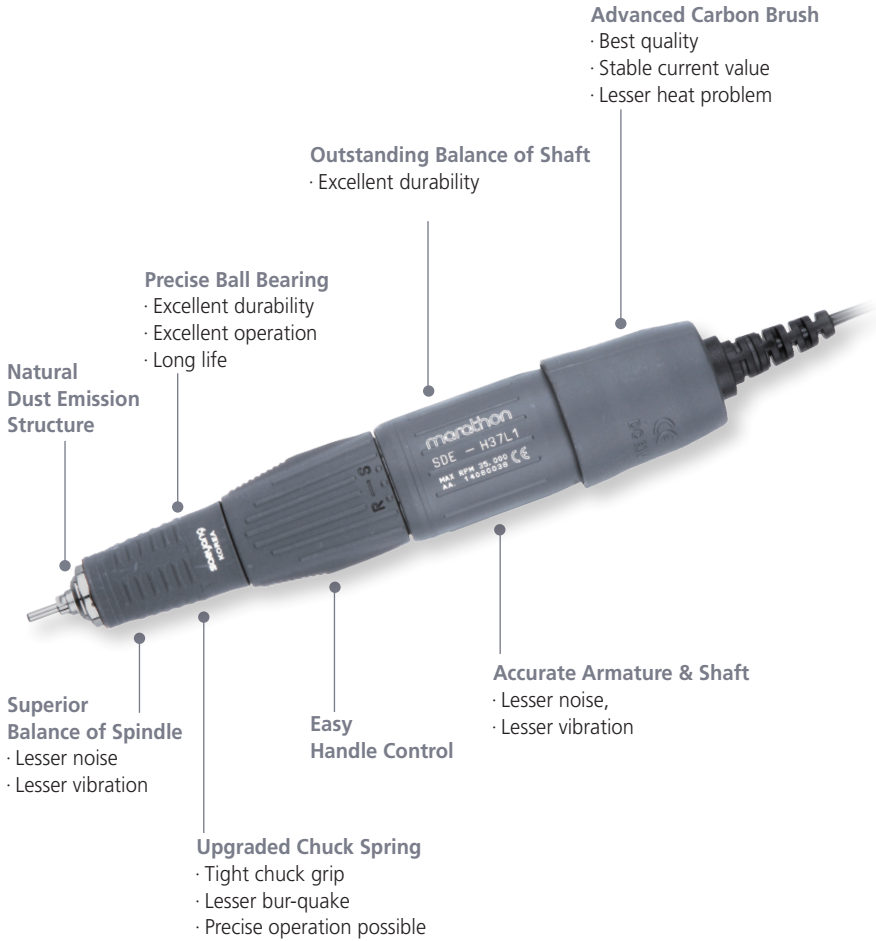
memo



H37L1

brush

- Max speed: 35,000 rpm
- 2.9 Ncm



H35SP1

brush



- Max.speed: 35,000 rpm
- 2.9 Ncm

H37LSP

brush



- Max.speed: 35,000 rpm
- 2.9 Ncm

H37SP

brush



- Max.speed: 35,000 rpm
- 2.9 Ncm (surveyor)

New N2 brush



▲ FS60



▲ H35SP1

- Max.speed: 35,000 rpm
- 2.9 Ncm
- Compact size
- Dust proof cap
- Automatic safety overload protection system
- Variable speed control pedal
- D.C 30V



▲ H37L1



▲ H37LSP

Champion

brush



▲ SFP27



▲ H37L1

- Max.speed: 35,000 rpm
- 2.9 Ncm
- Compact size
- D.C 30V



·blue



·white



▲ H35SP1



▲ H37LSP

Marathon-4

brush



▲ SFP20N



▲ H35SP1

- Max.speed: 35,000 rpm
- 2.9 Ncm
- Compact size
- 4 stage speed control
- D.C 30V



▲ H37L1



▲ H37LSP

Escort III

brush



▲ SFP20N



▲ H37L1

- Max.speed: 35,000 rpm
- 2.9 Ncm
- Compact size
- D.C 30V



▲ M33Es



▲ H35SP1



▲ H37LSP

Escort II Pro

brush



▲ SFP73



▲ SFP22



▲ H35SP1

- Max.speed: 35,000 rpm
- 2.9 Ncm
- Compact size
- Automatic safety overload protection system
- Variable speed control pedal
- D.C 30V



▲ M33Es



▲ H37L1



▲ H37LSP

Mighty

brush



▲ SFP27

▲ H37L1

- Max.speed: 35,000 rpm
- 2.9 Ncm
- Compact size
- D.C 30V



▲ H35SP1



▲ H37LSP



H37L1



H35SP1



H37LSP



M33Es



H37SP



New N2



Champion



Marathon-4



Escort III



Escort II Pro



Mighty

memo







C R A F I E N

manicure drill

pedicure drill

SH300

brush

- **MAX.SPEED: 30,000 rpm**
- 2.9 Ncm

Advanced Carbon Brush

- Best quality
- Stable current value
- Less heat problem

Outstanding Balance of Shaft

- Long life possible
- Excellent durability

Comfortable Grip

Precise Ball Bearing

- Excellent durability
- Excellent operation
- Long life

Optimized Armature & Shaft for Nail

- Brush micromotor
- Lesser noise,
- Lesser vibration

Easy Handle Control

Nail-Optimized Balance of Spindle

- Lesser noise
- Lesser vibration

Optimized Chuck Spring for Nail

- Tight chuck grip
- Lesser bur-quake
- Precise operation possible



CRAFIEN manicure & pedicure

MH20

brush



- Max.speed: 20,000 rpm
 - Excellent motor
 - Extreme light (114g)
 - 12V
-

MH24

brush



- Max.speed: 20,000 rpm
 - Excellent motor
 - Extreme light (114g)
 - 24V
-

SH250

brush



- Max.speed: 20,000 rpm
 - 24V
-

SH20N

brush



- Max.speed: 30,000 rpm
- 2.9 Ncm

SH20N

brush



- Max.speed: 30,000 rpm
- 2.9 Ncm

H200

brush



- Max.speed: 30,000 rpm
- 2.9 Ncm

H20

brush



- Max.speed: 30,000 rpm
- 2.9 Ncm

K38 **dial type** (12V)

Digital



▲ SH300

- **Max.speed: 30,000 rpm**
- 2.9 Ncm
- 12V portable type
- 25W
- **LI-ION battery (rechargeable)**
- Charging time: 3 hours
- Run-Time: 8~4 hours



pink



black



red



white

CRAFIEN manicure & pedicure

K38 **button type (12V)**

Digital



- Max.speed: 30,000 rpm
- 2.9 Ncm
- 12V
- 25W
- LI-ION battery (rechargeable)
- Charging time: 3 hours
- Run-Time: 8~4 hours



pink



black



red



white

K38 dial type (12V)

Digital



▲ SH300

- Max.speed: 30,000 rpm
- 2.9 Ncm
- 12V portable type
- 25W
- LI-ION battery (rechargeable)
- Charging time: 3 hours
- Run-Time: 8 - 4 hours



CRAFIEN manicure & pedicure

Combi 24 (24V)



▲ SH250

- Max.speed: 20,000 rpm
- 2.9 Ncm
- Elegant design
- 24V



red



black



silver



white

Champion



▲ SH20N (white)

- Max.speed: 30,000 rpm
- 2.9 Ncm
- 45W
- Compact size



▲ SH20N (pink)



▲ SH30N



▲ SH30N (black)

Mighty



▲ SH30N

-
- **Max.speed: 30,000 rpm**
 - 2.9 Ncm
 - 45W
 - Compact size



▲ SH20N (pink)



▲ H20



▲ SH30N (black)

Escort II Pro



▲ SH20N (white)

- Max.speed: 30,000 rpm
- 2.9 Ncm
- 40W
- Automatic Safety Overload Protection System



▲ SH20N (pink)



▲ SH30N

memo







equipments

SM110

hammer handpiece



- **5,000 Strokes/min.**
- Control function of Impact Force
- D.C 30V

LS200

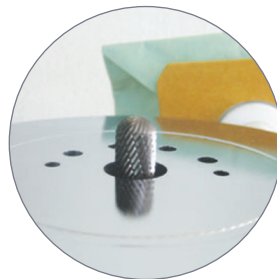
laboratory lathe spindle



- **Max.speed: 28,000 rpm**
- Compatible Automatic Spindle with laboratory alloy grinders
- Positive high speed grinding possible

Marathon-20

center grinder



- **Max.Speed: 3,200 rpm**
- Grinding Plaster Model
- Grinding Edge part of plaster model with an upper acetal plate
- Human-Friendly Dust Collecting System
- Tools can easily change
- Good & Effective design

Marathon-103

surveyor



▲ Surveyor tool pin set

- Precise instrument with exact movement
- Easy exchangeable system
(Spindle, model table, cone former and plaster)
- Excellent finished surface
- Variable Application possible
- Surveyor tools available

Marathon-37 cartridge warmer



- Maintains painless temperature with 37°C (98.6 °F)
- Helps patients feel very comfortable
- Effective for painless injection

Maintenance & Repair







spare parts

Collet sleeve



Collet chuck Standard

brushless



Special coated



Collet chuck

brush



Spindle chuck



Spindle assy

brushless



Spindle assy

H37L1 / H37LN

brush



Spindle assy

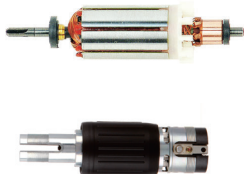
H35SP1

brush



Armature

SH37LN
(Bearing Ø4)



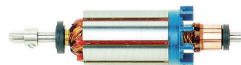
Armature

H37L1
H35SP1
(Bearing Ø3)



Armature

M33Es



BLDC Motor

brushless



Carbon brush

H37L1 / SH37L(M45)



SH300 / SH250



Ball Bearing

brushless



814



1360

Ball Bearing

brush



1260



830



1480



1040



1030

Implant Motor
Foot Pedal



Endo Motor
Foot Switch



Lab. Air Tubine
Foot Switch



Variable Speed Foot Pedal



On / Off Foot Switch



Hanger



Cord
(Straight)



Cord
(Curling)



Cord
(Brushless)



Implant Motor
Handpiece Stand



Handpiece Stand



Chuck Joint Wrench



Chuck Wrench



Spanner



Implant Head (non-optic)
Spanner

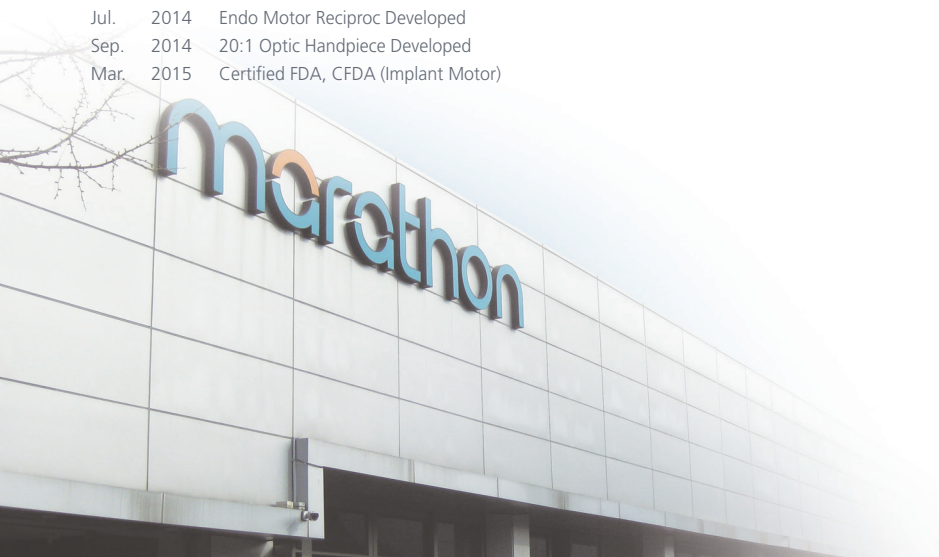


Implant Motor
Irrigation Tube



saeyang Company & History

Oct.	1976	Company Established
Dec.	1977	Registered manufacturing of medical equipment.
Sep.	1987	Registered trading business
Apr.	1989	Registered Korea medical equipment cooperative association
May.	1991	Registered of designs for engine for dental laboratory
Apr.	1998	Certified ISO 9001 from TUV (Germany)
Feb.	1999	Certified CE Mark from TUV (Germany)
May.	2000	Certified Venture enterprise for high technology
Nov.	2001	Awarded official Superior Exporting Firm
Nov.	2001	Awarded Leading Enterprise
Apr.	2002	Certified CE Mark of New item "Escort"
Jan.	2003	Registered manufacturing Brushless motor
Jun.	2003	Certified CE Mark of "Marathon Multi 600" Brushless motor
Jun.	2004	Established R&D center
Jul.	2004	Certified CE Mark of New item "Marathon N7 & N2"
Mar.	2005	Certified CE Mark of New item "Marathon HANDY 700 Series" Brush/Brushless motor
Dec.	2005	Awarded official best Exporting Firm
Apr.	2006	Moved into a new factory
Jul.	2006	Certified PSE from TUV
Oct.	2006	Opening Ceremony of a new factory as well as the 30th anniversary
Feb.	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)
Aug.	2010	Certified CE Mark of New item "Endo e class"
Mar.	2011	Developed of Endo A Class
Mar.	2012	Dental contra angle
Mar.	2013	Developed Implant Motor
Aug.	2013	Certified FDA (Endo Motor)
Jun	2014	60,000 RPM Handpiece Developed
Jul.	2014	Endo Motor Reciproc Developed
Sep.	2014	20:1 Optic Handpiece Developed
Mar.	2015	Certified FDA, CFDA (Implant Motor)



Introduction of SAEYANG MICROTECH

SAEYANG MICROTECH Co., Ltd. highly specializes in the research & development of micro motor handpiece with its state-of-art technologies that have been accumulated for over 40 years since its foundation in 1976. SAEYANG has been consistently pursuing technological innovation and investing in the research & development to create the masterpiece. Today, the outstanding products created by SAEYANG are distributed through over 100 countries around the world and recognized as one of the best products. Sincerely, SAEYANG promises to do the best in building the shining future with you all together.



Marathon User guide

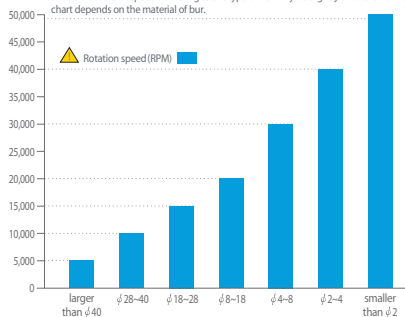
(For safety & efficiency)

* Precaution

1. Do not operate a micromotor with a bent, asymmetrical or damaged bur. Must operate it with a standard bur.
2. Do not start the motor at a high rotation speed.
Start from the low speed and change it slowly to the desired speed.
3. For your safety, do not exceed the rotation speed according to the type of bur.
4. Do not try to open/close the chuck handle during operation.
5. Clean the motor after use.

* Allowable rotation speed

Do not exceed the allowable rotation speed according to the type of bur for your safety. Allowable rotation speed according to the type of bur may be slightly different from the chart depends on the material of bur.



* This chart for allowable rotation speed can be slight different depending on bur materials or types



Check the product if everything is set before use.



Do not drop the product.
Dropping the motor may damage ball bearing or weaken durability of the motor.



Check the product if there is any flaw, crack, or faulty adhesion before use.



In order to take the bur out of the handpiece, release the chuck handle(shift to the left side, R) to open the collect chuck. Make sure to close the collect chuck(shift to the right side, S) before use.



Do not exceed the maximum speed.



Wear a safety goggles/shield and mask to protect your face from cutting and grinding works.



Check if the product is overheated when you use it at the maximum speed for long. When it gets overheated, you must stop the product and cool it down before use.



If the product works abnormally, stop the product immediately and contact your dealer for repair.



For safety, make sure to read and understand the operation manual carefully before use.



Do not customize the product.



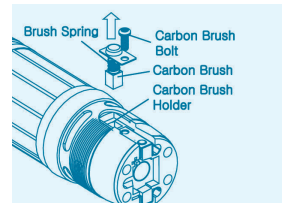
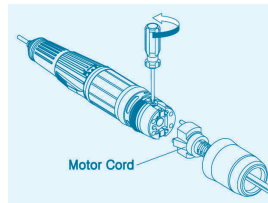
Avoid exposing the product to high temperature and humidity. Daily inspection & maintenance are required.



Make sure to turn off the product after use. Leaving the product turned on is very dangerous and may cause overheating.

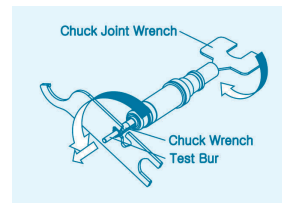
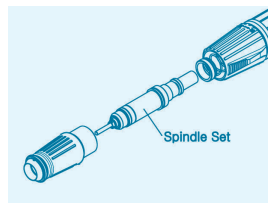
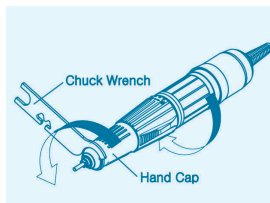
* Replacing Carbon Brushes

1. Turn off the power of the Control Unit and remove the Carbon Housing Cover and the Motor Cord from the rear of the handpiece.
2. Take off Carbon Brush Bolts using a screwdriver(+) and remove worn-out Carbon Brushes.
3. While replacing by new ones, the Brush Spring needs to get jammed in the Carbon Brush Holder.
4. Assemble the handpiece.
5. Run the handpiece at 20,000rpm for 30minutes under no load condition before use.



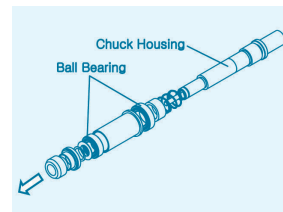
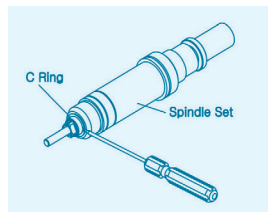
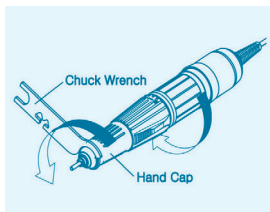
* Replacing the Collet Chuck

1. Turn the Hand Cap counterclockwise using the Chuck Wrench until the Hand Cap and the Spindle Set get disassembled.
 2. Keep turning it counterclockwise until the collect chuck gets disassembled.
 3. After replacing a new Collect Chuck, assemble the handpiece.
 4. Run the handpiece under no load condition to check if it works properly before use.
- ※ Collect chuck is supposed to be replaced every 2-3 years, depends on working hours or loading conditions.



* Replacing Ball Bearings

1. Disassemble the Hand Cap and the Spindle Set.
2. Remove the C Ring from the front of the Chuck Housing to disassemble Ball bearings and other parts.
3. Assemble other parts, replace it with new Ball Bearings, and install the C Ring.
4. Connect the Hand Cap and the Spindle Set.
5. Run the handpiece under no load condition to check if it works properly before use.



memo
