

Surgical Drive System

ES90



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Clinical application

Applicable to surgery of maxillofacial, alveolar cavity, cosmetic and other relevant treatment.

This device especially benefits for drilling, milling, saw cutting and grinding for bone tissue, like the upper jaw, lower jaw and cheekbone, together with segmentation, cutting and grinding of teeth.

Product characteristics

Fine: thinner saw blades by contrast

Safty: stable, minimal vibration under load

ALL IN ONE

Safety, Precise, Fiber optical, Aseptic



Osteotome

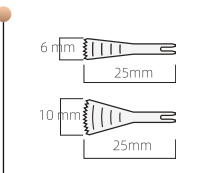
Other functional handpieces

Function

- It is used for drilling, milling, sawing and grinding of bone tissue in maxillofacial surgery, plastic surgery, orthopedics, stomatology or other related surgical operations.
- Performance features: With a thin and quiet saw blade, it can be flexibly operated in narrow tissue cavities. The high-speed grinding drill has strong stability and low heat generation, which is suitable for fine maxillofacial plastic surgery.
- Maxillary related surgery: Le Fort I, II type osteotomy, etc.
- Mandibular related surgery: mandibular branch sagittal bone split, mandibular branch vertical osteotomy, mandibular branch inverted L-shaped osteotomy, etc.
- Cheekbone related surgery: cheekbone reduction plasty, etc.
- Maxillofacial trauma surgery: upper jaw fracture, etc.

Sagittal Saw Handle

Pen design;
Maximum swing frequency 40,000cpm;
The cutting direction is parallel to the axis
Low vibration, removable;
Various sizes of saw blades are available;

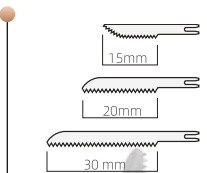


①

Electric bone knife (sagittal saw)

Reciprocating Saw Handle

Pen design;
Maximum swing frequency 40,000cpm;
The cutting direction is perpendicular to the axis
Stable cutting, high efficiency;
A variety of length saw blades are available;

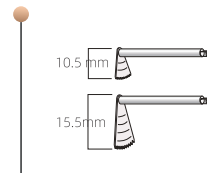


②

Electric bone knife (reciprocating saw)

Vertical Swing Saw Handle

Pen design;
Maximum swing frequency 40,000cpm;
0~360° multi-angle quick installation saw blade;
Stable cutting, high efficiency;
Various sizes of saw blades are available;

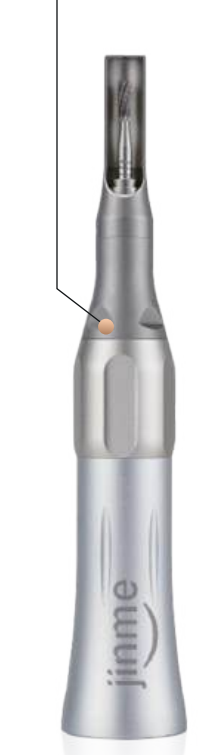


③

Electric bone knife (swinging saw)

Drill handle with sheath

Maximum speed 40,000rpm;
Radial runout less than 0.01;
Low heat, low noise;
A variety of sheath components are available;



④

Electric bone grinding straight handpiece

High Speed Drilling

Maximum speed 8,000rpm;
Radial runout less than 0.01mm;
Low heat, low noise;
Various lengths of drill bits available;



⑤

Electric bone grinding straight contra angle (20 degrees)

Fit for various types of attachment

Universal motor interface, convenient to insert and remove with tightly sealing surface.

45° electric surgery handpiece

Minimally invasive tooth extraction;
External saline;
45° elevation design;
Stable cutting, high efficiency;
Reduce postoperative infection rate;



⑥

45° electric surgery handpiece (1:4.2)

Electric Acceleration Handpiece

Prepare teeth, break crowns;
The maximum speed is 200,000 RPM.
Pulp correction, denture restoration;
Stable cutting, high efficiency;
Adapt to different scenarios of dental treatment;



⑦

Electric high-speed contra angle (1:5)

Electric Constant Speed Handpiece

Polishing, caries removal; restoration and prepare dental cavities;
Minimum up to 100 RPM;
Adapt to micro restoration, veneer;
A variety of polishing brushes are available;



⑧

Electric low-speed hadnpiece (1:1)

Electric Implant Handpiece

High torque (up to 80N · cm)
LED optical fiber lighting;
Minimal vibration, low noise;
Perfectly match with global branded implant motor



⑨

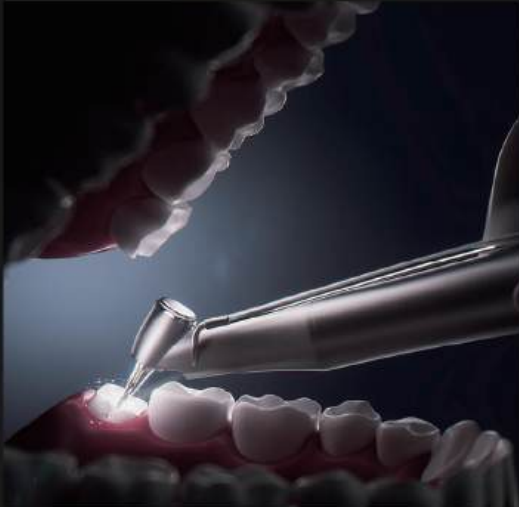
Electric implant handpiece (40:1)

Dental Surgical Drive System

More treatment options



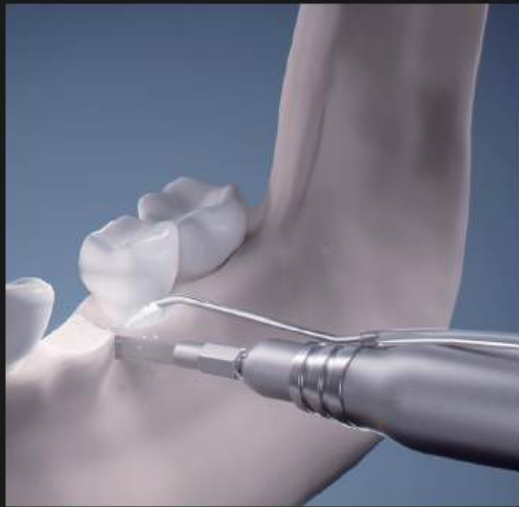
Implantation
(40:1/20:1)



Tooth extraction
(1:4.2)



Aesthetic restoration
(1:5)



Cutting in lower mandible
(Osteotome)

Model	ES90
Mainframe size	260mm×240mm×110mm
Input Voltage	220VAC
Allowable voltage fluctuation	±10%
Rated Current	0.1A-0.8A
Frequency	50Hz/60Hz
Power fuse	2*250V-T1.6AH
Maximum Power Consumption	180VA
Motor Rated Working Voltage	DC32V
Motor Rotation Mode	Forward/Reverse Rotation
Motor Speed Range	0r/min-40,000r/min
Motor Size	Φ21.7mm×70.5mm
Sterilization Method	High temperature and high pressure steam sterilization, 134°C for 5 minutes
Max allowable load for hanging	≤1.5KG

Item	Sub Item	Handpiece Model	Weight	Head Diameter	Head Height	Motor Speed(±10%)
Minimally Invasive Tooth Extraction 1:4.2	Aseptic Tooth Extraction	W142LW	Within 64g	Within 9.6 mm	12.5mm	0 ~ 168,000 r/min
High-speed Electric Handpiece 1:5L	Crown cutting	W15LW	Within 64g	Within 9.5mm	12.7mm	0 ~ 200,000 r/min
	Tooth Preparation					
	Pulp chamber opening					
	Pulp chamber preparation					
	Grinding dentures					
Low-speed Electric Handpiece 1:1L	Tooth Polishing	W11L	70g	9.8mm	14.2mm	0 ~ 40,000 r/min
	Caries Removal					
	Refinement					
	Cavity preparation					
Implant 40:1L	Position	W401LW	73g	96mm	13.55mm	0 ~ 1,000 r/min
	Guiding					
	Hole expanding					
	Thread Tapping					15 r/min
	Implant					
Osteotome	Drill & grind handle1:1	SH11W2, SH11W3				0 ~ 35,000 r/min

Item	Sub Item	Model Specifications	Sawtooth Thickness	Saw Blade Thickness	Handpiece Model	Motor Speed(±10%)	Corresponding frequency for each handpiece (±10%)
Osteotome	Reciprocating saw3.2:1	R-30T	≤0.7	≤0.5	SH41W1	15,000r/min	0~4,687 c/min
		R-20T					
		R-15T			SH32W1	15,000r/min	0~4,411 c/min
	Oscillating saw3.4:1	O-15.5L					
		O-10.5L					
	Sagittal saw3.2:1	S-10W			SH41W2	15,000r/min	0~4,687 c/min
		S-6W					