



ES5

Dental Surgical Motor



 Guilin Woodpecker Medical Instrument Co.,Ltd.
Information Industrial Park, Guilin National High-Tech
Zone, Guilin, Guangxi, 541004 P.R. China
Sales Dept.: +86-773-5873196/2350599
After-sales Service Dept.: 0773-5827898
E-mail: woodpecker4@glwoodpecker.com
Website: <http://www.glwoodpecker.com>
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Scan and log on to the website
for more information

STERILE AND SAFER ORAL SURGERY

In oral surgical procedures (such as periodontal surgery, apical surgery, implant surgery and tooth extraction), sterile saline or water can be used as a surgical coolant or irrigant to reduce the risk of wound infection.



STERILE

STERILE SALINE

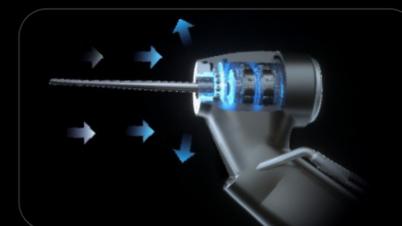
Two external irrigation lines available (sterilizable / single-use), enabling the access to sterile cooling saline
Bring less postoperative pain and wound infection

NO AIR LEAKAGE AT HANDPIECE HEAD

Electrically-driven, no air leakage at handpiece head,
less postoperative complications (e.g. emphysema)
Over 50% aerosols fewer than air turbines
Ensure safer treatment environment

HYGIENIC HEAD SYSTEM

Anti-suck-back design to avoid blood and bacteria entering the head
Reduce cross infection, more reassuring to use



EFFICIENT

97.4%

Higher cutting efficiency
than the turbine

Cutting the same bovine tooth

ES5

9.38s

Air turbine

18.52s

MORE PRECISE AND EASIER CUTTING

- Precise and adjustable speed, less heat generation, more stable and accurate cutting
- Lower risk of bur breakage and iatrogenic injury
- Constant speed, allowing uninterrupted and reliable cutting experience
- Better control of the preparation design, neatness visibility of margins and cavity line angles
- Simpler operation, higher efficiency



Preparation with air turbine

Rough surface with pits



Preparation with ES5

Smooth surface without scratch

3.5N·cm HIGH TORQUE MORE POWERFUL

Air turbine:

Generally inadequate torque (<0.2Ncm), prone to interrupted cutting efficiency

ES5:

Constant high torque (3.5N·cm), providing uninterrupted cutting efficiency

with significantly reduced vibration and noise

Accurate transmission of tactile feedback, more powerful cutting

Torque comparison between ES5 and turbine

ES5

3.5N·cm

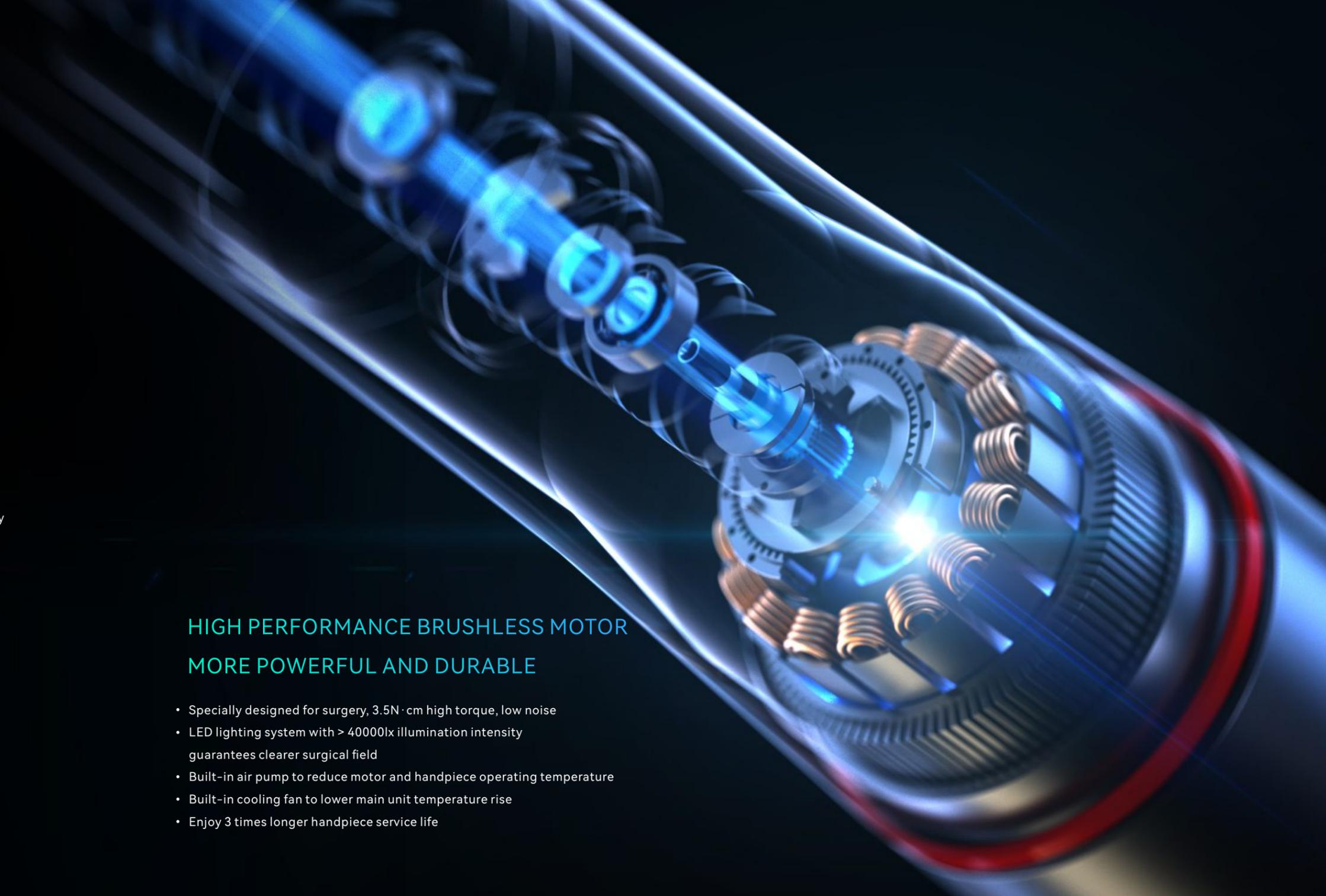
Air turbine

0.2N·cm

HIGH PERFORMANCE BRUSHLESS MOTOR

MORE POWERFUL AND DURABLE

- Specially designed for surgery, 3.5N·cm high torque, low noise
- LED lighting system with > 40000lx illumination intensity guarantees clearer surgical field
- Built-in air pump to reduce motor and handpiece operating temperature
- Built-in cooling fan to lower main unit temperature rise
- Enjoy 3 times longer handpiece service life



FLEXIBLE

DUAL WATER SUPPLY SYSTEMS

System 1: Attached water tank for distilled or pure water, used with the internal water channel handpiece

System 2: External sterilizable or single-use irrigation line, used with the external water channel handpiece

Deliver excellent oral surgical results thanks to lowered risk of surgical infection, accelerated wound healing, and minimized complications.

Sterile

**ELECTRIC HANDPIECE/EXTERNAL WATER CHANNEL
ACCESS TO STERILE SALINE**

Crown, Separation, Surgery, Rinse



Convenient

**ELECTRIC HANDPIECE/INTERNAL WATER CHANNEL
ACCESS TO ATTACHED WATER TANK FOR DISTILLED
OR PURE WATER**

Preparation, Trimming, Polishing, Caries removal

Apply to:

- Oral surgical procedures
- Minimally invasive tooth extraction
- Minimally invasive aesthetic restoration
- Denture finishing & polishing



LARGE COLOR SCREEN INTUITIVE AND EASY-TO-USE

5-inch color LCD touch screen, concise and intuitive interface
Easy-to-clean glass screen, allowing wiping disinfection

AUTO SAVING ONE-TOUCH CONTROL

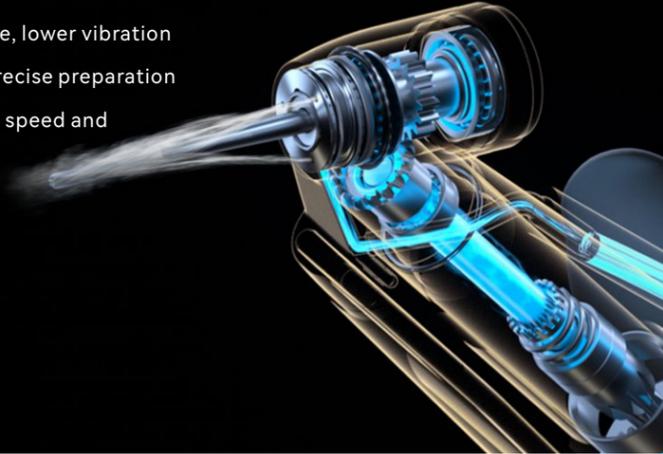
2 modes, 8 speed ratios, 6 preset programs
Auto parameter saving, one-touch function control

ALL TURBINE FUNCTIONS COVERED

Electrically-driven ES5
Adapted to multiple electric handpieces
(e.g. 16:1, 1:1, 1:3, 1:4:2, 1:5), delivering outstanding
performance results in both high- and low-speed procedures

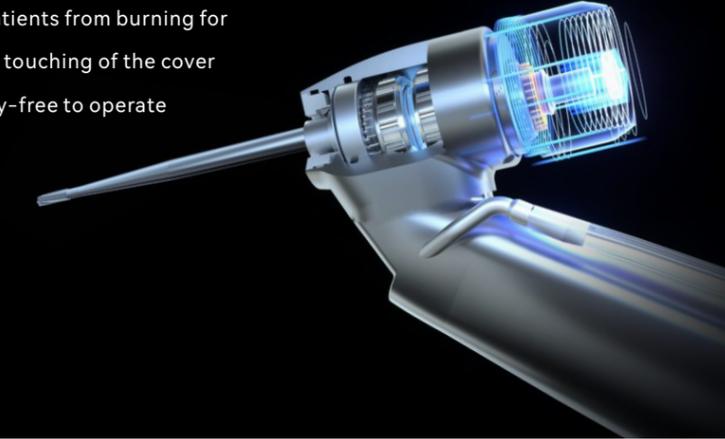
GERMAN BEARING

Longer service life, lower vibration
Stable cutting, precise preparation
Guarantee stable speed and
torque output



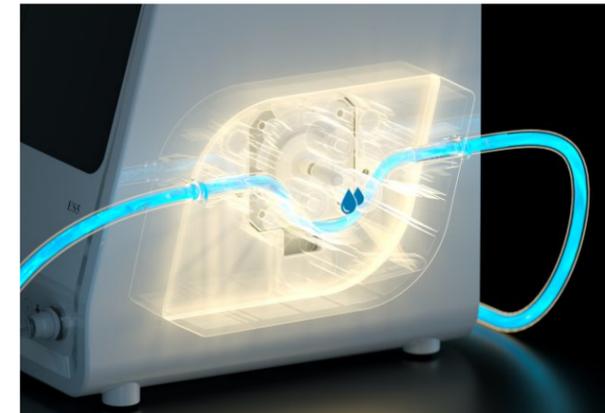
ANTI-HEAT DESIGN

Prevent patients from burning for
accidental touching of the cover
More worry-free to operate



ADJUSTABLE WATER FLOW

- Equipped with quality quiet motor, noiseless and stable
- 6 water flow adjustment levels,
120mL/min maximum water volume
- Controllable atomization and more uniform cooling
under internal water supply mode



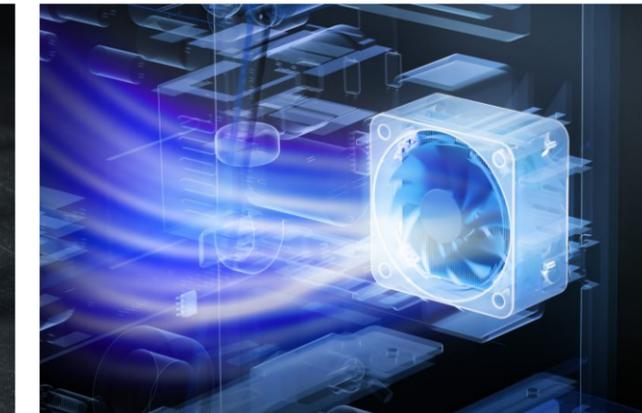
MULTIFUNCTIONAL FOOT PEDAL

- Adopt multi-function foot pedal to realize water
volume control, program switching, forward/reverse
rotation switching and speed control
- IPX6 rated protection meets the requirement for
operating room use



ACTIVE COOLING SYSTEM

- The built-in cooling fan enables effective temperature
rise lowering during operation, ensuring consistent
working efficiency
- Extend the main unit service life and guarantee the
output accuracy





NO NEED TO CONNECT WATER
AND AIR FROM DENTAL UNIT

PORTABLE DEVICE, FACILITATING
MULTI-SCENARIO APPLICATIONS

Traditional oral surgery:

Must rely on the water and air lines of dental unit, complex and difficult to disinfect

ES5:

Independently-driven, portable, plug-and-play

Access to sterile cooling saline, distilled water, and purified water

Fit into multiple scenarios such as surgical operating room, free medical care, home visit, research and teaching, pediatric dentistry, etc.

Model	ES5
Main Unit Dim. L x W x H (Excluding water tank)	155mm x 167mm x 227mm
Water Tank Dim. L x W x H	103mm x 67mm x 227mm
Input Voltage	AC 100V-240V
Permissible Voltage Variation	±10%
Rated Current	0.1A-0.8A
Frequency	50Hz/60Hz
Power Supply Fuse	2×T1.6AL 250V
Input Power	180VA
Cooling Water Flow Rate at 100% Water Volume (Surgery Mode)	>120mL/min
Air Supply for Atomization (Restoration Mode with Atomization Function)	>1.5mL/min
Quality and Hardness Requirements for Water in the Water Tank	Distilled water or pure water with hardness <6.5mmol/L

Motor Model	E-MT
Motor Type	Hollow cup brushless motor, with internal water sprayer
Max. Torque	3.5N·cm
Motor No-Load Speed Range	1000-41000r/min
Motor Weight	68g
Motor Dim. ø x L	22mm*76.7mm
Coupling	As per ISO3964 standard (YY1012)
Motor Lighting	LED lighting
Motor Luminous Intensity	>40000lx
Cleaning and Sterilization	Motor can be disinfected and sterilized (With protective sleeve installed)
Motor Noise	<50dB (As per YY0836 standard)
Motor Runout	<0.02mm

Model	WJ-SG45CL	WJ-15L
Speed Ratio	1:3	1:5
Water Supply	External water	Internal water
Speed	Max. 127500r/min	Max. 200000r/min
Weight	88.6g	74.7g
Head Dim. H x ø	14.1mm x 8.7mm	14.8mm x 9.5mm
Bearing	German bearing	German bearing
Anti-heat	Anti-heat design	Anti-heat design
Sanitation	Hygienic head system	Hygienic head system
Filtration	/	Micro filtration system
Noise	≤60dB	≤60dB
Water Spray	3-hole spray	4-hole spray
Light Source	Optical fiber	Optical fiber
Chuck	Push-button	Push-button
Type and Dimensions of Bur Shank	Type3, ø1.6mm shank (YY/T 0967.1-2015)	Type3, ø1.6mm shank (YY/T 0967.1-2015)
Sterilization	Autoclavable at 134°C, 0.22MPa	Autoclavable at 134°C, 0.22MPa