



LE-5600 Pattern less Edger

Introduction

LE-5600 Pattern less edger



No axis deviation during lens edging

- Optical tracing (pattern less)
- Lensfeeling (3 dimensional)
- Polishing (mini bevel)
- Grooving (depth&width adjustable)
- Beveling (lens thinning, lens thinning with bevel)

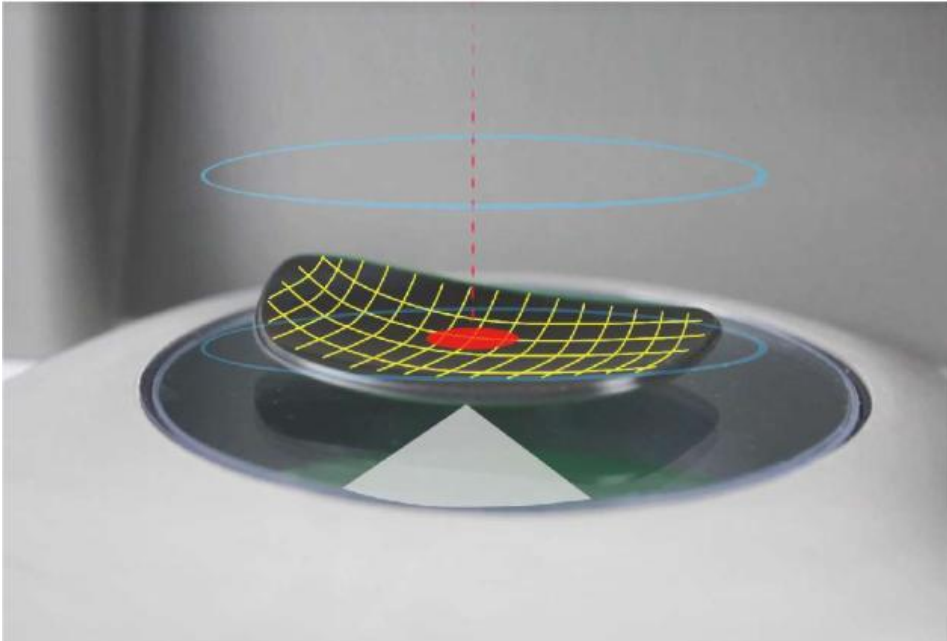
Features and functions



10.1-inch HD touch screen for more visualized operations

- The edger exterior has new design, the interior adopts modular layout, taking into account durability and easy maintenance;
- The cover has bright face and matte texture, every detail is carefully polished, and can perfectly integrated with the processing scene in your shop;
- 10.1-inch HD touch screen, new UI style design, more intuitive and simple operation.

Features and functions



Optical Tracing

Balance on lens convex side

3D optical tracing for demo lens, lens and pattern

Tracing speed: <2.3 seconds

Precision: deviation less than 0.06mm (within $\Phi 50\text{mm}$)

Type of patterns: bevel, wire, rimless



Digital tracer

Geometrical center, optical center optional
and user defined

Auto compensation for parallax caused by
lens refractive power and prism

Dual-job mode

Relying on the intelligent platform and advanced software algorithm, the LE-5600 EDGER can seamlessly execute the dual-job task flow, realize the dual-job operation of tracing, saving patterns and blocking during the edging process, and improve edging efficiency.

- Patterns can be saved: 1000
- Can be downloaded with USB disc



Features and functions



Edging speed improved by 30%

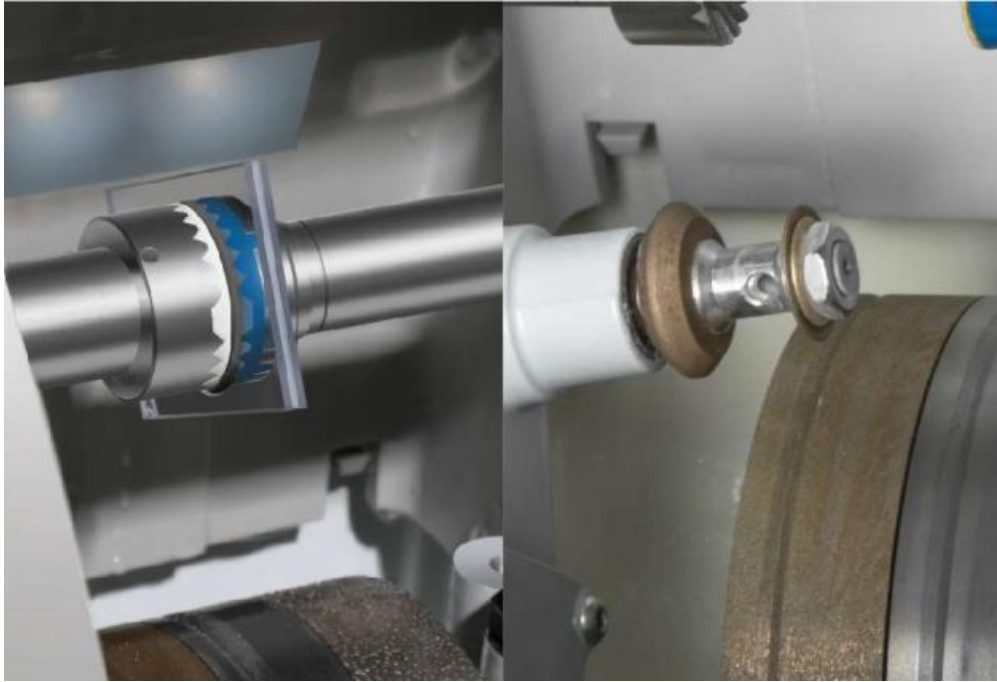
The roughing and finishing process are combined together, compared to last generation LE+, the same edging process for LE-5600 is 40 seconds faster. And the regular finishing+beveling process will only need 2'00"~2'20", and the bevel-polishing process will only need 3'10"~3'40".

LE+/LE-5600 edging time comparison

Mode	LE-5600	LE+
Roughing	55 seconds	94 seconds
Tracing	29 seconds	33 seconds
Finishing	46seconds	69 seconds
Polishing	66 seconds	82 seconds
Total time consumed	316 seconds	238 seconds

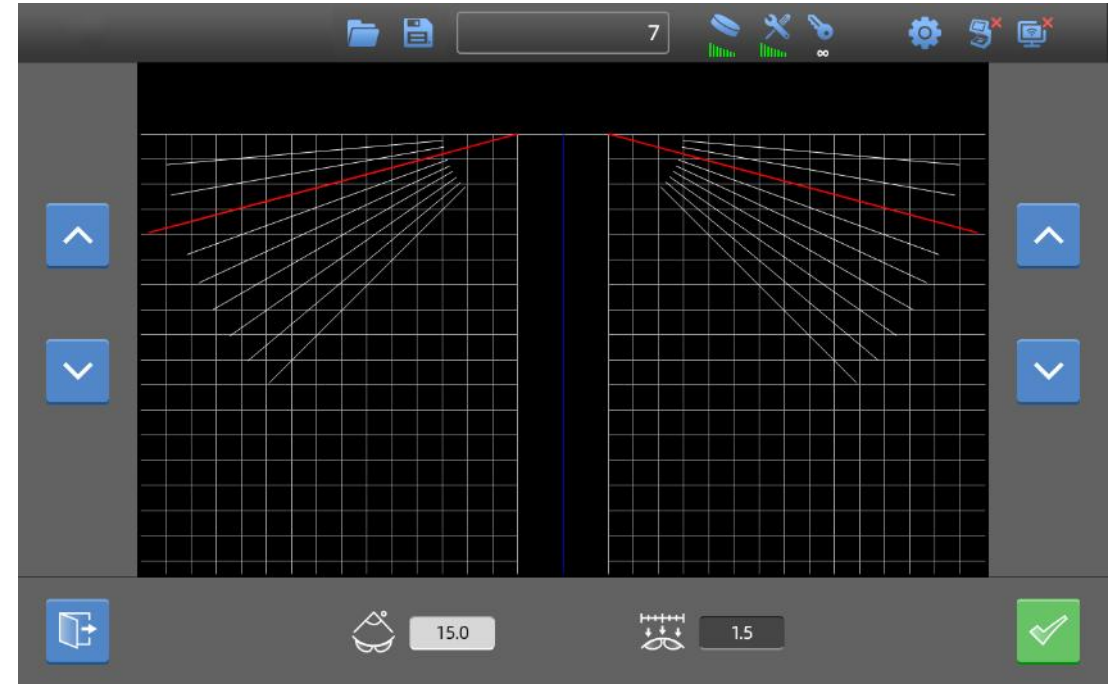
*Due to the influence of different frame size, the edging time might change

Features and functions



Automatically grooving and beveling

Groove position and depth
customization



Big curve lens for big curve frame

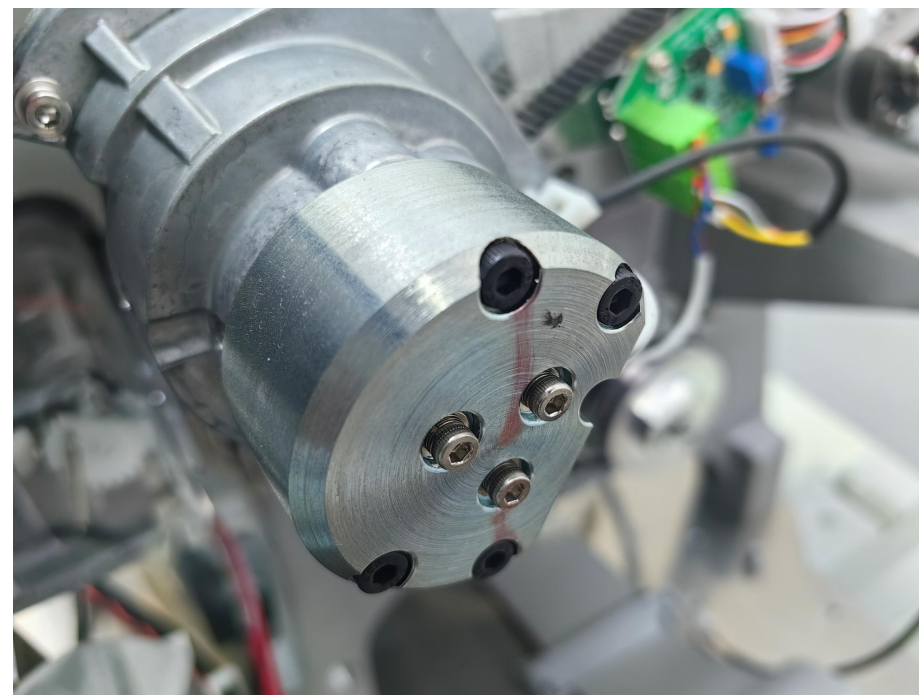
Edged lens can fit for sunglasses frame
with 1200 curvature at most



Features and functions

Kg level high precision pressure sensor

Kg level of accurate pressure control during the lens edging process, while the pressure changes in real time, accurate monitoring and feedback will ensure control of the pressure in an extremely stable range, and ensure output of the clamping force stable and no axis deviation during lens edging process.



Intelligent operation

- Automatically optimizes the edging speed and pressure according to the shape and thickness of the lens, and quickly processes without affecting accuracy;
- For the high hardness of the defocusing myopia control lens represented by MyoSmart, the PC+ anti-slip mode is developed, which perfectly solves the problem of lens slipping and the interference of edging waste;
- Safe edging mode design to solve the damage of prism and sensitive lens coating film.

For lens with $N=1.553$, the maximum prism can be processed is 7.3

For lens with $N=1.61$, the maximum prism can be processed is 8.2

For lens with $N=1.74$, the maximum prism can be processed is 10.0



Anti-slip test

Anti-slip test with more than 60 types of lenses

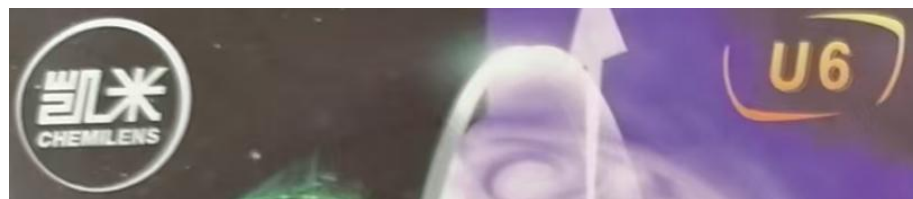
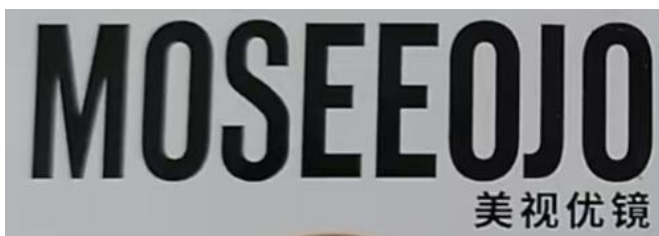
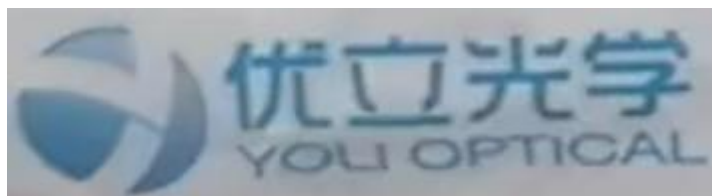
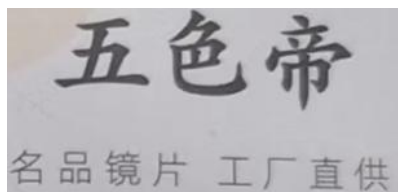
Through extensive experiments to study the influence of anti-slip film and different clamping force of lens slipping on the premise of no axis deviation, the edging efficiency and precision are well balanced.

*Anti-slip film is needed only for other 1.74 lenses.



软件版本	00.02.230901	防滑参数:	2500转/分钟 (实测2480), 粗抛转速: 14/14/12, 进刀3-5mm, 防滑扭矩20。				
目标模板编号	7#内置	双面胶类型	3M	防滑膜类型	EIN	吸盘轴位	150°
测试条件	1、机器轴位黑片测试得残余误差: -3°(因更换过左侧磁吸轴), 以下所列结论应减去这个误差。 2、不贴防滑膜和贴防滑膜测试。采用光学中心打吸盘。 3、RL各做一片, 分别记录。瞳高+3mm, 单眼瞳距35mm, 鼻梁18mm。 4、加工完毕后, 在机器角度测量界面直接测量轴位偏差。 5、默认: 大号吸盘, 防滑+HI模式。						
镜片品牌	膜层	防滑膜	夹紧力	材质	屈光度	测试结果	
宝视达, 搜酷, 阻蓝光系列 河南宝视达视觉健康	防蓝光防水膜, 多层复合膜 UV400 ASP BLUE BLOCK LENS	无	65kg	1.598 R	S:-7.00, C:-2.00	-3° (0°)	
		无	65kg	1.598 L	S:-5.00, C:-2.00	-3° (0°)	
优目健 江苏视可悦光学	超发水膜蓝光防护 MR-7 多层复合膜 绿膜	无	65kg	1.665 R	S:-11.00, C:-1.25	-2.5°(0.5°)	
宁靓 单焦点系列 上海康耐特光学	UV-1 绿膜	无	65kg	1.738 R	S:-11.50, C:-0.50	-2° (-1°)	
		无	65kg	1.738 R	S:-12.00, C:-1.00	-2° (-1°)	
		有	65kg	1.738 L	S:-11.00, C:-2.00	-3.5°(-0.5°)	
		无	65kg	1.738 L	S:-11.00, C:-1.00	-4.5°(-1.5°)	
以下: 测试条件变更: 调整压力=75kg, 精确调整机器轴位误差, 残余误差: 0°							
明月	PMC超硬非球面绿膜	无	75kg	1.6 R	S:-3.50, C:-0.00	0.0°	
			75kg	1.6 L	S:-3.25, C:-0.50	0.0°	
飞视VISIO	VH-56AS超洁膜 绿膜	无	75kg	1.554 L	S:-8.00, C:-0.75	0.0°	
			75kg	1.554 R	S:-5.25, C:-0.75	0.0°	
俊视	HD超韧高清耐磨防蓝光 MR-8 绿膜	无	75kg	1.6 R	S:-5.50, C:-0.50	0.0°	
			75kg	1.6 L	S:-5.50, C:-0.50	-1.0°	
宁靓 单焦点系列 上海康耐特光学	UV-1 绿膜	无	75kg	1.74 R	S:-11.00, C:-0.75	-1.0°	
			75kg 中号吸盘	1.74 L	S:-10.00, C:-1.00	-2.0°	
			EIN膜 75kg 中号吸盘	1.74 L	S:-10.50, C:-0.50	-1.0°	
视乐多 依视路	SEEFUN ASP BLUE BLOCK SHMC MR-8 钻丽智净美薄蓝光防护 多层复合膜 (钻丽膜) 发水阻水硬膜	无	75kg 中号吸盘	1.60 R	S:-8.00, C:-1.50	0.0°	
			75kg 中号吸盘	1.60 L	S:-6.00, C:-1.50	-5.0°	
			EIN膜 75kg 中号吸盘	1.60 L	S:-6.00, C:-1.50	0.0°	
全真视线	非球面膜变灰发水膜 绿膜	无	75kg	1.61 R	S:-4.25, C:-1.25	0.0°	
测试结论: 1) 夹紧力影响: 影响不明显。65kg和75kg均获得很好效果。 2) 高度数, 1.74材料镜片, 需配合防滑膜。其他材料并不需要防滑膜。 3) 大号吸盘比中号吸盘, 防滑效果好。如选用中号吸盘, 应使用防滑膜。							

Anti-slip test





Features and functions



No axis deviation

Intelligent adjustment of edging speed, excellent anti-slip effect

Edging process can be suspended at any time, and the edging details adjusted in real time

Special anti-slip chuck and clamping force electromagnetic induction technology

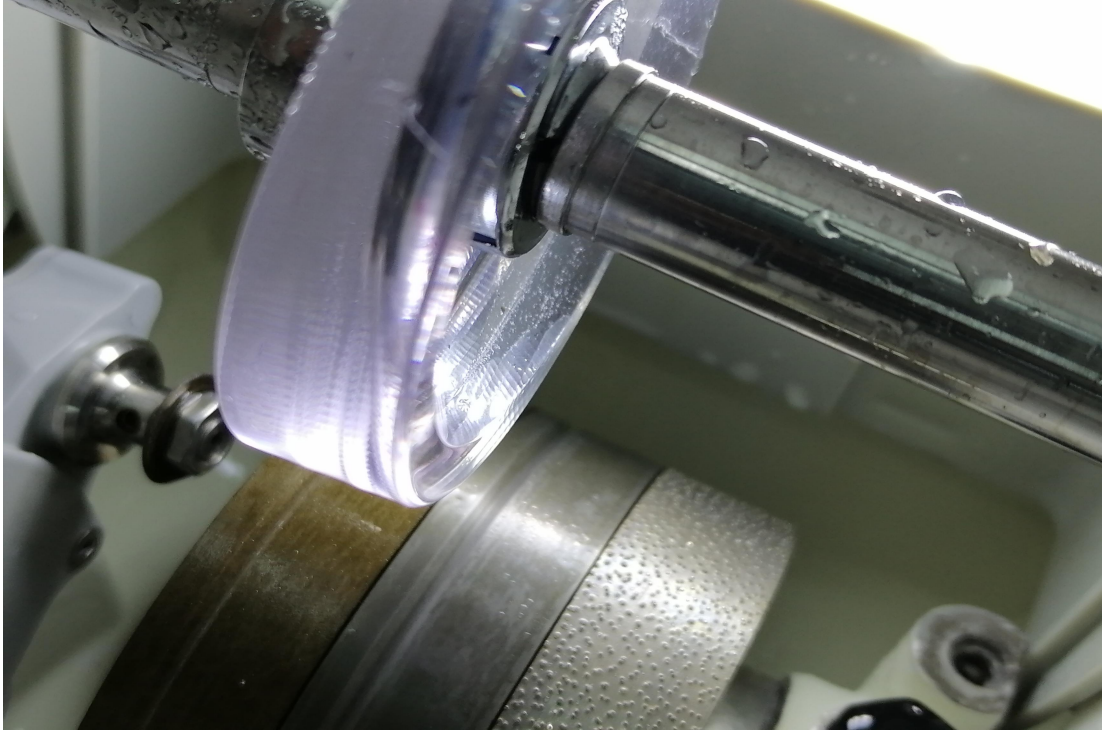


Special edging mode for myopia control lens

Reduce the temperature of waste and control the direction of waste ejection. Greatly reduce the possibility of lens waste affecting lens film under high-speed edging process.



Features and functions

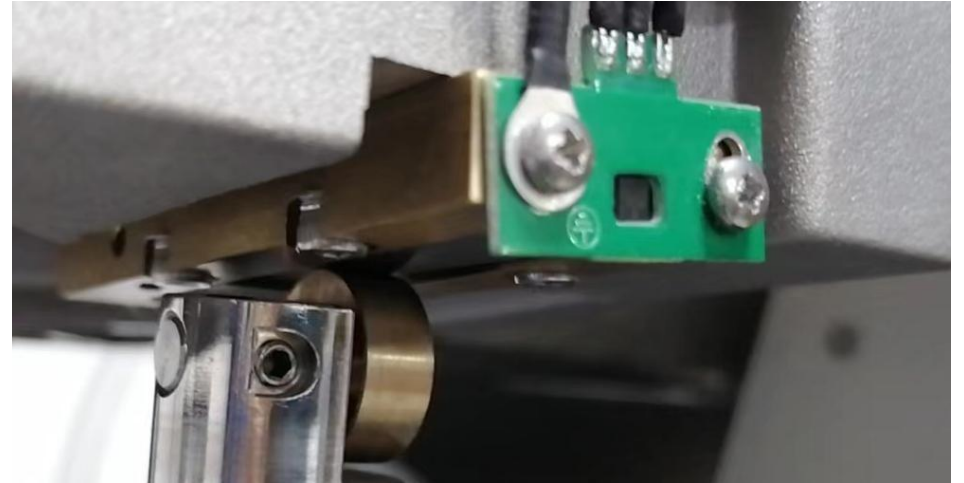
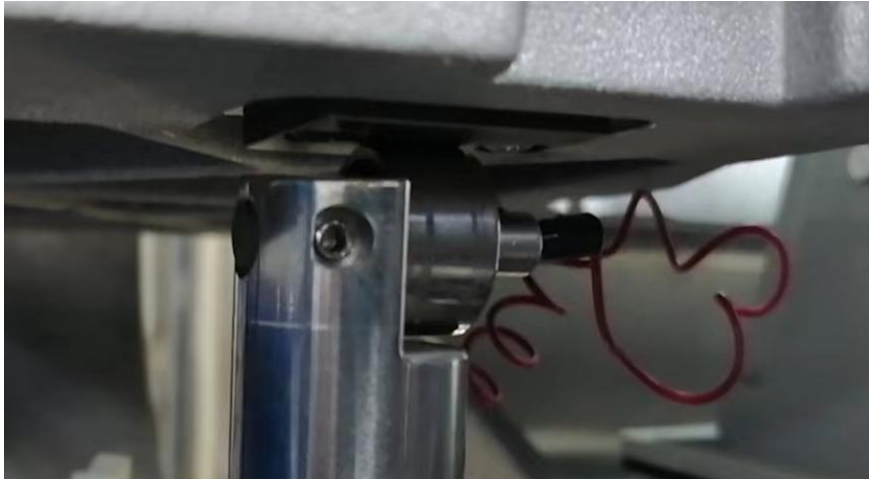


Prism lens (safe) edging mode

- Real time monitor on the rotation torque
- Safe pressure control, protection for lens film
- Gentle process to prevent blocking disc slipping during edging



Reliable design



**The lifting contactor structure,
resistant to dust pollution**

Features and functions

Graphical maintenance interface for easy operations

The daily maintenance can improve the stability and accuracy of the edger, and the operation status of the equipment can be clearly seen through the redesigned graphical maintenance interface.

The grinding wheel maintenance tool and the main interface are provided with maintenance frequency reminders to avoid maintenance delays.



Job counters



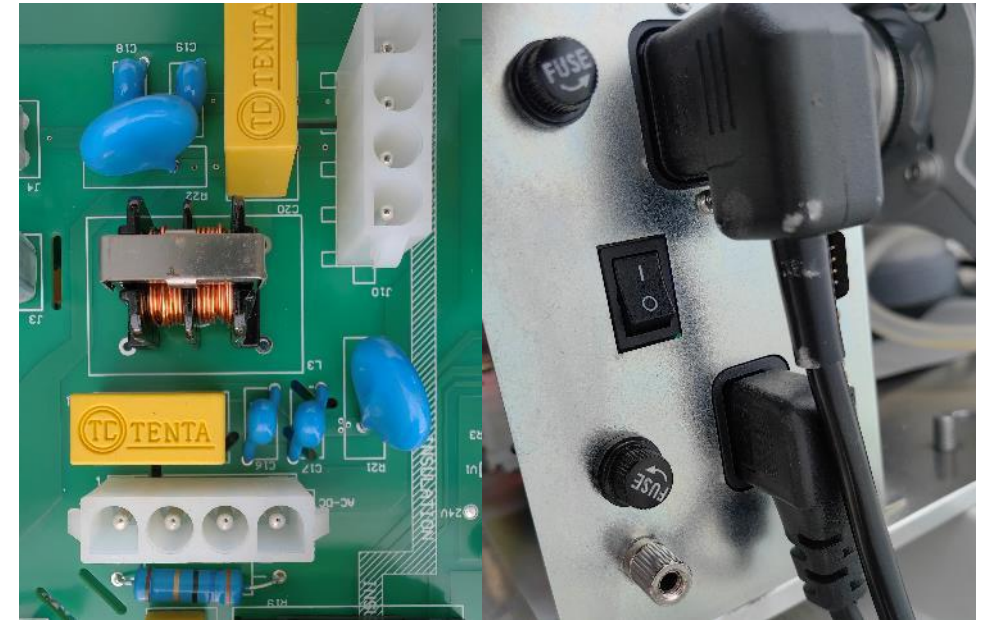
Dressing of finishing wheel and polishing wheel

Features and functions

Surge protection design

Provide strict real-time protection function for the edger, reduce the impact of peak current such as lightning strike on equipment;

At the same time, the method of replacing fuses with knobs reduces the process of removing the covers, which is simpler and more efficient.



Optional water pollution solution

During lens edging, the irritating odor of untreated water pollution will lead to surrounding air quality deterioration. By adding additional pretreatment devices, the irritating odor generated during lens edging process can be treated, which will greatly improve the air quality during lens edging and more thoroughly removes the pollutants in the used water.

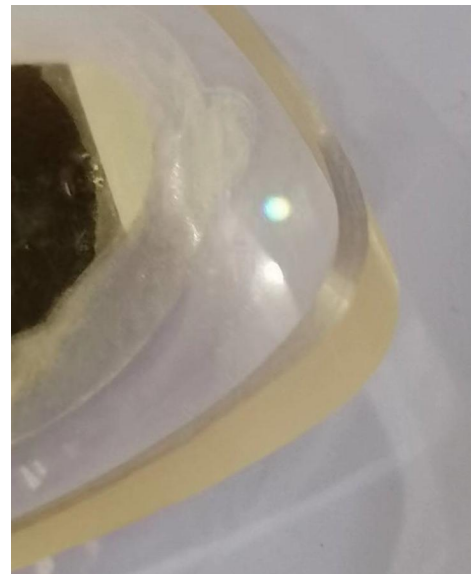
*The water pollution solution is value-added product



Perfect beveling and lens thinning function



Same size
safety bevel



Safety bevel
+ lens
thinning



Safety bevel+ lens
thinning +big chamfer
on the bevel

LE-5600 series edger different model comparison

Model Function	LE-5600	LE-5600B	LE-5600M
3D tracing	●	●	●
Blocking¢ering	●	●	●
Edging&polishing	●	●	●
Grooving	●	●	●
Mini bevel	●	●	●
Bevel		Safety bevel	Lens thinning&beveling
Lens thinning&beveling			●

Thank you!

