EssilorLuxottica







WORLDWIDE LEADER IN FINISHING SYSTEMS





TABLE OF CONTENTS

EDGING FUNCTIONS Standard and Advanced Finishing Specific Bevel Specific Jobs	p. 3p. 4p. 5p. 6
PRO-ETM SERIES	p. 8
ESTM SERIES	p. 10
NEKSIATM SERIES	p. 11
DELTA Series	p. 12
TRACER SOLUTIONS	p. 13
ESSIBOX®	p. 14
LENSMETERS	p. 15
LAB ACCESSORIES	p. 16
SPECIFICATIONS Edging Functions Tracing Functions Technical Design	p. 17p. 17p. 18p. 19

EDGING FUNCTIONS

Standard and Advanced Finishing







BEVEL. FLAT EDGE. POLISHING

CONFIGURATION

- 0.75 mm bevel height
- 3 wheels set for all plastic materials
- 4 wheels set for all materials including mineral
- 15, 19, 22 mm wheel widths for different lens thicknesses
- Round-edge roughing wheel for securing highcurve lens

Examples





DURABLE LIFE TIME

- 155 diameter wheel
- Lens swapping on roughing wheel
- Automatic cleaning of polishing wheel

MAINTENANCE

- Easy replacement depending on the model.
 Available with the ES™ series and the Pro-E series.
- Easy size adjustment



Polishing wheel cleaning kit

Refer to your technician for additional information

Available on all edgers 3 wheels set: Neksia 550, Pro-E™ 600, Pro-E 700 3 or 4 wheels set: Neksia™ 400, Neksia 500, ES 700, ES 700M, ES 800, ES 800M

MINI-BEVEL

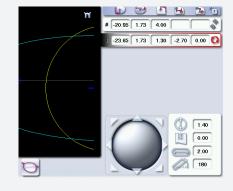
- Aesthetically-pleasing thin frame fitting
- Mini bevel height: from 0.30 mm to 0.75 mm
- Easy bevel configuration directly on the main screen



Available on ES 700, ES 700M, ES 800, ES 800M. Pro-E 600. Pro-E 700



- Integrated drilling function for perfect positioning
- Hole, slot, notch, non-through drilling
- 2 drill bit sizes (0.8 and 1.0) for durability and speed
- Holes from 0.8 mm to 3.0 mm
- Holes quantity up to 20
- Slot and notch width up to 5 mm
- Slot and notch angle position from 0 to 90 degrees
- Automatic and adjustable tilt angle from front and rear lens face
- Hole size compensation according to the tool wear



Available on Tilt 15°: Neksia D Tilt 0-30°: ES 700, ES 700M, ES 800, ES 800M, Pro-E 600, Pro-E 700

Standard and Advanced Finishing



- Integrated grooving function
- Grooving wheel design to secure the groove width stability regardless of the lens curve
- Adjustable width from 0.6 mm to 1.2 mm
- Adjustable depth from 0.2 mm to 1.2 mm

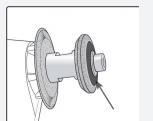
Available on all edgers Tilt 15°: Neksia™ D Tilt up to 30°: ES™ 700, ES 700M, ES 800, ES 800M. Pro-E™ 600. Pro-E 700

Grooving wheels



CHAMFERING

- Integrated chamfering function
- Unique Essilor patent with flexible wheel
- Perfect follow-up of the lens curvature
- Consistent chamfer width all around the lens
- Front and back
- Adjustable width
- Standard width: thin (0.2 mm) and large (0.4 mm)



Chamfering wheel mounted on flexible component

Available on all edgers Tilt 15°: Neksia D Tilt up to 30°: ES 700, ES 700M, ES 800, ES 800M, Pro-E 600, Pro-E 700

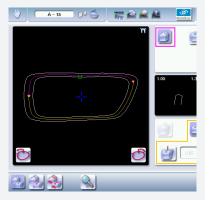








- Specific frame design
- Combination of 3 different types (groove-bevel-flat edge)
- Finishing type with any design (bevelbevel, groove-groove, groove-flat edge,
- Configurable sector
- Automatic and aesthetically-pleasing merge between sectors

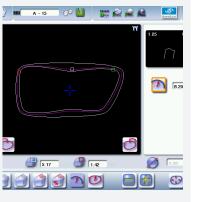


Available on ES 700, ES 700M, ES 800, ES 800M, Pro-E 600, Pro-E 700



CUSTOMIZED FINISHING

- Complete adaptability of bevel and groove positions
- Position in the lens thickness (front and rear surface tracking, distributed and/or position percentage)
- Frame rim or lens curve tracking
- Curve modification (general or at a particular point)
- Curve displacement



Available on all edgers

EDGING FUNCTIONS

Specific Bevel

the frame





• Binocular 3-D tracing of full-rim frames (tracer function)

Adjustment of high-curve bevel height on 4 to 8 points

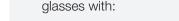
• Automatic frame trajectory follow-up to harmonize as best as

Automatic adjustment of centering data based on 3-D parameters of

the lens base, frame base and shape (only available on Mr Blue 2.0

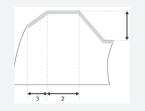






sport frames and safety

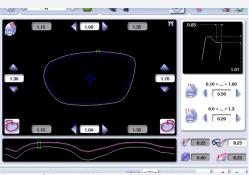
- A deep rectangular frame groove profile
- A frame groove with the back side longer than the front side



and Mr Blue Sun & Sport).

Cross-sectional view of a high-base bevel

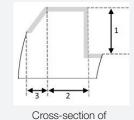
- 1: Value of shelf bevel of rear surface 2: Width of the flat side of the bevel
- 3: Front surface tracking value



Shape of the bevel (width, height, etc.) defined up to 8 locations

For the quality of the job, the lens base must always match the frame base perfectly.

Up to wrap 25°, Base 8: Neksia 550. Up to wrap 30°: Base 9: ES™ 700, ES 700M, ES 800, ES 800M, Pro-E™ 600, Pro-E 700





- 2: Width of the flat side of the
- 3: Front surface tracking value



For the quality of the job, the lens base must always match the frame base perfectly.

ES 800, ES 800M, Pro-E 600, Pro-E 700



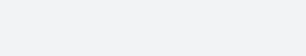




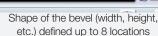












Specific Jobs

Specific Jobs



A unique engraving process, easy-touse and completely integrated in the edging routines. From initials and sports insignia to Chinese calligraphy and more, engrave a range of images and infinite texts.













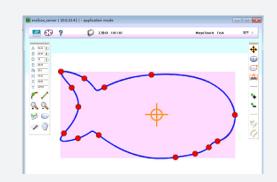
A unique engraving tool, non-invasive for the coating

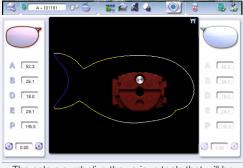
ES™ 800, ES 800M, Pro-E™ 700

CREATIVE SHAPE

This function allows you to create your own shapes:

- Using the pre-cut patterns
- Modifying the available forms
- Creating your own patterns





The colors symbolize the various tools that will be used to machine the shape:

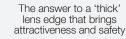
Mill bit High-base wheel Large wheel

ES 800, ES 800M, Pro-E™ 700

SUPER CHAMFERING

This function helps to obtain an aesthetically-pleasing and safe mounting in the case of a negative thick lens edge, due to the super chamfering wheel.







Super chamfer wheel

Available on Pro-E 700

CHEMISTRIE™

- A technology that attaches sun/ reader/3D/blue-cut lenses to any prescription eyewear using magnets embedded in the lenses
- Designed to be lightweight with a dedicated triacetate lens
- Lenses are available in multiple base curves to fit virtually any frame curve





Chemistrie™ processing feature



Starter kit composition

- A dedicated, guided process with Chemistrie screens and buttons to save
- A secure process of the job with presettings values that can be adjusted
- Optimized and dedicated edging process for sun/reader/3D/blue-cut
- One single job number to process either Rx frames and/or Chemistrie clips
- Easy drilling process for square magnets
- A starter kit that includes lenses, consumables and necessary tools (starter kit as an option for Pro-E™ 700)

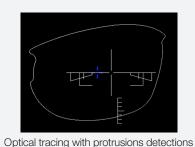
Available on ES™ 800, ES 800M and Pro-E 700

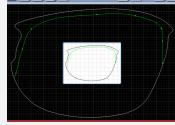


The Half Jacket endurance sport frame requires partial step beveling to fit into a portion of the frame and protrusions on the lens to hook into indentations in the frame groove.



- Advanced optical tracing of the external shape to detect protrusions of the demo lens (tracer)
- Assisted design of the step bevel shape with a touch screen (edger)
- Completed job saved in Essibox for future use





Define the partial step bevel



Available on ES 800, ES 800M and Pro-E 700

Need Essibox[®] solution

Need Essibox[®] solution

PROE 700

Edgers designed to meet lab expectations





VERSATILITY

- All types of mountings and finishing
- All materials except glass

PRODUCTIVITY

- Productivity gain: Up to 50%¹
- Groove: 3X faster¹
- Drill 4 holes: 2X faster¹
- Dry milling to secure hydrophobic lenses as fast as roughing wheels cycles²
- Start/stop mechanical button and bar code scanner embedded

PRECISION

- Top-end edger precision
- Advanced processes to enable faultless sizing, axis control and attractive mountings

EASY INTEGRATION

- Compact tabletop format
- No need for compressed air
- Intuitive and user-friendly MMI
- Large range of configurations

ROBUSTNESS

- Specific durable tools
- Easy and fast maintenance processes

Chemistrie™ Creative Shape Engraving Half Jacket® Super Chamfering 000°EC55 Step Bevel Step Bevel High-Curve Bevel High-Curve Bevel Up to wrap 30°, Base 9 Up to wrap 30°, Base 9 Milling Millina All types of All types of mixed jobs mixed jobs Drilling Tilt up to 30° Drilling Tilt up to 30° Chamfering Chamfering Grooving Grooving Polishing Polishing Flat-edge Finish Flat-edge Finish Mini Bevel Mini Bevel Bevel Bevel

PRO-E SERIES

Edgers designed to meet lab expectations of high productivity and uncompromising quality

PLAY COMPENSATION SYSTEM

Electro-mechanical system to eradicate all plays in the lens rotation system to ensure perfect drilled shapes



ROBOTIC CABLE & CONNECTION





STRAIN GAUGE

All edging efforts on the lens constantly measured to optimize the cycle time without compromise on the axis deviation



Lens sizing mastered regardless of the edging volume







MILLING



Dry cutting process to fully secure lens axis deviation during roughing and eliminate bad smell from MHI



FEELER METAL PIN

Perfect lens thickness measurement with free wear pin



ADVANCE CLAMPING SYSTEM

Ensure repeatable and constant ens clamping pressure



WECO BLOCK COMPATIBILITY

EASY AND FAST MAINTENANCE



DESIGNED FOR PRODUCTIVITY





A unique start button Embedded barcode reader

ES™ SERIES

10

NEKSIA™ SERIES

The efficient edging solutions for the daily workflow

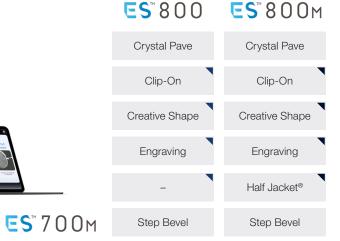




Cutting-edge technology to master edging and reveal creativity







SIMPLIFIED WORKFLOW. **ENHANCED PRODUCTIVITY**

- Optical tracing time reduced by up to 75%
- Blocking and centering time reduced by up to 20%
- Edging time reduced by up to 19%

OPTIMIZED AXIS PRECISION

- Roughing cycle automatically adapts to the curves of lenses up to base 10
- ES 700M and ES 800M bring together a hybrid milling and grinding technology to help ECPs ensure absolute axis control, even for slippery, hydrophobic, or delicate lenses
- With the eco-friendly dry-cut technology, ES 700M and ES 800M can also reduce wet lens waste and unwanted odors

DESIGNED WITH ECPS AND CUSTOMERS IN MIND

- High-quality materials and sleek modern silhouettes, an easy fit in any workspace
- Compact and user-friendly edging systems
- Ergonomic multi-touch screens and an intuitive interface

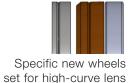
INSPIRE YOUR CUSTOMERS AND **REVEAL YOUR CREATIVITY**

- ES 800 and 800M are the perfect solution to demonstrate your craftsmanship and reinforce your expertise
- With the M'EYE CUSTOM web app, ECPs can inspire customers with unique personalized eyewear styles
- Easily engrave lens with M'Eye Sign™, customize lens shape with M'Eve Shape™, offer clip-on solutions with M'Eye Clip™, and even integrate crystal pavé with M'Eye Diamond™

ES[™] 700 Milling High-Curve Bevel High-Curve Bevel High Curve Bevel High Curve Bevel Up to wrap 30°, Base 9 Up to wrap 30°, Base 9 Up to wrap 30°, Base 9 All types of All types of All types of All types of mixed jobs mixed jobs mixed jobs mixed jobs Drilling Tilt up to 30° Chamfering Chamfering Chamfering Chamfering Grooving Grooving Grooving Grooving Polishing Polishing Polishing Polishing Flat-edge Finish Flat-edge Finish Flat-edge Finish Flat-edge Finish Mini Bevel Mini Bevel Bevel







EASIER WORKING PROCESS

- 8.4-inch user-friendly touchscreen
- Fast-access settings
- 1,000-job database

NEKSIA 600 NEKSIA 650

EXPERIENCE WORKFLOW EFFICIENCY

- Fast, easy and extended frame tracing
- Automatic drilling-hole recognition
- Convenient centering and blocking

ACHIEVE HIGH PERFORMANCE

- Improved axis accuracy
- Best automatic cycles
- Patented flexible chamfering wheel

		NEKSIA 550	Drilling Tilt 0-15°	Drilling Tilt 0-15°
	NEKSIA 500	High-Curve Bevel	-	High-Curve Bevel
	Chamfering	Chamfering	Chamfering	Chamfering
NEKSIA 400	Grooving	Grooving	Grooving	Grooving
Polishing	Polishing	Polishing	Polishing	Polishing
Flat-edge finish	Flat-edge Finish	Flat-edge Finish	Flat-edge Finish	Flat-edge Finish
Bevel	Bevel	Bevel	Bevel	Bevel

Need Essibox® solution

PROFIT FROM A COMPACT. HIGH-PERFORMANCE SYSTEM THAT COVERS ALL THE ESSENTIALS

- Tracing of all types of lenses including demo lenses and recut lenses
- Centering and blocking of all kinds of corrective lenses including recut lenses
- Edging of all types of materials up to base 6 including hydrophobic lenses

NO COMPROMISE ON THE AESTHETIC RESULTS

- Advanced bevel and grooving placement features with the ideal bevel position
- Automatic setting of the grooving/drilling angle according to the lens curve up to 15°

MANAGE ALL TASKS USING AN ALL-IN ONE HIGH-PERFORMANCE DISPLAY

- Natural posture reducing muscle stress
- No need to move from one piece of equipment to another



CONNECT YOUR DELTA WHEN NEEDED

For very special frames or for remote edging services, Delta can be connected:













DELTA 300

DELTA 200	Drilling Tilt 0-15°
Chamfering	Chamfering
Grooving	Grooving
Polishing	Polishing
Flat-edge finish	Flat-edge Finish
Bevel	Bevel
Centering	Centering
Manual blocking	Manual blocking
Optical tracing	Optical tracing

TRACER SOLUTIONS

Complete range to meet all the professionnal needs





L-TESS



Pro-B 300 With or without robust reionforced tracing table

Auto-recognize



Weco block compatibility

233B 300 **PROB** 300

Centering-Blocking Centering-Blocking

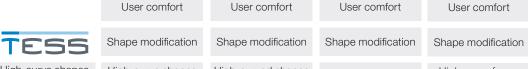
Holes	Tibles
Advanced creative shape	Advanced creative shape
Pedal for blocking (option)	Pedal for blockin (option)

Weco block compatibility compatibility



Auto-recognize

Shape and Shape and Shape Shape drilling libraries drilling librairies Reinforced table Reinforced table (>100k jobs) (>100kjob)



ETESS

High-curve shapes High-curved shapes High curve frame (up to base 9) (up to base 9) (up to base 9)

*Lifetime: more than 100,000 jobs

User comfort

The connectivity solution to increase the lab efficiency

Essibox connects multiple devices and centralizes all data flows for higher lab efficiency and lower errors. Designed around an open communication system, it is an upgradable solution that enables the addition of new functions and services to improve the configuration and profitability.



CREATION OF PERSONALIZED SHAPES AND DRILLING PATTERNS

- Shape- and drilling-creation module
- A user-friendly design based on the underlying principles used for computer-aided design software



UNLIMITED STORAGE CAPACITY AND INTEGRATED DATABASE

Create an unlimited archive of shapes and drilling models with easy management of the libraries:

- Multi-criteria searches (search by manufacturer, by collection or by model)
- Immediate visualization of the shape and related drilling pattern



JOB MANAGEMENT AND LMS (LAB MANAGEMENT SOFTWARE) CONNECTION

- Automatic data transfer (shape, prescription, height, PD, lens type, etc.) to the centering and edging system with barcodes
- Visualization and management of all jobs and their states of progress
- Full integration within the lab and/or storage network for easy and quick access



MULTI-SITE

Centralized workshop and/or job transfer between shops:

- Delegation for capability needs
- Delegation for functionality needs (creative shape, etc.).
- Delegation for availability

LENSMETERS

Simple and reliable measurement





EXTENDED MEASURING CAPACITIES

Lens support adapted to all lenses, frame curves and high base curves. The wide space under the base allows excellent positioning of frame temples.





UV TRANSMISSION

Measurement of lens power and UV transmission are simultaneously two nose supports makes carried out and displayed on the main screen.

INTER-PUPILLARY DISTANCE

An exclusive design featuring operations simple and efficient



ALM 500







ALM 800

Quantification of **ALM** 700 blue-violet light

UV transmission

Inter-pupillary distance

measurement

UV transmission

Inter-pupillary distance

measurement

measurement Curved and tinted lenses measurement

Curved and tinted lenses measurement

ALM 500 Touch screen

Touch screen

Green light beam

Automatic detection

of lens type

Printer

Data transfer

Green light beam

Printer

Data transfer

Tilting color screen

Green light beam

Automatic detection Automatic detection of lens type of lens type

Printer

Data transfer

Tilting color screen

All types of lenses and frames measurement frames measurement

Tilting color screen

All types of lenses and frames measurement

LAB ACCESSORIES

Discover our wide range of consumables on EssilorInstrumentsUSA.com/store

CONSUMABLES





■ Edging block
Ø 18 x 14 mm
pack of 20
Ref: GAM218



■ Edging block
Ø 22 mm pack
of 10 - Right (blue)
ES series
Ref: GAM232



■ Edging block Ø 22 mm pack of 10 - Left (red) ES series Ref: GAM233



■ Edging block
Ø 18 x 14 mm pack
of 10 - Left (red)
ES series
Ref: GAM239



Blocker holder Ø 22 mm

left side

Ref: M24A16



■ Blocker holder Ø 18 x 14 mm left side Ref: M24A15



-■ Edging block

ES series

Ref: GAM238

Ø 18 x 14 mm pack

of 10 - Right (blue)

→ Edging pads
Ø 22 mm roll
of 1000
Ref: GAM403



■ Edging pads Ø 18 x 14 mm roll of 1000 Ref: GAM316



Pad Aligner
ES series
Ref: L80K02

MOUNTING TOOLS

─ Weco/Vario

blocker holder

Ref: M40A17



MEASURING TOOLS



PAL Engraving Identifier Plus Ref: PAL-ID2



Lens Inspection Station Plus Ref: PAL-ID3



Ink marking remover Ref: 99-AOE



Weco/Vario clip-on clamping chuck, 19 -17 Ref: M24A19

SPECIFICATIONS

Edging Functions

		Delta 200	Delta 300	Neksia 400	Neksia 500	Neksia 550	Neksia 600	Neksia 650	ES™ 700	ES 700M	ES 800	ES 800M	Pro-E™ 600	Pro-E 700
	110V (4 wheels) ①		M16885											
	110V (3 wheels) ②	M16875		M25105	M25175	M25178	M25185	M25188	M8000006	M8000005	M9000006	M9000005	M40157	M40159
	220V (4 wheels) ①													
	220V (3 wheels) ②												M40057	M40059
3	Bevel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Mini Bevel										✓	✓	✓	✓
	Flat-edge Finish	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Polishing	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
33	Grooving	✓	✓		✓	✓	tilt 15°	tilt 15°	tilt up to 30°	tilt up to 30°				
60	Chamfering	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Drilling		tilt up to 15°				tilt up to 15°	tilt up to 15°	tilt 0-30°	tilt 0-30°				
00	All types of mixed jobs								✓	✓	✓	✓	✓	✓
	Milling (Super hydrophobic lens)									✓		✓	✓	✓
	High-curve Bevel					Up to wrap 25° Base 8		Up to wrap 25° Base 8	Up to wrap 30° Base 9	Up to wrap 30 Base 9				
3	Step Bevel										Height up to 3.5 mm	Height up to 5.5 mm	Height up to 5.5 mm	Height up to 5.5 mm
	Super Chamfering													✓
	Half Jacket®											✓		✓
	Engraving										✓	✓		✓
(m)	Creative Shape										✓	✓		✓
(Chemistrie™ (clip)										✓	✓		✓
	Weco block type adaptor			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

17

All 220VAC machines are special order except the Pro-E series.

①② Plastic, MHI, PC, Trivex, Tribrid

SPECIFICATIONS

Tracing Functions

1				I		
	Tess	E-Tess	Neksia 400, 500, 600, and 650	Neksia 550	ES™ 700 ES 700M	ES 800 ES 800M
Standalone tracers or those mating to the edgers	L12034	L11002	L20012	L20012	L800002	L800002
Mechanical Tracing						
Curve frame	Up to base 9	Up to base 9	Up to base 6 Neksia 400, 500, and 600 Up to base 8 Neksia 650	Up to base 8	Up to base 9	Up to base 9
Optical Tracing						
dvanced (creative shape)					✓	✓
Auto recognize holes			✓		✓	✓
entering-Blocking						
nape deformation		✓	✓		✓	✓
mi-auto			✓		✓	✓
to			✓	✓		✓
onomic						
ck block loading						✓
ocks and pads storage						✓
co block compatibility						
al for blocking						

SPECIFICATIONS

Technical Design

18

	Delta 200	Delta 300	Neksia 400	Neksia 500	Neksia 550	Neksia 600 and 650	ES™ 700	ES 700M	ES 800	ES 800M	Pro-E™ 600	Pr 7
Precision												
Temperature compensated reproducer							✓	~	✓	✓	✓	
Strain gauge (constant effort measurement)							✓	✓	✓	✓	✓	
Advanced clamping system							✓	✓	✓	✓	✓	
Mechanical compensation system (drill)							✓	✓	✓	✓	✓	
eeler metal pin (constant shape)							✓	✓	✓	✓	✓	
-star cycle	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
2-star cycle	✓	✓	✓	✓	✓	✓	✓	✓				
Advanced 2-star cycle							✓	✓	✓	✓	✓	
Milling - Dry cut								✓		✓	✓	
Robustness												
Small tools module maintenability	complete	complete		complete	complete	complete	2 spindles	3 spindles	2 spindles	3 spindles	3 spindles	3 sp
Reinforced tools (lifespan ncreased)											✓	
Reinforced stucture and parts											✓	
Easy and quick access											✓	
Robotic cables and connectors											✓	
Easy and fast maintenance integrated process)											✓	
Preventive maintenance plan	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
ntegration												
DMA protocol	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
essibox® compatibility	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Embedded remote maintenance ¹	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
start button											✓	
Barcode reader	option	option	option	option	option	option	option	option	option	option	integrated	inte
lo need of compressed iir and vacuum	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Capacity recommendation (1 unit)	10-20 jobs/ shift	10-20 jobs/ shift	20-40 jobs/shift	20-40 jobs/shift	20-40 jobs/shift	20-40 jobs/shift	40-80 jobs/ shift	40-80 jobs/ shift	40-80 jobs/ shift	40-80 jobs/shift	> 80 jobs/ shift	> 80

1 Including remote machine memory upgrade, remote control assistance, remote machine settings, remote errors analysis and troubleshooting

¹ Centering-Blocking 2 Tracing-Centering-Blocking

³ Neksia 600 and 650 only

⁴ Option for auto-blocking with the L14042 tracer-blocker for the Neksia and Pro-E series.

WORLDWIDE LEADER IN FINISHING SYSTEMS





Essilor Instruments USA | 8600 W. Catalpa Avenue, Suite 703 | Chicago, IL 60656 - USA | Phone: 855.393.4647 Email: info@essilorinstrumentsusa.com | www.EssilorInstrumentsUSA.com

As improvements are made, these specifications and pictures are not contractually binding and may be changed without prior notice.