CONFIGURATIONS & SOLUTIONS

HUVITZ
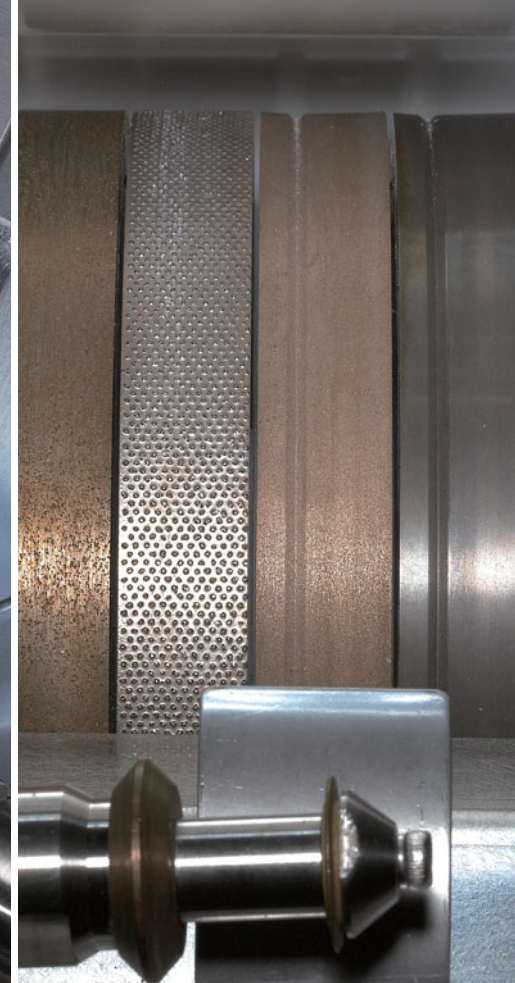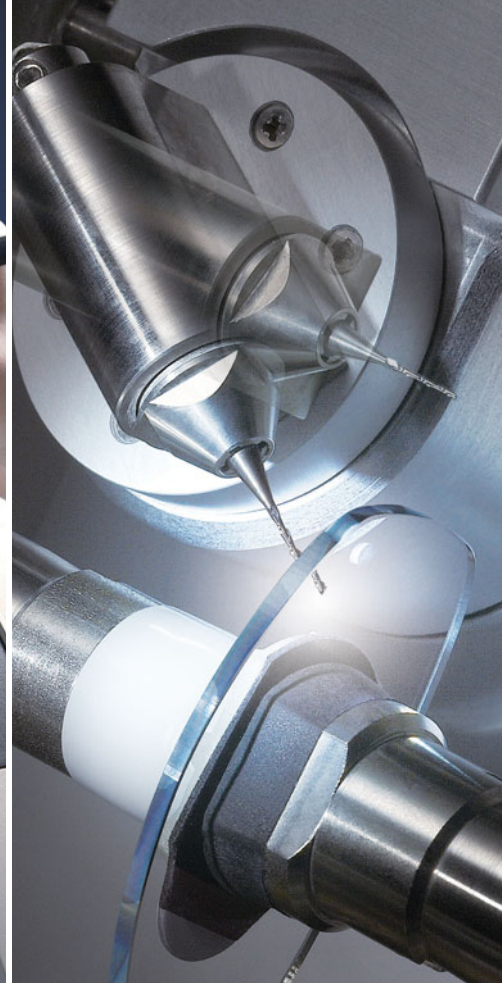
The faster speed and superior efficiency by drill integrated high-end edger / Excelon-XD
The faster speed and superior efficiency / Excelon XQ

Fast Hole Editing

Fast and easy hole editing functions with 'drag & drop option' offers you maximum work efficiency.
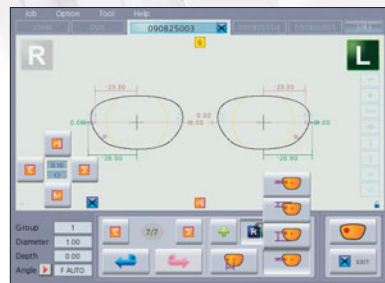
Touch Screen

As a well known world pioneer of 'Digital Pattern' function, Huvitz offers you even more improved shape modification choices with drag & drop function on touch screen.

Dual Side Feeler

2 lens feelers come together to read the lens simultaneously from the front and rear sides, offering 50% faster lens reading.

Inside Edging Room Illumination

Highly durable LED light makes easy observation of the edging process possible.

LCD Tilting Function

Operator's view angle is taken into account with the adjustable screen, to improve work efficiency.
(standing / seated / tall / short)

Dual CPU

The world first dual 'CPU implementation' is another milestone of the Excelon series which offers you fully supported multi-tasking, allowing you to load and edit 'next job' during edging.
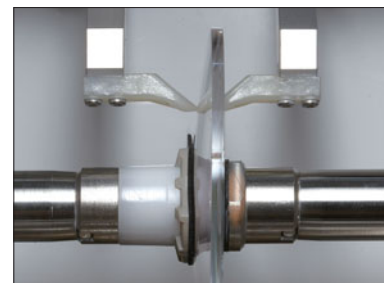
30 Degree Tilting Drill

Highly curved lenses and needing holes are supported with up to '30 degrees of tilting drill function'.

Real-Time Edging Status Display

Edged sections, lens thicknesses, rotation etc, are displayed in 'real-time' during the edging process.

Bigger Wheels

Bigger cutting wheels and 'direct drive motor system' offers you 30% faster cutting.

1 Horse Power Direct Motor Drive

Direct motor drive offers powerful cutting and performance, reducing vibration and noise.

Automatic Edging Room Door

Automatic door enables safer, faster and easier operation.

SD Card Storage / Memory

SD card implementation; means a new level of data management and compatibility.

Industry leading and maximum data storage is possible, with full PC compatibility and data interchangeability.

*With standard 1G SD card, the system permits you to store more than thousands of jobs.
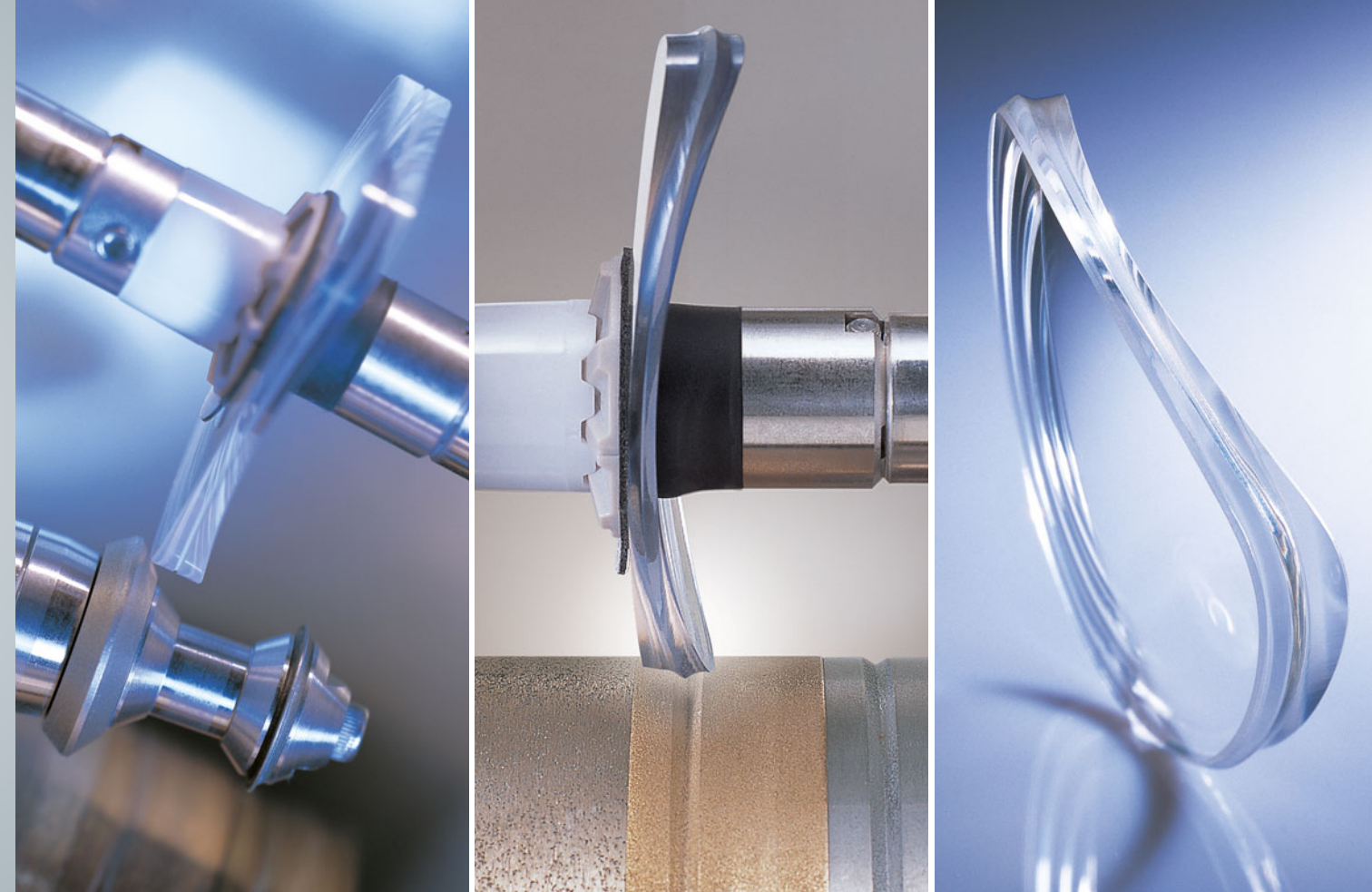
Imagine creating a 3D materialize as patternless automatic edger / Excelon
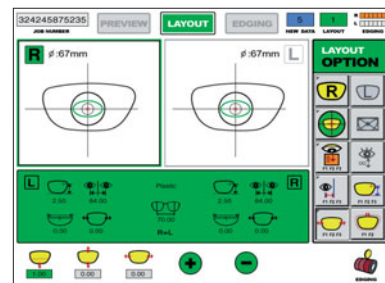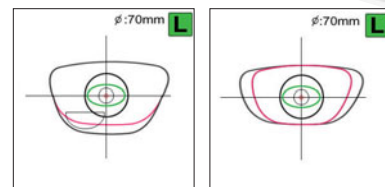
Digital Pattern Layout

The 'Digital Pattern Layout' allows users to modify lens width, height, and circumference and manage the fitting challenges posed by rimless and semi-rimless frames.

Operators can choose between optical and geometric-centered layouts.

Layouts for far vision and near vision in bifocal lens mode are provided.

The horizontal PD can be easily adjusted.

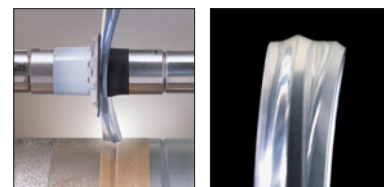Multiple input methods for setting the height of multi-focal progressive lenses are available.

When replacing frames the sizes of the old and new frames can be conveniently compared on screen.

3D Lens Measurement with Lens Feeler

Optimal beveling and grooving with 3-dimensional measurement

Bevel Position Adjustment

The bevel position can be adjusted in 0.01mm increments relative to the front curve, back curve, thickness, or base curve of the lens.

Grinding Wheel / Powerful Motor

Four grinding wheels enable the Excelon to edge all lens materials.

Servo motor drive offers powerful cutting and performance, reducing vibration and noise.

Adjustable Precision Grooving

The position, width, and depth of the groove can be adjusted in 0.01mm increments.
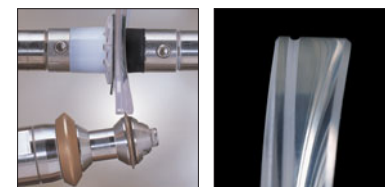
Safety Beveling / Automatic Polishing

Safety bevel all materials on one or both sides

Polish beveled, grooved, and flat-edged lenses

Efficient and Silent Operation

Numeric keypad permits rapid data entry.

Advanced 3-dimensional digital technology substantially reduces the overall cycle time.

Manage multiple jobs simultaneously for improved efficiency.

The inverter mechanism minimizes noise during the edging process, ensuring a comfortable work environment.

Tracer, lensmeter, blocker that integrated the auto-blocker / CAB-4000

Completely Integrated / Fully Automated

Tracing, metering, and blocking are fully integrated and ensure superior precision by reducing the potential for user error.

Frame reading, lens centering, and blocking are performed automatically for maximum speed and convenience.

Directly Input Lens Layout / Edging Options

Users can complete all lens layout work, adjust parameters (such as PD & OH values), and select edging options.

The information is directly transferred to the edger by simply pressing the start button.

Automatic Lens Recognition

The advanced system automatically recognizes the type of lens being used (single vision, bi-focal, or progressive) as soon as it is set in position.


Integrated Lensmeter

The integrated lensmeter provides the spherical value, cylindrical value, and axis of the lens upon scanning.

Single vision lenses do not need to be marked.

Digital Pattern Layout

The 'Digital Pattern Layout' menu allows users to modify lens width, height, and circumference and manage the fitting challenges posed by rimless and semi-rimless frames.
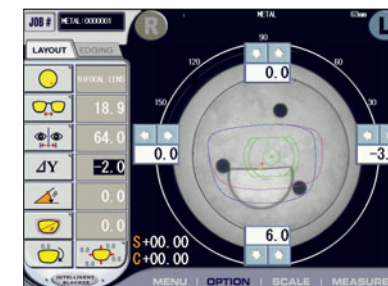

Advanced Image Processing

Advanced image processing technology permits the CAB-4000 to recognize any lens shape, ensuring utmost precision when detecting progressive, bi-focal, and blended lenses.

Automatic Blocking

Upon setting the lens in position the blocking center is displayed on screen.

The system will automatically block the lens at its geometric or optical center; the user may elect their preference or rely on the default setting.
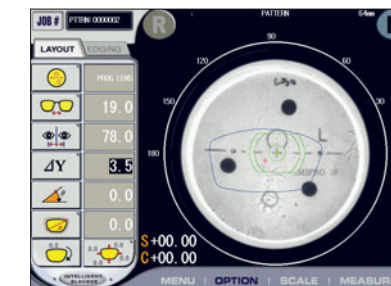
3 Joint Motorized Robot Arm

The patented 3 joint motorized robot arm is efficient and extremely precise.

Graphic Interface / Touch Screen Monitor

The intuitive icon-based interface permits users of all experience levels to easily manage the entire finishing process.

The high resolution touch screen monitor allows users to easily control all of the system's functions.

Precise Scanning / Intelligent Data Transmission

The CAB-4000 provides binocular three dimensional scanning, making data collection easier and more precise.

Tracing data, FPD, frame diameter, and other key changes are transmitted to the edger in real-time, assuring interoperability.

Data Storage

Up to 1,000 patterns can be stored within the system's large database, allowing users to access saved jobs at any time.
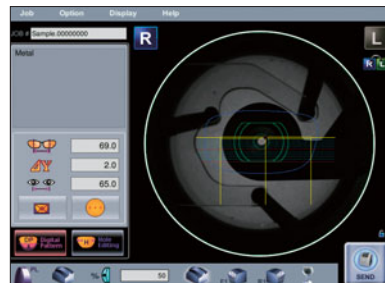
Intuitive and easy-blocker using graphic icons / HBK-7000

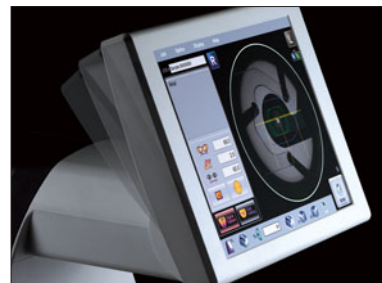Immaculate 3D scan of the frame reader / CFR-4000

Easy Graphic Interface

3D icons and a simple touch screen allow users to understand the menu with ease.

Touch Screen

Lens shapes, hole / notch positions and sizes can be easily modified with a simple touch of the screen.

High resolution LCD screen with 20 degrees of tilting angle offers you a better, more efficient working environment.

Lens Leveling Holder

For the most accurate blocking, the HBK-7000 has a lens leveling holder which is adaptive for any kind of lens.

SD Card Data Sharing

All data can be shared and stored into an SD card.

LED Lamp

Bright LED lamp has Lifetime durability and makes for easy work.

High Resolution Digital Filtering

Frame reader capable of reading 16,000 points and digital filtering assure the maximum accuracy.

Binocular and monocular tracings are both available for increased accuracy and efficiency.

3 Dimensional Tracing

Fast and adaptable tracing for all frame materials, plus demo lens tracing, makes for increased accuracy and efficiency.

Data transfer of FPD to Edger / Data Storage

Automatic data transfer of FPD to edger

Save up to 300 frames, and barcode recognition information is also available.

Stand-Alone System

TRACER → EDGER

TRACER → EDGER

TRACER → SMART BLOCKER → EDGER

SMART BLOCKER → EDGER

AUTO BLOCKER → EDGER

AUTO BLOCKER → EDGER
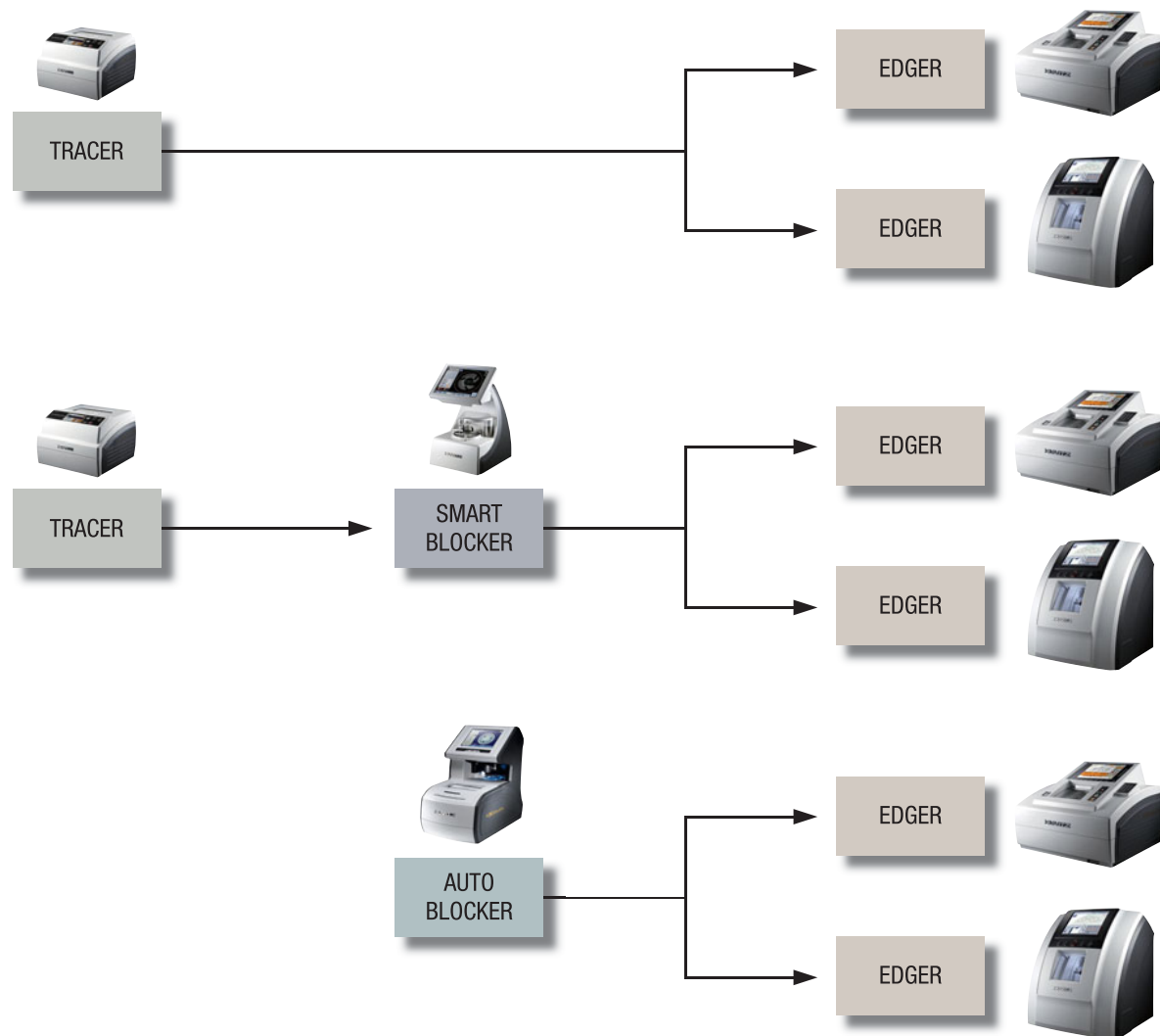
Remote Tracer & PC Interface

- Add Z-axis info to the tracer output
- Develop the PC application HERA IntraWorks
- Add an option to the HERA IntraWorks that makes it export the frame data in even angles

FRAME DATA

TRACER → PC

PC
DCS protocol → 3rd PARTY SOLUTION

Internet

FRAME DATA

TRACER → PC

PC
HERA IntraWorks → DCS Export → 3rd PARTY SOLUTION

Internet

Remote Edger & PC Interface

- Add an option to the Auto Blocker to receive and to recognize frame data from PC thru its EDGER-2 port
- Add an option to the Smart Blocker to receive and to recognize frame data from PC thru its TRACER port
- Add functions to the Smart Blocker allowing the edger to request job data to the Smart Blocker

Remote Edging Solution with The Huvitz Excelon Remote Assistant

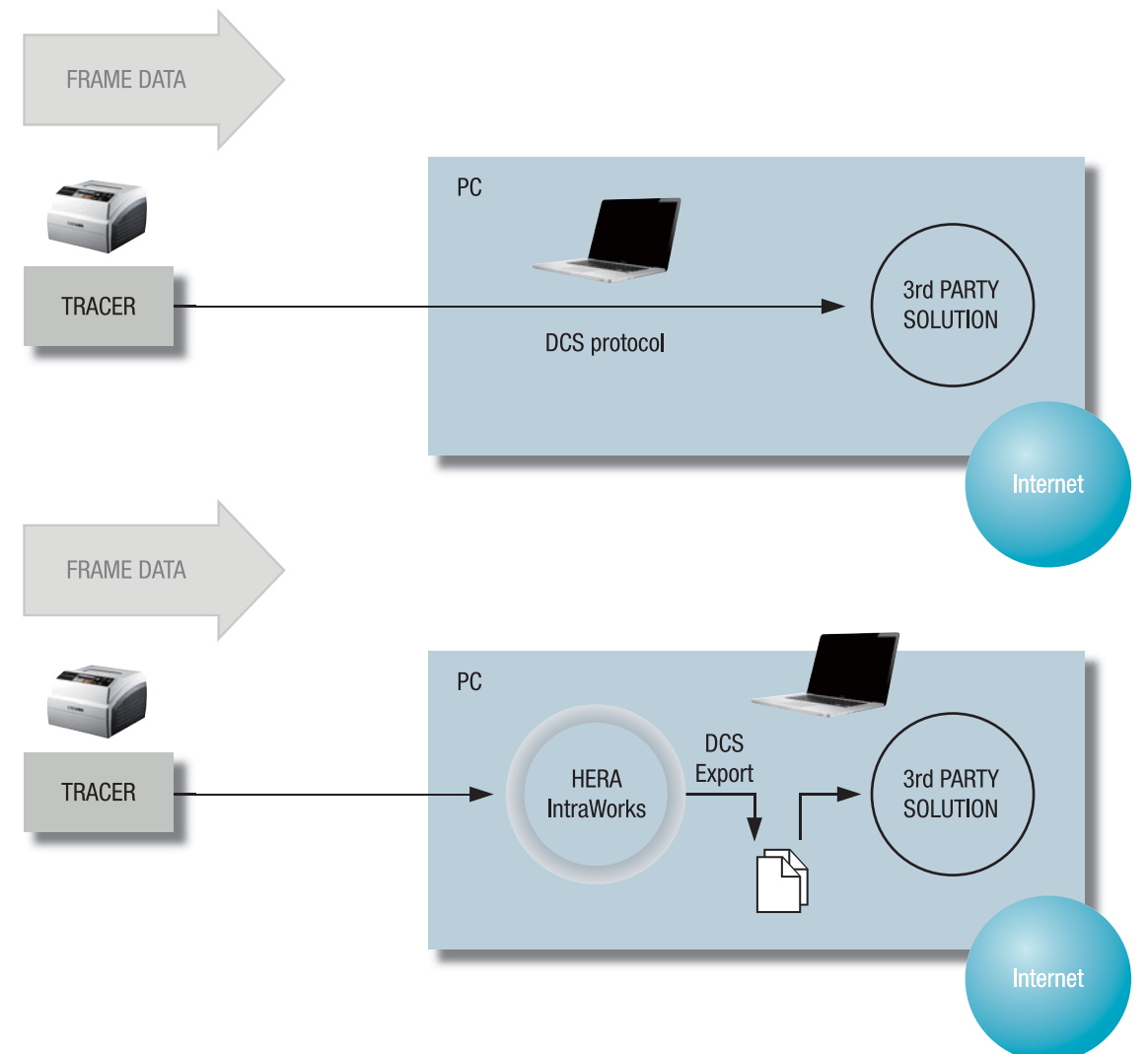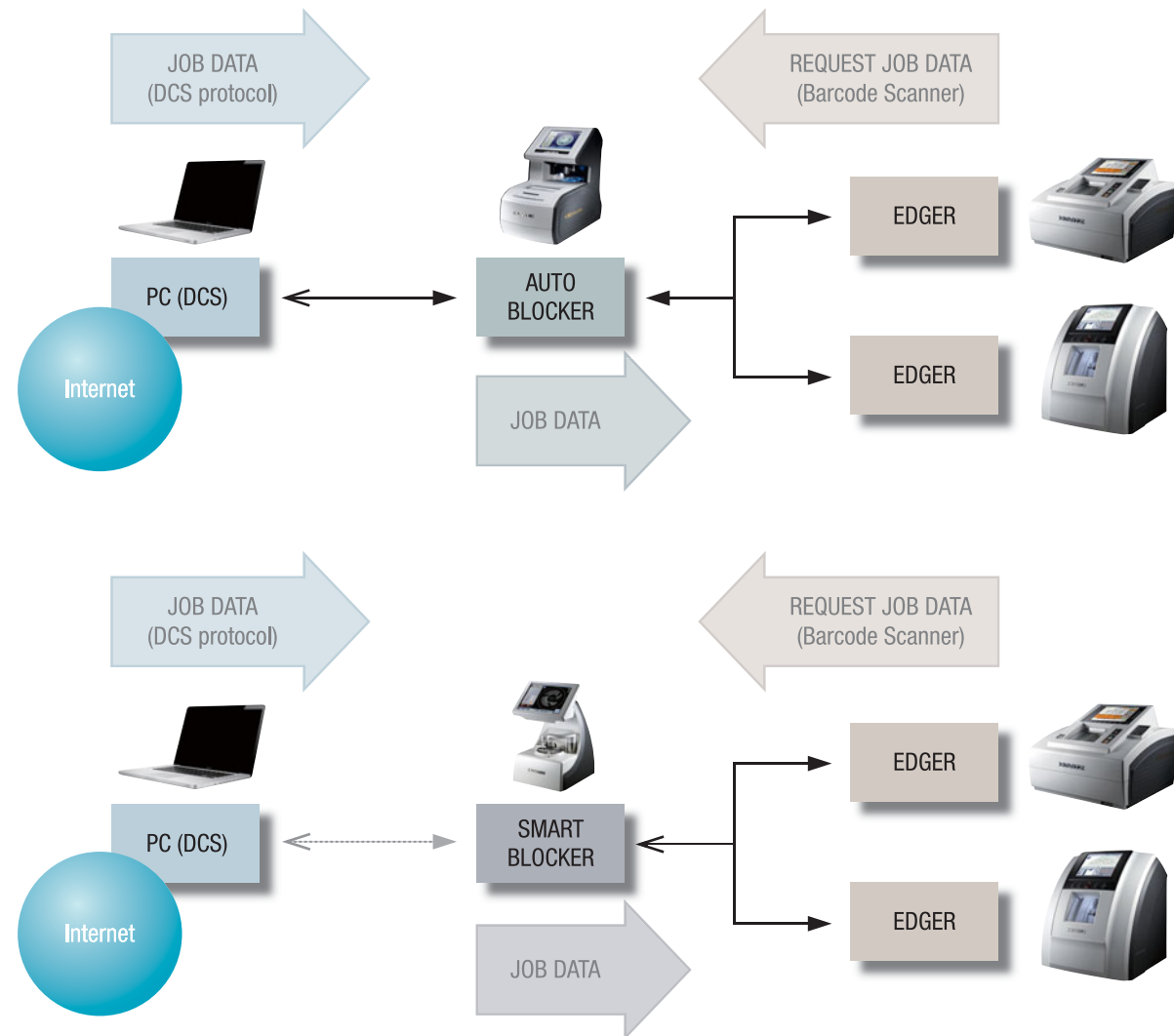- Add functions to the HERA to support downloading job data to Auto Blocker device

JOB DATA (DCS protocol)
REQUEST JOB DATA (Barcode Scanner)
PC (DCS)
Internet
AUTO BLOCKER
EDGER
EDGER
JOB DATA

JOB DATA (DCS protocol)
REQUEST JOB DATA (Barcode Scanner)
PC (DCS)
Internet
SMART BLOCKER
EDGER
EDGER
JOB DATA

HERA
STATION-A
EDGER CLIENT-A
EDGER-1
EDGER-n
shop-1
TRACER-1
TRACER CLIENT-1
REMOTE SERVER
STATION-B
EDGER CLIENT-B
AUTO BLOCKER-1
EDGER-1
AUTO BLOCKER-n
EDGER-n
shop-n
TRACER-n
TRACER CLIENT-n
Internet
STATION-Z
EDGER CLIENT-Z
AUTO BLOCKER-1
AUTO BLOCKER-n
EDGER-1
EDGER-n

FRAME DATA
ORDER INFO
ORDER INFO
JOB DATA

Intra-Lab Networking Solution

- Develop the HERA IntraWorks
- Add export / import function to the HERA IntraWorks for frame DB migration

REQUEST JOB DATA
(Barcode Scanner)

TRACER-1

TRACER-n

SMART BLOCKER-1

SMART BLOCKER-n

AUTO BLOCKER-1

AUTO BLOCKER-n

HERA IntraWorks

Internet

EDGER-1

EDGER-n

JOB DATA

JOB DATA
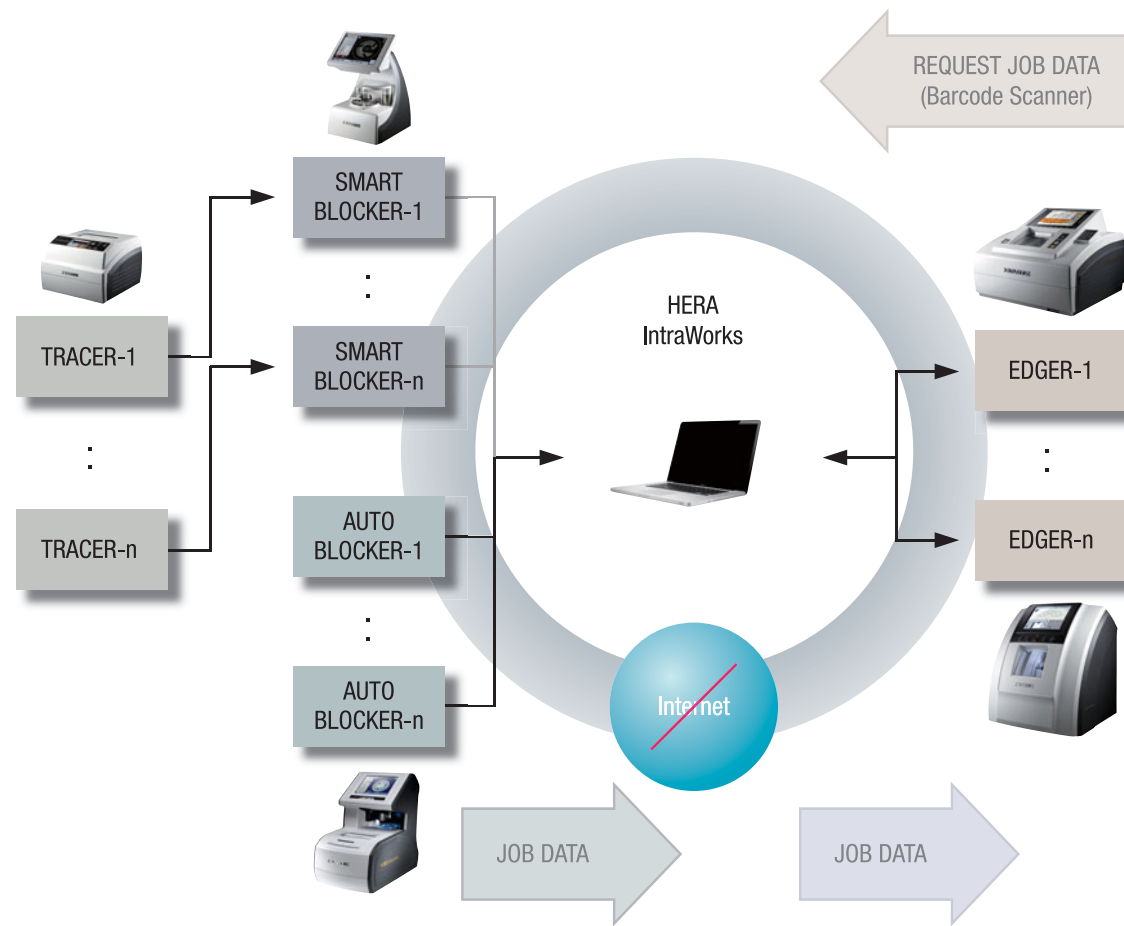
EDGER

	EXCELON-XD	EXCELON
Lens Material	Plastic, Polycarbonate, High Index Plastic, Glass, Trivex	
Finishing Type	Beveling, Flat Edging, Grooving, Safety Beveling, Polishing	
Drilling	Size : 0.8mm or 1.0mm (Diameter), Tilting Scope : 0 ~ +30 Degrees	
	Number of Holes : Unlimited, Hole Size : Unlimited, Hole Coordinates : x, y	
	Hole Type : Hole, Slot, Notch, Counterbore	
	Hole Depth : 0.0 ~ 6.0mm (0.0mm = Through Hole)	
Edging Size	Maximum Lens ⌀ 90mm, Minimum Lens ⌀ 18mm	
Operation	Digital Pattern, Retouch	
Utilities	LCD Tilting Function, Automatic Edging Room Door, Inside Edging Room illumination,	Bar Code Reader (Optional)
	SD Card Storage & Memory (Included), Bar Code Reader (Optional)	
Display	10.4 Inch TFT Color Touch Display	High Brightness Wide TFT LCD Adopted
Dimensions/Weight	540(W) x 462(D) x 597(H)mm / 55kg	570(W) X 540(D) X 460(H) mm / 45kg
Power Supply	AC 100-120V / AC 200-240V 50 / 60Hz	AC 110-220V, 50/60Hz
Power Consumption	1,200W (Maximum)	

BLOCKER

		CAB-4000	HBK-7000
Tracer	Detection Methods	Photographs & Traces	
	Tracing Size	Dia 80mm or Less, Dia. 18mm or More	
	Lensmeter Camera	CCD B/W	
	Imaging Camera	SVGA Color 2x Image	
	Measurement	SPH, -20D~+15D, CYL: ±10D	
	Increment	0.01D	
Layout	Lens Type	Single Lens, Progressive Lens, Bi-focal Lens	
	FPD	30~99.50 (in steps of 0.01mm)	
	Binocular PD	30~99.50 (in steps of 0.01mm)	
	Monocular PD	15.0~49.75	
	OH	±15.00mm	
	Layout Factors	FPD, PD (Binocular or Monocular), Cyl Axis, Bridge Size, OH (⊿ Y, Mixed Height, Box Height), Lens Size (including adjustment),	
		Frame Material (Metal, Plastic-Hard, Plastic-Soft), Digital Pattern	
Blocking	Blocking Method	Automatic Blocking with Mechanical Arm	Manual arm
	Mode	Box Center & Optical Center	
	Accuracy	-0.5~+0.5mm	
	Pressure	2.5kgf	
	axis Tolerance	-1.0° ~ +1.0°	-0.5° ~ +0.5°
Display	LCD	8.4 inch TFT / 800x600 Color	8.4 inch TFT / 800x600 Color (Tilting range / 45°~65°)
	Input Method	Touch Pad LCD, Buttons	Touch Panel
Data transmission port	Com PORT	PORT 1 / Edger 1, PORT 2 / Edger 2	Serial PORT — Edger 2 channels, Frame Reader 1 channel
		PORT 3 / Tracer Out, PORT 4 / Bar Code Reader	Reserved 1 channels, Barcode Reader
Collateral functions	Data Storage	Maximum 1,000 data	Ext. Memory SD Card
	Digital Scanning	Photographs Lens Shape	
	Regulating LCD brightness	Control LED	
	Lens Type Interpretation	Single Lens, Progressive, Bi-Focal etc.	

Designs and details can be changed without prior notice for the purposes of improvement.