SMARTVISION
IN LINE QUALITY

SMARTVISION
IN LINE QUALITY

Smart Quality Control Equipment
for Industrial Production

YouTube.com

www.SmartVision.it

info@SmartVision.it

+39 0432 484765

MISSION

PROVIDE SOLID TECHNOLOGIES THAT ALLOW

AUTOMATIC QUALITY CONTROL TASKS

DIRECTLY IN PRODUCTION LINE

Our History

1999

Founded in 1999

With over 25 years of experience in the filed, Mr Giovanni Schiavi founded SmartVision in the early 1999 in Northen Italy

Custom Made Products

In Line Quality Control Systems
and Solutions for Industrial Production

Standard Products

Introduction of Standard Products:

- Smart Quality Control Equipment for Industrial Production

2009

Our History

2009

Two product Lines

Focus on two main specialized categories:

- Video Measuring Machines
- Quality Control Instruments for Sunglasses

New offices Location

Moved the Headquarter in a Brand new strategic location, employment of new expert personnel, developement of a new range of products

SmartVision S.r.l.

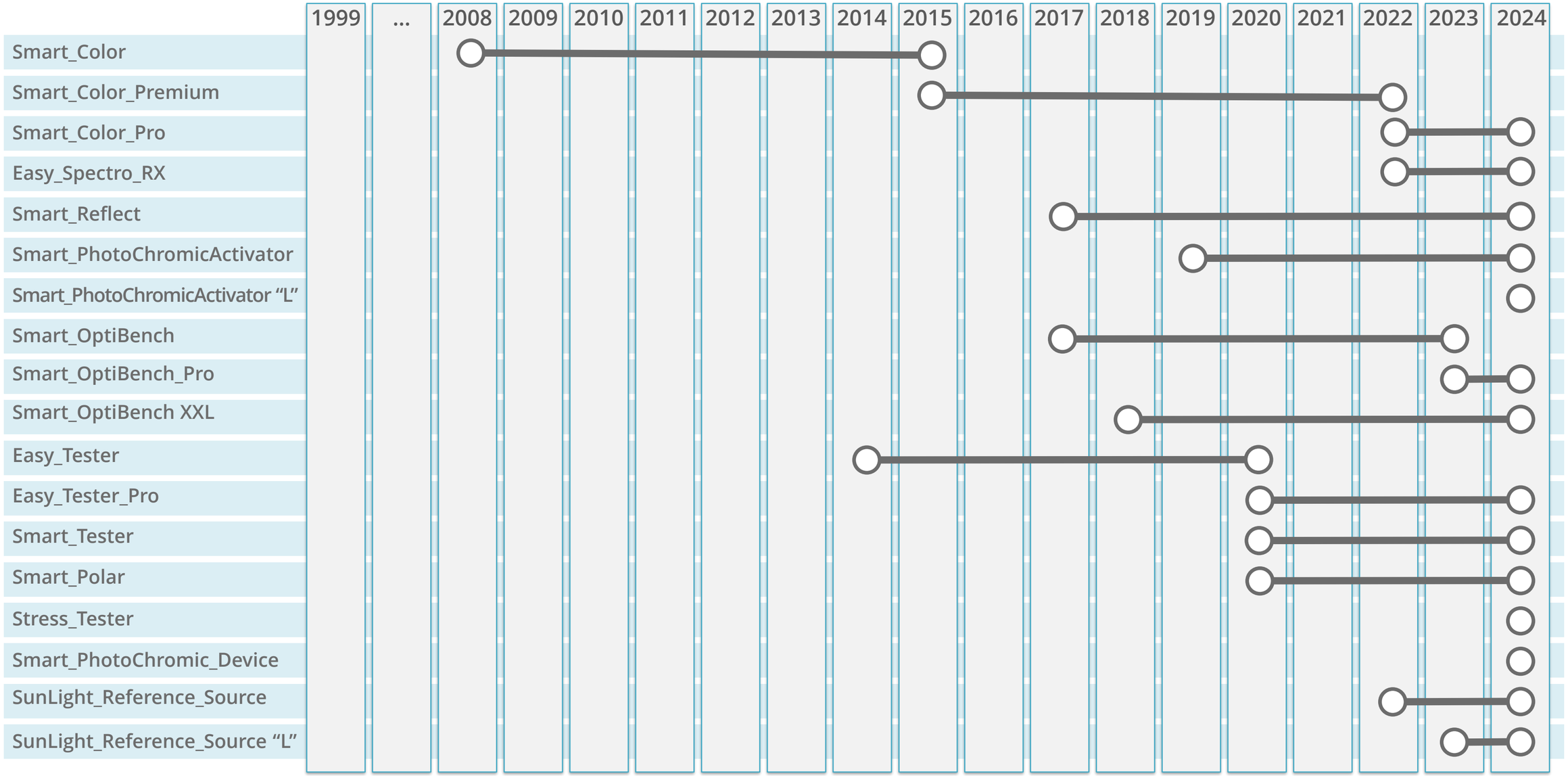
SmartVision consolidated its reputation and became a Limited Company, reaching 35 Qualified Distributors all over the world

2024

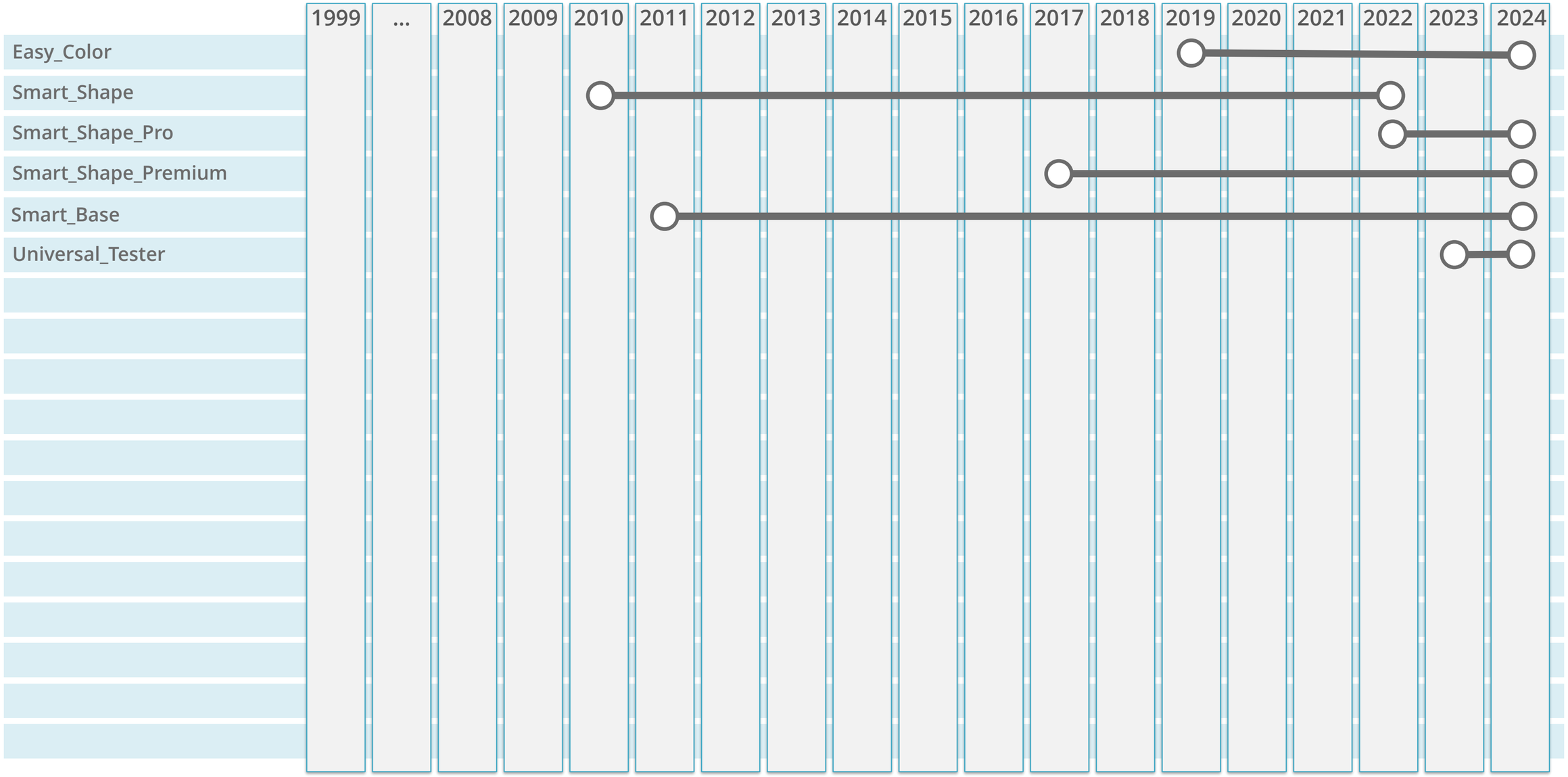
PRODUCTS

- Video Measuring Machines
- Quality Control Equipment For Optical Market
- Custom Made Vision Systems

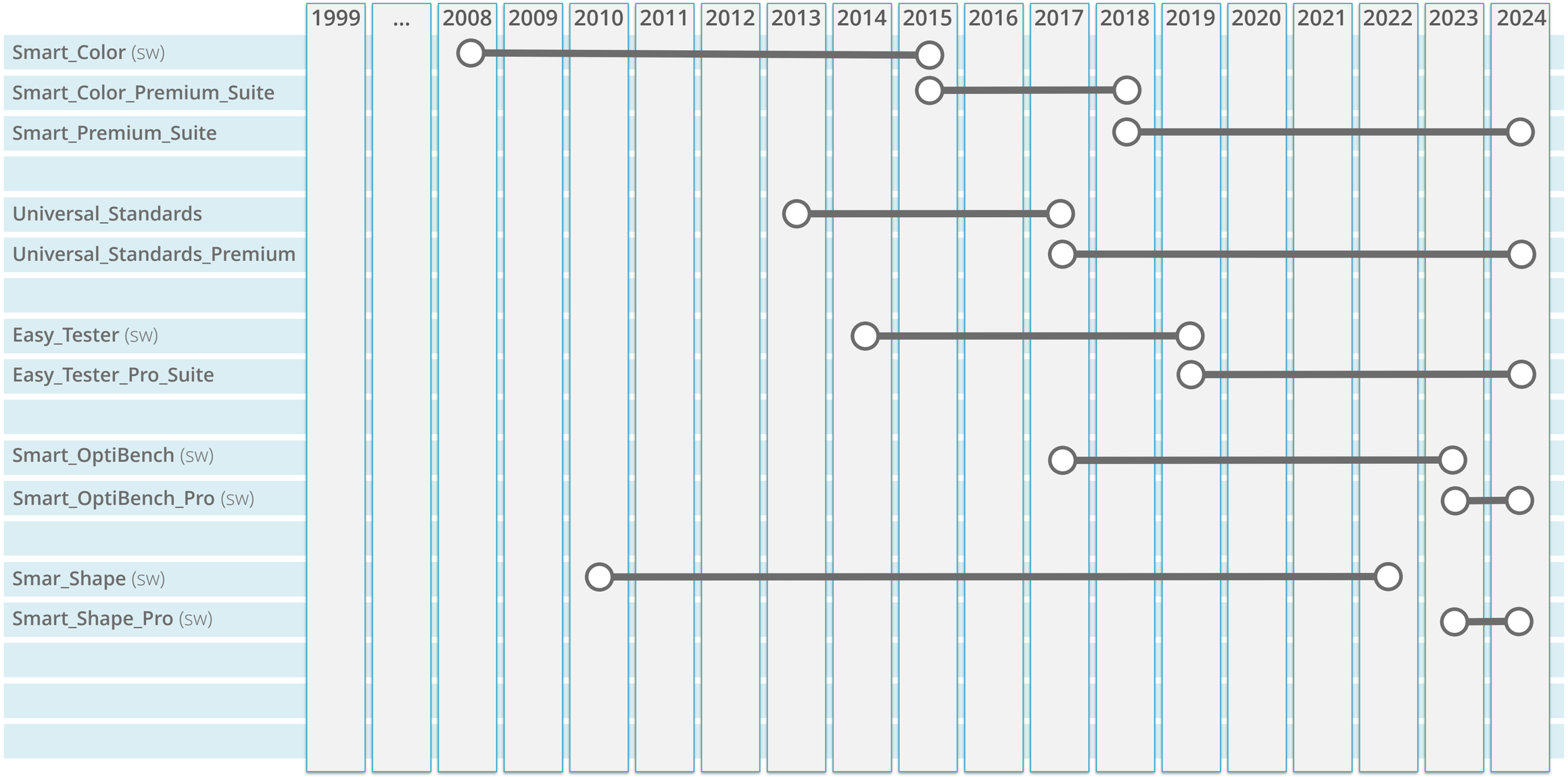
History Road Map - Eyewear Equipment



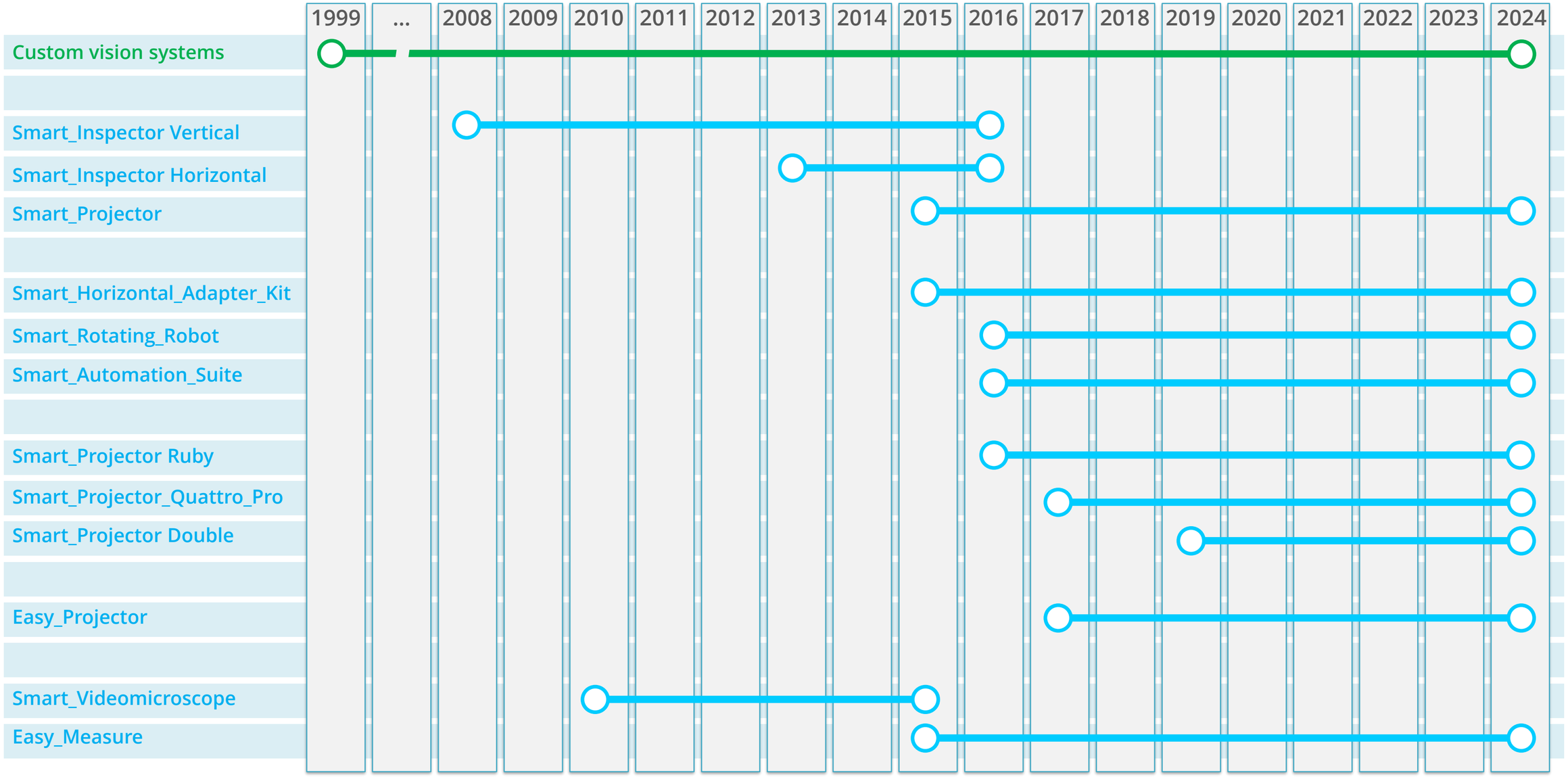
History Road Map - Eyewear Equipment



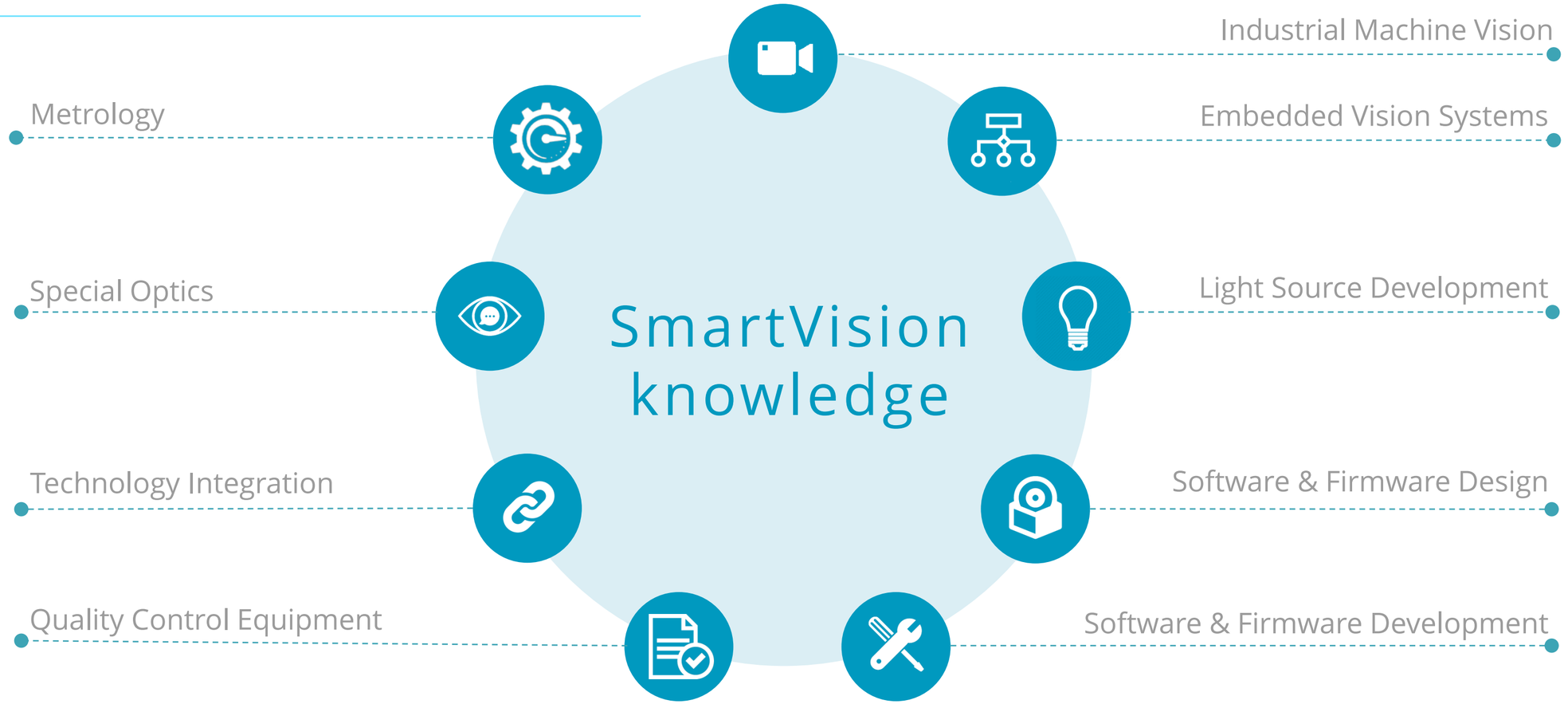
History Road Map - Eyewear Software



History Road Map - Metrology Equipment



Research & Development Company



Our Strenghts

01 Research And Development

02 Sales And Marketing Strategy

03 Technical Creativity

04 Flexibility & Efficiency

05 Customer Care

Current Market Segments

EYEWEAR

GLASS

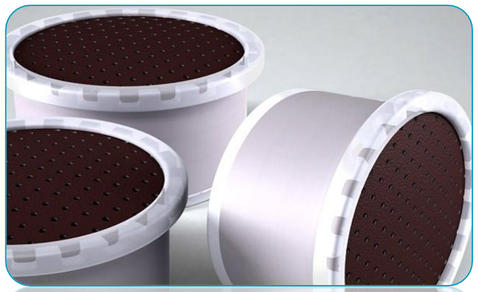
AUTOMOTIVE

MICROMECHANICAL

PHARMACEUTICAL

MEDICAL

MECHANICAL



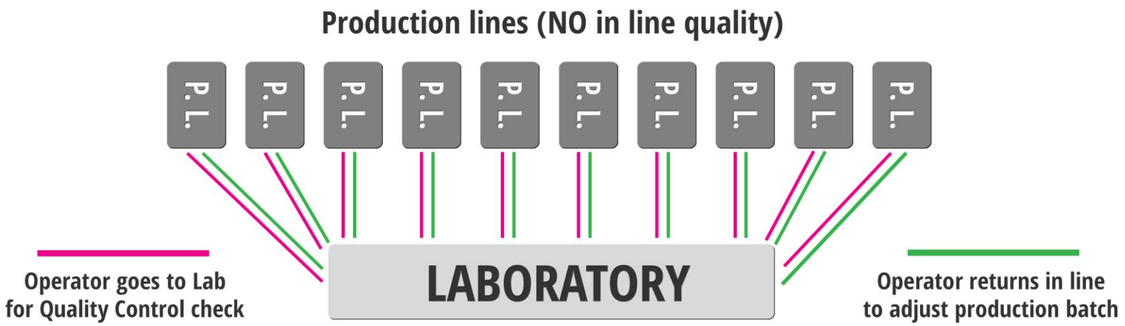
FOOD&BEVERAGE

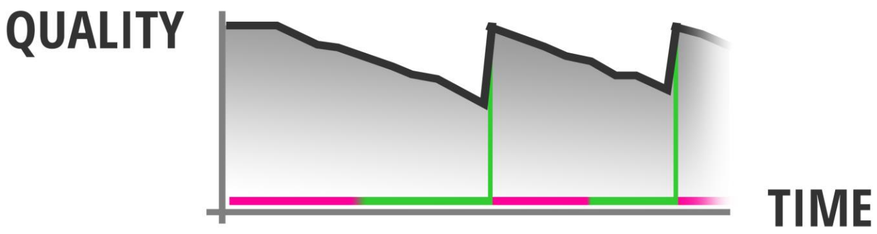
PLASTIC

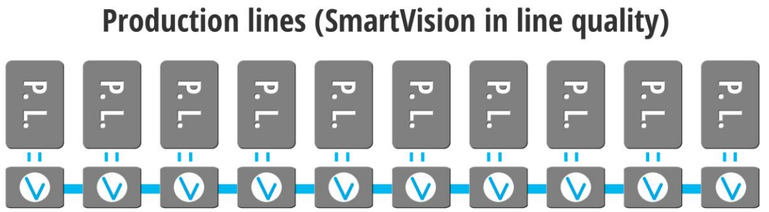
SmartVision’s Market Distribution

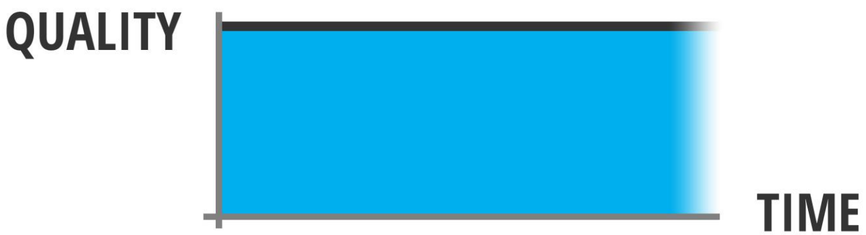
Production Lines

Production – Traditional Way









Standard Products - Eyewear

NEW

Easy_Spectro_RX

NEW

Smart_Color_Pro

Smart_Reflect

Easy_Color

NEW

Smart_PhotoChromicActivator

NEW

SunLight_Reference_Source

Standard Products - Eyewear

Easy_Tester_Pro

Smart_Tester

Smart_Polar

NEW

Stress_Tester

NEW

Smart_OptiBench_Pro

Smart_OptiBench XXL

Standard Products - Eyewear

Smart_Base

NEW

Smart_Shape_Pro

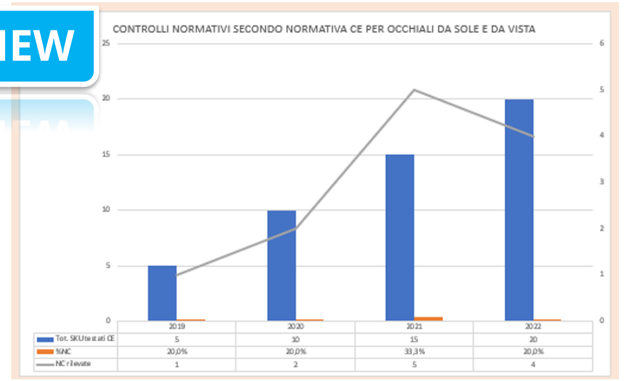
Smart_Shape_Premium

NEW

Universal_Tester

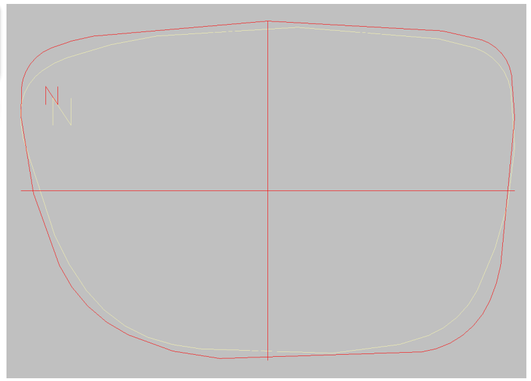
NEW Software Products

NEW



Certification & Statistics

NEW



Equal-Template Research
(Pari-Dima)

NEW

SMARTVISION CloudServices

SmartVision_Cloud_Service

All International Standards Available

Application	Standard	Regulation	Easy_Spectro_RX & Smart_Color_Pro	Smart_Reflect	Easy_Tester_Pro & Smart_Tester	Smart_OptiBench	Universal_Tester	
							Smart_Tester Sub System	OptiBench Sub System
SunGlasses	ISO 12312-1	*Sunglasses for general use*	✔	✔ FullLens version	✔	✔	✔	✔
	ANSI Z80.3	*Nonprescription Sunglass and Fashion eyewear requirements*	✔		✔	✔	✔	✔
	AS/NZS 1067.1	*Sunglasses and Fashion Spectacles*	✔			✔		✔
	EN 1836	*Sunglasses and Sunglare Filters for general use*	✔			✔		✔
	GB 39552.1	*Sunglasses and Sunglasses Lenses*	✔		✔	✔	✔	✔
	QB 2457	*Sunglasses*	✔			✔		✔
Ski	EN 174	*Ski Goggles for downhill Skiing*	✔		✔	✔	✔	✔
	EN ISO 18527-1	*Requirements for downhill Skiing and Snowboarding Goggles*	✔		✔	✔	✔	✔
	ASTM F659-10	*Standard specification for Ski and Snowboard Goggles*				✔		✔

All International Standards Available

Application	Standard	Regulation	Easy_Spectro_RX & Smart_Color_Pro	Smart_Reflect	Easy_Tester_Pro & Smart_Tester	Smart_OptiBench	Universal_Tester	
							Smart_Tester Sub System	OptiBench Sub System
Squash	ISO 18527-2	*Requirements for eye protectors for Squash and eye protectors for Racquetball and Squash 57*	✔			✔		✔
Swimming	ISO 18527-3	*Requirements and test methods for eyewear intended to be used for Surface Swimming*	✔			✔		✔
Active Lifestyle	ISO 12312-3	*Eye and face protection - Sunglasses and related eyewear - Sunglasses for running, cycling and similar active Lifestyles*	✔			✔		✔
Ophthalmic	GB 10810.3	*Single-vision and multifocal lenses*	✔			✔		✔
	ISO 8980-3	*Uncut finished spectacle lenses - Transmittance specifications and test methods*	✔					
	ISO 8980-4	*Uncut finished spectacle lenses - Specifications and test methods for anti-reflective coatings*		✔ Surface version				

All International Standards Available

Application	Standard	Regulation	Easy_Spectro_RX & Smart_Color_Pro	Smart_Reflect	Easy_Tester_Pro & Smart_Tester	Smart_OptiBench	Universal_Tester	
							Smart_Tester Sub System	OptiBench Sub System
Safety	ISO 16321-1	*Eye and face protection for occupational use*	✔		✔	✔	✔	✔
	ANSI/ISEA Z87.1	*Occupational and Educational personal eye and face protection devices*	✔			✔		✔
	EN 166	*Personal eye-protection*	✔			✔		✔
	AS/NZS 1337.1	*Eye and face protectors for occupational applications*	✔			✔		✔
	JIS T 8147	*Personal eye-protection*				✔		✔
	Z94.3	*Eye and face protectors*				✔		✔
Helmets	ECE 22-06	*Uniform provisions concerning the approval of protective Helmets and of their Visors for Drivers and passengers of Motor cycles and mopeds*	✔			✔		

All International Standards Available

Application	Standard	Regulation	Easy_Spectro_RX & Smart_Color_Pro	Smart_Reflect	Easy_Tester_Pro & Smart_Tester	Smart_OptiBench	Universal_Tester	
							Smart_Tester Sub System	OptiBench Sub System
Blue-light hazard	GB/T 38120	*Technical requirements on application of light health and light safety of coating for protection against Blue-light*	✔					
	ISO 18526-2	*Eye and face protection - Test methods - Physical optical properties*	✔					
	ISO 4007	*Eye and face protection for artificial Light*	✔					

Easy_Spectro_RX

NEW

- Best entry level Spectrophotometer
- Spectral analysis in the 355 - 790 nm range
- Color Difference
- Transmittance Properties
- 3D Color Space Visualization
- Lamps Warm-up Dynamic Control
- Continuous Auto-calibration
- Spectrum Stability Continuos Control
- Modular: Wide Range of Optional Features
- Ideal for use in the following sectors:
  - Verification of RX Lenses, SunLenses, SunGlasses, SkiGoggles and Helmet Visors
  - Colorimetric verification of semitransparent materials

Smart_Color_Pro

NEW

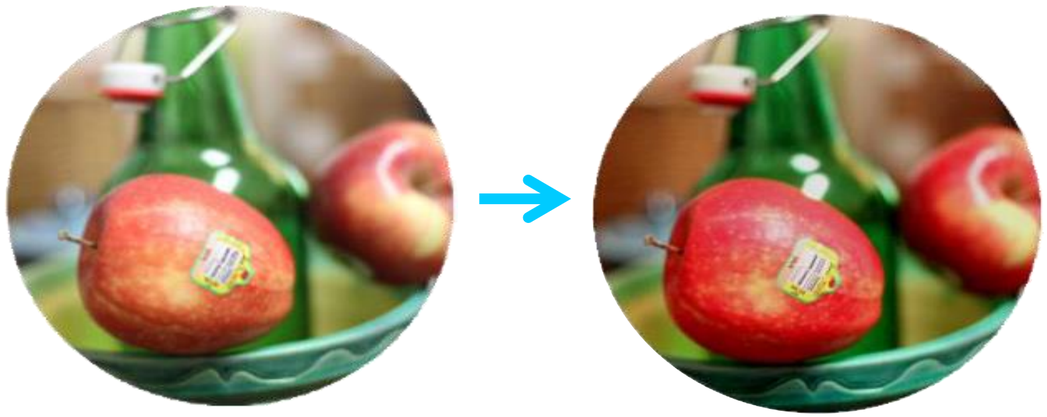
- Automatic Spectrophotometer
- Color Difference
- Transmittance Properties
- Lens Holding System
- 3D Color Space Visualization
- Lamps Warm-up Dynamic Control
- Continuous Auto-calibration
- Spectrum Stability Continuos Control
- **NEW** Function Mode "CRF" (Color Resolution Factor: Measure and Comparision)
- **NEW** SmartVision Cloud Service
- **NEW** International Standard Available for Quality Control of Lenses, Eyeglasses & Visors for Sun, Sports & Safety

Smart_Premium_Suite | New Optional Features

New **Color Resolution Measurement and Comparison** for Smart_Premium_Suite

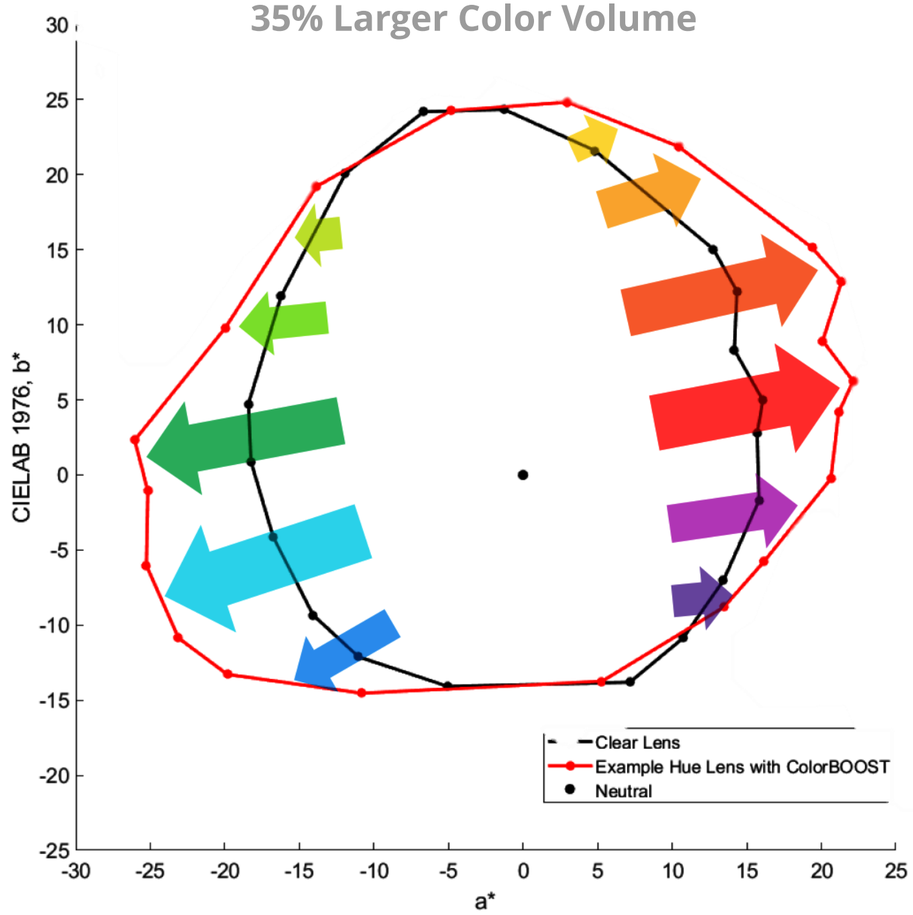
Clear Lens
CRF 100%
CAF 100%

CRF **135**%
CAF 99%



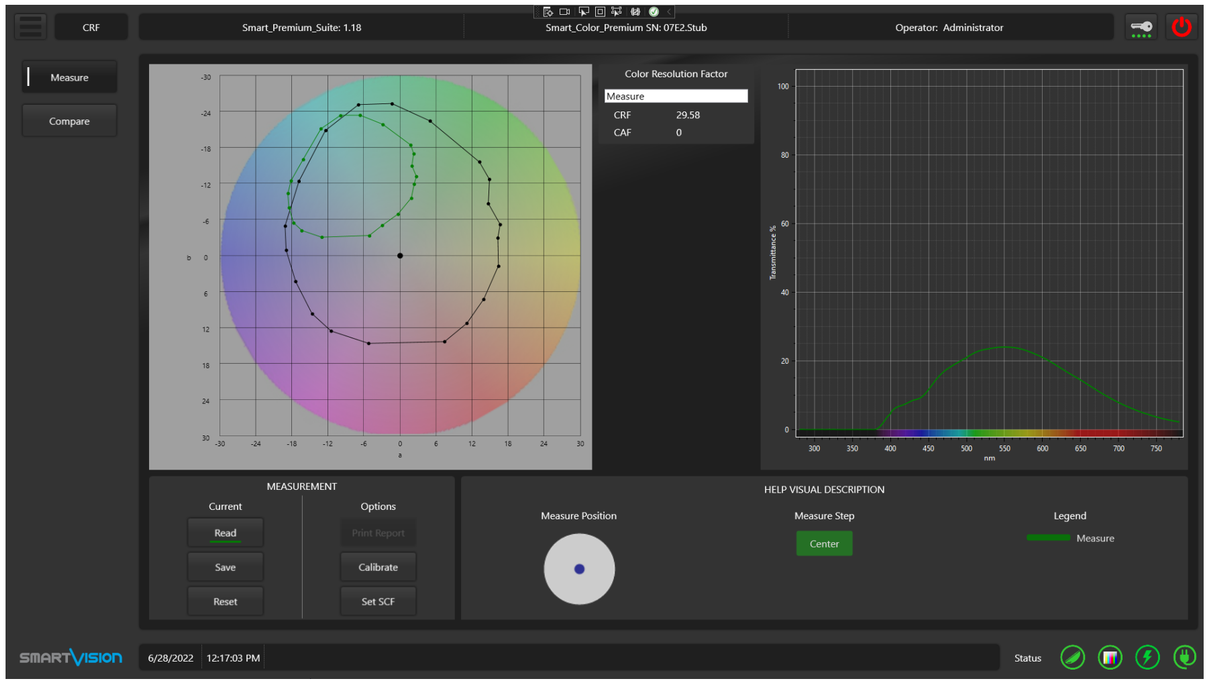
CRF outcome: High Color Contrast
CAF outcome: High Color Accuracy

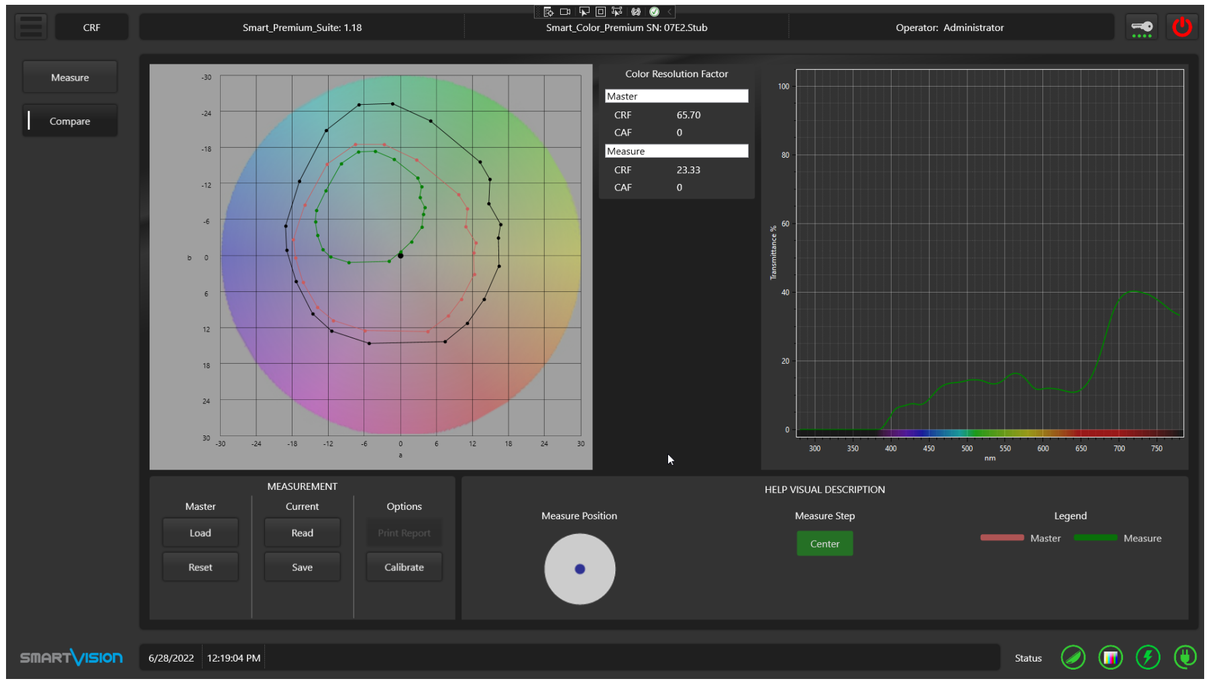
35% Larger Color Volume



Smart_Premium_Suite | New Optional Features

New **Color Resolution Measurement and Comparison** for Smart_Premium_Suite





Smart_Premium_Suite | New Optional Features

Blue Light Hazard Mode: GB/T 38120

NEW

Table 2 The requirements for light transmittance of blue light protective film

Spectral range λ/nm	Requirement for Light transmittance
385≤λ<415	<75%
415≤λ<445	≤80%
445≤λ<475	>80%
475≤λ<505	>80%

- Automatic check of Requirements for Light Transmittance

Blue Light Hazard Mode: ISO 4007

NEW

3.10.1.37
optical radiation transmittance
DEPRECATED: blue-light hazard transmittance
τ_{AOR}
<artificial source of *optical radiation*>normalized value of the *spectral transmittance* (3.10.1.22) averaged between 300 nm and 700 nm, weighted by the *blue-light hazard* (3.1.7) function

Note 1 to entry: The *optical radiation transmittance* for artificial radiation sources is usually expressed as a percentage and calculated from the following formula:

$$\tau_{AOR} = 100 \times \frac{\int_{300}^{700} \tau(\lambda) \cdot B(\lambda) \cdot d\lambda}{\int_{300}^{700} B(\lambda) \cdot d\lambda}$$

where

λ is the wavelength in nanometres;

$\tau(\lambda)$ is the *spectral transmittance* of the *lens* or *filter*;

$B(\lambda)$ is the *blue-light hazard* function.

Automatic calculation of:

- T_{AOR}
- T_{AOR} / T_V

Threshold customization for:

- T_{AOR}
- T_{AOR} / T_V

Smart_Premium_Suite | New Optional Features

Blue Light Hazard Mode: ISO 18526-2

NEW

9.2 Blue-light transmittance from artificial sources

9.2.1 Calculation of blue-light transmittance from artificial sources from spectral values

See ISO 4007:2018, 3.10.1.36. See also C.3.3.2.

The values of $B(\lambda)$ are given in Table D.1.

- Automatic calculation of:
  - T_B
  - T_B / T_V
- Threshold customization for:
  - T_B
  - T_B / T_V

3.10.1.36
blue-light transmittance
τ_B
<artificial source of *optical radiation*>normalized value of the *spectral transmittance* (3.10.1.22) averaged between 380 nm and 500 nm, weighted by the *blue-light hazard* (3.1.7) function

Note 1 to entry: The *blue-light transmittance* for artificial radiation sources is usually expressed as a percentage and calculated from the following formula:

$$\tau_B = 100 \times \frac{\int_{380}^{500} \tau(\lambda) \cdot B(\lambda) \cdot d\lambda}{\int_{380}^{500} B(\lambda) \cdot d\lambda}$$

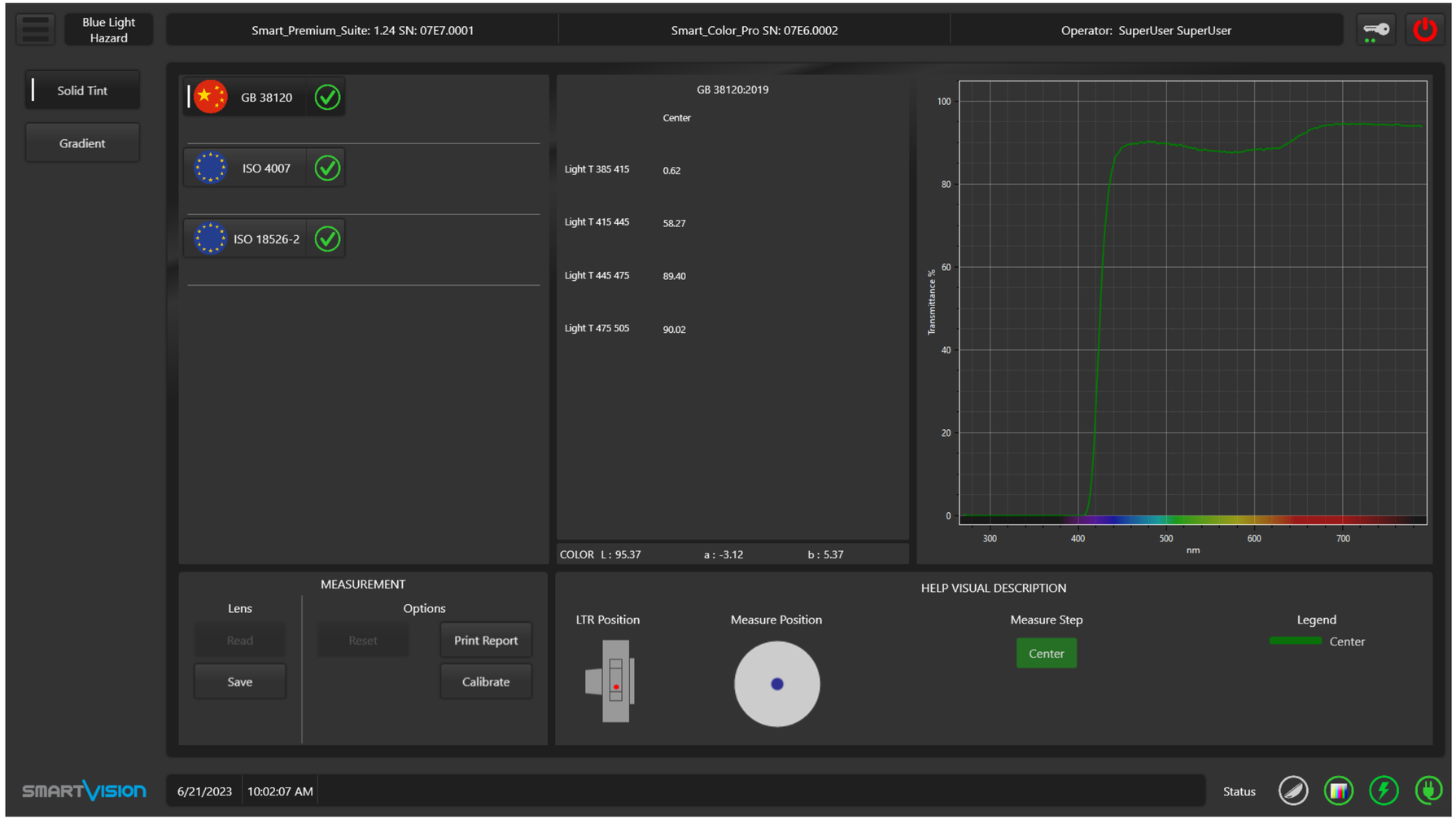
where

λ	is the wavelength in nanometres;
$\tau(\lambda)$	is the *spectral transmittance* of the *lens* or *filter*;
$B(\lambda)$	is the *blue-light hazard* function.

Smart_Premium_Suite | New Optional Features

Blue Light Hazard Mode: Software

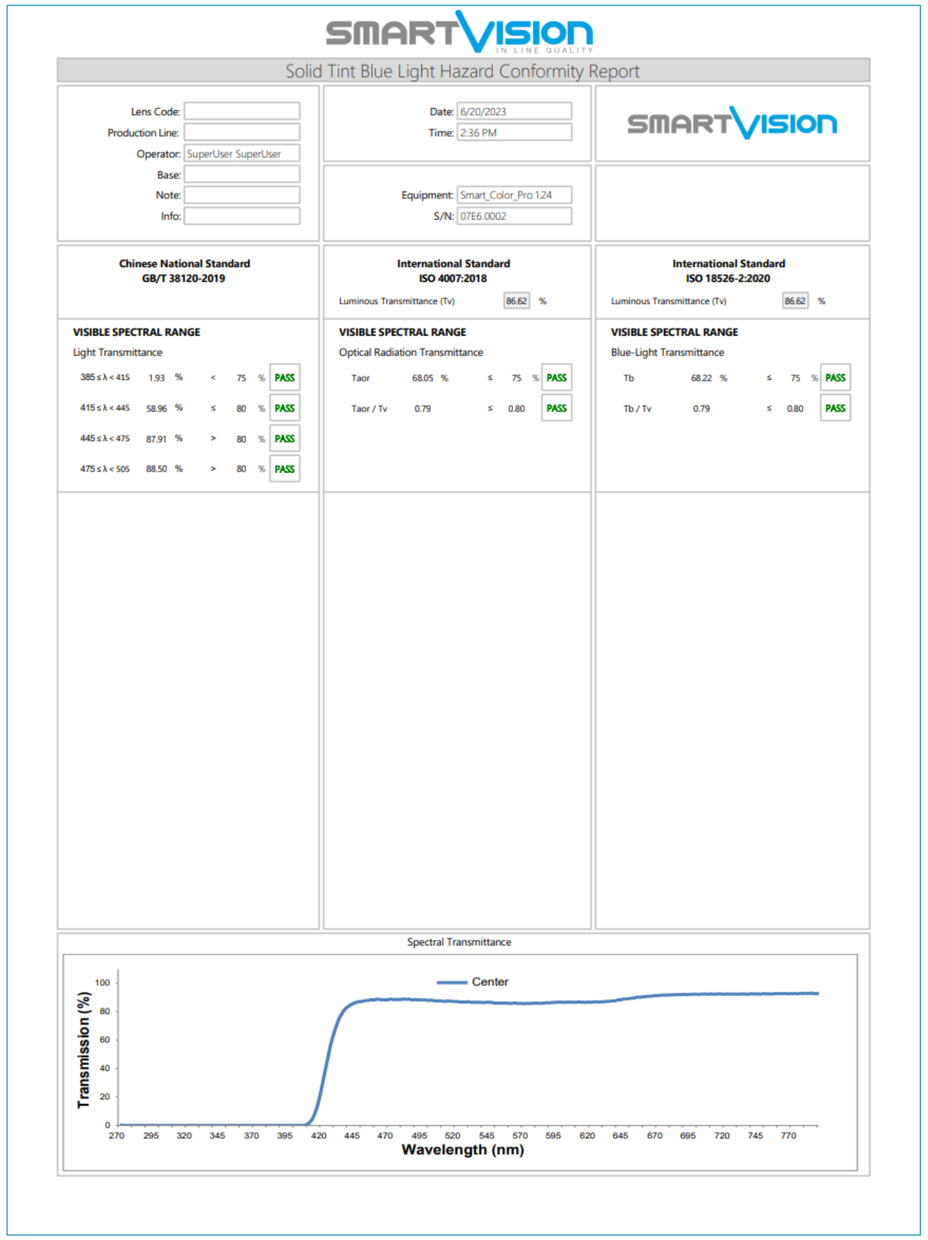
NEW



Smart_Premium_Suite | New Optional Features

Blue Light Hazard Mode: Report

NEW



SMARTVISION IN LINE QUALITY

Solid Tint Blue Light Hazard Conformity Report

Lens Code:	Date: 6/20/2023	SMARTVISION
Production Line:	Time: 2:36 PM	
Operator: SuperUser SuperUser		
Base:	Equipment: Smart_Color_Pro 1.24	
Note:	S/N: 07E6.0002	
Info:		

Chinese National Standard GB/T 38120-2019							International Standard ISO 4007:2018							International Standard ISO 18526-2:2020						
							Luminous Transmittance (Tv)	86.62	%					Luminous Transmittance (Tv)	86.62	%				
VISIBLE SPECTRAL RANGE							**VISIBLE SPECTRAL RANGE**							**VISIBLE SPECTRAL RANGE**						
Light Transmittance							Optical Radiation Transmittance							Blue-Light Transmittance						
385 ≤ λ < 415	1.93	%	<	75	%	PASS	Taor	68.05	%	≤	75	%	PASS	Tb	68.22	%	≤	75	%	PASS
415 ≤ λ < 445	58.96	%	≤	80	%	PASS	Taor / Tv	0.79		≤	0.80		PASS	Tb / Tv	0.79		≤	0.80		PASS
445 ≤ λ < 475	87.91	%	>	80	%	PASS														
475 ≤ λ < 505	88.50	%	>	80	%	PASS														

Spectral Transmittance

Smart_Reflect

- Spectrophotometer for Colour Coating check
- Complete Check of Color Differences
  Δe , L*, A*, comparing to a master lens
- Smart_Probe Holding System
- Extended user management
- Pass/Fail Result With Reflection Graph
- According to International Standard ISO 12312-1
  (FullLens version) & ISO 8980-4 (Surface version)
- Continuous Auto-calibration
- Spectrum Stability Continuos Control

Easy_Color

- Easily checks reflecting surfaces in few seconds
- Camera System that allows to measure surfaces with high reflectance
- Ideal for small details analysis
- Live View of the test area
- Modifiable Region of Interest
- No external light influence
- Digital Master Automatic Creation and Storage
- **NEW** SmartVision Cloud Service
- Easy-to-use and Ergonomic, perfect for placing items with different shapes

Smart_PhotoChromicActivator

- Photochromic Lens Activation on UV + Visible Spectral Range
- Light Activation Spectral Range conforming to ISO 12311:2013
- High Uniformity of Activated Area
- Embedded Microprocessor Controller
- Embedded Color Touch Screen Display
- Adjustable Activation Time (Protected by Password)
- Adjustable Light Power Density (Protected by Password)
- Upper housing door for Lens under test with Closing Sensor, interrupt emission when open
- Beeper: Acoustic Signal for Operator
- Self-centering base for a correct lens position
- Rugged, Static, Fanless, Compact and Easy-to-use Device

Smart_PhotoChromicActivator Large

NEW

- UV & Visible Photochromic Lens Activator
- Stand-alone, Compact, Easy-to-Use Device
- Suitable to activate lenses of different shapes (max Ø 80 mm
- Mechanical System for centering circular Lenses
- Activation light covers the spectral range as requested by the International Standards
- Customizable activation time
- Acoustic Signal at the end of the process
- The operator is always protected by the activation light
- Activation Chamber protects the operator from Artificial Optical Radiation (AOR)
- Interlook system stops activation process if Activation Chamber is open
- Ozone-free

SunLight_Reference_Source

NEW

Large

- Reference Light Panel with Leds for surface and lenses color visual inspection
- Selectable light source: D65 or D50 or both sources
- Variable light intensity: to better adapt it to the transmittance of the analyzed lenses
- Warming up indicator: the control system indicates when the light source is ready for use
- High quality and stability of led source
- Unique device to analyze light and dark lenses
- Greater fidelity in color reproduction than the competitor devices
- Two Models Available

Easy_Tester_Pro

- Automatic Uniformity Tester
- Solid Tint and Gradient Filters
- Automatic Filters Category Detection
- Small Head and Big Head Testing
- Contactless System Measure
- Very Fast and Objective Measurements
- Excel and Pdf Data Report
- **NEW** QFactor Analisys & Alignment markers
- **NEW** SmartVision Cloud Service
- Standard ISO 12312-1, GB 39552.1, EN 174, ISO 16321-1, ISO 18527-1, ANSI Z80.3-2018

Double_Autocentering_Lens_Holder

NEW

- Auto-centering tool for lens control up to Ø90 mm
- Simultaneous control of two lenses of different sizes
- Independent locking system of the two lenses
- Easy locking and unlocking system
- Plug-and-play, Easy-to-use
- Available for Easy_Tester_Pro & Smart_Tester

Smart_HeadForm - *New Version 03*

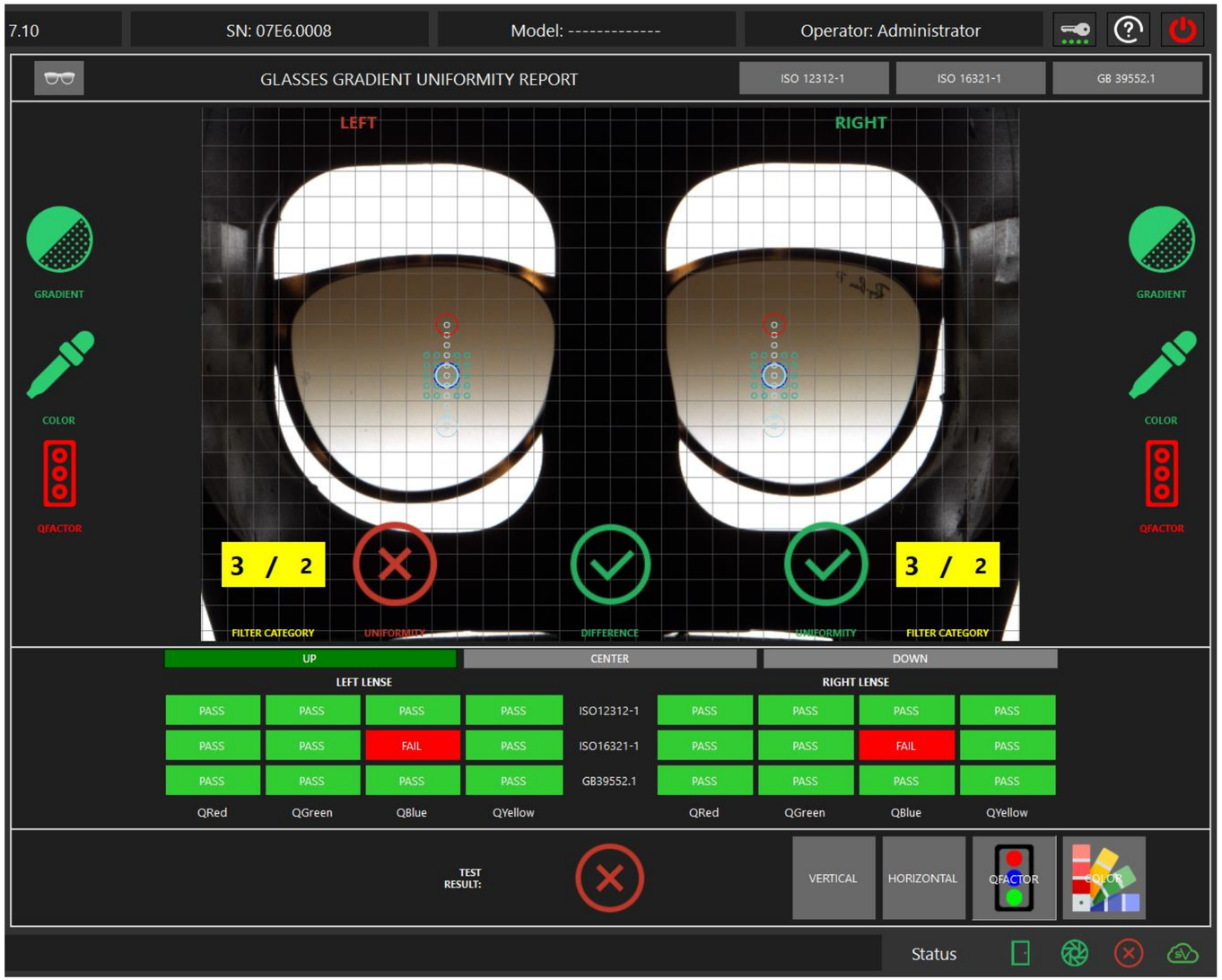
NEW

- Compliance with the Standard ISO 18526-4: 2018 Type 1-S, 1-M, 2-M
- Suitable for checks according to chinese Standard GB/T 39552.1:2020 (Smart_Tester)
- Larger size of the Orbital cavity
- New adapter support for SkiGoggle
- Optional Multi-device accessory for:
  - Easy_Tester_Pro
  - Smart_Polar
  - Smart_Tester
  - Smart_OptiBench (with apposite support)
  - Universal_Tester (with apposite support)

Smart_Tester

- Polarization Axis & Uniformity Tester
- Smart_Headform compliant with the Standard ISO 18526-4:2018 Type 1-M
- Live-View of Whole Spectacle for perfect alignment in as-worn position
- Fast: measure uniformity of transmittance and polarization axis in parallel
- Static: there are no moving parts
- In-Line Application Capability
- Wide Range of Smart Tools (Option)
- Test according to ISO 12312-1, GB 39552.1, EN 174, ISO 16321-1, ISO 18527-1, ANSI Z80.3-2018
- **NEW** QFactor Analisys & Alignment markers
- **NEW** SmartVision Cloud Service

Signal Light Check - *Optional Software Feature*



- Available for:
  - Easy_Tester_Pro
  - Smart_Tester
  - Universal_Tester
- QFactor estimation and check with:
  - ISO 12312-1
  - GB 39552.1
  - ISO 16321

Signal Light Check - *Optional Software Feature*

QFACTOR REPORT

Model Name: ---
Lens CODE: ---
Lens TYPE: ---
Supplier: ---
Lot: ---
Operator: Administrator

Date: 1/30/2023
Time: 17:25

Equipment: E_T_P_GLASSES
S/N: 07E6.0008

Qfactor

ISO 12312-1 2013

LEFT					RIGHT				
		Tol					Tol		
QRed	Min≥	0.80	PASS		QRed	Min≥	0.80	PASS	
QGreen	Min≥	0.60	PASS		QGreen	Min≥	0.60	PASS	
QBlue	Min≥	0.60	PASS		QBlue	Min≥	0.60	PASS	
Qyellow	Min≥	0.60	PASS		Qyellow	Min≥	0.60	PASS	

ISO 16321-1 2022

LEFT					RIGHT				
		Tol					Tol		
QRed	Min≥	0.80	PASS		QRed	Min≥	0.80	PASS	
QGreen	Min≥	0.80	PASS		QGreen	Min≥	0.80	PASS	
QBlue	Min≥	0.80	PASS		QBlue	Min≥	0.80	PASS	
Qyellow	Min≥	0.80	PASS		Qyellow	Min≥	0.80	PASS	

GB/T 39552.1

LEFT					RIGHT				
		Tol					Tol		
QRed	Min≥	0.80	PASS		QRed	Min≥	0.80	PASS	
QGreen	Min≥	0.60	PASS		QGreen	Min≥	0.60	PASS	
QBlue	Min≥	0.60	PASS		QBlue	Min≥	0.60	PASS	
Qyellow	Min≥	0.60	PASS		Qyellow	Min≥	0.60	PASS	

- Automatic PDF report

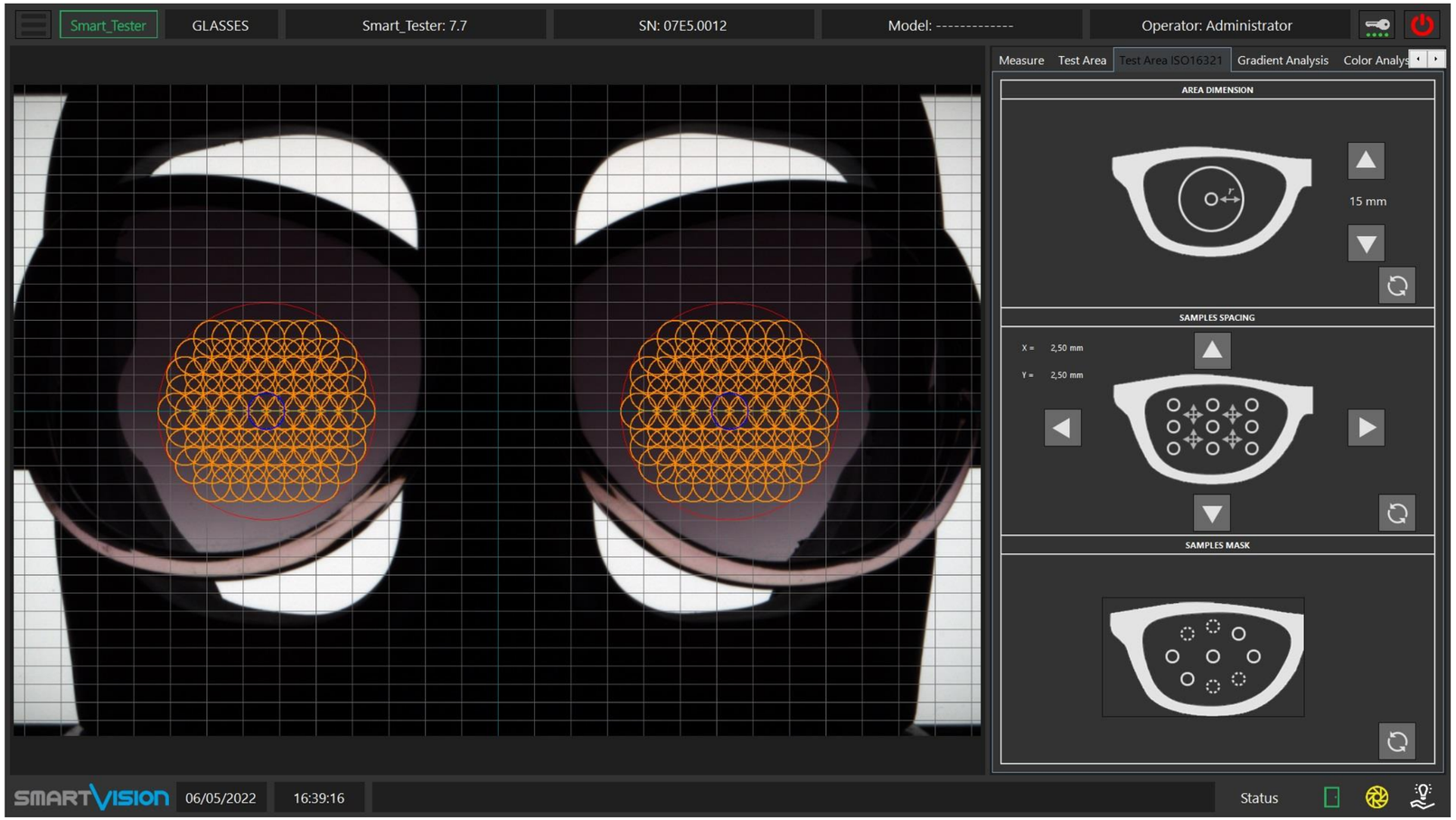
Qfactor

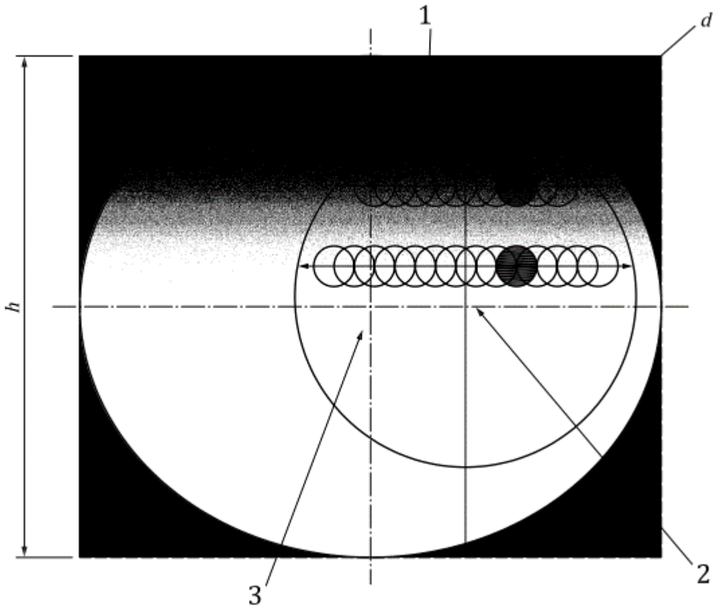
ISO 12312-1 2013

LEFT					RIGHT				
		Tol					Tol		
QRed	Min≥	0.80	PASS		QRed	Min≥	0.80	PASS	
QGreen	Min≥	0.60	PASS		QGreen	Min≥	0.60	PASS	
QBlue	Min≥	0.60	PASS		QBlue	Min≥	0.60	PASS	
Qyellow	Min≥	0.60	PASS		Qyellow	Min≥	0.60	PASS	

Easy_Tester_Pro_Suite | New Optional Features

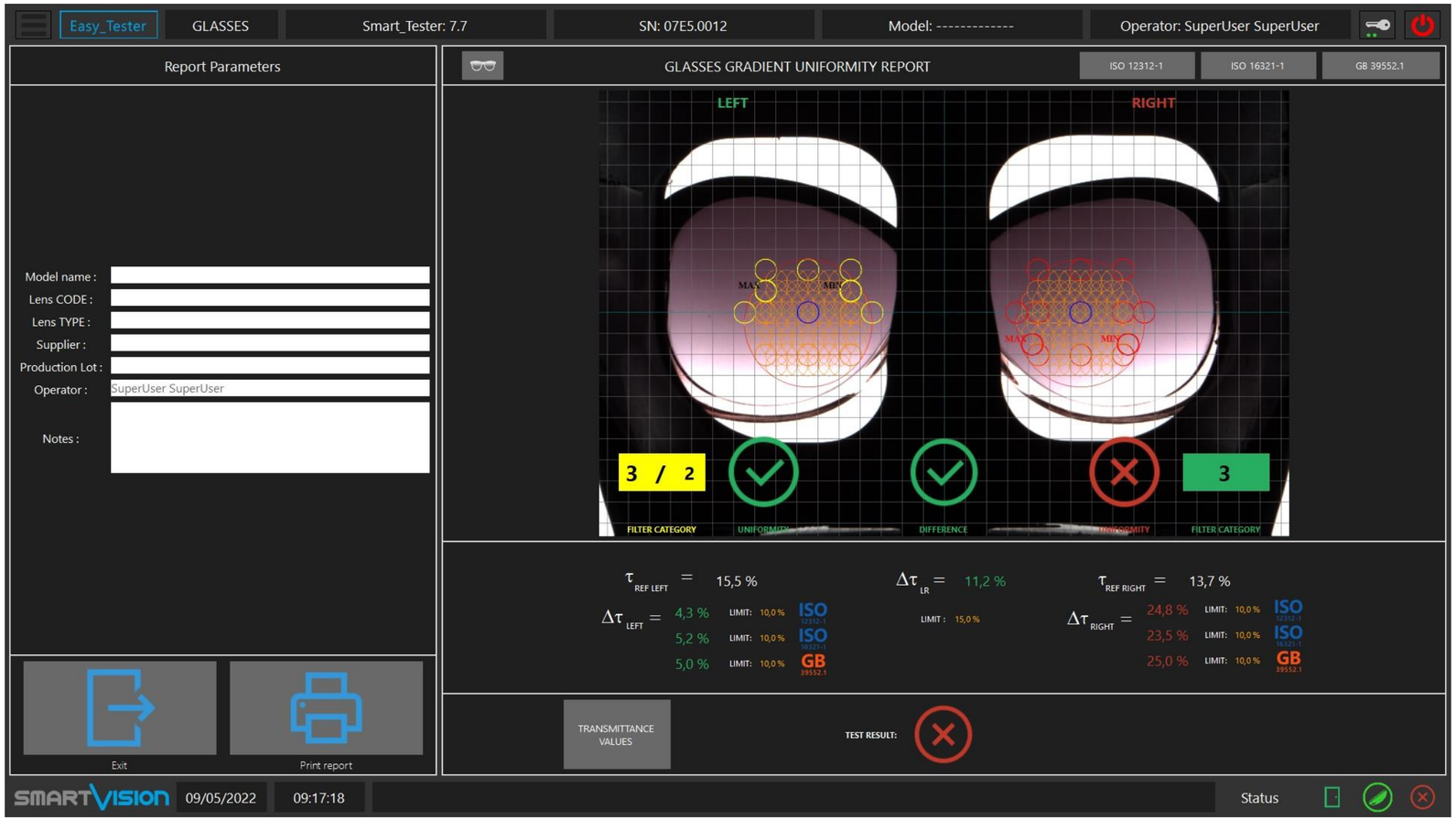
New “**ISO 16321-1 International Standard**” – Option for Measurement of uniformity of luminous transmittance in accordance to ISO 18526-2 Paragraph 7.4

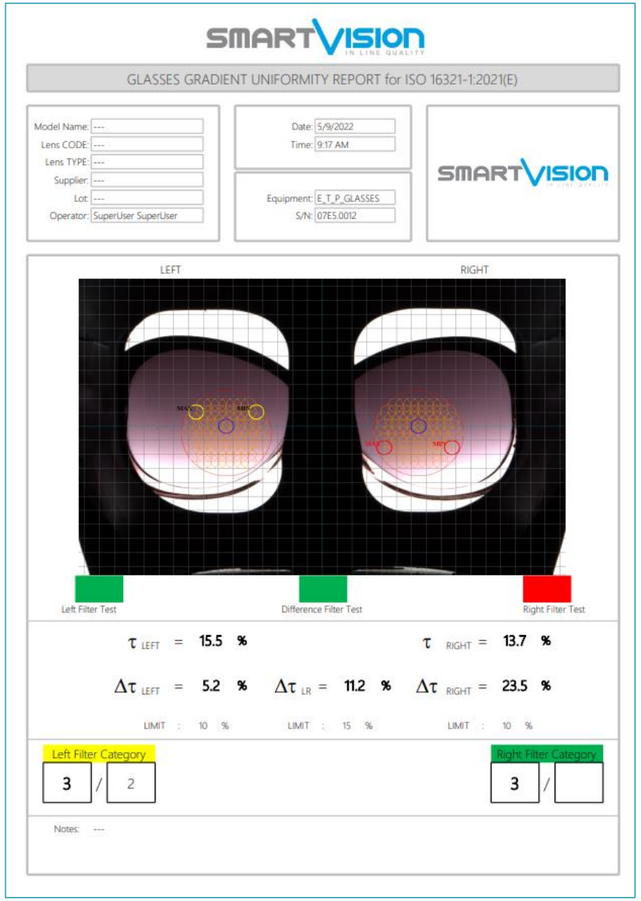




Easy_Tester_Pro_Suite | New Optional Features

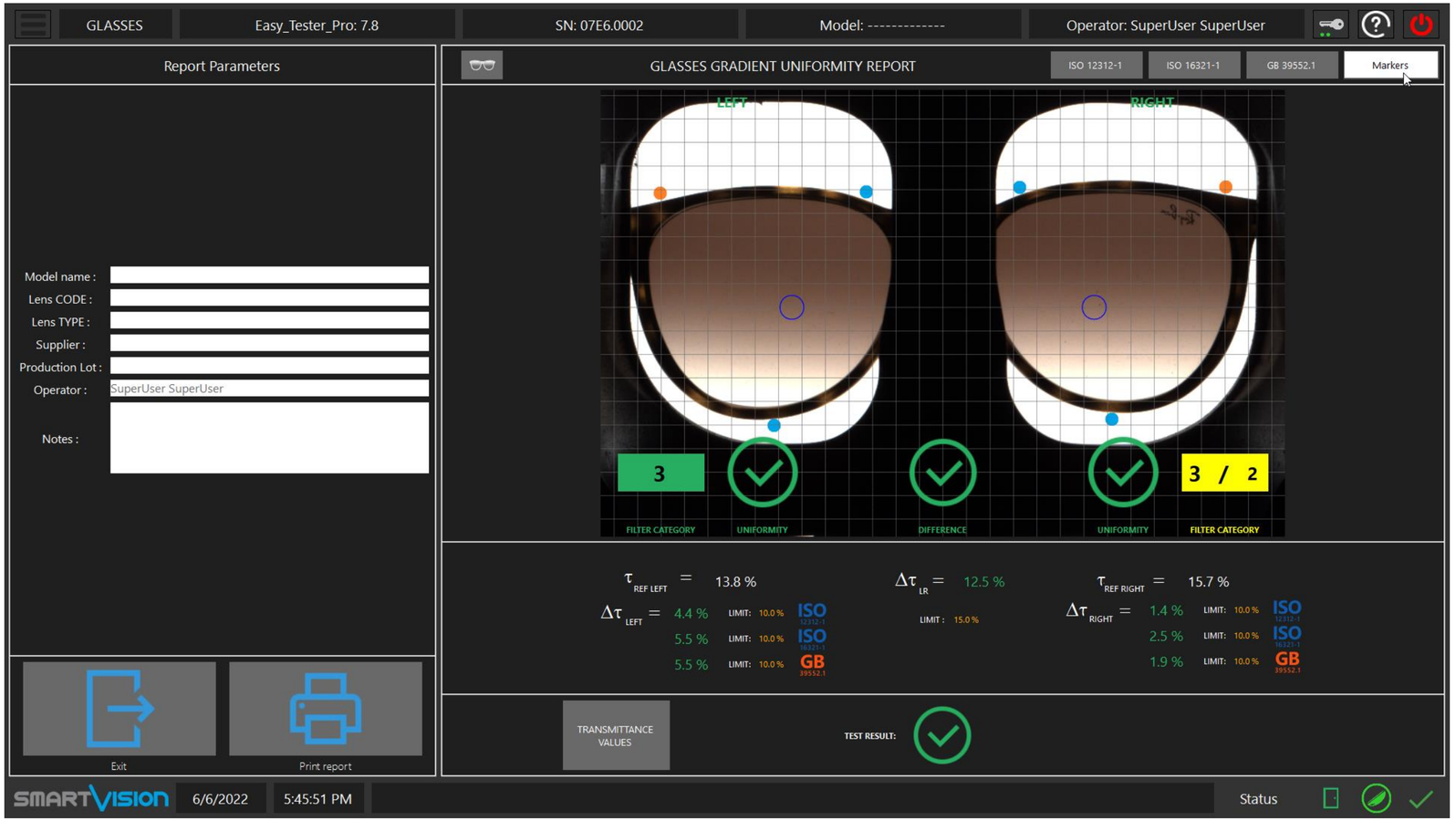
New “**ISO 16321-1 International Standard**” – Option for Measurement of uniformity of luminous transmittance in accordance to ISO 18526-2 Paragraph 7.4





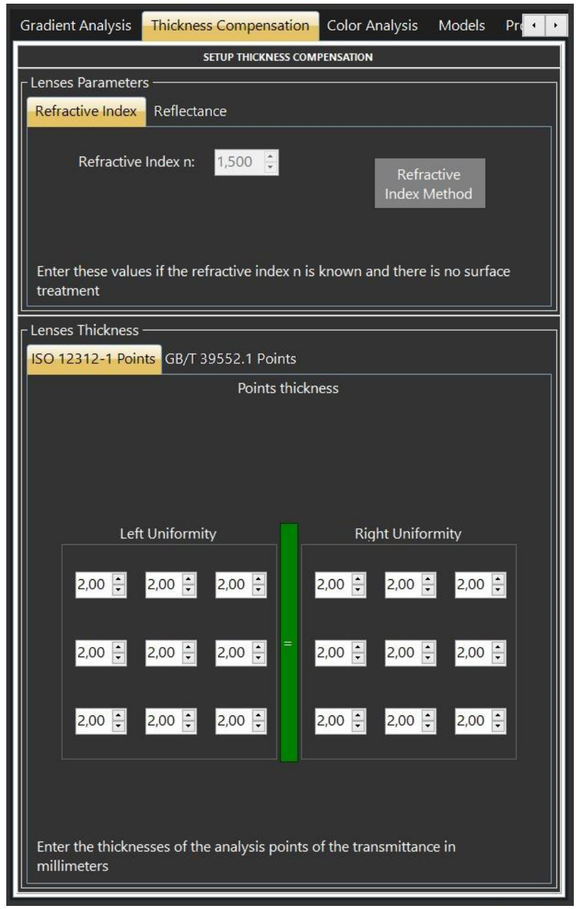
Easy_Tester_Pro_Suite | New Optional Features

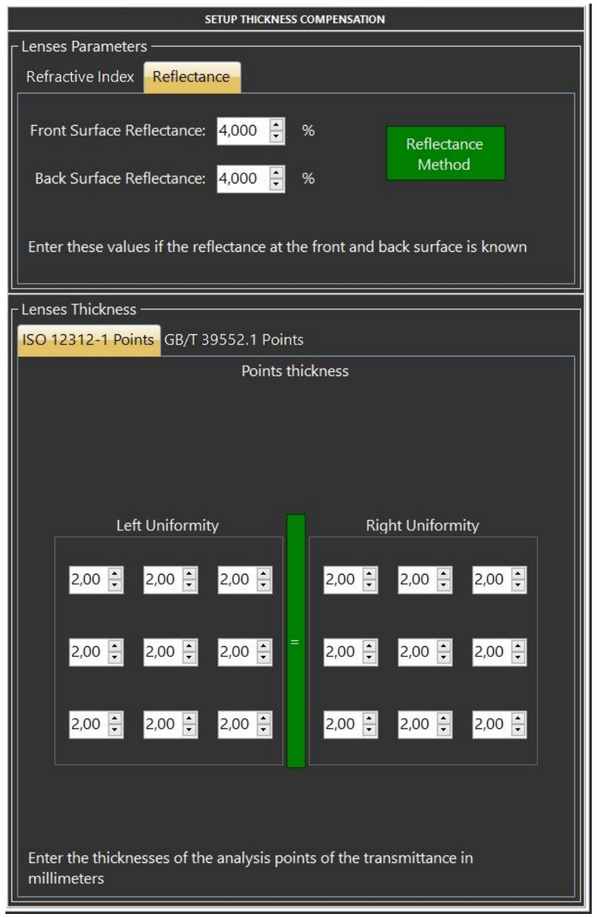
New “**Alignment markers**” – Option for display markers on the image to check the alignment of the glasses and its correct registration



Easy_Tester_Pro_Suite | New Optional Features

New "**Thickness Compensation**" – Option for Easy_Tester_Pro Software Only



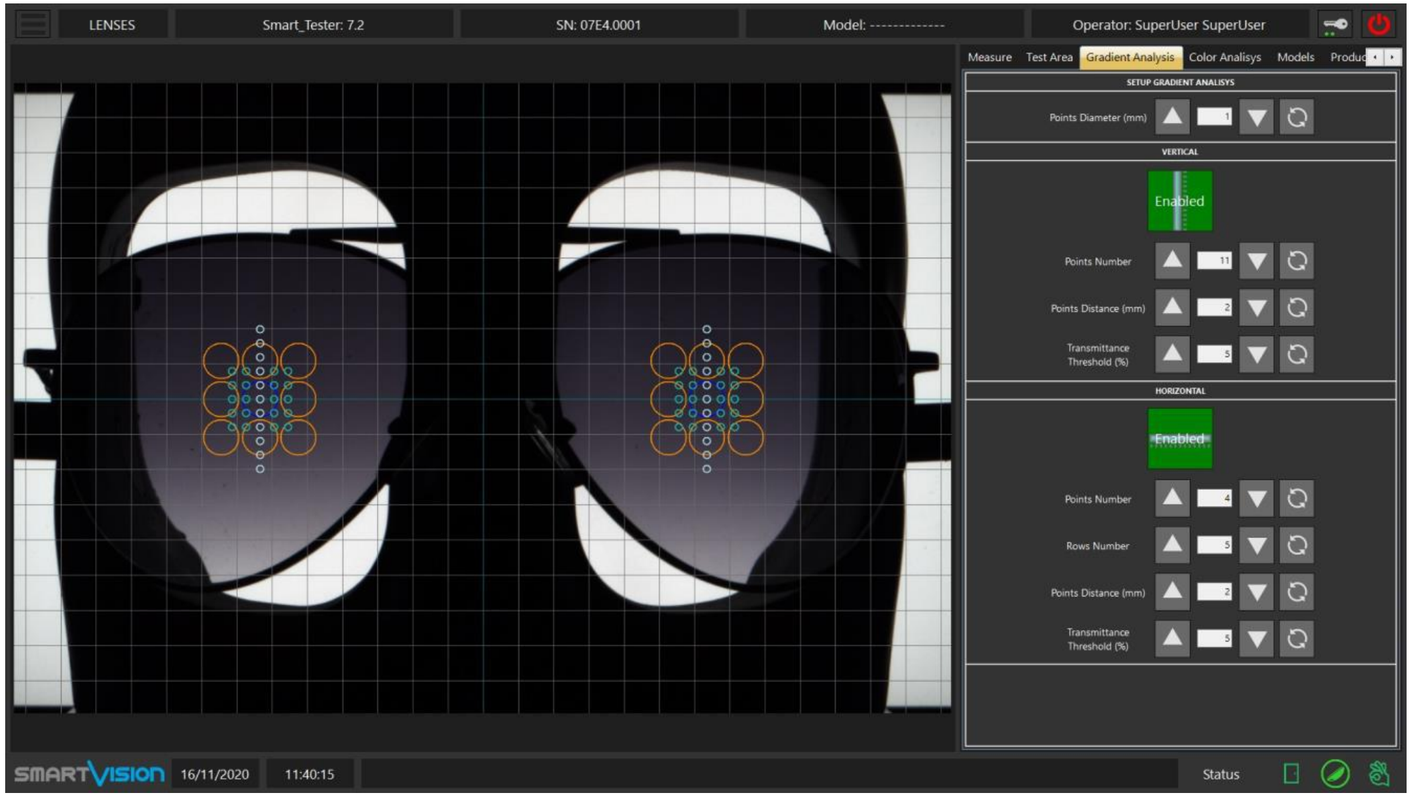


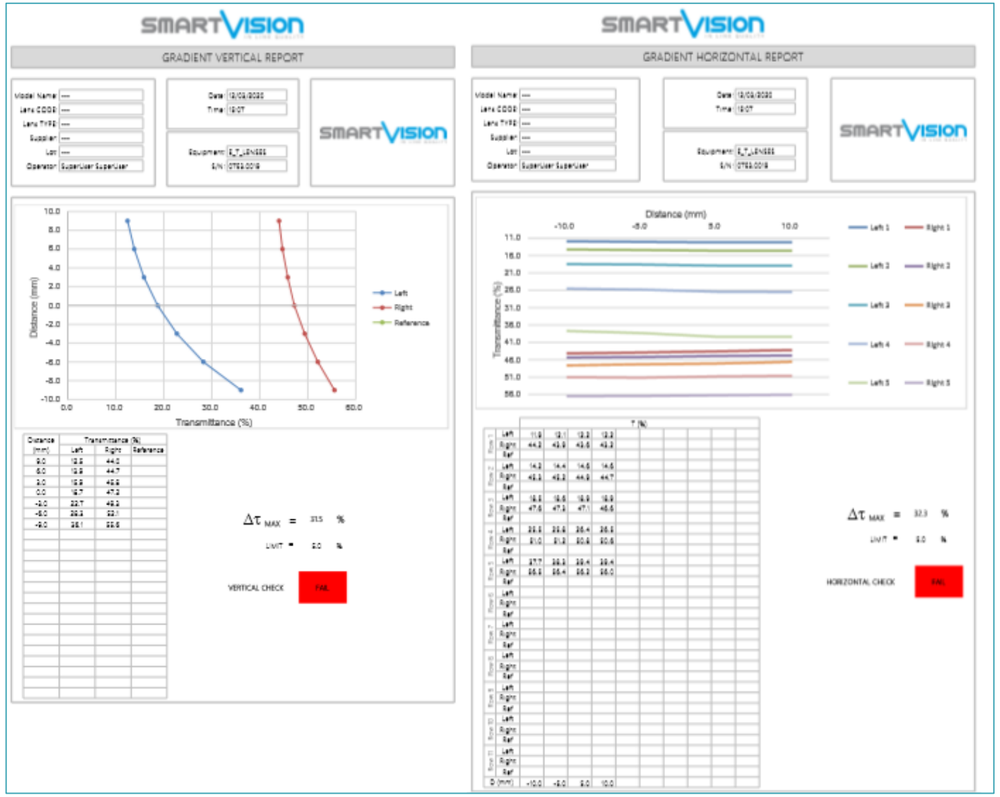
Easy_Tester_Pro_Suite | New Optional Features

New "**Color Matching Check**" – Software Option for Easy_Tester_Pro Software Only

Easy_Tester_Pro_Suite | New Optional Features

New "**Gradient Profile Check**" – Software Option Easy_Tester_Pro Software Only



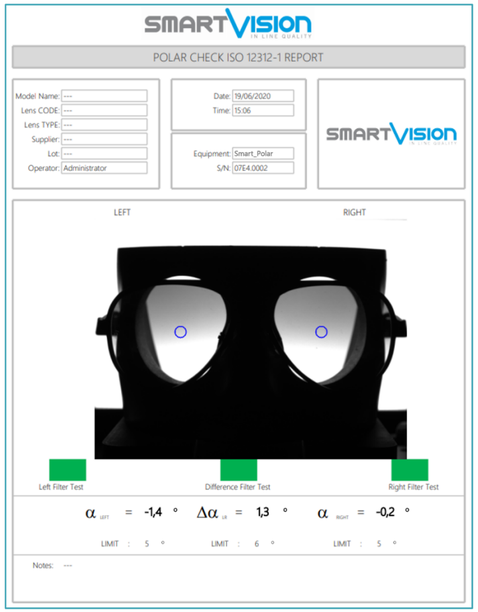


Smart_PhotoChromic_Device for Smart_Tester

NEW

- HW/SW Solution designed for use with Smart_Tester
- UV & Visible Automatic Photochromic Lens Activator
- Suitable to Activate SunGlasses of Different Shapes
- UV-VIS Spectral Range 300-500 nm as required ISO 18526-2
- Integrated Software on Smart_Tester for Automatically Activation Process & Measurement
- Customizable Activation Time
- Automatic Interlook System to Stop the Activation Process if Measuring Chamber is open

Smart_Polar



- Automatic Polarization Axis Tester according to ISO 12312-1 & GB 39552.1
- Fast: batch analysis of SunGlasses in 1 second
- Static: No moving parts
- Live-View of Whole Spectacle for perfect alignment in as-worn position
- Measurement independent of the type of lens (Solid Tint / Gradient)
- New Smart_Headform compliant with the Standard ISO 18526 4:2018 Type 1 M
- In-Line Application Capability
- Production Data Reporting
- Mandatory Production Data

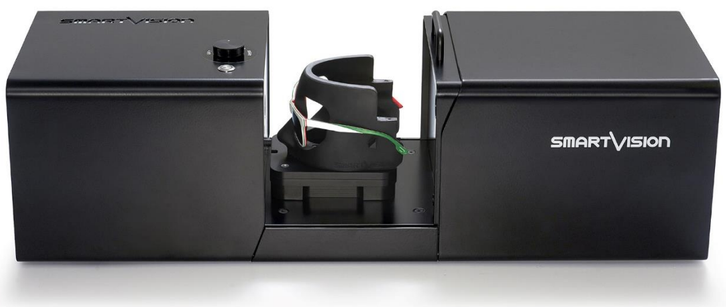
Stress_Tester

NEW

- Automatic Stress Tester for check residual mechanical stress on SunLenses, SunGlasses, Masks & SkiGoogles
- Polarized Image in a Single Acquisition - Discover the not visible material properties
- Measurement independent of the type of lens (Solid Tint / Gradient)
- Live-View of Whole Spectacle for perfect alignment in as-worn position
- Objective: unrelated to any possibility of interpretation by the operator
- Fast analysis in few second
- Rugged & Static device without moving parts
- Smart_Headform compliant with the Standard ISO 18526-4:2018 Type 1-M

Smart_OptiBench_Pro

NEW

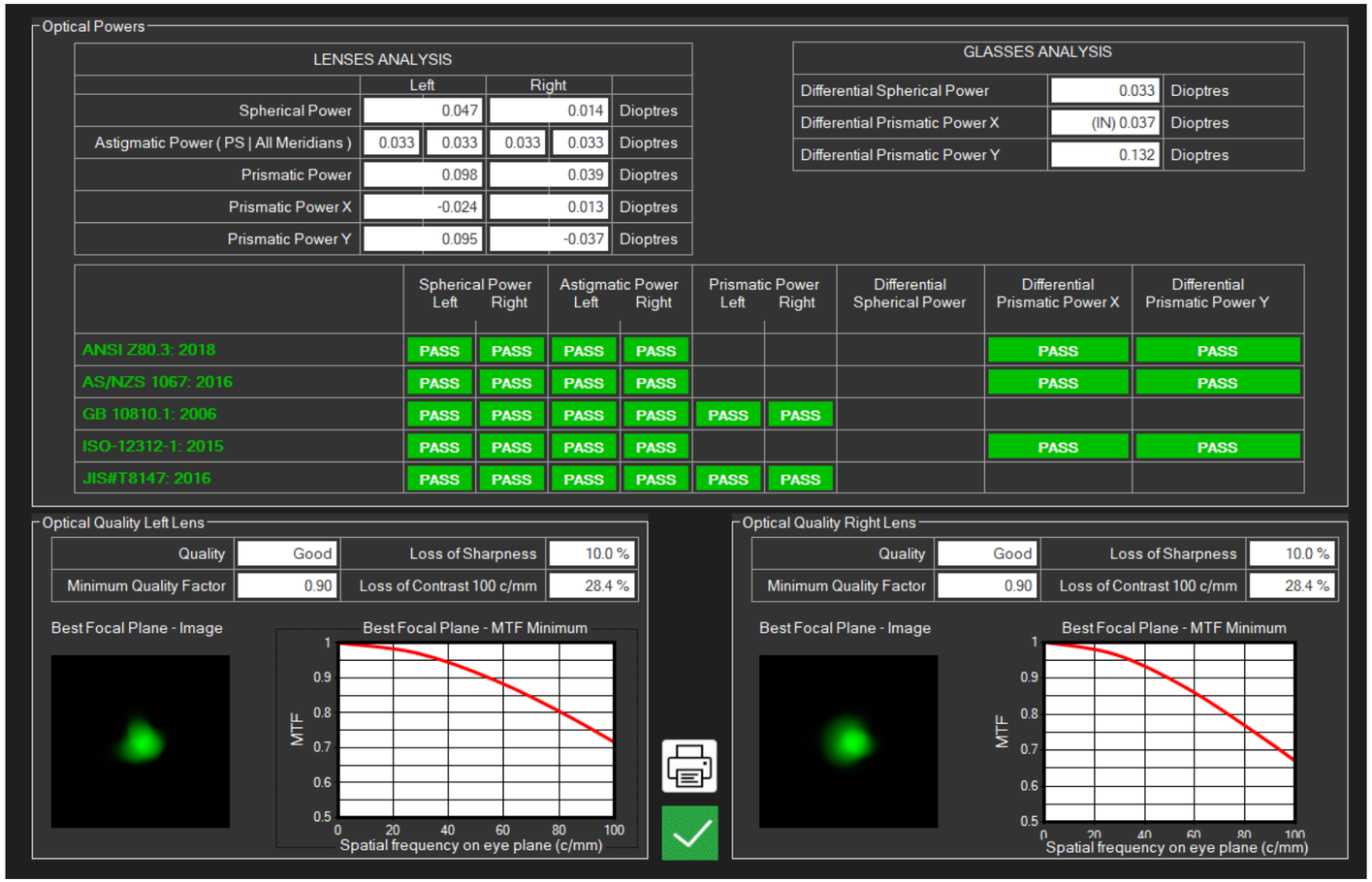


- High-performance Digital Bench
- Classification of the sunglasses
- Fast measuring time
- Resolution = ± 0,01 D
- Prismatic Resolution = ± 0,002 D
- Range +1D – 0,75D
- Full data Reports
- **NEW** SmartVision Cloud Service

Smart_OptiBench XXL

- Measure of Refractive Powers for afocal Sunlenses
- Spherical, Astigmatic and Prismatic Power
- Prismatic Balancing (for SunGlasses)
- Sunglasses Holding System (Adult & Children measurements)
- Compliance with main International Standards in Europe, Canada, Australia & New Zealand, America, Japan, China
- **NEW** SmartVision Cloud Service

Smart_OptiBench_Pro - *Software*



- The System can be configured with these measurement options:
  - Two types of Resolutions (Low/Standard)
  - Two types of Speed Motor (Standard/High)
  - Fast check mode (only « Pass / Fail » without optical power calculation)
- New measurement features:
  - Loss of Sharpness
  - Loss of Contrast @ 100 c/mm
  - Limits display for each measured quantity
  - Possibility to print the measurement report

Universal_Tester

NEW

- Polarization Axis & Uniformity & Refractive Power Tester
- Smart_Headform compliant with the Standard ISO 18526-4:2018 Type 1-M
- Live-View of Whole Spectacle for perfect alignment in as-worn position
- Fast: measure uniformity of transmittance and polarization axis in parallel
- Fast: automatic measurement of the Refractive Power with a single positioning of the glasses
- Automatic: complete report for all measurements performed
- Test according to ISO 12312-1, GB 39552.1, ISO 16321-1, EN 174, ISO 18527-1
- **NEW** QFactor Analisys & Alignment markers
- **NEW** SmartVision Cloud Service

Universal_Tester

Workstation / Functions Smart_Tester

- Live-View of Glasses for Right Alignment
- Transmittance Uniformity Check
- Category Filters Estimation and/or Check
- Absolute Transmittance Estimation of Filters
- Transmittance Left - Right Balance Check
- Qfactor Estimation
- Polarization Axis Check

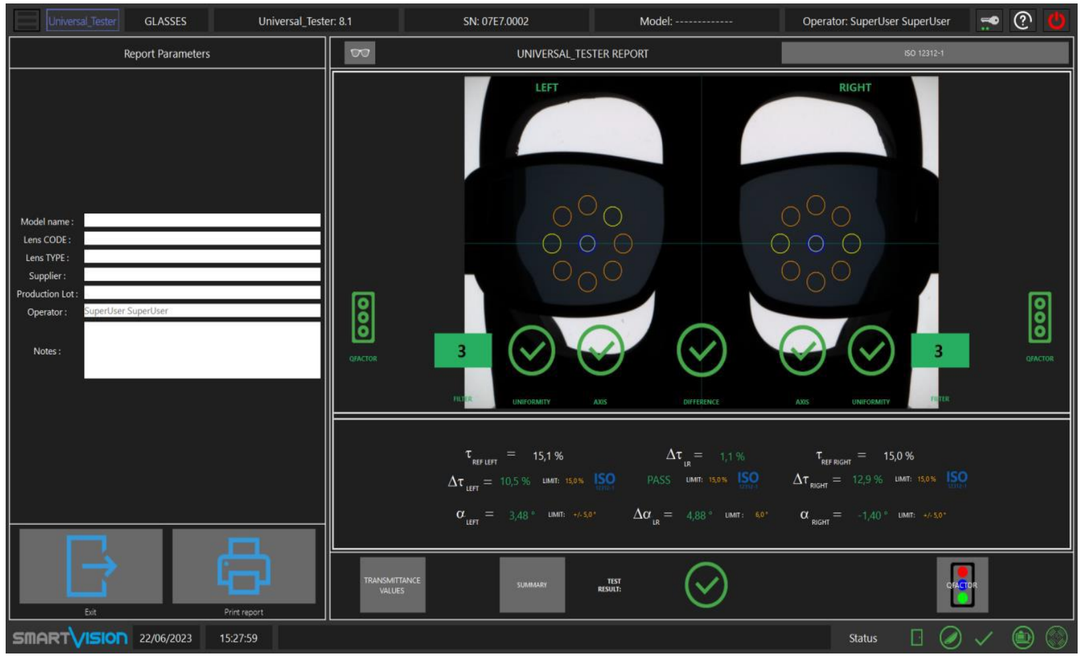
Workstation / Functions Smart_OptiBench

- Spherical Power Check
- Astigmatic Power Check
- Prismatic Power Check
- Optical Powers Left - Right Balance Check

Universal_Tester | SW Feature

Smart_OptiBench Sub System Results

Smart_Tester Sub System Results



Smart_Base

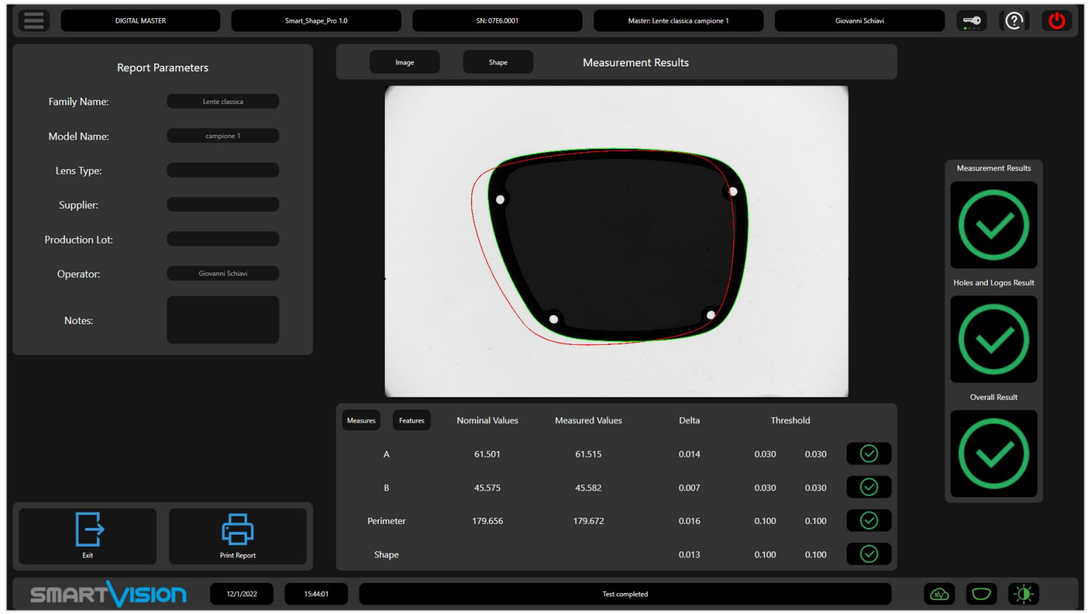
- Lens Curve Radius and Base Meter
- Easy and fast Load / Unload of any part to be checked on the lateral window
- Live view window helps fast part positioning
- Capability to manually rotate the lens and quickly repeat measure to check sphericity and absence of unwanted cylinders
- High resolution analysis
- Production batch report
- Saves time and money in control tasks
- Static and Fanless with external PC

Smart_Shape_Pro

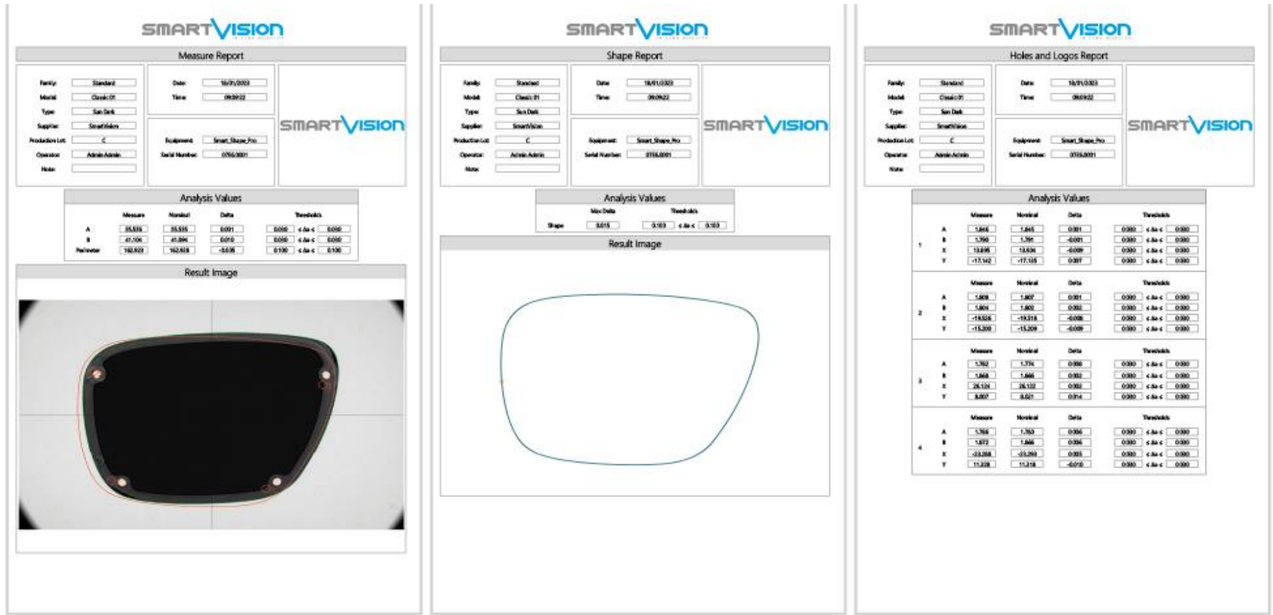
NEW

- High Performance Lens Shape Testing Instrument
  - Full check cycle and full report output in few seconds
  - Full automatic traceability of all control activities
  - Traceability of any modification of the lens master
  - Works with clear-to-dark lenses
- New Software Suite with new Features
- OMA and DXF file import for Profile Matching
- Lens Shape Checks:
  - Automatic evaluation of lens shape
  - A/B axis length lens and holes check
  - Absolute position check of holes respect of the lens center
  - Automatic lens overlay with master profile
  - Comparative check with a master lens
  - Mirror Mode, check right/left lens using one master
- **NEW** SmartVision Cloud Service

Example of Lens Shape Check



Passed lens test



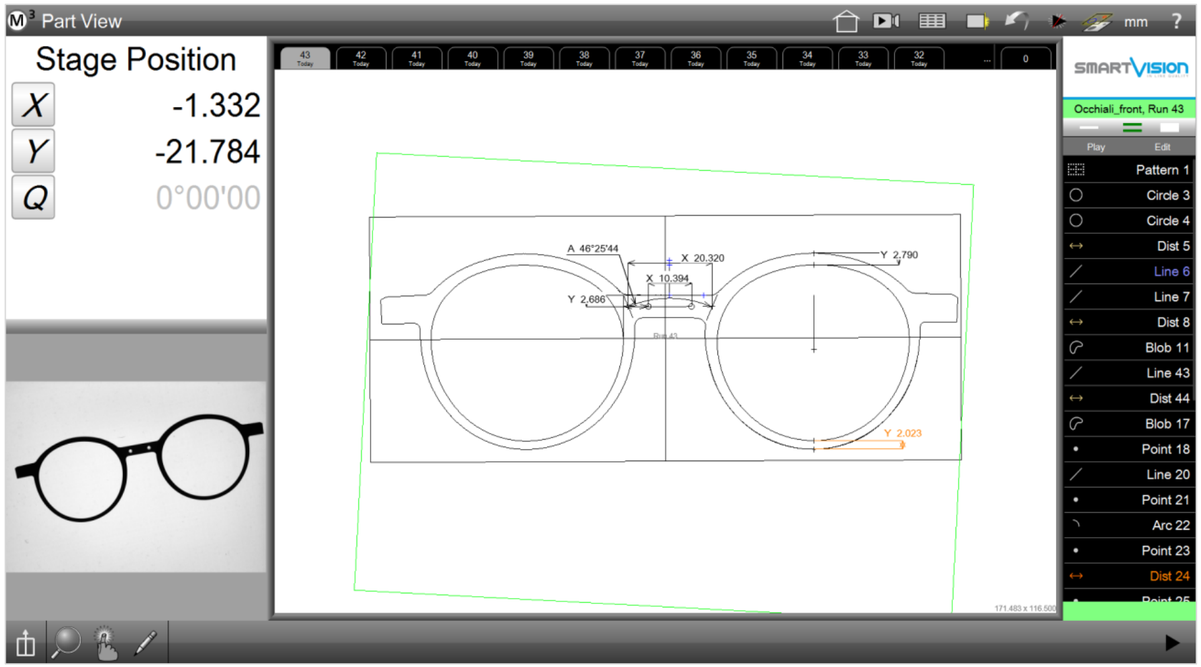
Full printable report

Smart_Shape_Premium

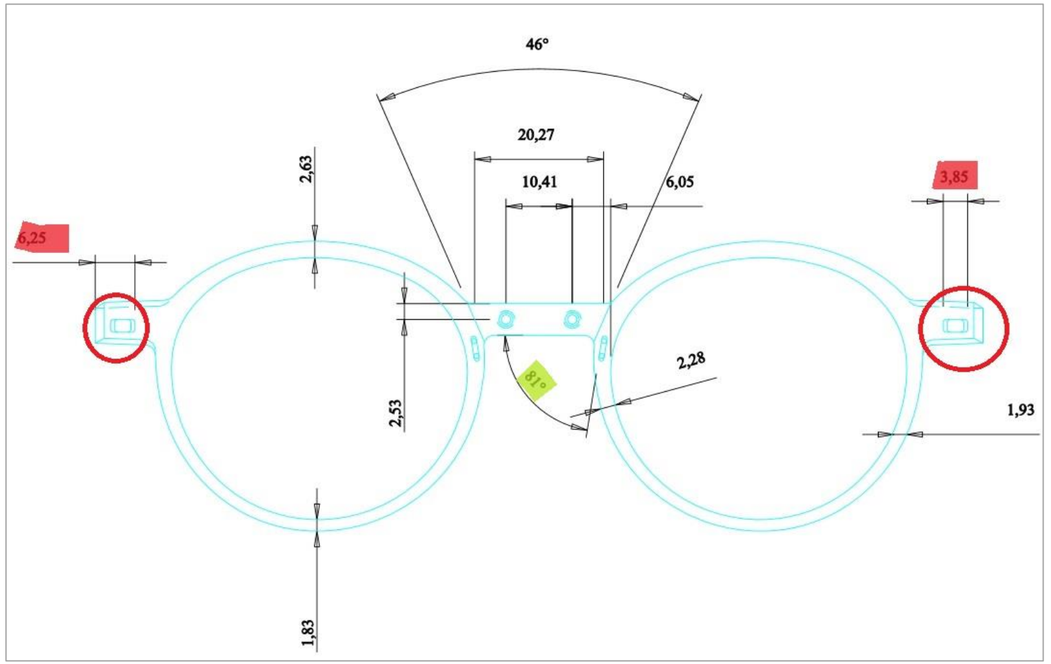
- Wide range solutions
- Automatic Lens Shape Control
- Perimeter Differential Check
- Automatic “A & B” Axis Length
- Comparative Check With A Master Lens
- Analysis Of Perimeter Shape
- Absolute Perimeter Control
- Lens Perimeter Length (Clock)
- Excel And Pdf Data Report
- Fast And Objective Measurements

Smart_Shape_Premium

Example of Frame Shape Dimensional Control



Software Live view



Technical draw

Smart_Shape_Premium - *Available Models*

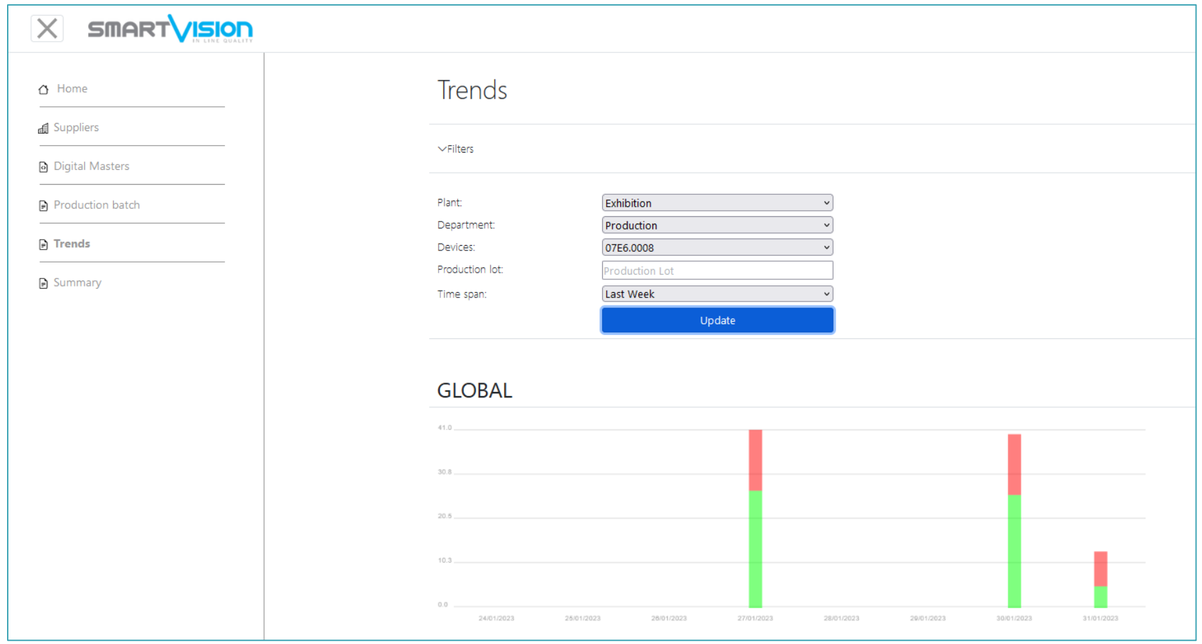
Feature	Smart_Shape_Premium @ 92	Smart_Shape_Premium @ 108 Lenses	Smart_Shape_Premium @ 168	Smart_Shape_Premium XXL
Layout	Vertical	Vertical	Vertical	Vertical
Fielf of View (FoV)	92 x 61 mm	108 x 73 mm	168 x 113 mm	200 x 150 mm
FoV Diagonal	100 mm	125 mm	195 mm	250 mm
Measuring Chamber	203 x 250 x 280 mm	200 x 230 x 240 mm	250 x 330 x 405 mm	419 x 456 x 475 mm
Repeatability	±1 µm	±1 µm	±1.5 µm	±5 µm
Accuracy	±6 µm	±6 µm	±8 µm	±20 µm
Diascopic Light	Directional	Collimated	Directional	Directional
Dimensions	290 x 330 x 880 mm	284 x 330 x 1255 mm	335 x 380 x 1255 mm	685 x 510 x 1813 mm
Weight	25 kg	45 kg	40 kg	140 kg

Smart_Shape_Pro *vs* Smart_Shape_Premium

Differences

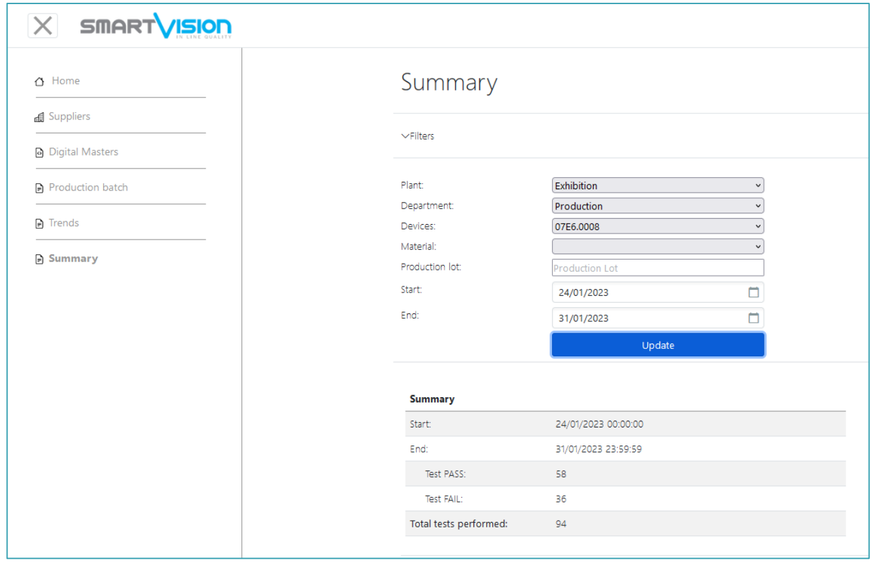
Check / Features	Smart_Shape_Pro	Smart_Shape Premium
A + B	V	V
Shape	V	V
Custom Measures	X	V
Ease Modeling	V	X
Easy Positioning	V	V
Single Analysis	V	V
Programming	V	V
Automatic Report	V	V

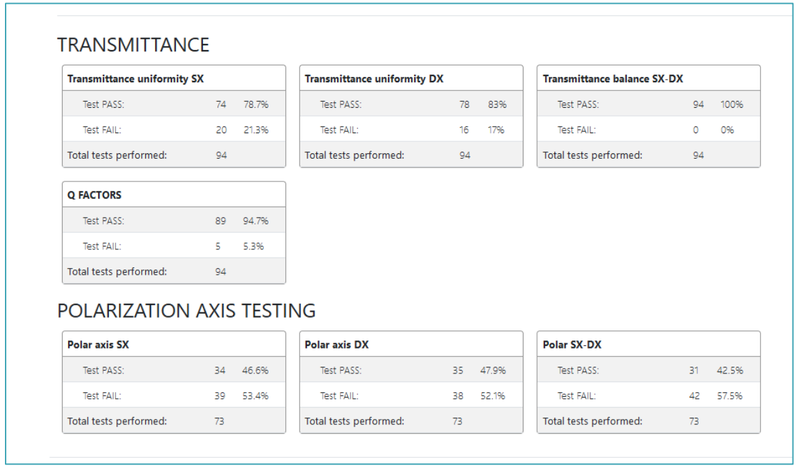
SmartVision_Cloud_Service



- Automatic ProductionBatch Upload
- Available for:
  - Easy_Tester_Pro
  - Smart_Tester
  - Easy_Color
  - Smart_OptiBench
  - Smart_Shape_Pro
  - Universal_Tester
- Easy access through web application

SmartVision_Cloud_Service

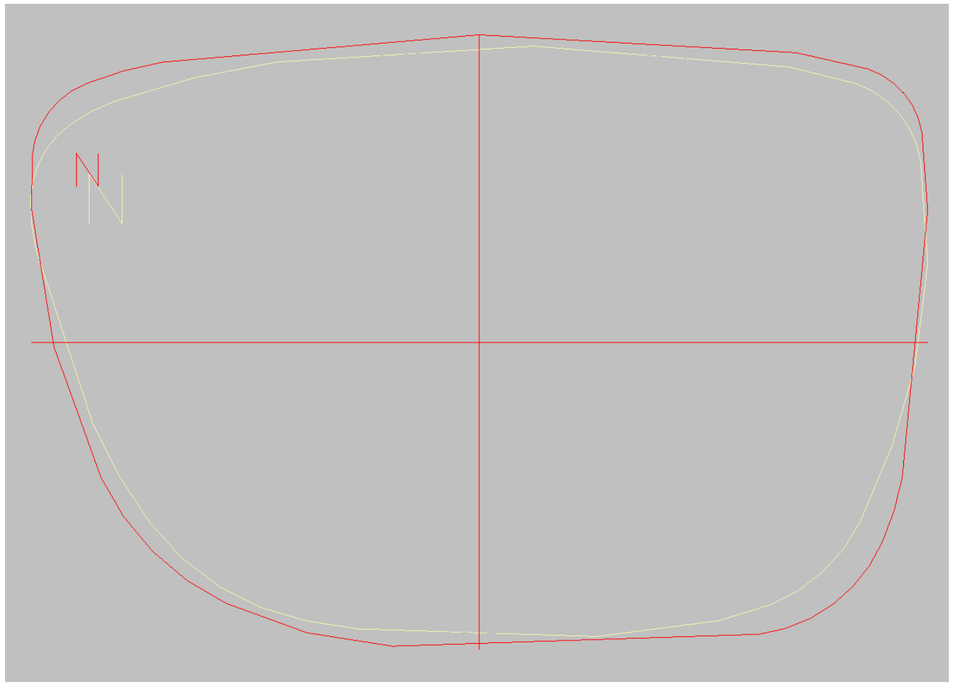




- Statistical data analysis by date, Production Lot, etc
- Possibility of data filtering by Plant, Department, Production Lot, etc
- Centralized analysis system independent of the IT architectures of the individual Departments / Plants

Equal-Template (Pari-Dima) Research Software

Software support for opticians to finding compatible lens models for a given frame



- Automatic template features extraction from Technical Drawings
- Import model features from ERP:
  - Model
  - Gender
  - Brand
  - Form Type
  - Material
- Automatic lenses search Equal-Template and Equal-Features

Standard Products - Metrology

Smart_Projector *Series*

Easy_Projector *Series*

Easy_Measure

Smart_Projector Pharma

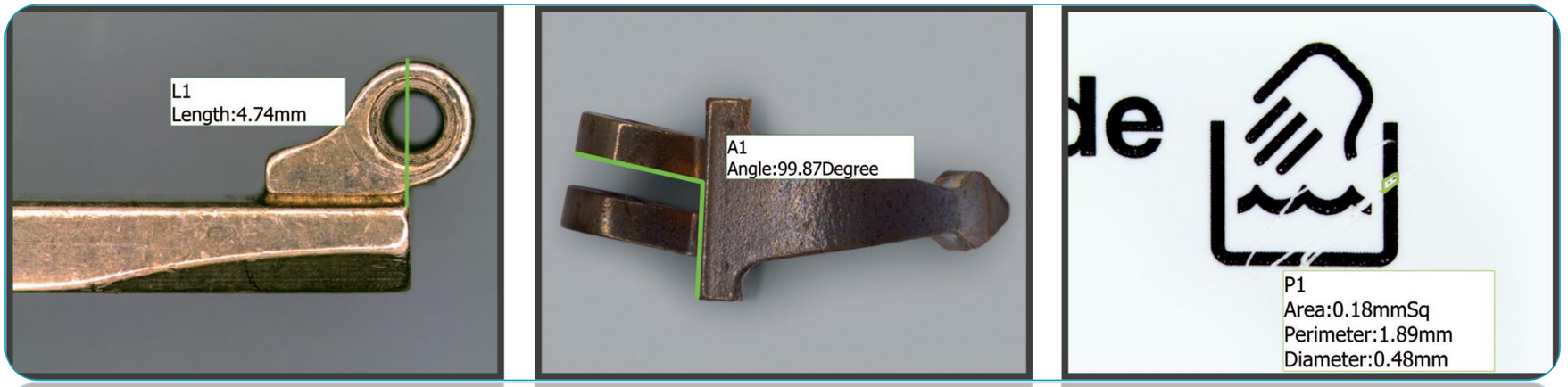
Hardware Accessories

Software Options

Easy_Measure

- Video Measuring Instrument
- High Resolution Live View
- Hand-held & Ergonomic
- Automatic Image Storing
- Telecentric Optic
- Light Intensity Regulation
- Variety of Applications
- Sharp And Accurate

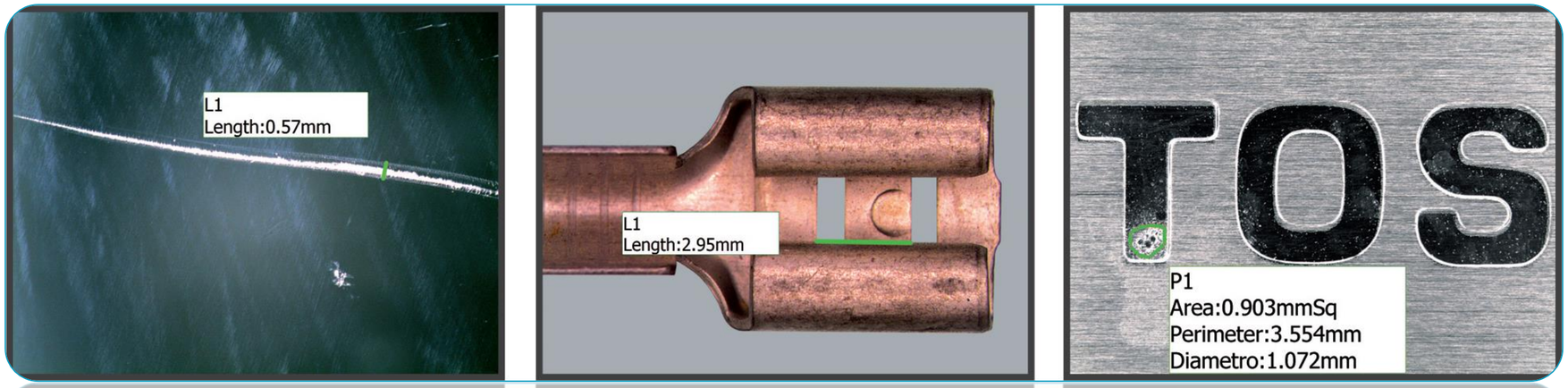
Easy_Measure - *Applications*



DIMENSIONAL CHECK (EYEWEARE) - SCRATCH GAUGING (APPLIANCE)

DIMENSIONAL CHECK (SURFACE; WOOD KNOT; STEEL FLAW)

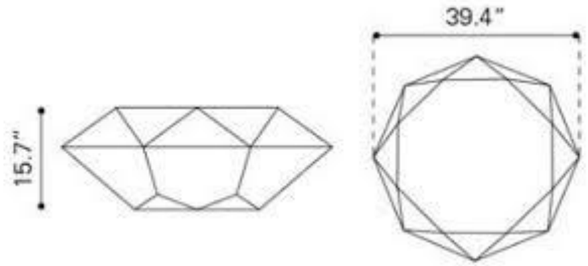
Easy_Measure - *Applications*



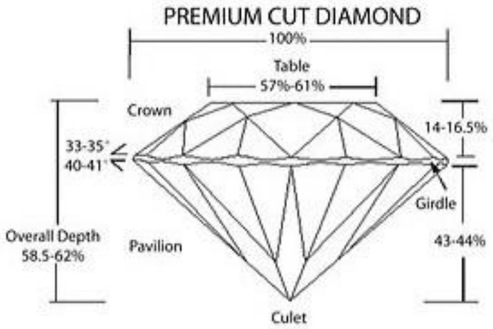
DIMENSIONAL CHECK OF: SCRATCH ON GLASS - ELECTRICAL COMPONENTS - PRINTED SURFACES)

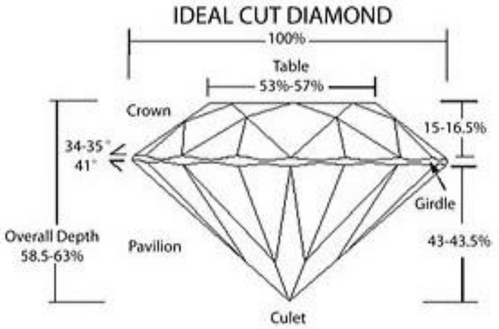
DIMENSIONAL CHECK (PLASTIC; PRINTED GLASS) - LIVE VIEW (MASTER COMPARISON)

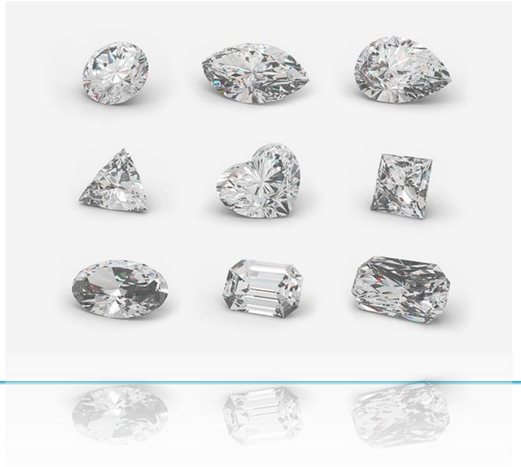
Easy_Measure - *Niche Markets*



GEM & JEWELRY







DIAMONDS

Smart_Projector

- Automatic Digital Profile Projector
- Instant Measurement
- 16.000 Measurements Per Item
- Random Part Positioning
- No influence from the user
- One-shot Measurement
- Easy Data Management
- Pass / Fail Lamp
- Easy To Use

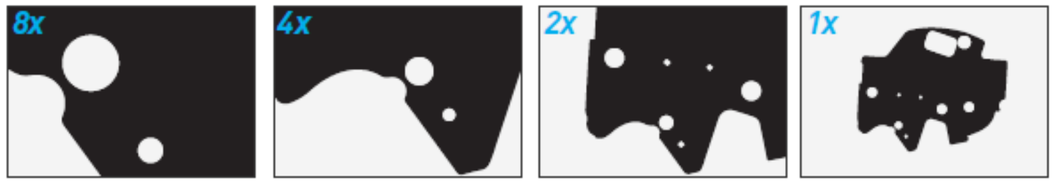
Smart_Projector - *Available Models*

Pc AIO | Smart_Projector 7 | Smart_Projector 29 | Smart_Projector 55 | Smart_Projector 108 | Smart_Projector 168 | Smart_Projector 224 | Double | Quattro_Pro | Ruby

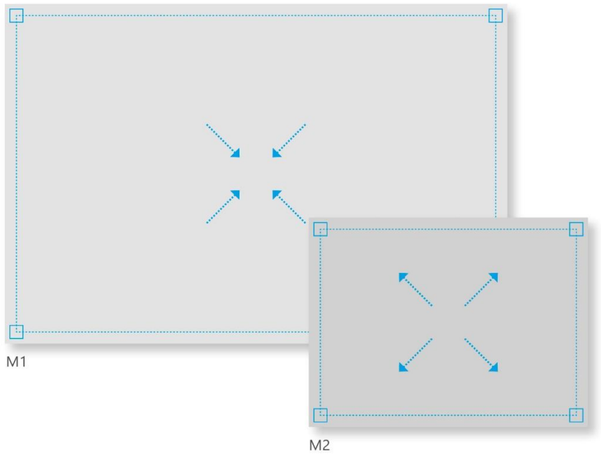
Smart_Projector_Quattro_Pro

NEW

- High Performance ZOOM Video Measuring Instrument
- Allows 4 different magnifications: Ø 12 / 24 / 48 / 90 mm
- Stability of the image center when focusing and switching from one level of magnification to another



Smart_Projector_Double



- Fast Industrial Bi-Magnification Video Measuring Instrument
- Allows 2 different magnifications, Wide choice of FoV pairs
- Capex and Opex reduction (compared to two separate instruments)

Smart_Projector_Ruby

- Fast Automatic Industrial Video Measuring Instrument
- Extra Small FoV and X/Y moving axes
- Double Episcopic lights source
- High precision tolerances, ideal for checks to watch components, microelectronics and micromechanical items

Smart_Projector Pharma

- Fast Digital Profile Projector
- Ideal for Primary Pharmaceutical Packaging
- Eliminates Subjective Measurements
- Easy Setup And Model Management
- Easy Data Management
- Horizionta Layout ideal for Cylinders
- Industrial Grade Components
- Accurate with Transparent Materials
- Optional Rotating Robot

Easy_Projector

- Best entry-level Digital Profile Projector
- Low Price & High Performances
- Equipped with a Next Unit Computing
- Two models availables
- Field of View 92x62 or 168x113 (mm) circular with vignetting

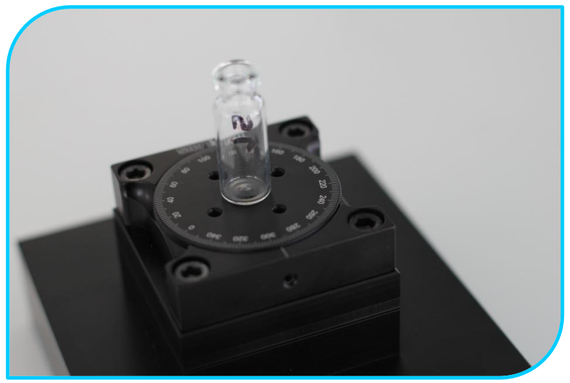
Smart_Horizontal_Adapter_Kit

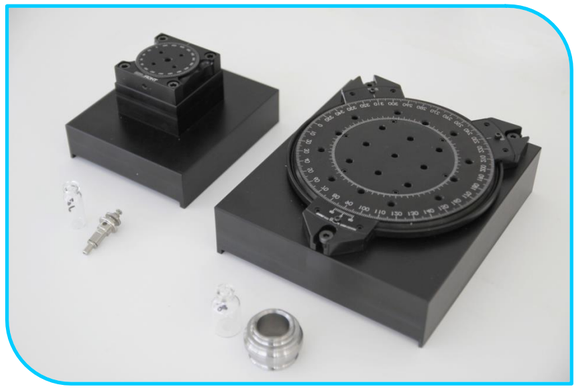
Smart_Projector Accessories

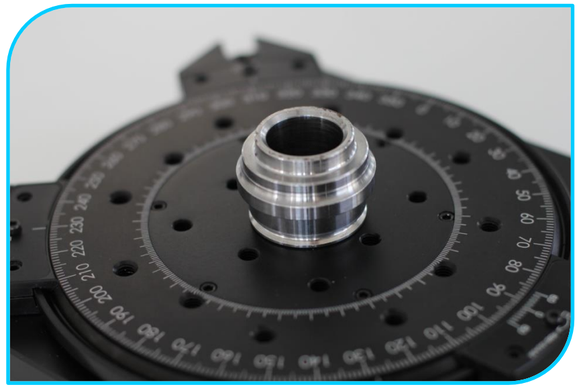
- Rotating_Stage + 4 Rubber Pins
- Two Smart_Projector In One
- Cylindrical Item Dimensional Check
- The Item Can Be Rotated 360°
- No influence from the user

Smart_Rotating_Stage

Smart_Projector Accessories







- Innovative 360° Measuring
- Cylindrical Parts Measurements
- Transparent Material Measurements
- Place Your Item
- Run The Program
- Rotate The Graduated Stage
- Easily Check More Views At Selected Angles
- Record Steps For 360° View
- Variables And User Messages

Smart_Rotating_Robot

Smart_Projector Accessories

- Automated 360° Measurements
- Dedicated Control Station
- Rotating Robot Stage with Accessories
- Measurement of different views at selected Angles
- Measurement of Any Cylindrical Component
- Horizontal and Vertical configuration

Smart_Projector Hardware/Software Options

- Automation Features For Smart_Projector
- Integration With Other Industrial Machines
- Automatic Measurements Integrated With Production Lines Through I/O Module
- Immediate Adjustment Of Production Quality Level
- Reduced Production Scraps

Smart_Profile_Matching

Software Options

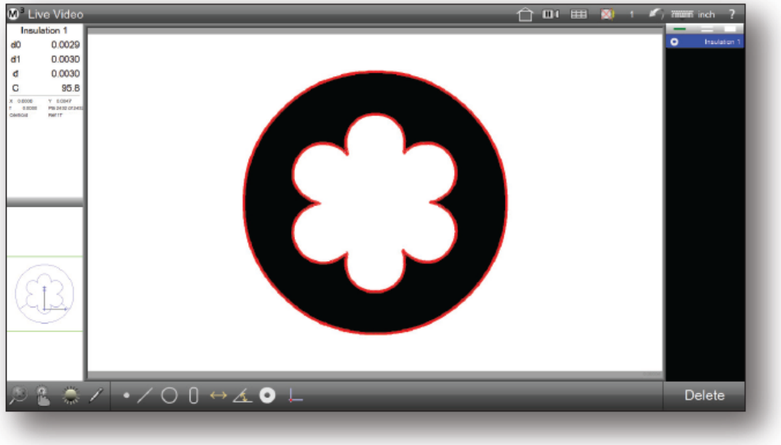
- New Software Upgrade
- High Performance DXF Digital Comparator
- Digital Profile Check Tool
- Pattern Teach And Recognition
- Import DXF Files To Create Video Overlays

Smart_Projector Software Options

Software features to extend the capability of Smart_Projector

Smart_Wire_Measurement

Measure and check the thickness of wire insulation samples

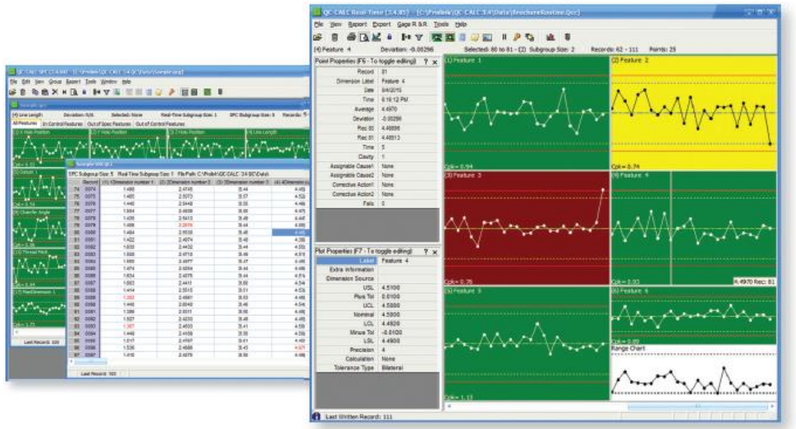


Smart_Thread_Measurement

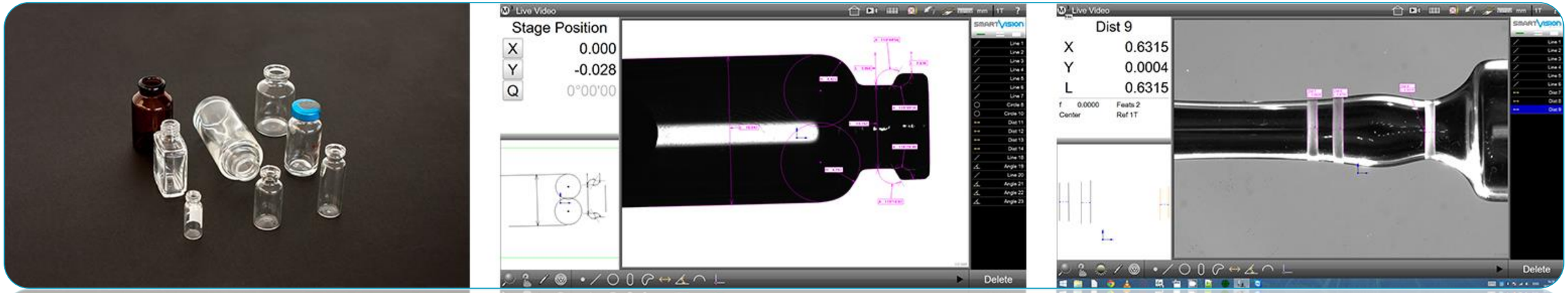
Complete Threads measurement and check

Smart_Data_Collection_SPC

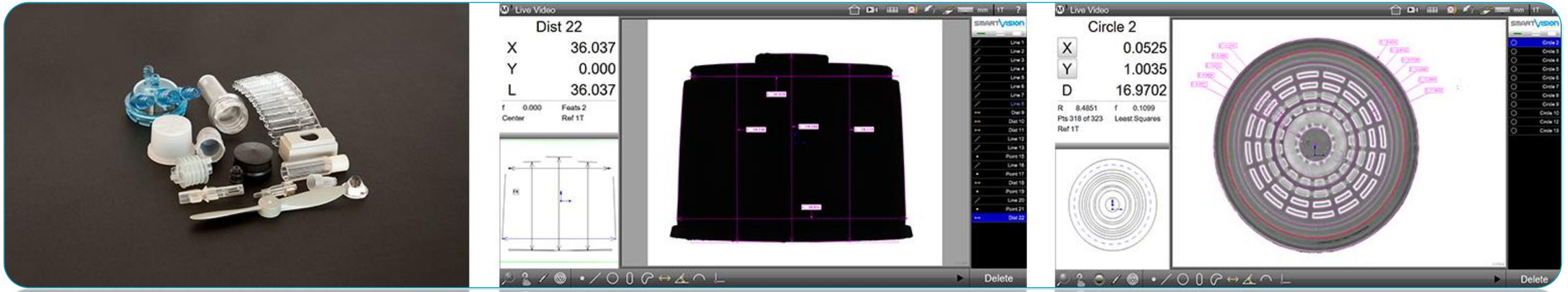
Analyse & Collect Data



Smart_Projector - *Applications*

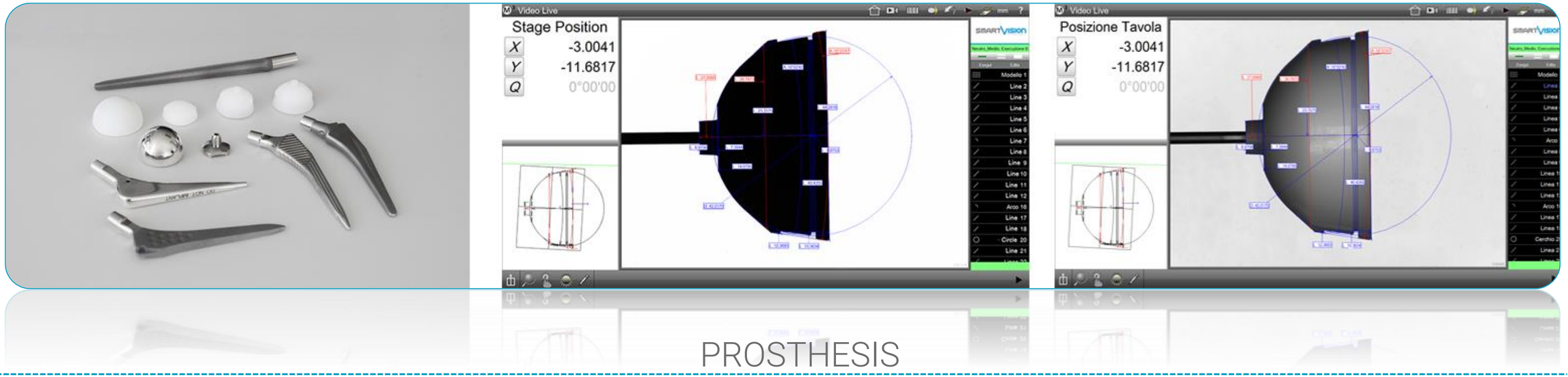


GLASS

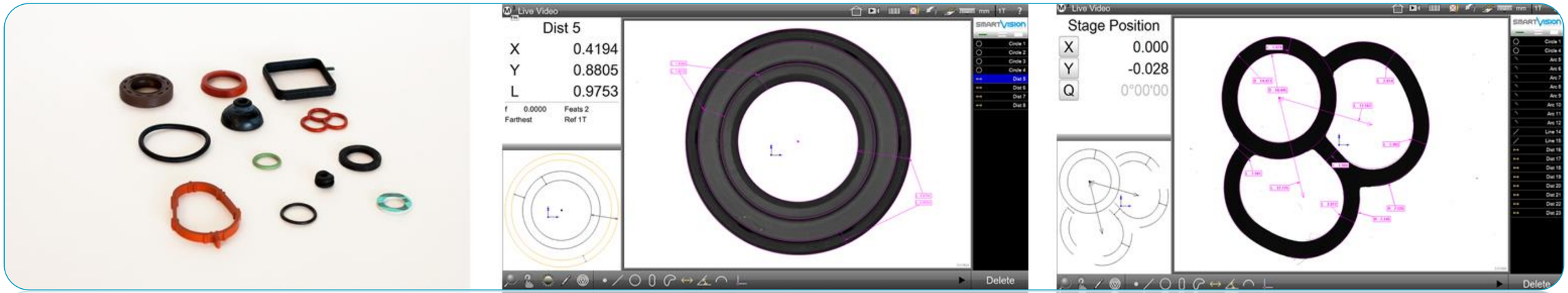


PLASTIC

Smart_Projector - *Applications*

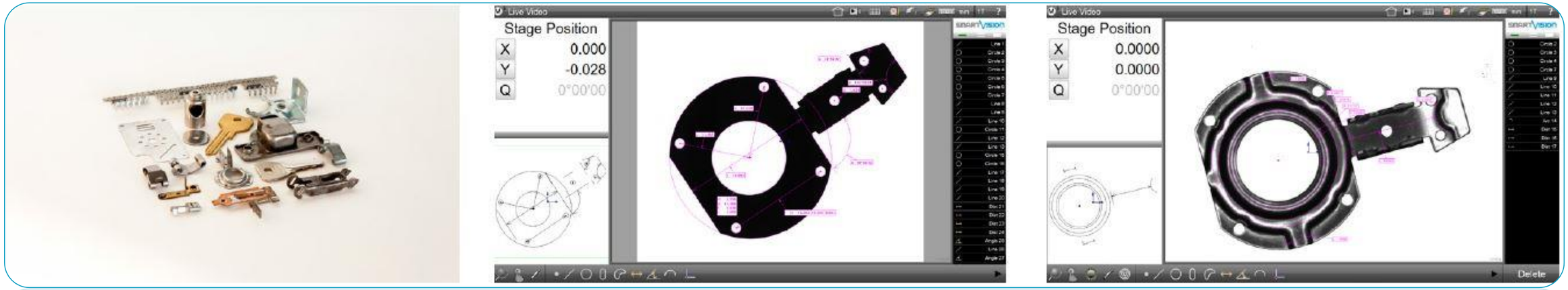


PROSTHESIS

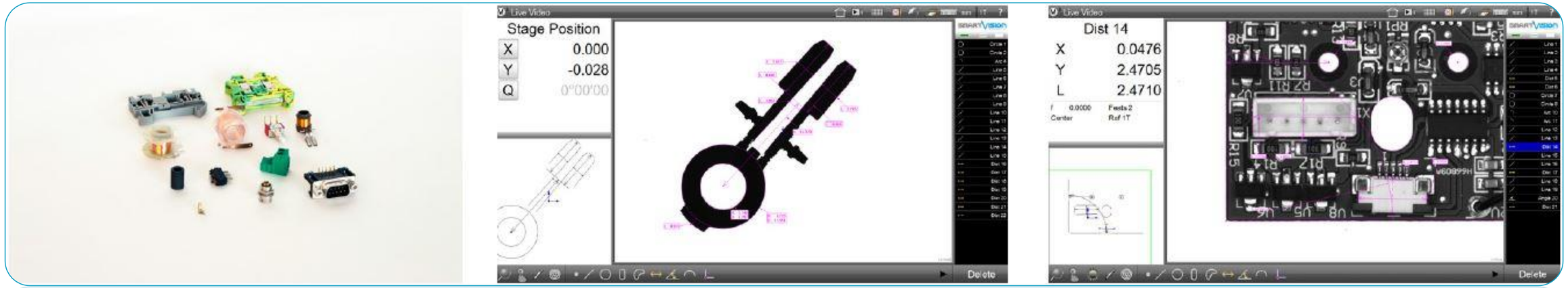


RUBBER & O'RINGS

Smart_Projector - *Applications*

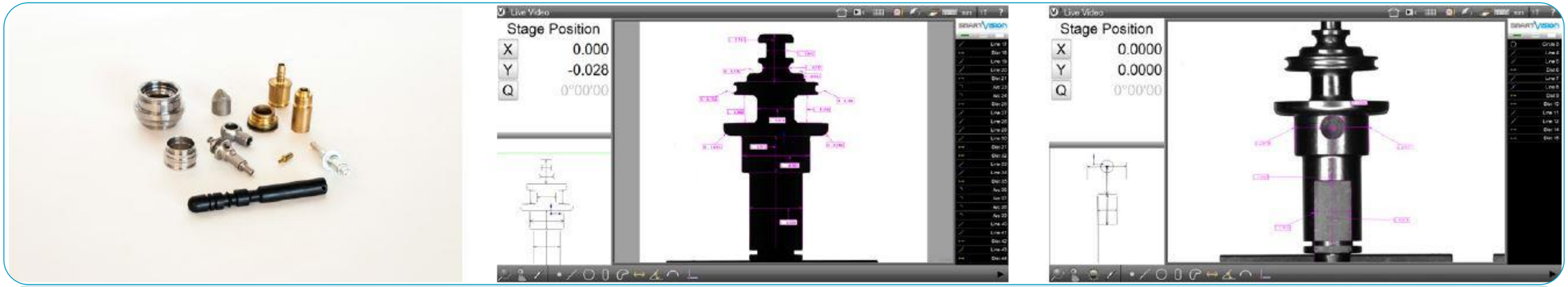


CUTTED

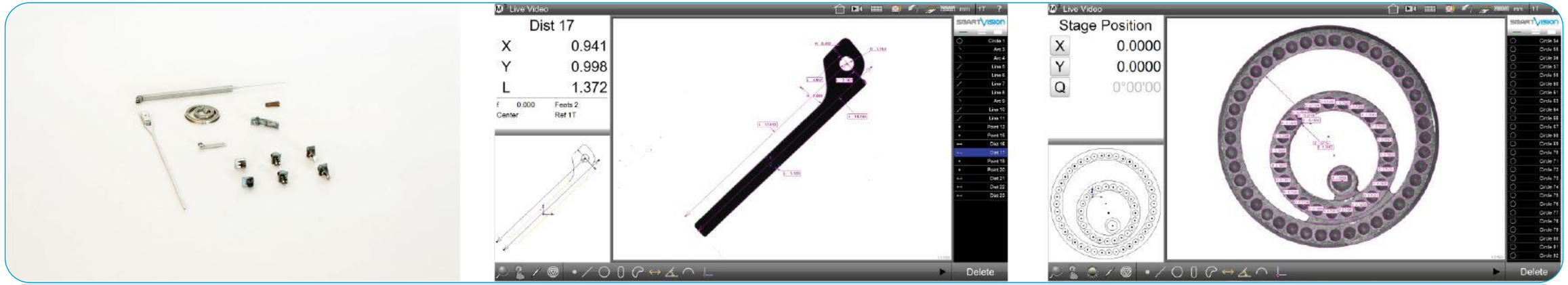


ELECTRONICS

Smart_Projector - *Applications*



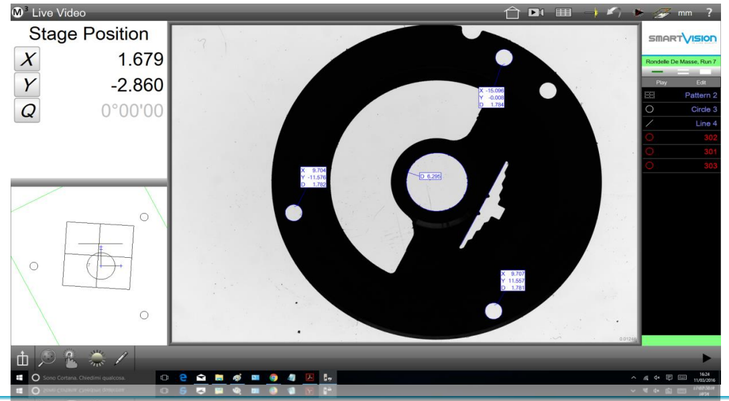
TURNING

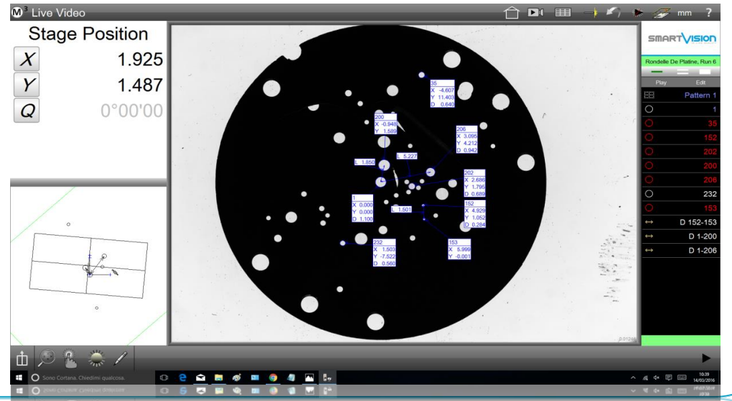


EYEGLASSES

Smart_Projector - *Niche Markets*

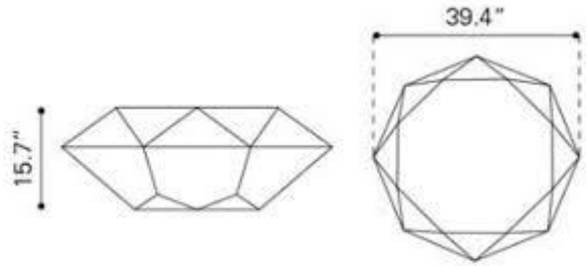
DENTAL



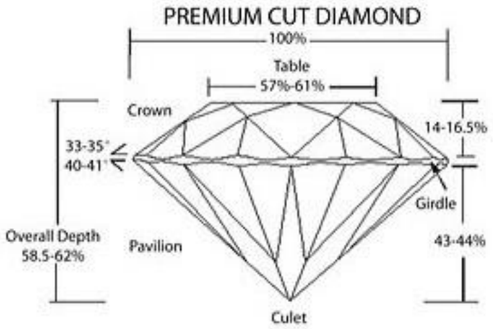


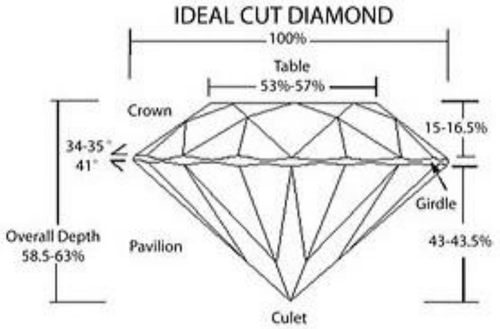
WATCH INDUSTRY

Smart_Projector - *Niche Markets*



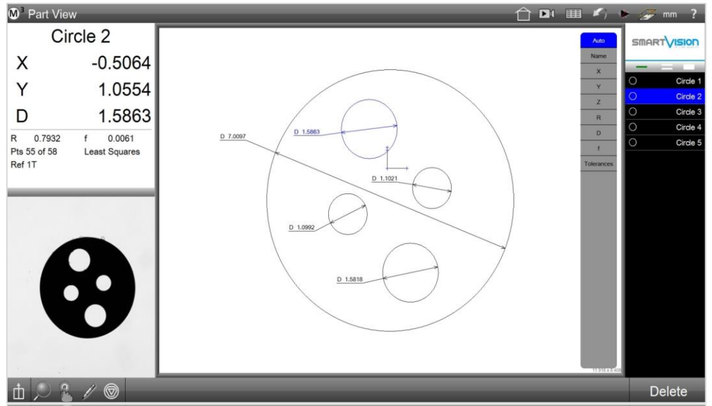
GEMS & JEWELLERY



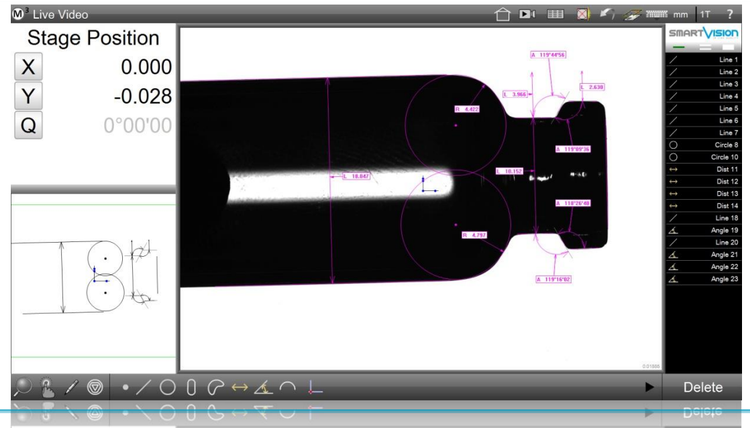


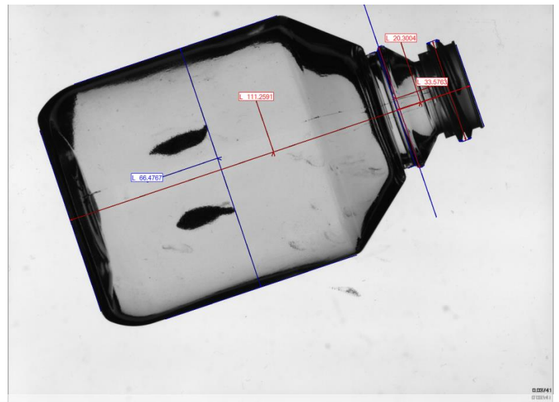
DIAMONDS

Smart_Projector - *Niche Markets*



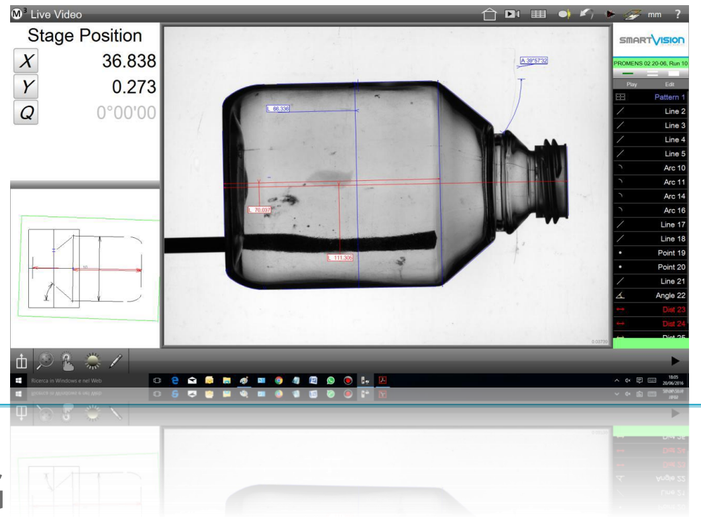
MEDICAL



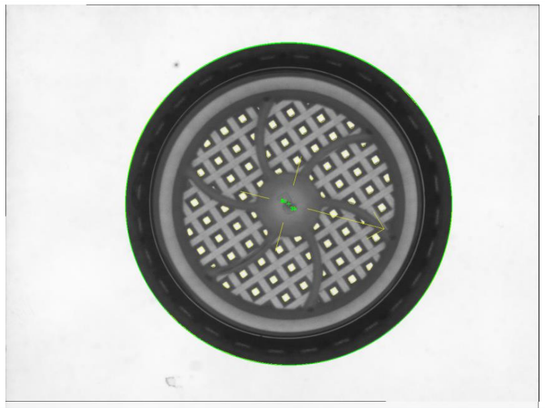


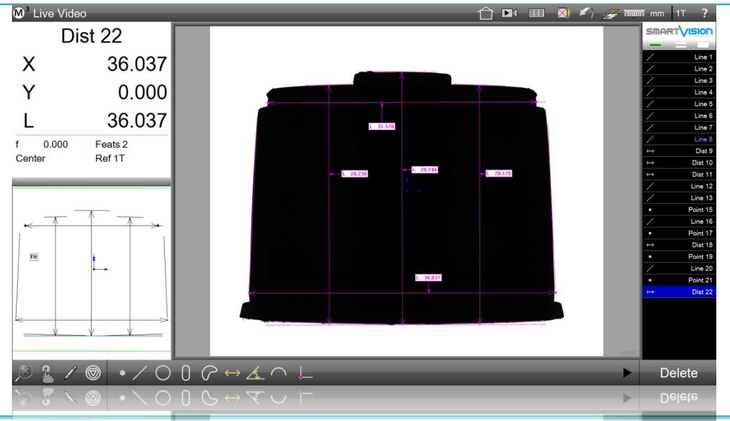
PHARMACEUTICAL PACKAGING

Smart_Projector - *Niche Markets*



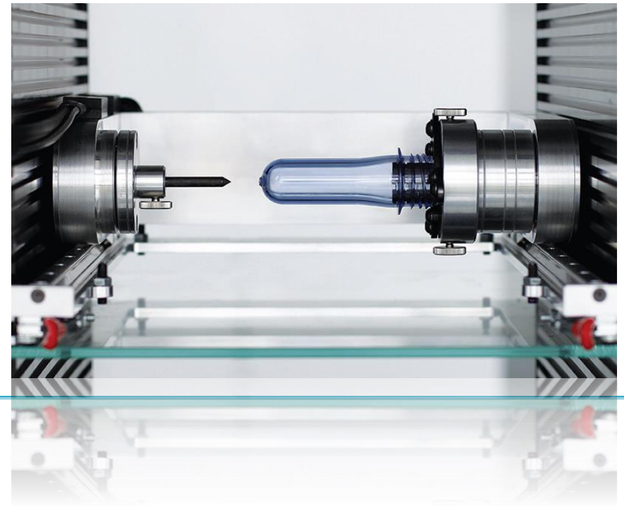
PLASTIC BOTTLES & PACKAGING



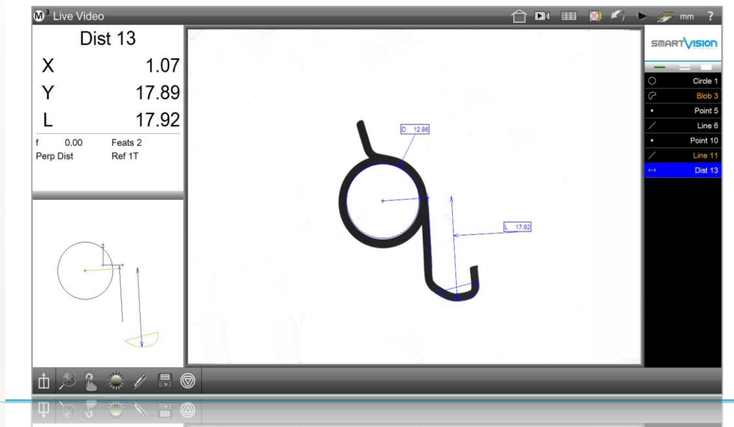


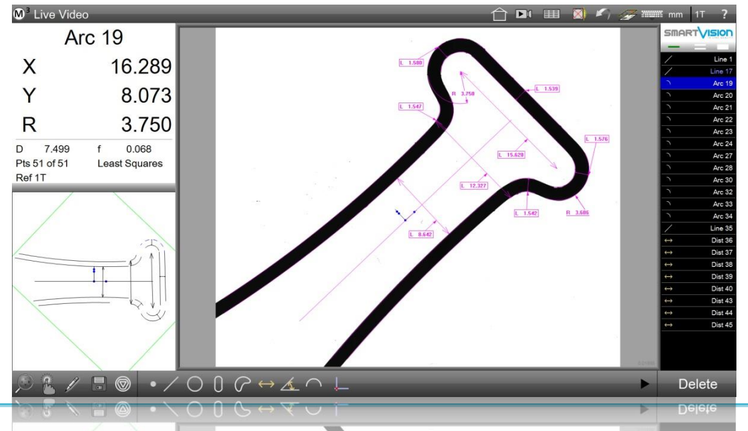
COFFEE PODS

Smart_Projector - *Niche Markets*



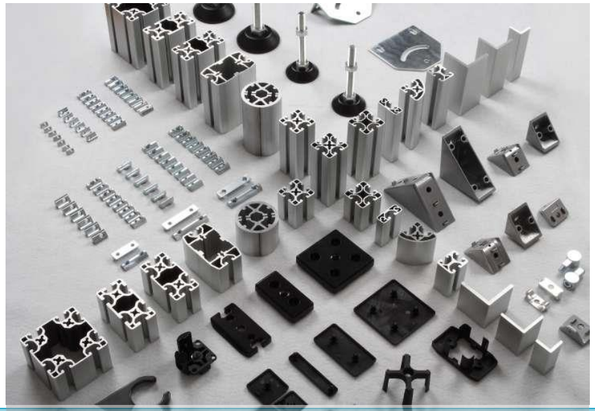
PLASTIC

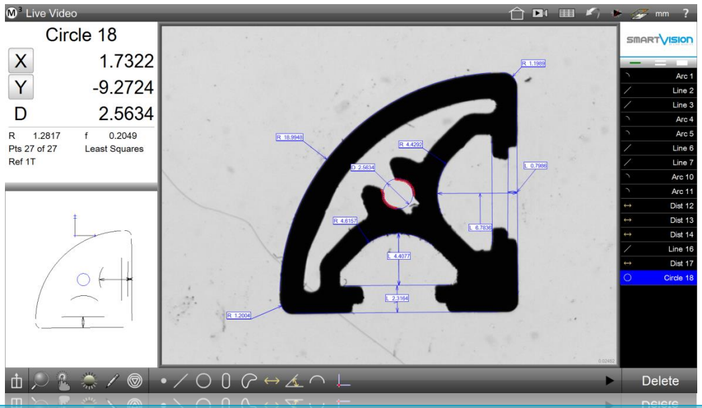


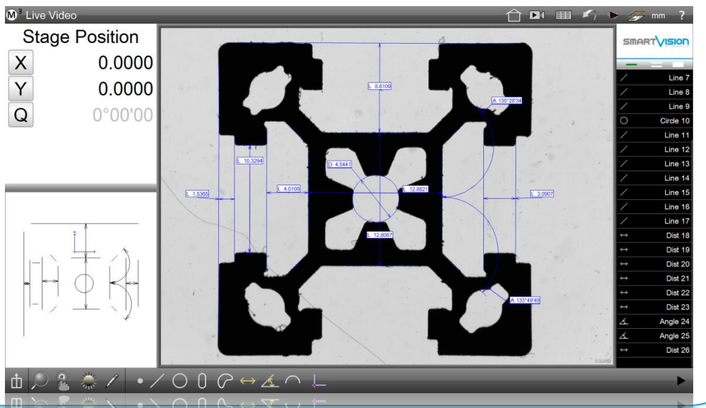


SPRINGS

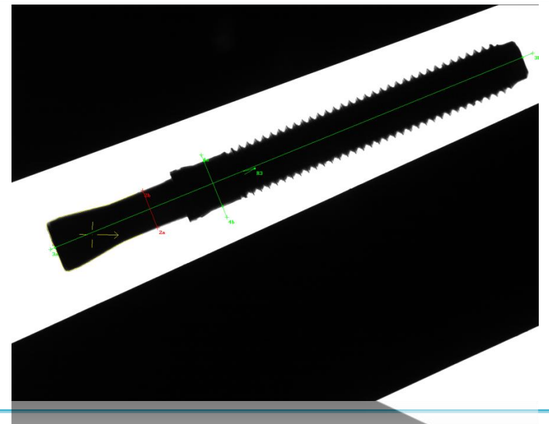
Smart_Projector - *Niche Markets*

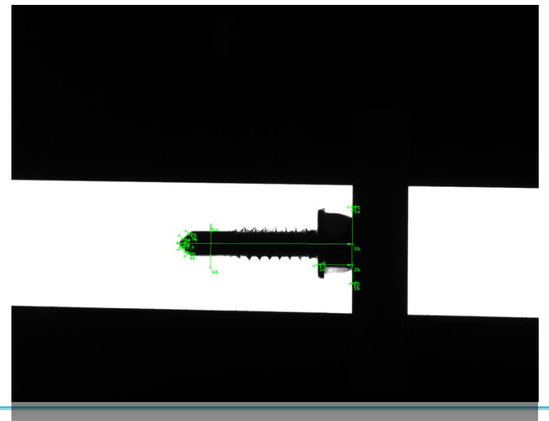






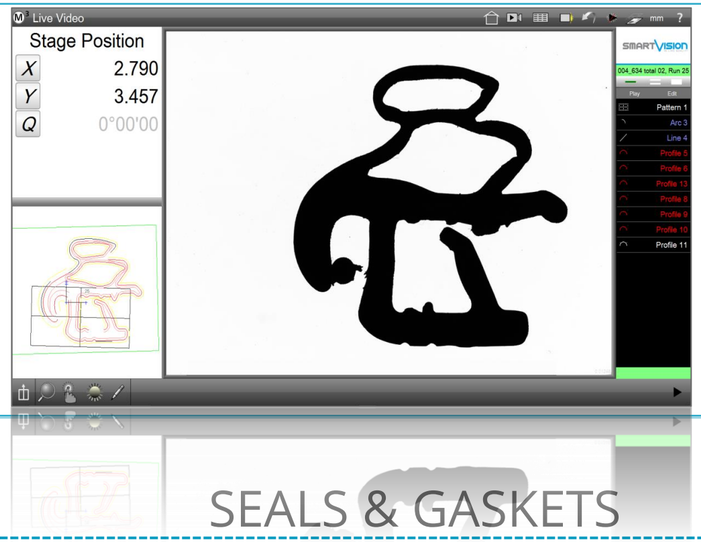
EXTRUDED ALUMINIUM

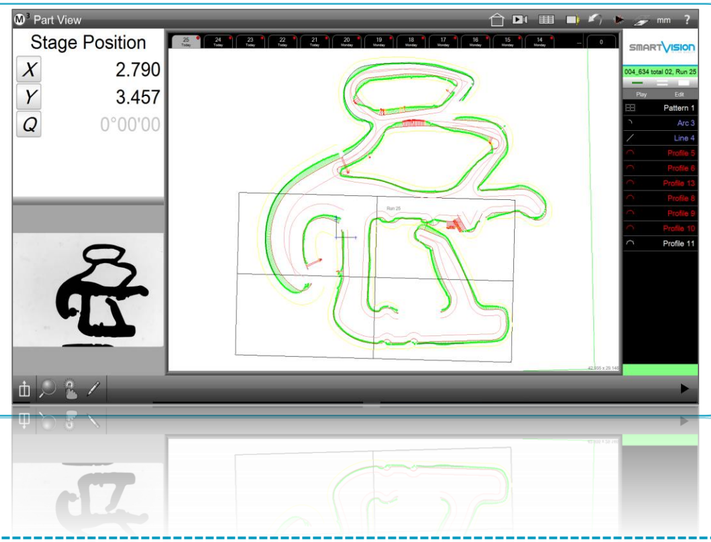




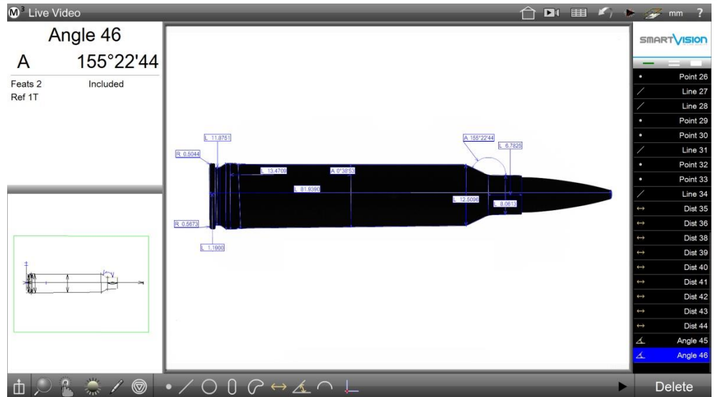
SCREWS

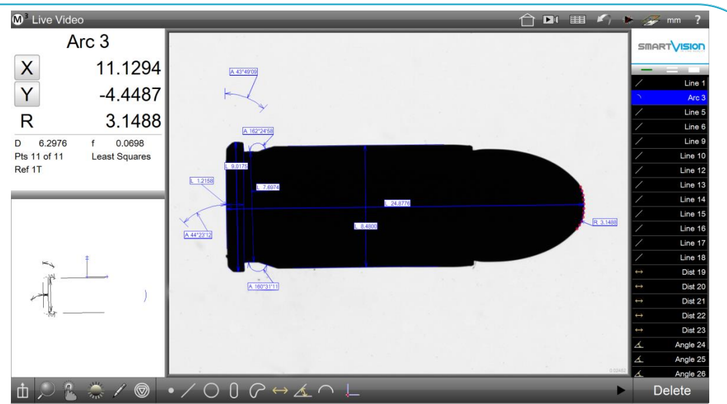
Smart_Projector - *Niche Markets*



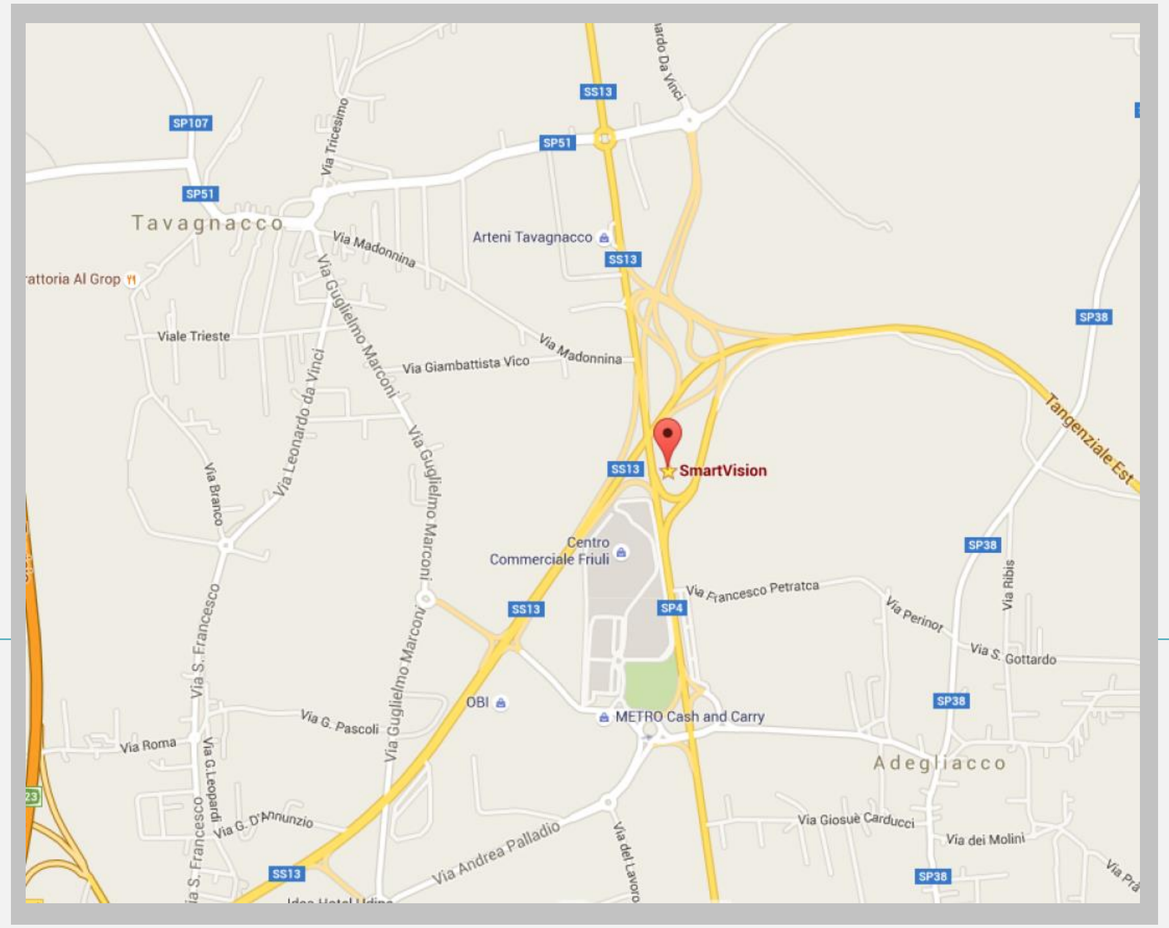


SEALS & GASKETS





AMMUNITION



Contact us!

Via Nazionale, 130/C
33010 Tavagnacco (UD) Italy

www.SmartVision.it

YouTube

info@SmartVision.it

+39 0432 484765

THANK YOU!

ANY QUESTION?