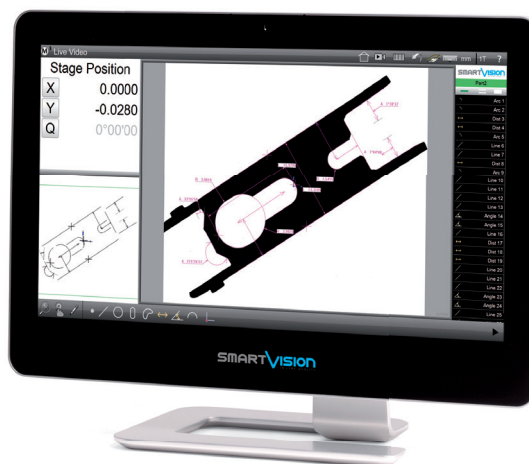# SMART**VISION**
IN LINE QUALITY

HIGHLIGHTS

New Models Available

10 Mpx Industrial Camera

Episcopic Light

Wide Range of Working Area

New Profile Check Feature

The Next Generation Profile Projector
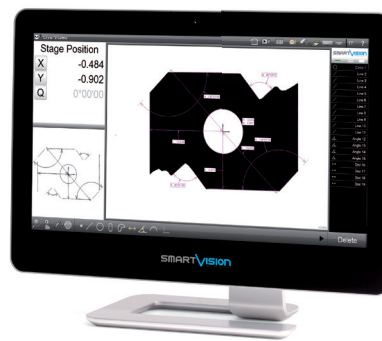
Smart_Projector

State-of-the-art Video Measuring Machine

Smart_Projector

Fast Industrial Video Measuring Machine

"Smart_Projector allows automatic, objective, repeatable, easy and fast dimensional quality check"

Easy and Fast

Smart_Projector by SmartVision is the first and unique instrument designed to perform a **complete and automatic dimensional check** of any part easily and fast.

Automatic and Productive

Revolutionary digital evolution of traditional profile projector and micrometer caliper, it allows to **check an unlimited number of quotas per item in just few seconds**, with no need for part alignment, no manual collimation nor focus and without any moving part inside the equipment.

Accurate

Smart_Projector provides objective and repeatable measures and signals a simple Pass / Fail semaphore output, with **no contribution nor interpretation by the operator**, ensuring a full automatic gauging and **reporting of all checking activities** in compatible excel files (csv, tsv, txt), prints (or pdf) and image files.
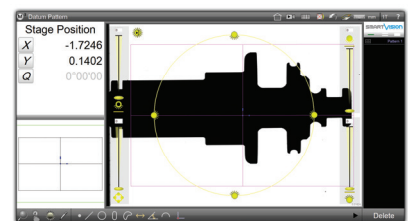
Industrial and Compact

Smart_Projector is a fast, compact, rugged, static, easy to use and easy to program equipment, **designed for harsh environment and heavy duty cycle use**.
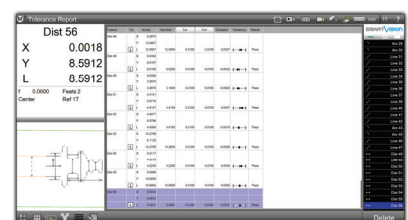
New Generation Software: TOUCH & MEASURE!
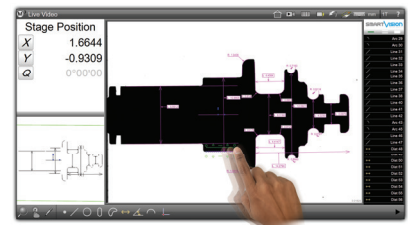
• Multi touch-screen software
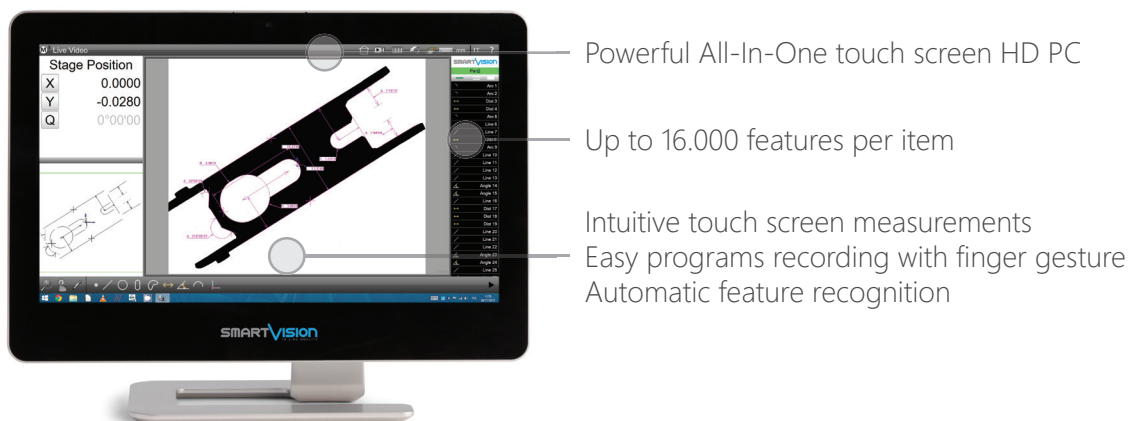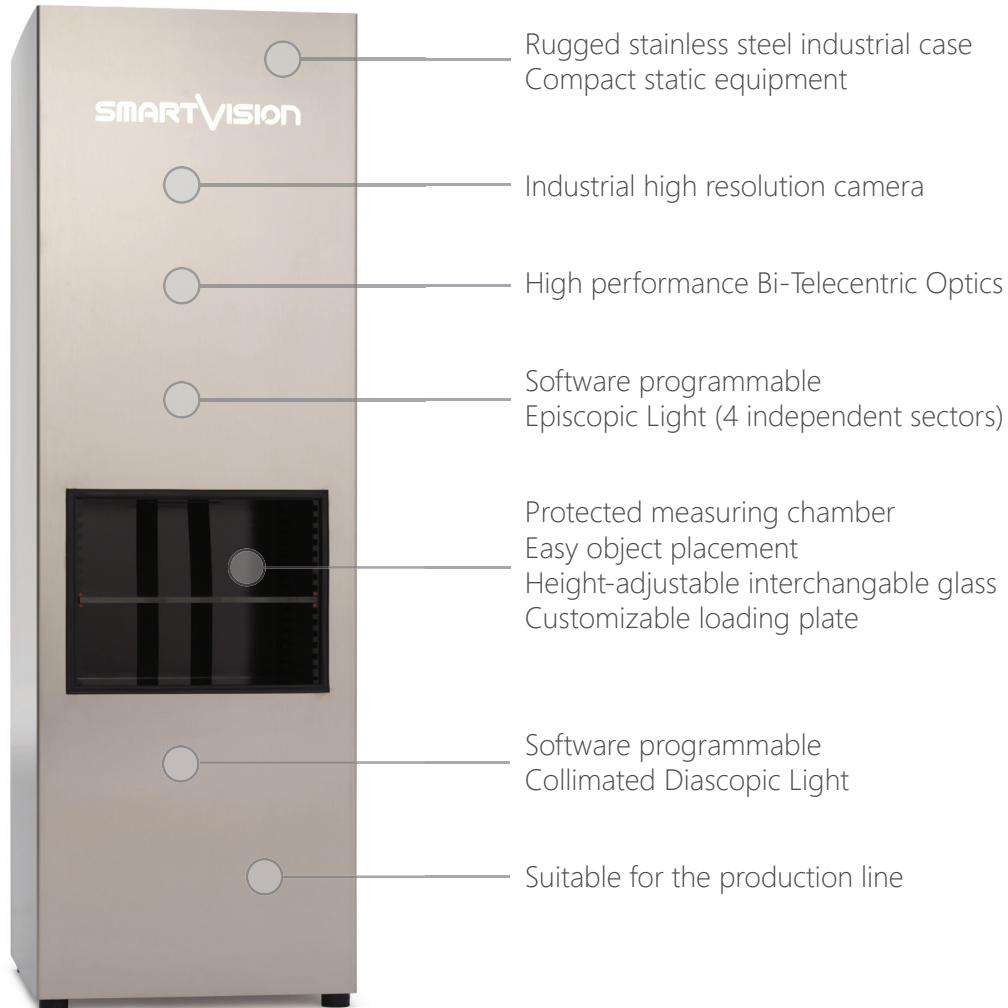• Automatic feature recognition

• Software programmable light
• Front / Back / Diffused light

• Automatic data report
• CSV / TSV / TXT / DXF / PDF

FEATURES

Smart_Projector - Fast Industrial Video Measuring Machine

Rugged stainless steel industrial case
Compact static equipment

Industrial high resolution camera

High performance Bi-Telecentric Optics

Software programmable
Episcopic Light (4 independent sectors)

Protected measuring chamber
Easy object placement
Height-adjustable interchangable glass
Customizable loading plate

Software programmable
Collimated Diascopic Light

Suitable for the production line

Powerful All-In-One touch screen HD PC

Up to 16.000 features per item

Intuitive touch screen measurements
Easy programs recording with finger gesture
Automatic feature recognition

LARGE RANGE OF AVAILABLE MODELS

Smart_Projector - Fast Industrial Video Measuring Machine

| WORKING AREA DIMENSION (mm)	4.2 / 7 / 5.6	16 / 27 / 22	34 / 59 / 48	68 / 117 / 95	105 / 179 / 145	140 / 240 / 195
FoV (mm)	5.6 x 4.2	22 x 16	48 x 34	95 x 68	145 x 105	195 x 140
FoV Diagonal (mm)	7	27	59	117	179	240
FoV Area (mm^2)	23.5	352	1632	6460	15225	27300
Camera (Mpixel)	5	5	10	10	10	10
Diascopic Light[1]	Collimated	Collimated	Collimated	Collimated	Standard	Standard
Episcopic Light[2]	-	-	Yes	Yes	Yes	-

PRODUCT HIGHLIGHTS:

- Specifically suited for massive (production) quality inspection, in-line control, incoming inspection
- Eliminates subjectivity and errors of operator-based gauging
- Increases number of quotas and quality check rate, up to 16000 checking features in a few seconds
- Performs full automatic reporting and SPC (Min, Max, Range, Average, Std Dev, 6 Sigma)
- Designed for in-production massive use
- Suitable for unskilled operators use
- Flexible investment with a fast Return on Investment
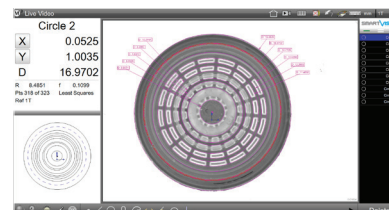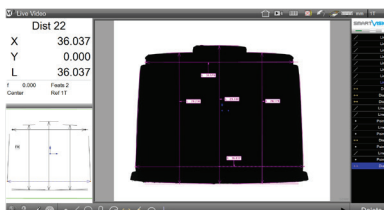- Reduces time and costs of controls

APPLICATIONS

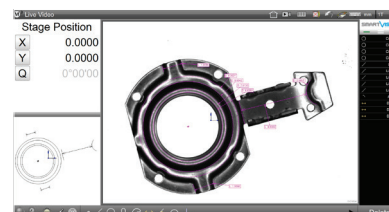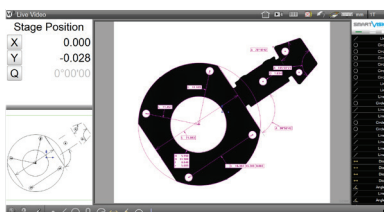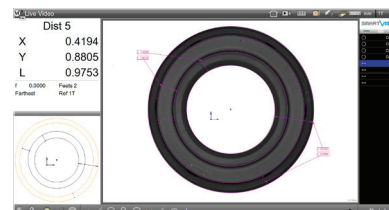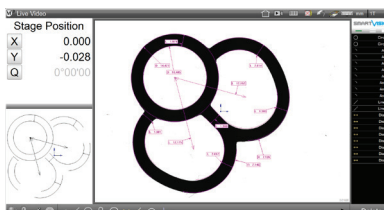Smart_Projector - Fast Industrial Video Measuring Machine

GLASS
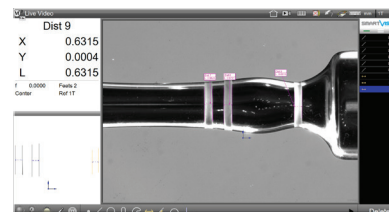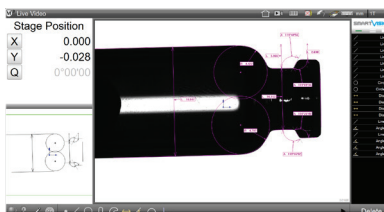
PLASTIC

CUTTED

RUBBER

ELECTRONICS
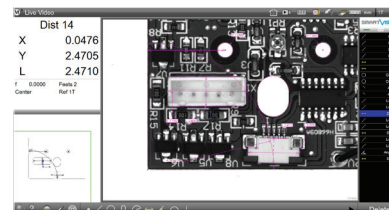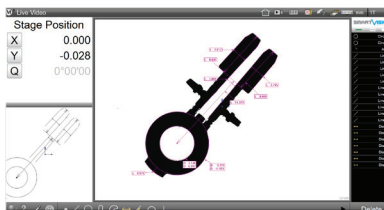
TURNING

MICROMECHANICS
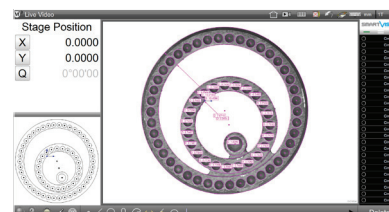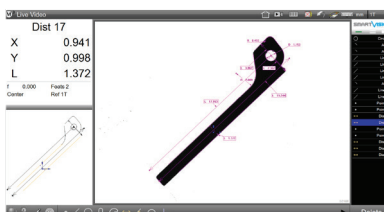
SPECIFICATIONS

Smart_Projector - Fast Industrial Video Measuring Machine

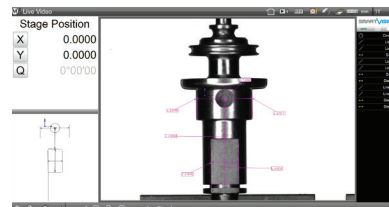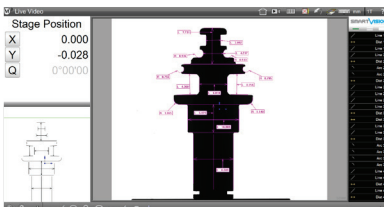|						
PC Device	Touch Screen AIO with Win 8 x64 PRO, monitor resolution 1920x1080 HD					
Light receiving lens	Double telecentric lens					
Field of View (FoV)[3] (mm)	5.6x4.2	22x16	48x34	95x68	145x105	195x140
FoV Diagonal (mm)	7	27	59	117	179	240
FoV Area (mm[2])	23.5	352	1632	6460	15225	27300
Measuring Chamber (mm)[5]	215x120x58	215x120x58	200x174x165	200x220x250	260x330x410	300x400x800
Camera (M pixel)	5	5	10	10	10	10
Repeatability accuracy[4]	±0.1 µm	±0.2 µm	±0.5 µm	±1 µm	±1.5 µm	±2 µm
Measurement accuracy[4]	±0.5 µm	±1.5 µm	±3 µm	±6 µm	±8 µm	±12 µm
Dimensions (mm)	282x330x490	282x330x490	282x330x875	282x330x1255	330x380x1255	490x490x1600
Weight (kg)	18	18	29	45	45	60
Diascopic Light[1]	Collimated	Collimated	Collimated	Collimated	Standard	Standard
Episcopic Light[2]	-	-	Yes	Yes	Yes	-
Operation ambient °C	+10 to +40°C					
Power supply	110-240 Vac	50-60 Hz				
Power consumption	2 A					

Measurement points	16000 features max
Pattern search	XYΘ (accepts random positioning)
Tolerance	Angle, angularity, area, circumference, concentricity, diameter, flatness, form, length, parallelism, perpendicularity, radius, roundness, runout, straightness, symmetry, true position, width, XY position.
CAD export	*.dxf file with nominal values and tolerance
CAD import	*.dxf file for profile match, nominal values and tolerance
Data Report	*.csv, *.tsv, *.txt
Print Report	Windows installed Printer (optional *.pdf), *.xps
User account control	Super Visor, Users 1 to 20 (with password login and editable rights)
Multi language interface	English, German, Spanish, French, Italian, Portuguese, Russian, Chinese, Japanese, Polish, Czech, Romanian. All languages are editable.

[1] Diascopic Light: Collimated Projector with green led light or Standard Directional led backlight.
  Collimated projector intensitiy is software programmable when also episcopic light control (2) is available.
[2] Episcopic Light Control: 4 independent 90° sectors, software programmable, front / episcopic white diffused led light, made to order.
[3] Standard models - other custom FoV available on request.
[4] Precision of measurement (±µm) of a line, obtained measuring a specific calibration target located approximately in FoV center, best focus position, at 25° C ±1°.
[5] The dimensions of the measuring chamber are not the dimensions of the Field of View, therefore they have not to be considered as test area.

FAST   EASY   ACCURATE   INDUSTRIAL   COMPACT   PRODUCTIVE
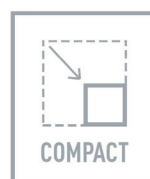
SMARTVISION
IN LINE QUALITY

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