

Smart_Projector

State-of-the-art Video Measuring Machine

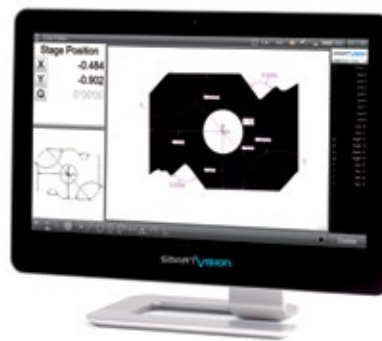


Smart_Projector

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.

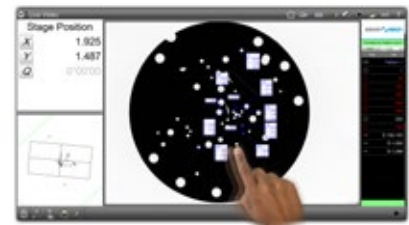
Accurate

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.

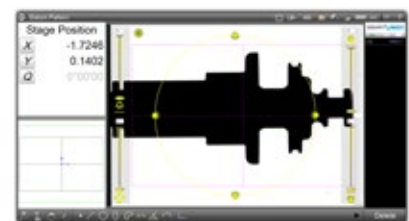
Industrial and Compact

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



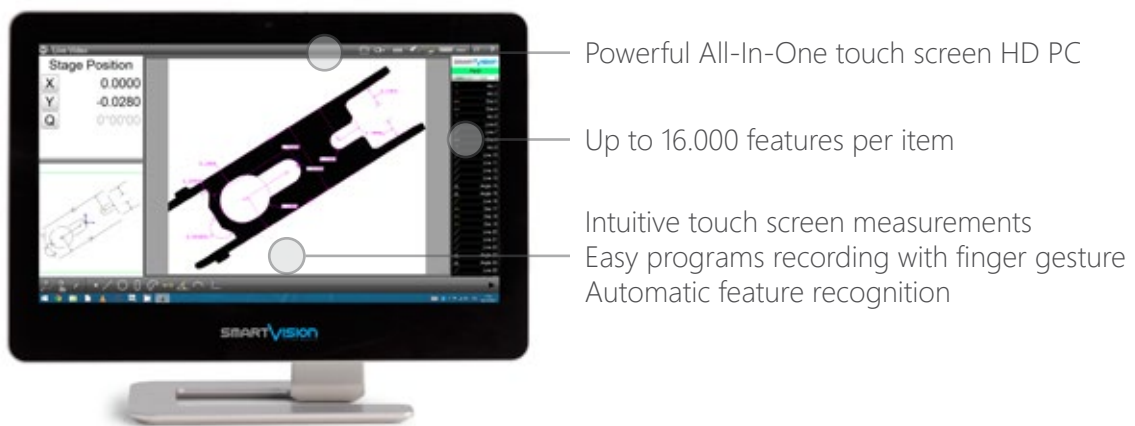
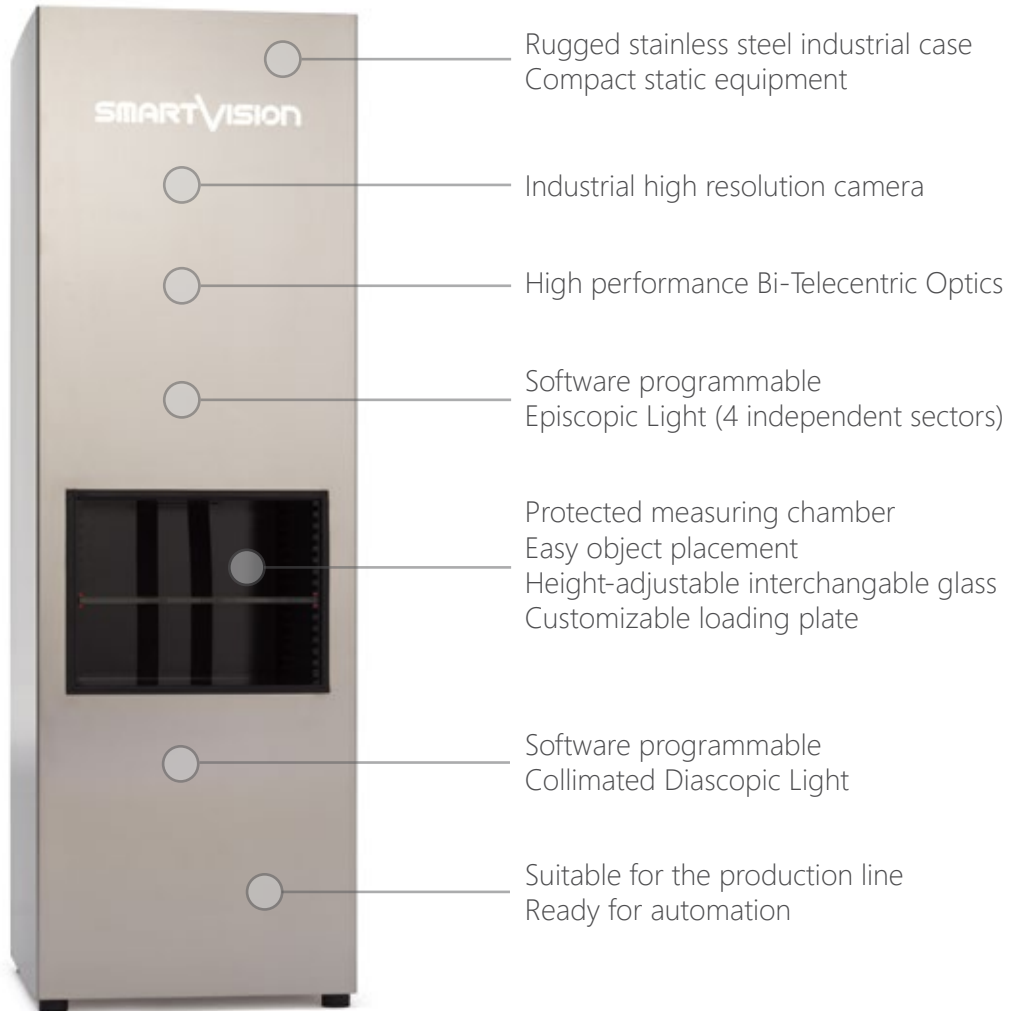
- Software programmable light
- Front / Back / Diffused light



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

Features

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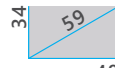
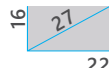


Large range of available models

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WORKING AREA DIMENSION (mm)



FoV (mm)	6 x 4	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	-

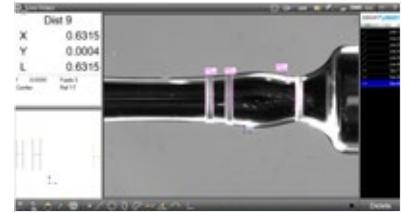
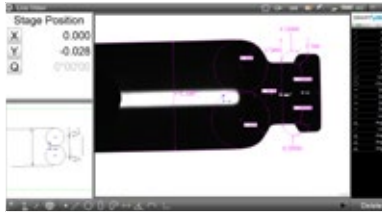
Product Highlights

- 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

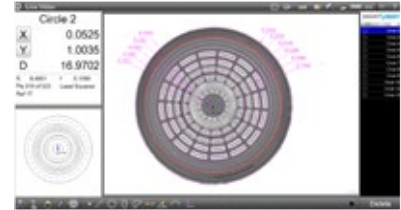
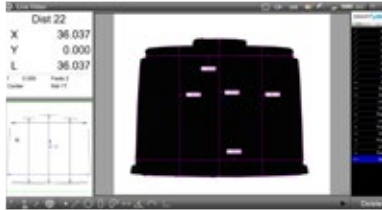
Applications

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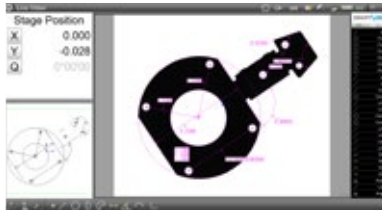
GLASS



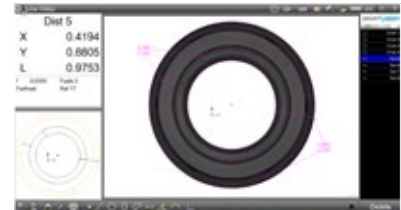
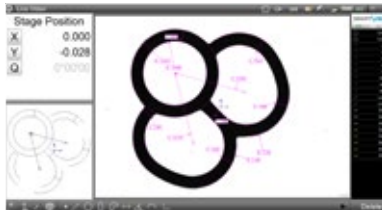
PLASTIC



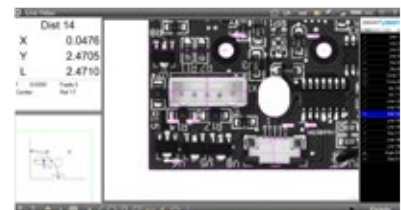
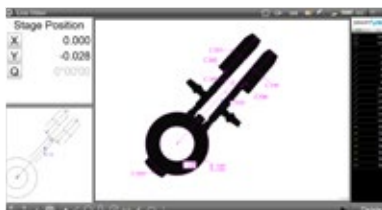
CUTTED



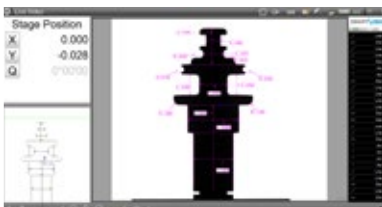
RUBBER



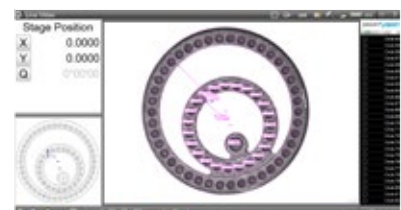
ELECTRONICS



TURNING



MICROMECHANICS



Specification

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PC Device	Touch Screen AIO with Win 8 x64 PRO, monitor resolution 1920x1080 FULL HD					
Light receiving lens	Double telecentric lens					
Field of View (FoV) ³ (mm)	6x4	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	218x125x55	218x125x55	203x200x175	203x230x240	260x330x410	419x450x475
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 (WxDxH mm)	324x330x490	324x330x490	282x330x873	284x330x1255	335x380x1255	553x510x1813
Weight (kg)	18	18	29	45	45	150
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	Supervisor, 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 intensity 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.

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SMARTVISION
IN LINE QUALITY

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