SMARTVISION
IN LINE QUALITY

Smart_Projector Pharma

The Next Generation Video Measuring Machines for Primary Pharmaceutical Packaging

About Smart_Projector Pharma

Fast Industrial Digital Video Measuring Machines

"Smart_Projector Pharma allows automatic, objective, repeatable, easy and fast dimensional quality check of any cylindrical parts"

Easy & Fast

Smart_Projector Pharma by SmartVision is the first and exclusive machines designed to perform, in a easy and fast way, a **complete and automatic check of any cylindrical pharmaceutical packaging**. This includes bottles and vials, even if transparent.

Automatic & Productive

Smart_Projector Pharma is the revolutionary digital evolution of the traditional profile projector and micrometer caliper. It allows to **check an unlimited number of measurements per item in just few seconds**. There is no need for part alignment, no manual collimation nor focus and there are not moving components inside the machine.

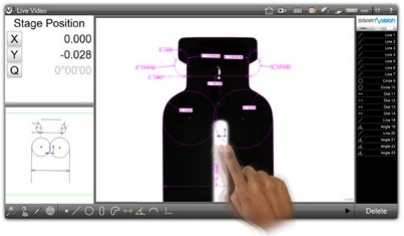
Accurate

Smart_Projector Pharma provides objective and repeatable measurements and signals a simple « Pass / Fail » lamp output, **with no contribution nor interpretation by the operator**, ensuring a full automatic evaluation and reporting of all control activities in compatible and ready-to-print Excel files (XLSX, CSV, TSV, TXT), PDF and Image files.

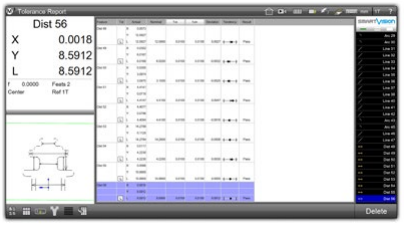
Industrial & Compact

Smart_Projector Pharma is a fast, compact, resistant, static, easy-to-use and easy-to-program device, **designed for harsh environments and heavy duty cycles use**.

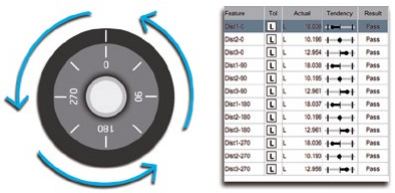
New Generation Software: TOUCH & MEASURE!



- Multi touch-screen software
- Automatic feature recognition



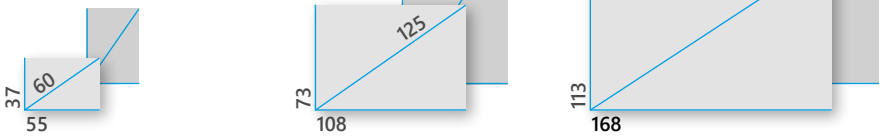
- Automatic data report
- XLSX / CSV / TSV / TXT / PDF



- Record steps for 360° view
- Variables and user messages

Available Models

Smart_Projector Pharma - Configurations & Features

WORKING AREA DIMENSION (mm)			
	55x37	108x73	168x113
FoV[3] (mm)	55x37	108x73	168x113
FoV[3] Diagonal (mm)	60	125	195
FoV[3] Area (mm²)	2000	7800	18500
Diascopic Light[1]	Collimated	Collimated	Collimated
Episcopic Light[2]	Yes	Yes	No
Layout	Vertical / Horizontal	Vertical / Horizontal	Vertical / Horizontal

*See note (1), (2) and (3) at the back.

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)
- Plug-and-play, ready-to-use
- Suitable for unskilled operators use
- Flexible investment with a fast Return on Investment
- Reduces time and costs of controls

Hardware Features

Vertical & Horizontal Use: The Power of Two Smart_Projectors in One

Resistant stainless steel industrial case
Compact static device

Industrial high-resolution camera

High performance Bi-Telecentric Optics

Smart_Projector Pharma with SHAK Option

Software programmable
Collimated Diascopic Light
(Transparent glass becomes dark)

Protected measuring chamber
Easy object placement
Customizable loading plate
Rotating Stage for 360° Measurements

Suitable for the production line
Ready for automation

Dedicated All-in-One PC

Intuitive touch screen measurements
Easy to program with the simple touch of your fingers
Automatic feature recognition

Up to 16.000 features per item

Powerful All-In-One PC with HD Touchscreen

Smart Accessories

Smart_Horizontal_Adapter_Kit

"Thanks to the new Smart_Horizontal_Adapter_Kit, you can use Smart_Projector Pharma both in vertical and horizontal layout"

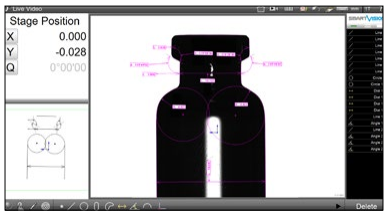
Smart_Rotating_Robot

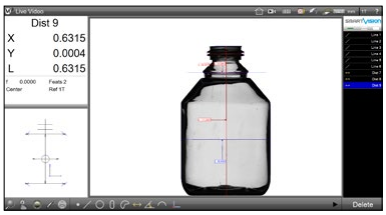
"With Smart_Rotating_Robot is now possible to measure a single item on different chosen angles"

Application Examples

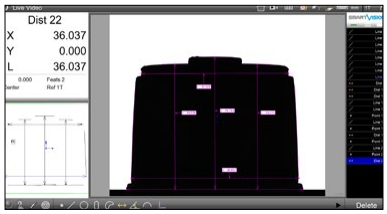
Quality Control for Pharma Packaging & Medical Industry

GLASS

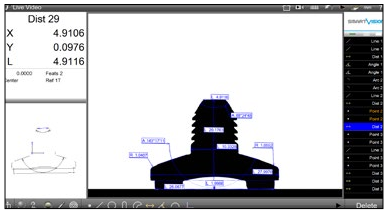


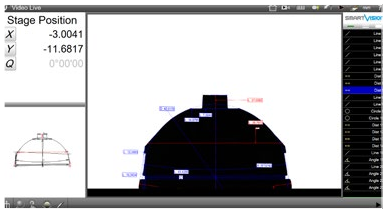


PLASTIC



PROSTHESIS





Technical Specifications

Smart_Projector Pharma - Fast Industrial Video Measuring Machines

Model	Smart_Projector@55 Pharma	Smart_Projector@108 Pharma	Smart_Projector@168 Pharma
Layout	Vertical / Horizontal	Vertical / Horizontal	Vertical / Horizontal
Field of View (FoV)[3] (mm)	55x37	108x73	168x113
FoV[3] Diagonal (mm)	60	125	195
FoV[3] Area (mm²)	2000	7800	18500
Measuring Chamber (mm)[5]	200x200x175	200x230x240	250x330x430
Repeatability Accuracy[4]	±0.5 µm	±1 µm	±1.5 µm
Measurement Accuracy[4]	±3 µm	±6 µm	±8 µm
Diascopic Light[1]	Collimated	Collimated	Collimated
Epsicopic Light[2]	Yes	Yes	No
Light Receiving Lens	Double telecentric lens	Double telecentric lens	Double telecentric lens
Dimensions (mm)	282x330x873	284x330x1255	525x365x1930
Weight (kg)	29	45	120
Operation ambient °C	+10 to +40°C		
Power Supply / Consumption	110-240 Vac | 50-60 Hz | 2 A		
Software Interface	English, German, Spanish, French, Italian, Portuguese, Russian, Chinese, Japanese, Polish, Czech, Romanian. All languages are editable.		
User Account Control	Super Visor, Users 1 to 20 (with password login and editable rights)		
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.		
Statistical Analysis	Ready to connect with SPC software		
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, xlsx		
Print Report	Windows installed Printer (optional *.pdf), *.xps		
Optional PC Device	Powerful All-in-One PC, Full HD Touchscreen, Monitor resolution 1920x1080, Windows 11 PRO 64-bit		

[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] Rectangular with vignetting - 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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