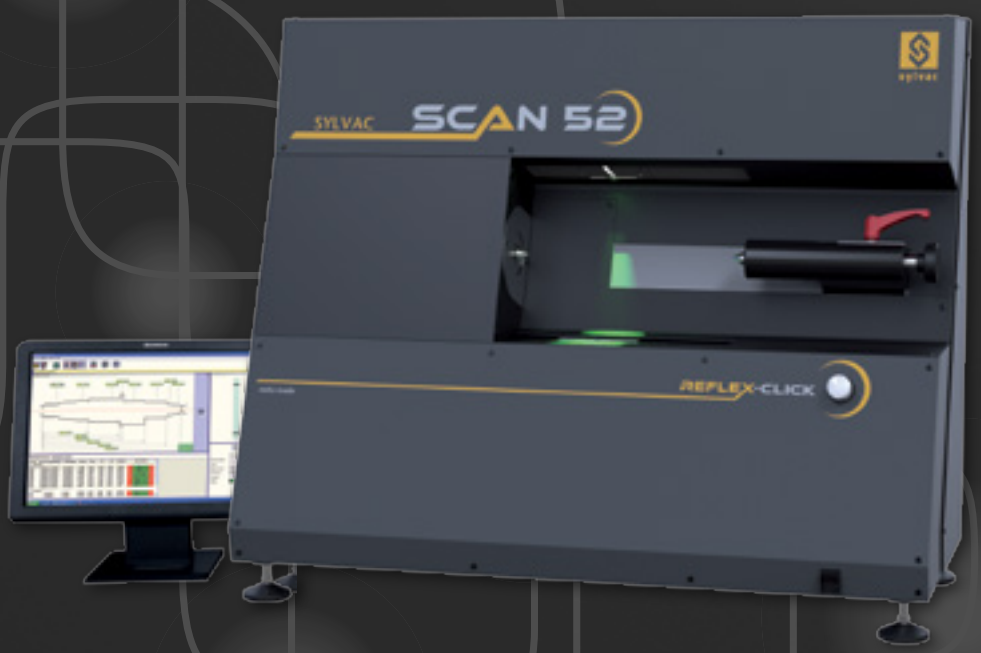
sylvac

Swiss manufacturer of precision measuring instruments since 1969

Sylvac Scan

OPTICAL MEASURING MACHINES FOR TURNED PARTS



FAST AND PRECISE OPTICAL DIMENSIONAL MEASUREMENT FOR ALL CYLINDRICAL PARTS

- Discover our new range of Sylvac SCAN machines with over 150 measuring features to control the most demanding dimensions and geometrical tolerances

Swiss manufacturer of precision digital measuring instruments since 1969, SYLVAC has now added a new range of optical machines to its manufacturing program.

SWISS MADE

SIMPLE

FAST

VERY QUICK ROI

General features

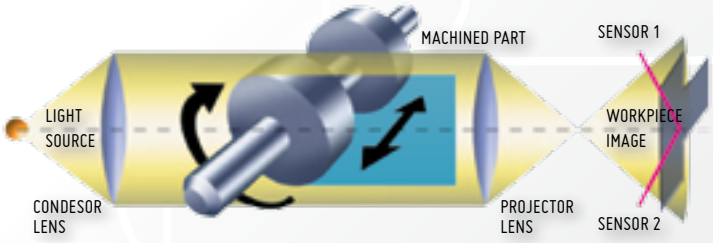
APPLICATIONS

Our range of SYLVAC's machines are designed to measure round parts with diameters from 0.25 mm up to 50 mm (80 mm on request) and up to 500 mm long. Most of the cylindrical parts, such as aerospace and automotive shafts and components, connectors, dental screws and implants, hydraulics parts, metal packaging for food and cosmetics, rollers, turbines parts, CNC turned parts, etc. can be measured in a few seconds. Various thread types and features can be measured and analyzed with our machines.

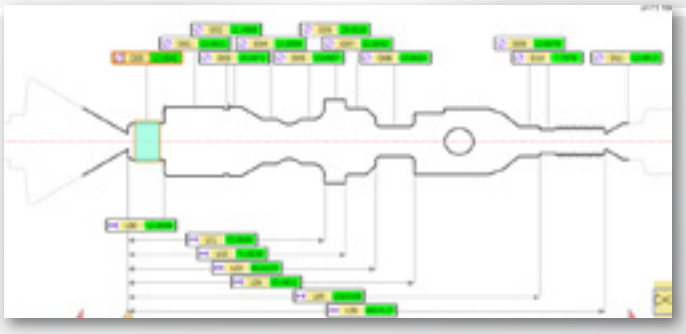
MEASURING PRINCIPLE

All SYLVAC-SCAN incorporate high resolution CCD sensors that combine 2 x 7'000 elements linear arrays, with a patented 7.5° system, which would correspond to a camera with a resolution of 200 megapixels !

As the part profile is projected, these sensors, which are capable of detecting the slightest changes at pixel level, act as a light sensitive rule.



The contour of the workpiece is reproduced in shadow image on the software and all the various elements shown can be measured in static (without part rotation) or in dynamic (with part rotation) when geometrical features such as run-out or concentricity must be measured.



Click & measure !

Sylvac Scan 52 Reflex Click

- First horizontal SCAN machine specially designed for workshop measurement close to the machine-tool. The concept is to measure the parts in the same position as they are machined.

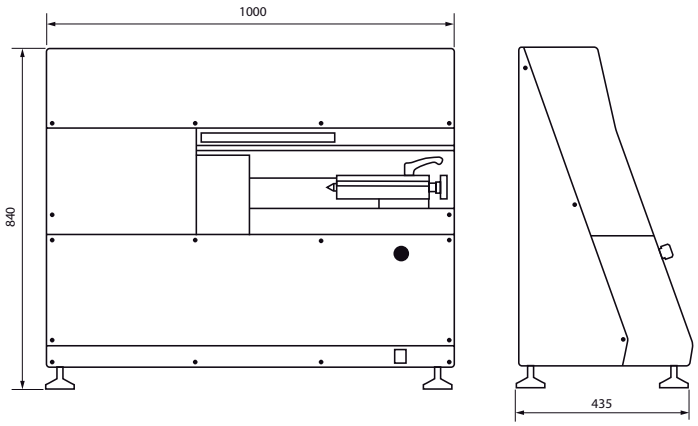
Suitable for first-off part, control in process (SPC), sampling or 100% inspection, our Sylvac SCAN 52 machines are set to revolutionize the control in workshop.

Reflex Click :
The measuring system that makes everyone an expert !

WHEN MEASURING BECOMES A BREEZE !

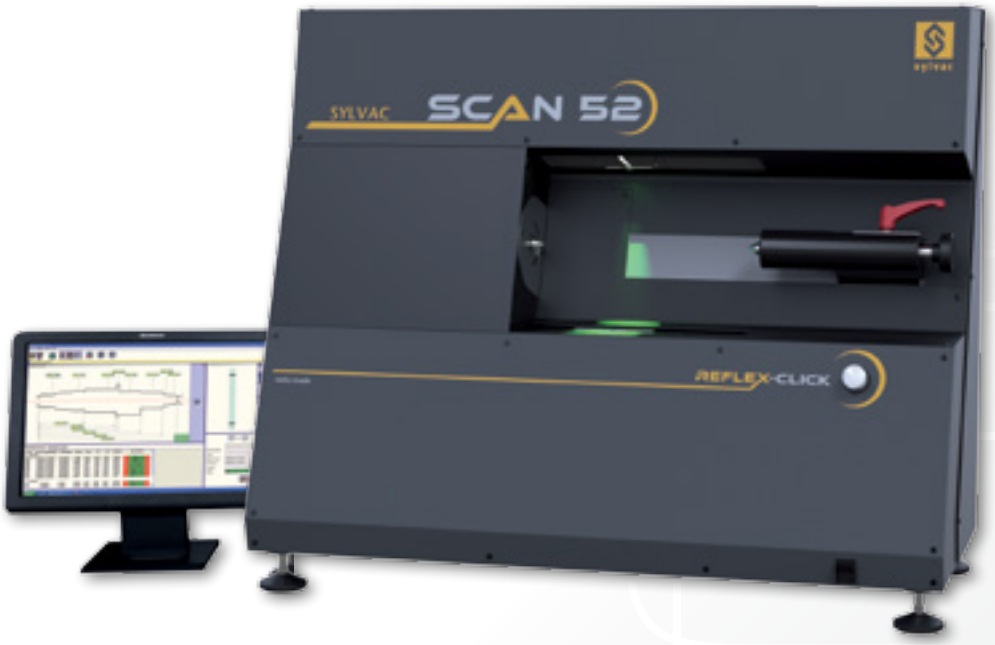
Place the workpiece on the SCAN machine, click the button and get all the values automatically and without prior programing. Perfectly integrated in the workshop, our SCAN 52 machines replace conventional measuring systems including multi-gauging jigs.

Sylvac Scan 52 Reflex Click



TECHNICAL SPECIFICATIONS

		902.5520		902.5521	
		Diameter	Length	Diameter	Length
Measuring range	mm	0.5 ÷ 52	300	0.5 ÷ 52	300
Numerical interval	mm	0.0001	0.0005	0.0001	0.0005
Accuracy	µm	(1.5 + D/100)	(4 + L/100)	(1.5 + D/100)	(4 + L/100)
Repeatability	µm	0.6	2.5	0.6	2.5
Rotary headstock				✔	
Weight	kg	103			



DELIVERY

- Instrument according to technical specifications
- 2 male centers
- Computer
- Mouse
- Keyboard
- Windows multilingual operating system
- Screen
- Manual
- Sylvac Reflex-Scan Software
- Rotary headstock (on model 902.5521)

Software for SCAN 52

SYLVAC-REFLEX Scan

Equipped with this software, the SYLVAC-SCAN 52 is robust and easy to use, allowing perfect integration in workshops. Adjacent to operators, it advantageously replaces conventional measuring systems including multi-gauging thanks to unsurpassed flexibility and time saving.

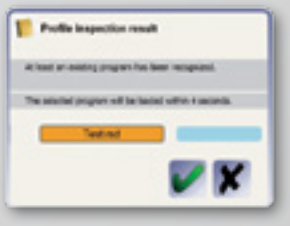
The cutting edge REFLEX-Click mode measures your parts with a simple click .

SYLVAC REFLEX SCAN SOFTWARE FOR SCAN 52 MACHINES

- 1. The operator places the workpiece on the machine
- 2. The operator clicks on the button
- 3. The workpiece is scanned, the main values are measured and displayed on the software against the generated work piece drawing
- 4. The operator can choose to take the measured values, or edit the auto program ready to measure a series of parts with classification, following entry of nominal and tolerance information.

These four operations only take a few minutes.

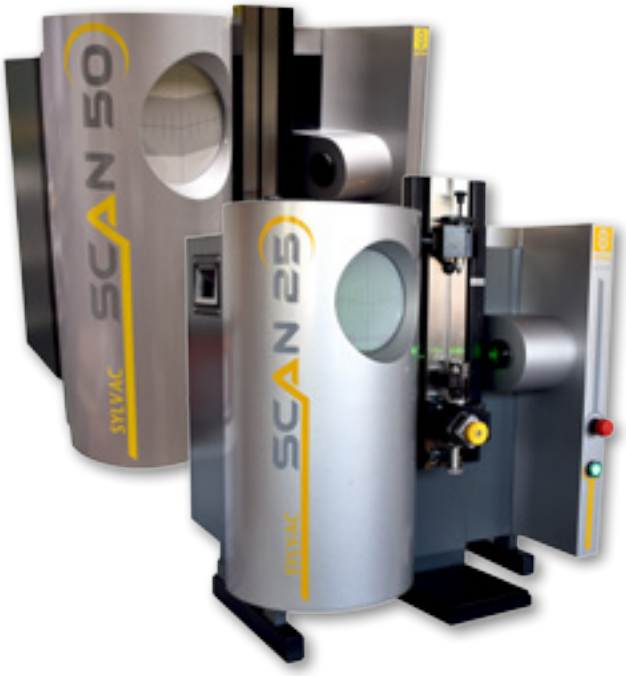
Measuring only in a few seconds !



In order to facilitate measurements for operators, the software will select for you the right measuring program. After scanning, a part already programmed and saved will be recognized and the software will load the program for you. You get classified results that can be printed or exported without any additional operation.

Intelligent automatic recognition of your existing parts/programs

The best value for small parts !



Sylvac Scan 25/50

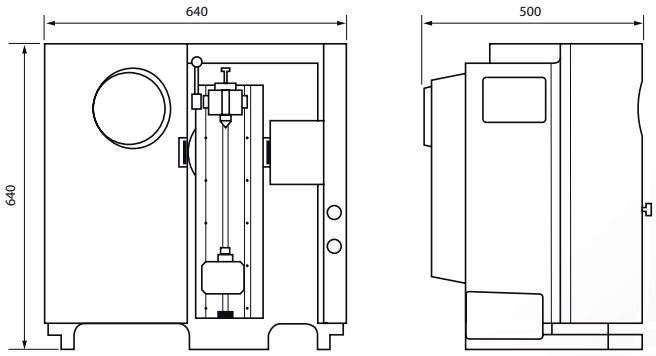
- Entry level vertical SCAN machines for simple applications with attractive design including a profile projection of the component on the left side of the machine. With the work piece secured, the machine moves the work piece through the optical path whilst scanning the profile.

The open design of these machines make them easily and quickly accessible by the operator.

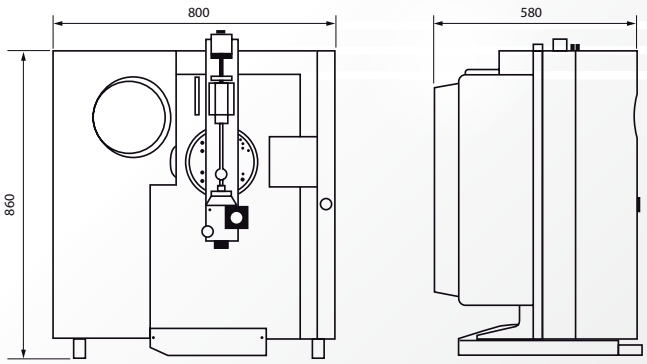
Thanks to the integrated projector, you can always follow the evolution of the measurement process.

Excellent value for money, the perfect solution for the measurement of all your small cylindrical parts.

Sylvac Scan 25



Sylvac Scan 50



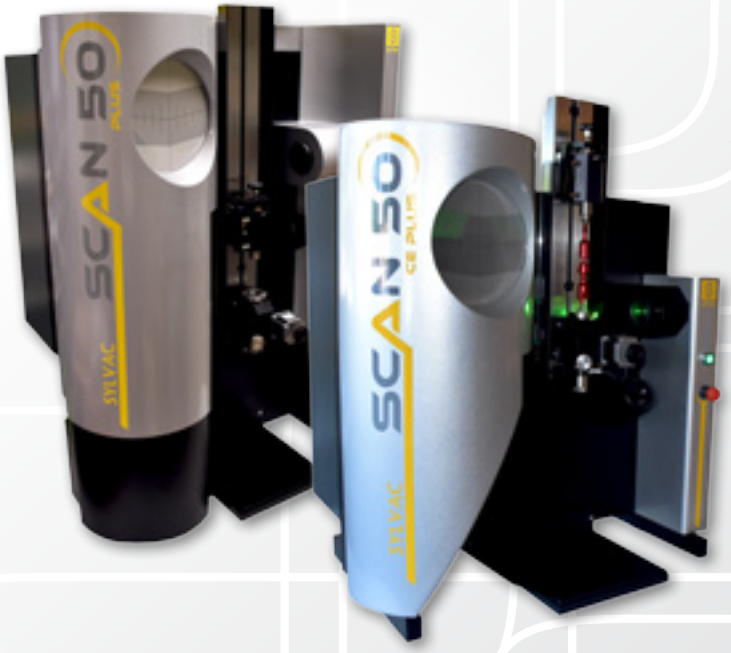
TECHNICAL SPECIFICATIONS

		902.5250		902.5500	
		Diameter	Length	Diameter	Length
Model		Sylvac Scan 25		Sylvac Scan 50	
Measuring range	mm	0.25 ÷ 25	200	0.50 ÷ 50	275
Numerical interval	mm	0.0001	0.001	0.0001	0.001
Accuracy	µm	(1 + D/100)	(4 + L/100)	(1 + D/100)	(4 + L/100)
Repeatability	µm	0.5	2	0.5	2
Rotary headstock		✔		✔	
Weight	kg	67		130	

DELIVERY

- Instrument according to technical specifications
- Part rotation
- 1 rotary headstock
- 2 male centers
- PC, mouse, screen, keyboard
- Windows multilingual operating system
- Software Pro-Measure
- Manual

Measure PLUS !

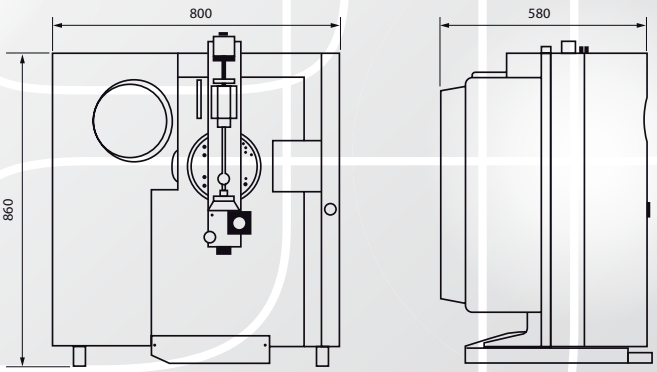


Sylvac Scan 50 CE Plus / Plus

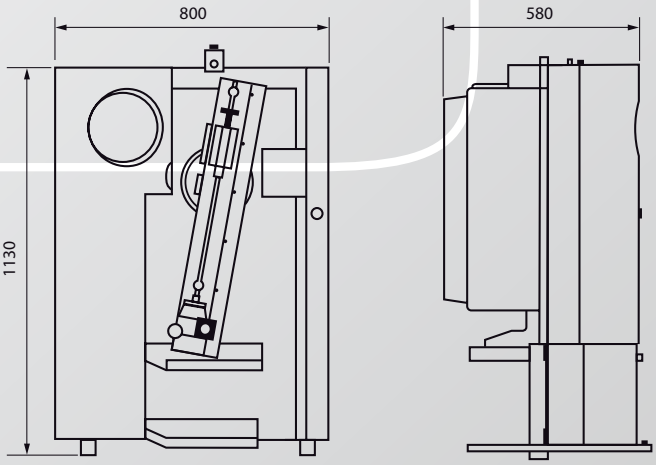
- With a similar concept of the models 25 and 50, these machines offer in addition a motorized axis used to incline the workpiece to the helix angle of the thread, thus allowing a true projected image of the thread form. This unique and exclusive Sylvac slewing system allows to measure much more features on threads, such as minor diameter and root detail, on ball screws for example.

EXCLUSIVE
SLEWING SYSTEM BY SYLVAC

Sylvac Scan 50 CE Plus



Sylvac Scan 50 Plus



TECHNICAL SPECIFICATIONS

		902.5501		902.5502	
		Diameter	Length	Diameter	Length
Model		Sylvac Scan 50 CE Plus		Sylvac Scan 50 Plus	
Measuring range	mm	0.50 ÷ 50	275	0.50 ÷ 50	500
Numerical interval	mm	0.0001	0.001	0.0001	0.001
Accuracy	µm	(1 + D/100)	(4 + L/100)	(1 + D/100)	(4 + L/100)
Repeatability	µm	0.5	2	0.5	2
Tilting for thread meas.	°	30		15	
Rotary headstock		✔		✔	
Slewing mechanism for thread measurement		✔		✔	
Weight	kg	140		180	

DELIVERY

- Instrument according to technical specifications
- Part rotation
- 1 rotary headstock and slewing mechanism for thread measurement
- 2 male centers
- PC, mouse, screen, keyboard
- Windows multilingual operating system
- Software Pro-Measure
- Manual

Software for SCAN 25 and 50

PRO-MEASURE

Featuring a user-friendly interface and a wide variety of measuring dimensions, Pro-Measure remains in line with the SYLVAC-REFLEX Scan philosophy while offering extended capabilities to measure the most advanced applications.

The operating system is in fact divided into 2 softwares:

Pro_Composer : For the programing of the measurement.

Pro_Measure : For parts measurement and results.

SCANNING OR CAD IMPORT

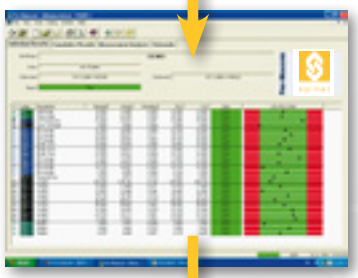
To start a measuring program, you can either scan your part or import a CAD file (DXF). You will then use the comprehensive toolbox of features to create your programs.

OFF-LINE PROGRAMMING

Directly on the PC coupled with the machine, measuring programs can also be easily created remotely. Once your program is completed, import it into the machine and start measuring!

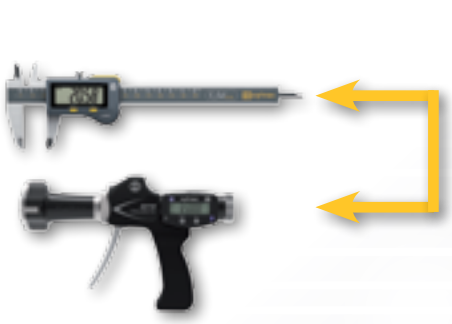
ACCESS MANAGEMENT

Up to four levels of security can be set to provide you with the highest security for your data, insuring perfect safety and traceability.



PRO-MEASURE

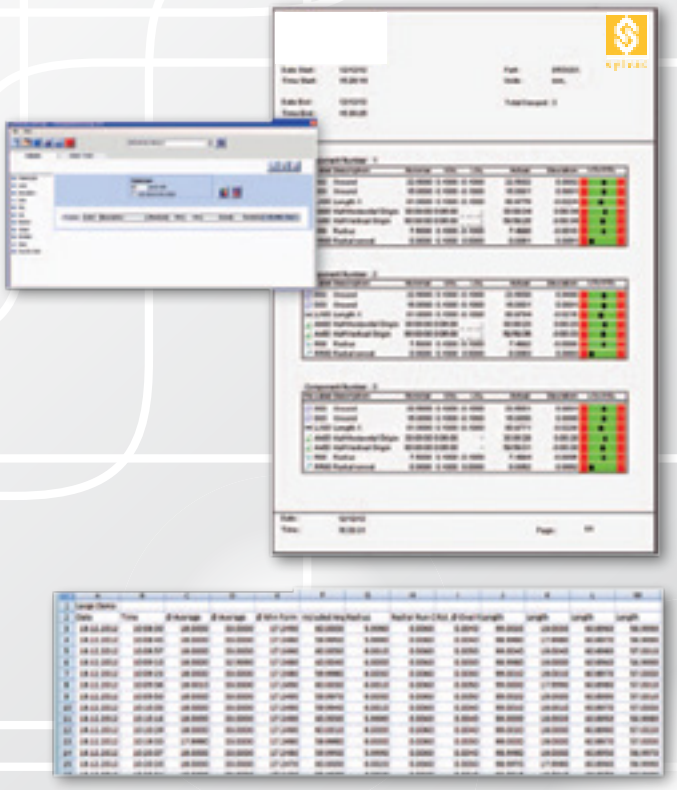
SPC SOFTWARE



INTEGRATED RESULTS

FLEXIBLE REPORT EDITOR

- A flexible report editor is also available, enabling you to customize the presentation of your measuring reports by adding information through a drag & drop method.



DATA EXPORT AND SPC

Although main statistical calculations are included as a standard feature in our software packages, you might want to use your own SPC (Statistical Process Control) software to control your part batches.

For this reason we offer you several export formats (e.g. CSV, QDAS...) that can be imported into your own system.

As an option, you can also use an **SPC software** for more advanced statistical analysis.

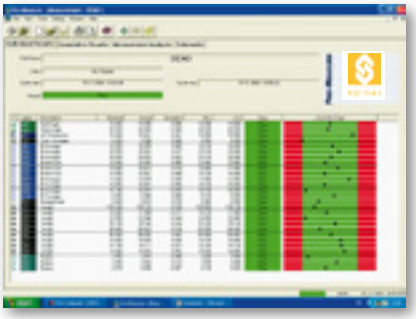
SPC SOFTWARE

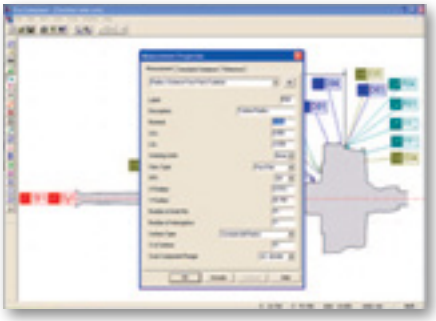
Some applications require additional measurements such as internal diameters that cannot be performed by a SYLVAC-SCAN. SPC softwares make it possible by enabling you to add some measurements taken from complementary products (e.g. internal micrometers, calipers or dial gages) into the same report.

SPC SOFTWARES KEY FEATURES:

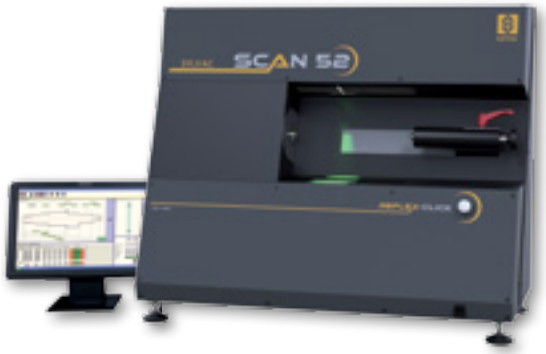
- Graphics with limits
- Histograms
- Statistic parameters
- Control charts
- Protocols

SPECIFICATIONS





CAPABILITIES



	SYLVAC-REFLEX Scan	PRO-MEASURE
Automatic measurement of the main features (diameters, lenghts, angles, radii)	✔	
Automatic parts / program recognition	✔	
Off-line programming		✔
CAD import		✔
Reports editor	✔	✔
Data export	✔	✔
SPC basic calculations	✔	✔
SPC software	On request	On request
Access management - security lever	1	4

GEOMETRICAL TOLERANCING - FEATURES SUMMARY

	SYLVAC-REFLEX Scan	PRO-MEASURE
Diameters	✔	✔
Lenghts, heights, distances	✔	✔
Angles, chamfers	✔	✔
Radii	✔	✔
Threads (parallel)	✔	✔
Threads (root detail, taper, multi-starts, ball screws, worm screws, special threads)		✔
Perpendicularity		✔
Form deviation		✔
2 and 3D alignment of the parts (axis correction)	✔	✔
Rotational diameters	Advanced	✔
Run out	✔	✔
Concentricity	✔	✔
Roundness	✔	✔
Cylindricity	✔	✔
Across flats	✔	✔
Straightness	Advanced	✔
Interrupted parts (splines, turbines)		✔

Advanced : with Reflex SCAN Avanced package 902.6350

INVESTMENT

Contact your agent for more information or a free calculation !

SYLVAC SCAN MACHINES QUICK ROI

Because the return of investment is essential data to make sensible decisions, SYLVAC has developed an interface enabling you to calculate your estimated payback time. It will directly depend on the profile of your company and the expected use of the machine.

You will therefore be able to validate yourself that your payback time will be no longer than 6 months in most cases.

Moreover, the quality of your measurements will be improved!

Traditional manual methods using multiple gauges.

= 10-30 minutes inspection time

Sylvac SCAN series

= 30-60 seconds inspection time = cost saving !

TAILOR-MADE SOLUTIONS

Some applications need more than one stand-alone machine. In order to fulfill specific requirements, we can evaluate various turnkey solutions such as:

Clamping solution

Apart from our standard range of fixtures, customised solutions can be developed to optimise your measuring process.

Software

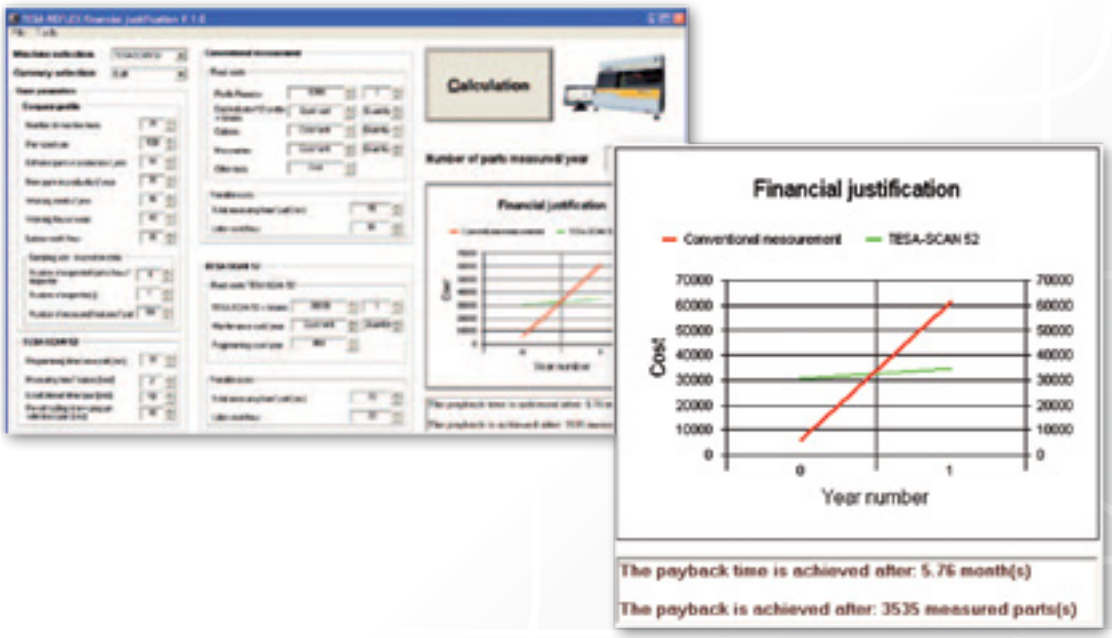
Thanks to the Pro-Measure flexibility and its open Procal language, software adaptations to fit your needs are possible.

Enclosures

Giving extra protection on the the shop floor, enclosures are available on request.

Auto-loading parts integration

To offer maximum flexibility and increase production levels, the SYLVAC-SCAN can be integrated into your workshop with various equipment.



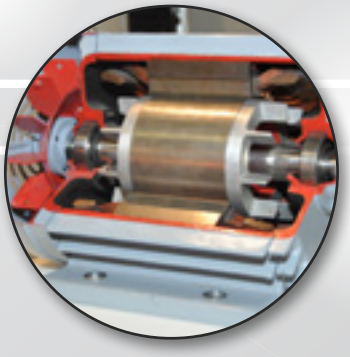
APPLICATIONS

AUTOMOTIVE

AEROSPACE

PHARMA

ELECTRO MOTORS



PACKAGING

MEDICAL

WATCH INDUSTRY

PLASTICS

APPLICATIONS

THREADS

CONNECTORS

MUNITIONS

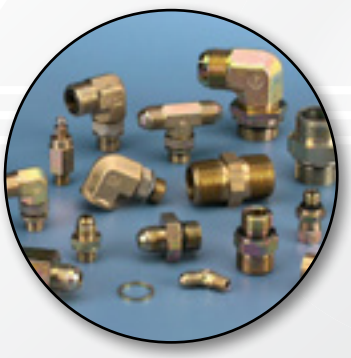
INJECTION MOULDING

COSMETICS

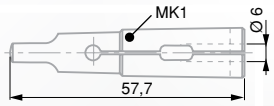
PLUMBING

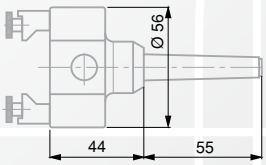
HYDRAULIC

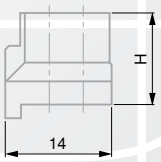
PNEUMATIC

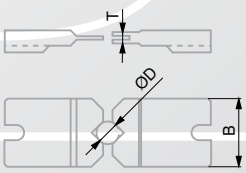


Accessories



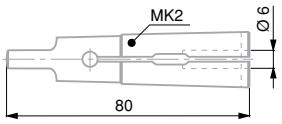
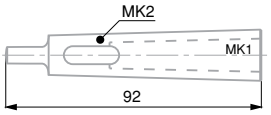
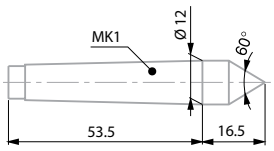
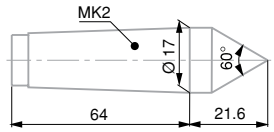
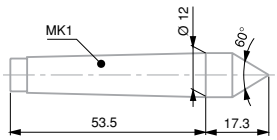
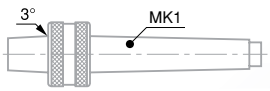
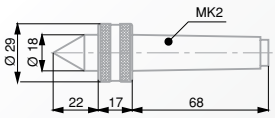


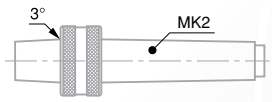
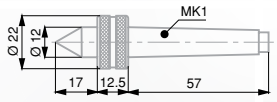
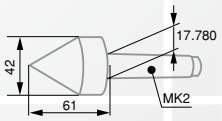
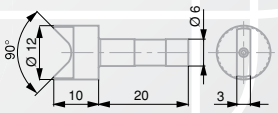
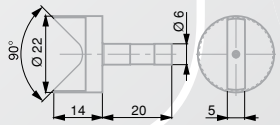
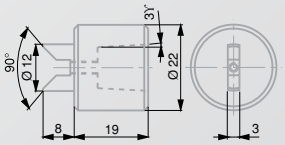
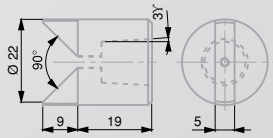




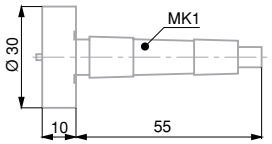
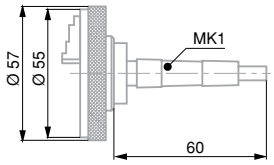
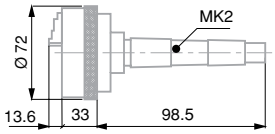
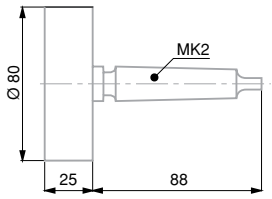
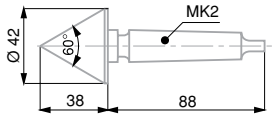
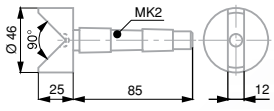
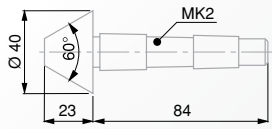
Order Number	Morse 1 SYLVAC-SCAN 25	Morse 2 SYLVAC-SCAN 50/52	Notes	Description
902.6250	✔			Center adapter with a 6 mm dia. coupling bore
902.6220	✔	✔ Requires 902.6360	Internal clamping for manual use	Two-jaw gripper
902.6231 H=22	✔ For 902.6220			Raising blocks for external jaws, in pairs
902.6141 0÷6 mm T = 1,5	✔ For 902.6220			External jaws, in pairs
902.6142 0÷6 mm T = 3				
902.6143 6÷12 mm T = 3				
902.6144 12÷18 mm T = 6				
902.6145 18÷24 mm T = 9				
902.6152 0÷6 mm T = 6				
902.6153 0÷6 mm T = 15				
902.6140 6÷12 mm T = 15				
902.6154 Set of jaws including: 902.6141 902.6142 902.6143 902.6144 902.6145		✔ For 902.6220		External jaws, in pairs

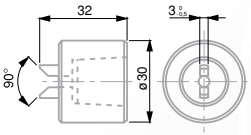
ACCESSORIES

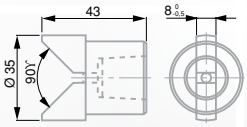
	Order Number	Morse 1 SYLVAC-SCAN 25	Morse 2 SYLVAC-SCAN 50/52	Notes	Description
	902.6251		✔		Center adapter with a 6 mm dia. coupling bore
	902.6360		✔		Reduction sleeve, Morse 2 to 1
	902.6201	✔		2 items provided with SYLVAC-SCAN 25	Extra male center, 10 mm
	902.6202		✔	2 items provided with SYLVAC-SCAN 50 and SYLVAC-SCAN 52 Reflex-Click	Extra male center, 17 mm
	902.6203	✔		Diamond coated 10 mm	Drive centre
	902.6160	✔		For added sleeves 902.6206 / 902.6207	Rotation center with a B12 male taper plus a Morse 1 taper shank
	902.6161		✔		Rotation center, Morse 2

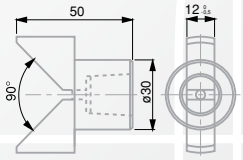
Order Number	Morse 1 SYLVAC-SCAN 25	Morse 2 SYLVAC-SCAN 50/52	Notes	Description
 **902.6162**		✔		Rotation center with a B12 male taper plus a Morse 1 shank
 **902.6163**	✔			Rotation center, Morse 1
 **902.6380**	✔			Rotation center, Morse 2
 **902.6204**	✔ Requires 902.6250	✔ Requires 902.6251		Female center, 10 mm dia.
 **902.6205**	✔ Requires 902.6250	✔ Requires 902.6251		Female center, 20 mm dia.
 **902.6206**	✔ Requires 902.6160			Female center, 10 mm dia. Also with internal B12 taper
 **902.6207**	✔ Requires 902.6160			Female center, 20 mm dia. Also with internal B12 taper

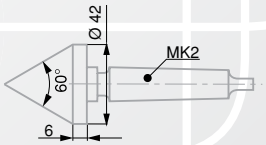
ACCESSORIES

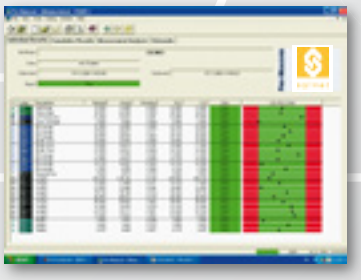
	Order Number	Morse 1 SYLVAC-SCAN 25	Morse 2 SYLVAC-SCAN 50/52	Notes	Description
	902.6208	✔			Platten, 30 mm dia.
	902.6300	✔	✔ Requires 902.6360	Clamping capacity : outside 1÷15mm, inside 11÷26mm	3-jaw chuck, clamping range 1÷15mm
	902.6301		✔	Clamping capacity : outside 2÷50mm, inside 23÷50mm	3-jaw chuck with Morse 2 taper shank, clamping range 2÷50mm
	902.6209		✔		Platten, 80mm dia, Also with a Morse 2 taper shank
	902.6210		✔	Diamond coated	Drive centre, Ø40mm. Also with a Morse 2 taper shank
	902.6340		✔		Female centre, 40 mm dia. Also with a Morse 2 taper shank
	902.6341		✔		Male centre, 15÷40 mm dia. Also with a Morse 2 taper shank





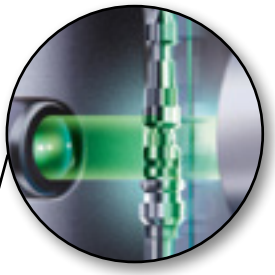




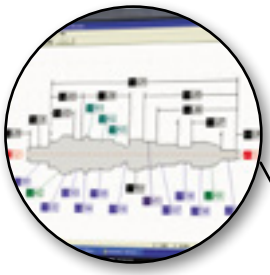


Order Number	Morse 1 SYLVAC-SCAN 25	Morse 2 SYLVAC-SCAN 50/52	Notes	Description
902.6310		✔ Requires 902.6162		Female center, 10 mm dia., Also with a B12 internal taper
902.6311		✔ Requires 902.6162		Female center, 30 mm dia., Also with a B12 internal taper
902.6312		✔ Requires 902.6162		Female center, 45 mm dia., Also with a B12 internal taper
902.6410		✔		Drive centre, 42 mm dia. max.
H02460076	Pro-Measure off-line programming (not for SYLVAC-SCAN 52)			

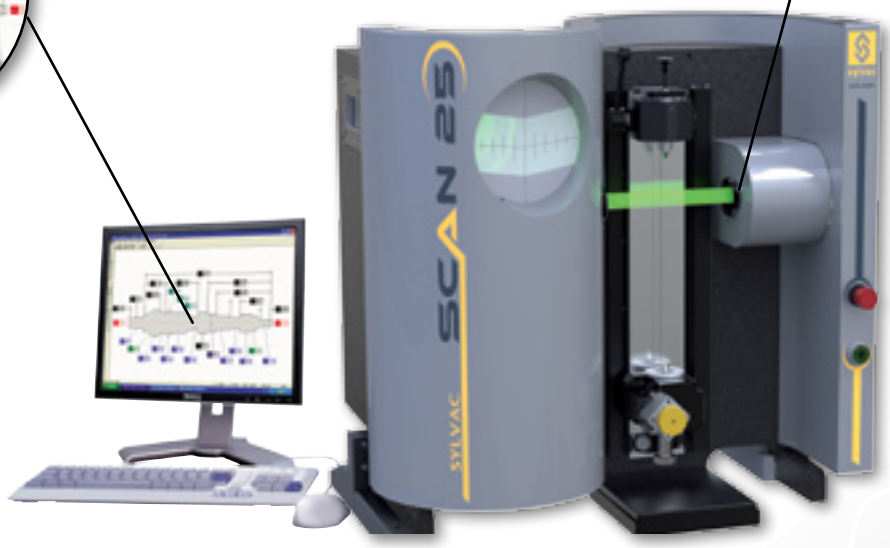
INSTRUMENT



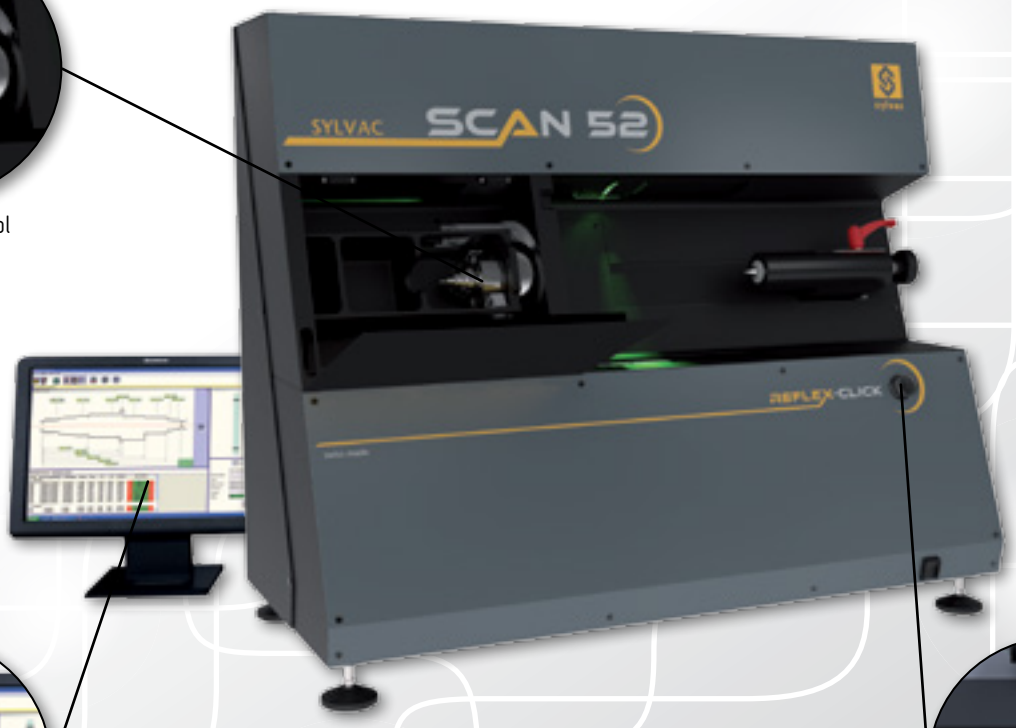
Part measurement



Pro-Measure software



Integrated control master



Sylvac Reflex-Scan software

One click measurement

SYL1508_SCAN_EN
Images may differ from reality. Change without prior notice
SWISS MADE

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