



SCAN S145 SYSTEMS

Optical Measuring Machines For Turned Parts



***Fast and precise optical dimensional
measurement for all cylindrical parts!***



www.fowlerprecision.com

SCAN S145 and S145L

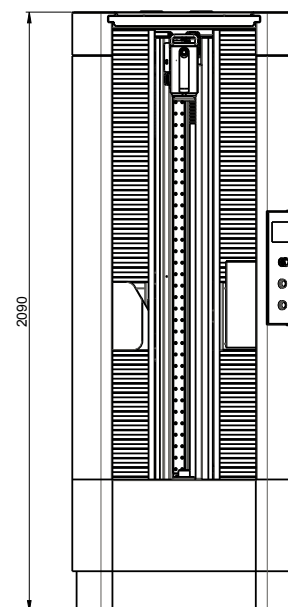
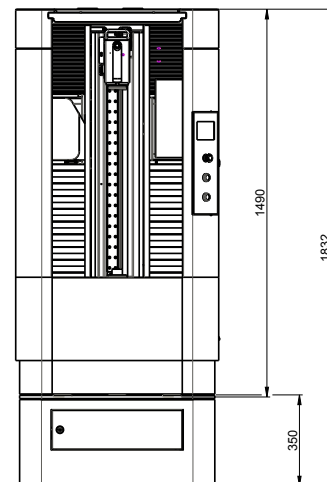
These machines are suitable for larger parts up to 5.7"/145mm diameter and 50.3"/1280mm length. They come equipped with the advanced Reflex-Scan+ software and are automation ready.

Features:

- Part measurement up to 5.7"/145mm diameter and up to 50.3"/1280mm length
- Fast, accurate, repeatable, reliable measurements of cylindrical parts
- Full part measurement in just a few seconds
- Easy to use software for operator use on the shop floor
- One click measurement, part recognition, auto measure
- Advanced and custom software features for complex parts
- Offline software and programming from CAD
- Full measurement reports and SPC compatible
- Automation ready
- Motorized tailstock
- Reduce inspection time, reduced scrap and save money!

INCLUDES:

- Instrument according to technical specifications
- 2 Adapters for Morse 2 , rotating center 42mm 54-902-638-0 and drive center 54-902-621-0
- Computer with screen, keyboard and mouse
- Windows multilingual operating system
- Sylvac Reflex SCAN+ software
- Plastiform case for optical machines
- Manual



TECHNICAL SPECIFICATIONS

SCAN S145 - 54-902-145-0			SCAN S145L - 54-902-145-5	
	Diameter	Length	Diameter	Length
Measuring range	5.7"/145mm	24.2"/615mm	5.7"/145mm	50.3"/1280mm
Resolution	Diameter: 0.0001mm / Length: 0.0001mm			
Accuracy	Diameter: (1.5 + D/100 μm) / Length: (4 + L/200 μm)			
Repeatability	Diameter: 0.5 / Length: 1.0 μm			
Holding Capacity	10"/254mm	24.2"/615mm	10"/254mm	50.3"/1280mm
Rotary Headstock	✓		✓	
Axial Measuring Speed	80mm/s			
Axial Positioning Speed	up to 200mm/s			
Rotational Meas. Speed	360°/s			
Maximum Part Weight	60 kg			
Machine Weight	530 kg		650 kg	

APPLICATIONS

Packaging



Medical



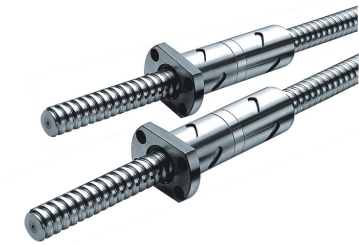
Watch Industry



Plastics



Threads



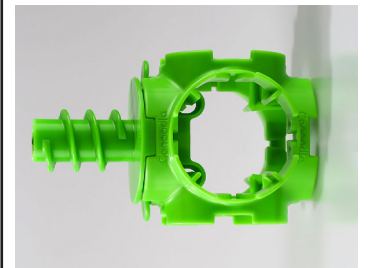
Connectors



Munitions



Injection Moulding



Cosmetics



Plumbing



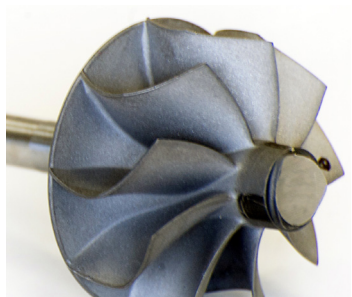
Hydraulic



Pneumatic



Automotive



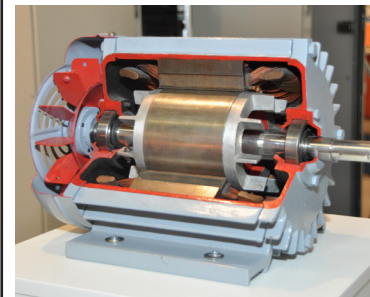
Aerospace



Pharma



Electro Motors



APPLICATIONS

Our range of Fowler/Sylvac machines are designed to measure round parts with diameters from 0.2mm up to 14mm and up to 1200mm long. Most 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.

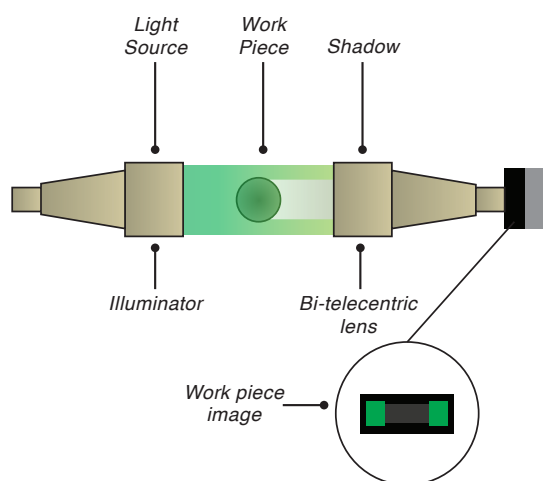
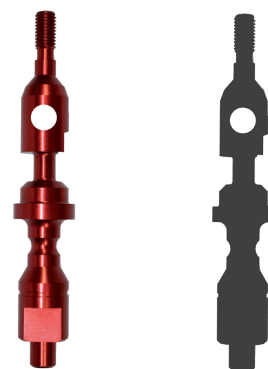
Diameter, circularity, concentricity, cylindricity, parallelism, runout circular, runout total, angulaity, perpendicularity and much more!



MEASURING PRINCIPLE

All Fowler Sylvac SCAN machines incorporate high resolution line-scan cameras, which would correspond to a 200 megapixel camera! Using the green LED illuminator to project a collimated beam of light across the part, the part is scanned at speeds up to 100mm/s, while the contour of the part is collected through the high precision bi-telecentric lens system and the projected image is detected and processed using the latest line-scan camera technology.

Workpiece Shadow Image



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

