



Accuflex

Portable Coordinate Measuring Machine

Accuflex is high performance & high accuracy portable coordinate measuring machine for shop floor environment



Accuflex

The Accuflex and the Accuflex Plus are two portable articulated Arm's CMM, ideal for quick & accurate inspection of components within its range on shop floor environment.

- The Accuflex line arms are high accuracy, repeatability and are lighter in weight
- The counter-balance system with a double spring also gives machine the characteristics of precision light-weight, ease of handling and more flexibility in the use
- The Accuflex Plus arm can be used also in the combination with the laser scanners for point cloud inspection or reverse-engineering, in the 7 axis configuration

- The version has some unique features like the magnetic break, which prevents accidental fall of the arm. It also has improved electronics for better performance
- It is the perfect equipment for contact or non-contact type measurement, it is also suitable for reverse - engineering and pipe inspection with laser fork and dedicated software





Accuflex EXPLORER

When you need to measure a large volume in the range of 5.0m to 9.0m, unique portable arm is available; the Accuflex Explorer. It is the perfect equipment you need for large size component measurement, with incredible accuracy and great flexibility.

When you need to inspect large volumetric and heavy parts, take the Explorer arm on the part & get the measurements done quickly.



- **EXPLORER** arm is a standard equipped with electromagnetic brake on the second axis, which allows the operator to lock the second axis at the required height and use the arm safely and comfortably.
- It is also suitable with laser fork for pipe inspection, laser scanning for Reverse-engineering and point cloud inspection. It is suitable with all our standard accessories

Accuflex MICRON

A new concept for portable articulated arm CMM designed to get the best accuracy performance with the best part access, thanks to its unique 5 axis design.

It's a portable CMM dedicated for precise part inspection in quality control or any other process where a touch probe control is necessary.

Accuflex MICRON is light-weight and is easy to handling, the counter-balance makes the movement of the axes extremely smooth. The operator holds the probe and guides the arm supporting only 15 gms weight.

It's the perfect case equipment for touch probe inspection when ease of use and high precision is necessary and should be within a hand's reach. The particular design of the arms allows access to the measurement of the workpiece around its outline, like no other CMMs can do!



Accuflex Plus & Laser Scanners

This is the combination of a 7 axis ARM & HI-END scanner ideal for complex profile contour scanning

Arm with laser scanner is used for complex part surface inspection and for reverse engineering of complex parts. It is ideal tool for inspection, point cloud to CAD comparison, rapid prototyping, reverse engineering & 3D modelling



Applications

- Fast & Accurate 3 D scanning
- Part to CAD inspection
- Geometric features inspection/ point cloud inspection
- Gap & Flush inspection
- Reverse Engineering
- Rapid Prototyping

ACCUFLEX series plus (6 & 7 axes arms) *= 2 sigma error (mm)

ACCUFLEX plus		Measuring Range	Volumetric accuracy	Point Repeatability*	Weight (kg)
ACCUFLEX plus 1.8	6 Axes	1800mm	0,020	0,012	8.4
ACCUFLEX plus 2.5		2500mm	0,026	0,016	8.9
ACCUFLEX plus 3.2		3200mm	0,036	0,020	9.3
ACCUFLEX plus 4.0		4000mm	0,046	0,024	10.0
ACCUFLEX plus 1.8	7 Axes	1800mm	0,027	0,017	8.9
ACCUFLEX plus 2.5		2500mm	0,030	0,020	9.4
ACCUFLEX plus 3.2		3200mm	0,045	0,026	9.8
ACCUFLEX plus 4.0		4000mm	0,056	0,030	10.5

ACCUFLEX					
ACCUFLEX 1.8	6 Axes	1800mm	0,025	0,018	7.9
ACCUFLEX 2.5		2500mm	0,036	0,022	8.4
ACCUFLEX 3.2		3200mm	0,045	0,032	8.8
ACCUFLEX 4.0		4000mm	0,060	0,040	9.5

explorer (6 & 7 axes arms) *= 2 sigma error (mm)

ACCUFLEX explorer					
explorer 5.0	6 Axes	5000mm	0,065	0,038	12,5
explorer 7.0		7000mm	0,080	0,048	14.0
explorer 9.0		9000mm	0,100	0,060	16.5
explorer 5.0	7 Axes	5000mm	0,075	0,050	13.5
explorer 7.0		7000mm	0,090	0,060	15.0
explorer 9.0		9000mm	0,110	0,070	17.5

micron (5 axes arms) *= 2 sigma error (mm)

ACCUFLEX micron		Measuring Range (Cube Side)			
micron 250	5 Axis	250mm	0,004+L/50	0,005	12
micron 400		400mm	0,006+L/40	0,007	14



Hard Probe

- The Mechanical probe is the standard touch probe, available with different sphere diameters
- Points can be taken by touching and pressing green button.
- The smallest available probe diameter is 1 mm and any Renishaw standard M4 stylus can be used



Touch Trigger- (Renishaw LP2) Probe

- The touch trigger probe acquires points by applying the minimum force on the measured part
- Its very precise, quick and comfortable in use, acquires points only by touching the surface without triggering buttons
- Stylus are available in different diameter and lengths. It is a standard Renishaw™ Probe (Model LP2 Kit)



Floating Probe (EXCLUSIVE FEATURE)

- Is the new revolutionary new concept probe designed by Accurate. It is a rigid mechanical probe suspended on a spring driven by an aluminium ring that triggers the probe with a simple touch. The integrated force control avoid to apply uncontrolled load on the part, improving accuracy and repeatability
- The control ring is isolated from the probe stylus to avoid thermal impact from the hands of the user



Mobile Tripod

- Stable and practical, is the ideal accessory to move easily and quickly the accuflex arm. The handwheel at the base allows you to quickly switch the retractile wheels from measurement position to mobile position, and vice versa in a gradual way without shocks
- The Tripod is adjustable in height (range 900-1400mm) and the weight of the tripod column is balanced by a gas spring. A side handle allows for vertical and horizontal movement of the tripod. A removable and rotary shelf allows positioning of the laptop next to the measuring arm.



Magnetic Mount

- Magnetic mount allows any accurate arm to be mounted to surface plates, tool beds and other ferrous surfaces



Laser Fork

- Laser fork is suitable for pipe inspection with dedicated software.