

Multi Axis Motion Unit

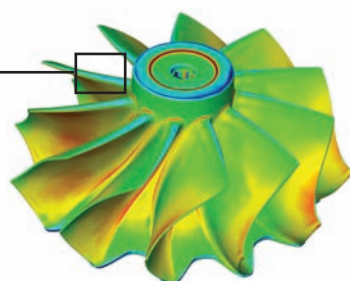
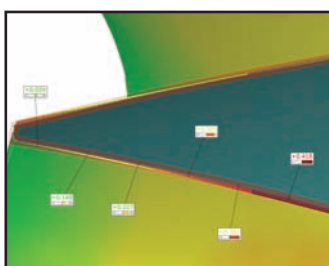
Fully Automated Measurement Cell

The Multi Axis Motion Unit has been designed for fully automatic measurement of small to mid-size parts up to approx. 400 mm². With the 6 freely automated movement axes; 3 rotation and 3 translation axes, the Multi Axis Motion Unit assists the measurement of even the most complex parts.

Equipped with the ATOS SO 3D Digitizer, the Multi Axis Motion Unit allows complete 3D scanning of components. The ATOS SO systems are mainly used for complex small parts with high demands on accuracy and data quality.

Fully automated measurement with the Multi Axis Motion Unit has a number of advantages:

- Throughput - Increase the number of parts scanned per hour to maximise the investment made in the measurement system. By recording the measurement plan, the system is able to repeat the process over and over much quicker than is possible by operators.
- Repeatability - Measure each part in precisely the same way by using the repetitive process of the machine, eliminating the variability of different operators.
- Productivity - Allow human assets to be more productive by analyzing results rather than completing monotonous tasks better suited for machines.
- More comprehensive inspections - More complete part information compared with traditional methods.



Complete Control within ATOS Software

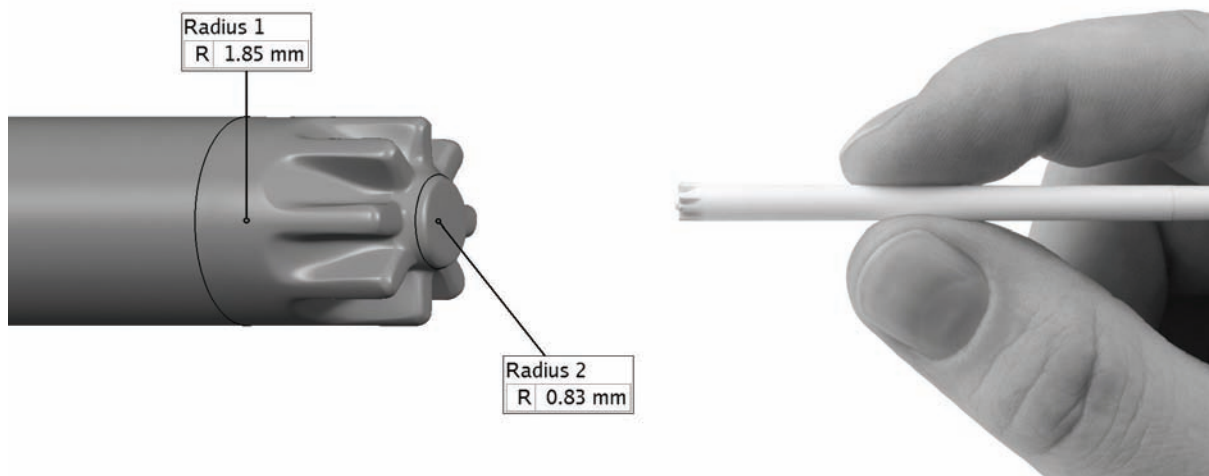
The Multi Axis Motion Unit is controlled directly from the ATOS Software. The automation protocol manages all movements and measurements and has advanced exception handling for automatic measurement repetition on errors or problems.

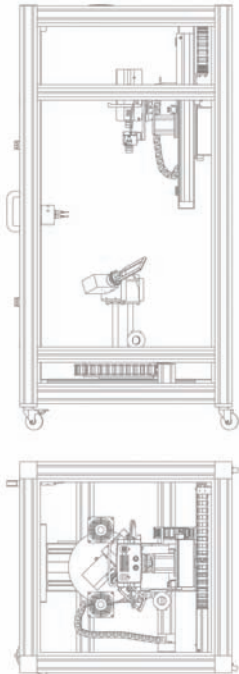
Integrated Hardware and Software Solution

Alongside the complete automated control of the Multi Axis Motion Unit, the ATOS Software is a data editing and complete inspection package capable of:

- CAD import and registration (CATIA V4/V5, Pro/Engineer, IGES, STEP, VDA, ...)
- Import of measurement plans and inspection lists (DMIS, CATIA-List, ...)
- Creation of full-field inspection plots
- Section based analysis
- Deviation measurements of individual points
- Geometric Dimensioning and Tolerancing (GD&T)
- Classic comparison to drawings and dimensional control

The free ATOS Viewer is also available to present the measurement results. The results are freely available to customers and colleagues for discussion and further analysis.



	Technical Data	
	Dimensions	1000 x 1000 x 2000 mm ²
	Weight	260 kg
	Max. Measurement Volume	ATOS III 50 MV300
	Max. Part Size	up to 450 x 400 x 200 mm ²
	Typ. Part Weight	1 - 2 Kg
	Traverse Path of Linear Units	± 190 mm
	Rotation Angle of Large Rotation Table	± 120°
	Rotation Angle of Swivel Axis	-60° to 150°
	Rotation Angle of Small Rotation Table	360°
	Speed of the Linear Units	max. 30 mm/s
	Speed of the Rotation Tables	max. 180°/s
	Speed of the Swivel Axis	max. 90°/s
	Maximum Torque without Holding Current	0,4 Nm
	Maximum Torque with Holding Current	3,3 Nm
	Cable Length	3 m
	Number of Axis	6
	Driver Type	Step Motor
	Translation Stage	Lead Screw
	Power Supply	230V / 110V