

TIMI Intelligent Shaft Dimensional Inspection System

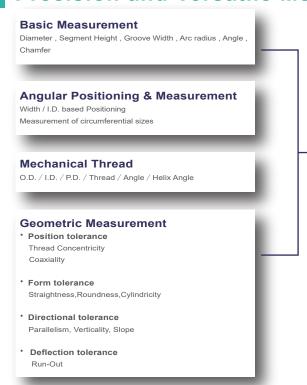
Precise+Fast+Effective

Rapid full-size measurement during the manufacturing process Measurement data streaming enterprise ERP/MES system



- ◆Micron-level measurement Precision.
- ◆User-friendly interface. Simple Automatic Programing.
- Automatically measure full sizes with a large field of view.
- ◆Rotational position and measure with speed and precision
- ◆Integrated measuring system with multiple gauging functions.
- ◆Transcription-free with TIMI measurement database system.
- ◆The TIMI system is compatible with any ERP system.
- ◆Machine with a robot arm to automatically load and unload shafts.

Precision and Versatile Measurement





Full Dimension Measurement

Measure 40+ items in 30 seconds, such as diameter, segment difference, angle, arc radius, chamfer and machanical thread.

Runout Measurement

Specify any position C, rotate and scan it for one circle, and runout can be measured in as fast as 3 seconds with respect to A,B axis.



Concentricity Measurement

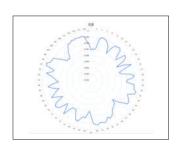
TIMI can automatically detect the center coordinates of any two cross-sections of a shaft and calculate the axial diviation.

Roundness Measurement

TIMI system can rotate the shaft to measure the roundness without centering the axis, and the measuring resolution reaches 0.1µm.



Center Coordinates and Pitch Diameter



Roundness



Management Database: Complete production history / quality assurance

 Access data analysis of measurements at any point during the process, and export it for process capability analysis and fault tracing.

MDB Database Application Software (Standard)



Manually enter product inspection information.

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	100 10031/10719															

Collate measuring data. Browse data for basic analysis.



Measuring data is saved in real-time.



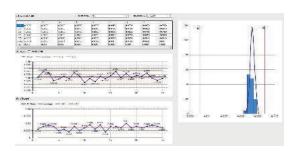
Print inspection checklist and save as a PDF report.

Data can be exported in Excel format.

MDB database Application Software (Optional)



Link ERP/MES for import or export of prodcution/quality control information.



Query historical measurement data and analysis. (e.g. X bar, R chart, Cpk)



Hybrid data can be imported. (including data from other gauges)



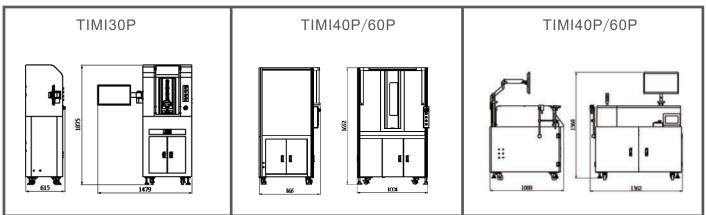
Print and export inspection checklist as well as create your own.



Spec Model	TIMI30P	TIMI40P	TIMI60P					
Measuring Diameter (D)	ø30mm	ø40mm	ø60mm					
Measuring Length(Z)	300mm	300mm 400mm						
Rotatable range (R)	360°							
Repeatability (D)[#1]	±0.2µm	±0.2µm	±0.3µm					
Uncertainty (D)[#2]	±(2+D[mm]/100)μm							
Image Resolution	14µm	19µm	25µm					
Minimum display unit	0.1µm							
Rotational Resolution (R)	≦0.1°							
Clamping Method	Center Tips							
Central Processing Unit (CPU)	Intel Core i5 or plus							
Memory Capacity	8GB RAM, 128GB SSD, 500GB HDD							
MonitorMonitor	22 " LCD							
Operating System	Windows10							
Weight (without computer)	300Kgs	350~450Kgs	350~450Kgs					
Power Supply	110~240V,50~60Hz,10A (single or three phase)							
Operating Ambient Temperature	0°~45°C							
Operating Ambient Humidity	≦ 80 %							

 $^{\#1: \} Repeatability \ is \ calculated \ by \ measuring \ the \ fixed \ position \ of \ a \ standard \ gauge \ repeatedly \ without \ the \ connection \ of \ the \ motion \ mechanism \ and \ estimating \ the \ statistical \ value \ \pm 2\sigma.$

Machine Size



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^{#2}: The measurement uncertainty is calculated by arbitrarily measuring a standard gauge without the connection of the linear motion mechanism and estimating the statistical value $\pm 2\sigma$.