Mitutoyo

NEW Product

NEWS

Bulletin No. 1563

i-Checker

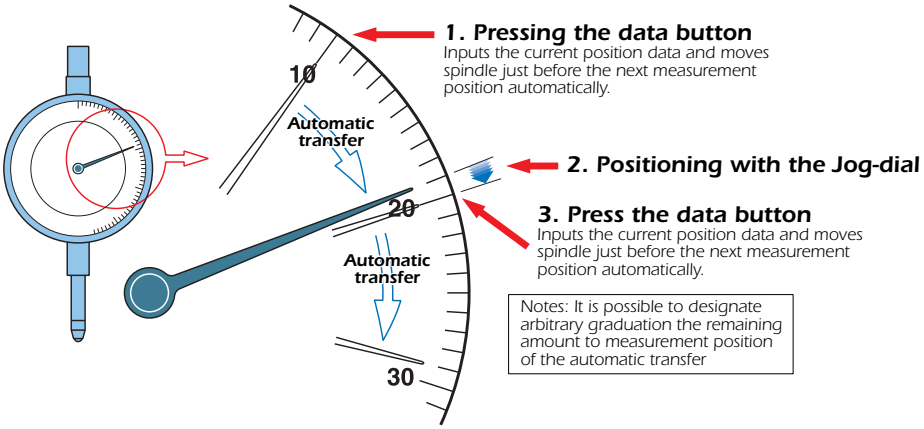
Full/Semi-Automatic Inspection System

(personal computer optional)

Inspect your analog indicator semi-automatically!

• The pointer of the analog indicator is positioned just before the measuring point automatically via Mitutoyo's Semi-automatic Measurement function. After that, inspection begins simply by adjusting the pointer position with the jog-dial. Because of this function, measurement time is reduced and user fatigue is eliminated. Additionally all functions necessary for inspection are combined in the control box for easy operation.

Attached bore gage accessory set (optional)



1. Pressing the data button
Inputs the current position data and moves spindle just before the next measurement position automatically.

2. Positioning with the Jog-dial

3. Press the data button
Inputs the current position data and moves spindle just before the next measurement position automatically.

Notes: It is possible to designate arbitrary graduation the remaining amount to measurement position of the automatic transfer

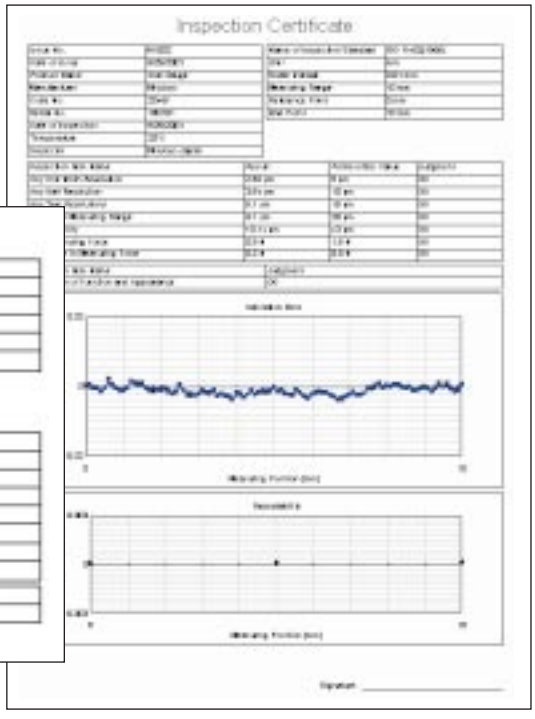
Attached test indicator accessory set (optional)

Fully automatic inspection of digital indicator

• The Automatic Measurement function, in tandem with a digital indicator makes the spindle move so that measurement data is acquired automatically. Therefore, manual adjustment to the measurement position is unnecessary and the efficiency of every inspection is enhanced.

Create and printout a simplified inspection certificate

• It is possible to create, edit and print out your own inspection certificate, and that data can be saved as a CSV file.



Inspection Certificate

Issue No.	M1002	Name of Inspection Standard	ISO 9453(1985)
Date of Issue	5/29/2001	Unit	mm
Product Name	Dial Gauge	Scale Interval	0.01 mm
Manufacturer	Mitutoyo	Measuring Range	10 mm
Code No.	2046F	Reference Point	0 mm
Serial No.	100101	End Point	10 mm
Date of Inspection	5/29/2001		
Temperature	20°C		
Inspector	Mitutoyo Japan		

Inspection Item Name	Result	Permissible Value	Judgment
Any One-tenth Revolution	2.52 µm	5 µm	GO
Any Half Revolution	3.54 µm	10 µm	GO
Any Two Revolutions	5.1 µm	15 µm	GO
The Total Measuring Range	6.1 µm	20 µm	GO
Repeatability	+0.14 µm	±3 µm	GO
Max. Measuring Force	0.9 N	1.5 N	GO
Difference in Measuring Force	0.2 N	0.6 N	GO

Inspection Item Name	Judgment
Inspection of Function and Appearance	GO

SPECIFICATIONS

i-Checker main unit

Order No. 170-303A

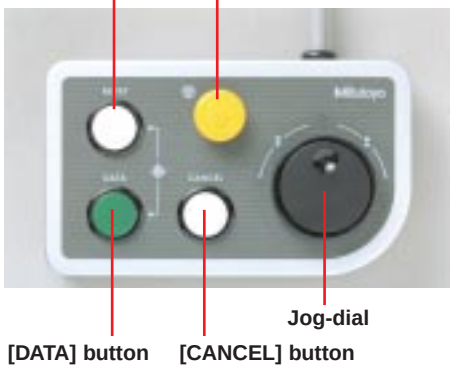
Item		Contents
Measuring Range		100mm/4"
Resolution		0.02µm/1.24µin
Accuracy (at 20°C)	vertical position	±(0.2+L/100)µm L = Arbitrary length
	lateral position	±(0.3+2L/100)µm L = Arbitrary length
Feed speed		4mm/sec (max.)
Drive method		Motor drive
Measuring Unit		Reflective-type metal linear encoder
Thermal expansion coefficient of measurement mode		(8±1)X10^{-6}/K
Measurement method		Semiautomatic measurement Fully automatic measurement*1 Digimatic Indicator with RS-232C output*2
Input data connector		Digimatic data input connector X1*3 Flat cable connector 10pin/equivalent to XG4-1301 from OMRON*4
Dimensions (W x D x H)		184 x 225 x 532mm/7.24" x 8.86" x 20.94"
Operating temperature range		20°C ±3°C
Operating humidity range		58%RH±15%RH (Only free of condensation)
Storage temperature range		-10°C to 50°C
Storage humidity range		5%RH to 90%RH (Only free of condensation)
Power supply		100VAC to 240VAC ±10%, 50/60Hz
Mass		20kg/441lbs

*1 Automatic measurement requires the indicator's connection cable. Additionally some form of indicator, along with a connecting machine (the optional accessory for indicator as a digimatic power-supply unit on EF counter) will be needed.
*2 The indicator that can be measured via RS-232C is the one equipped with the function to receive the "send data" request command form from the main unit and can output the counter value to the main unit.
*3 For the RS-232C connector, uses the connector from a computer
*4 The connection cable connector is equivalent to MIL-DTL-83503/7D-10.

*Personal computer and printer are optional.

Operation Box

Item		Contents
Switch	Jog-dial	Shuttle moves main unit spindle up and down.
	[DATA] button	Use for acquiring the measurement data.
	[RETRY] button	Handy for retrying "measurement positioning". Automatically removing indicator hysteresis
	[CANCEL] button	Deletes previous data and measures it again.
	[STOP] switch	Forcibly halts operation.
Dimension (W x D x H)		170 x 100 x 55mm/6.69" x 3.94" x 22.17"
Mass		1kg/2.2lbs.



Applicable computer and printer*1

Item	Operating environment (minimal condition)	Suggested environment
Machine type	IBM-PC compatible	
OS	Windows 2000 or NT4.0 (SP3 or newer + IE 5.0 or newer)	
Microprocessor	Pentium III 450MHz	Pentium III 600MHz or more
Memory	64MB	128MB or more
HDD	more than 50MB free space except for OS	more than 1GB free space except for OS
Drive	CD-ROM, FDD	
Interface	Parallel (for printer) X1 RS-232C (for full-automatic measurement) X1	
Slot	PCI (PCI2.1 Compatible) X1: for control board	
Screen resolution	1024 (W) x 768 (H) x High Color (16Bit)	1024 (W) x 768 (H) x True Color (32Bit)

*1 Windows supporting printer

i-Pak

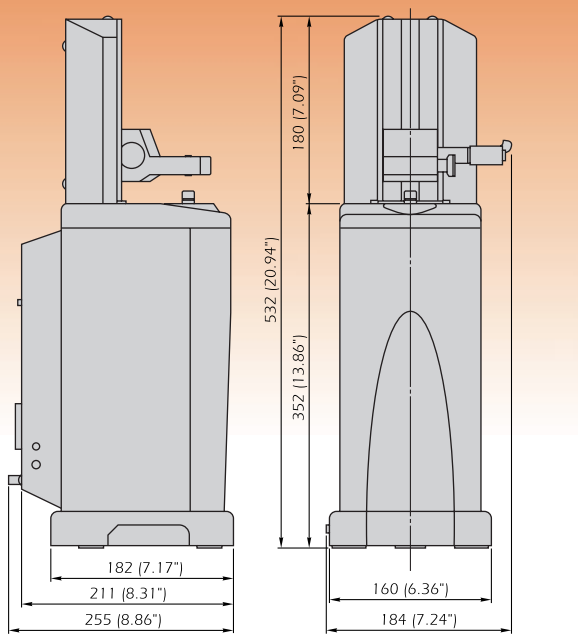
Item		Contents
Supporting industrial standard*1		ISO, JIS, JMAS, DIN, VDI/VDE/DGQ, ANSI/ASME
Basic functions		•Create an inspection standard conforming to the industrial standards. •Create an original inspection standard, though customization industrial standard •Inspect an indicator using a newly created inspection standard (inspection for accuracy, dispersion) •Create and print of simplified inspection certificates. •Display measurement results graphically.
Other functions	Warning	This window is displayed when the measured value exceeds the limit during the semiautomatic inspection
	Re-measurement	It is possible to confirm the measuring data, by re-measuring the specified position after the inspection
	Display of inspection manual	Display the inspection manual when starting an inspection*2
	Retry	Use for retry the "measurement positioning". (it removes the hysteresis of indicator automatically)
	Password	Restricted access through by password registration

*1 Refer to the reference materials (attached paper) for details about support for industrial standards.
*2 To create an inspection manual, it is necessary to install the application software used to create the document, in the computer where i-Pak is installed.

NEW Product News

DIMENSIONS

Unit: mm (inch)



Optional accessories

Attachment

02ASK000	Test indicator accessories set (ø6 stem)
02ASK180	Test indicator accessories set (ø8 stem)
02ASK370	Test indicator holder (ø6 stem)
02ASK380	Test indicator holder (ø8 stem)
02ASK110	Bore gage accessories (1 set)
902803	ø6 dovetail grooved stem
902804	ø8 dovetail grooved stem

Stem bush

02ASK040	Stem bush ø6
02ASJ856	Stem bush ø8
02ASK150	Stem bush ø8, short
02ASK050	Bush ø9.5*
02ASK060	Stem bush ø12
02ASK070	Stem bush ø15
02ASK080	Stem bush ø20
02ASK090	Stem bush 3/8"
02ASK130	Case

*Requires 02ASK070

Cable*1

905338	Connecting cable (1m/40")
905409	Connecting cable (2m/80")
936937	Connecting cable (1m/40")
905014	Connecting cable (2m/80")
905387	Connecting cable (1m/40")
905013	Connecting cable (2m/80")

*1: for automatic measurement

Others

02ASK730	Reflector
937179T	Foot switch

Computer Systems

Code No.	Description
64AAA355	Dell System w/17" Monitor included; printer HP-950C deskjet
64AAA356	Dell System w/15" Flat Monitor included; printer HP-950C deskjet

Distributed By:

Willrich Precision
Ph 866-945-5742
email: sales@willrich.com

Mitutoyo
www.mitutoyo.com

Mitutoyo America Corporation

© 2002 Mitutoyo America Corporation, Aurora IL

We reserve the right to change specifications and prices without notice.

7A-15 • Printed in USA • November 2002