MarForm® MMQ 100

MarForm MMQ 100 with Easyform
and 23" Touchscreen All-In-One PC

Form measurement made easy

- Powerful and simple MarWin EasyForm software
- Operate from Touchscreen or with keyboard and mouse
- Fast, precise measuring results
- Proprietary Ultra precision Mechanical bearing C-Axis – no maintenance, no compressed air required
- Large measuring volume
- Fast workpiece alignment assisted by EasyForm

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MarForm MMQ 100

Features

The MarForm MMQ 100 offers outstanding accuracy in a robust package designed for use in production environments. Used in combination with the EasyForm software, it represents the perfect solution for simple, yet powerful measuring tasks.

- Precise and fast measurement results
- Reliable thanks to mechanical bearings
- Large measuring volume
- Fast workpiece alignment thanks to computer support
- Centering and tilting screws for rough and fine adjustment
- Universal and reliable
- Suitable for use in workshops since no compressed air connection is required
- No keyboard or mouse required
- Optional digital transmitters in Z and X transmit the measuring position directly to the software

Optimized for frequent form measuring tasks

- Roundness (also in a section)
- Flatness (from one circle)
- Concentricity
- Coaxiality
- Radial run-out
- Axial run-out
- Plane parallelism from two opposite circles
- Fourier/waviness analysis.

(1) From a polar trace

EasyForm Touchscreen Software

If you want to use a form measuring instrument in a production environment, you don't want to have the hassle of a keyboard and a mouse.

The **touchscreen operation** makes measurement simple. All the necessary functions are available at the touch of your finger tip. The number of steps required to produce a record are minimized, enabling you to reduce your personnel and operating costs. You can perform a roundness measurement in two simple steps. What is more, the software guides you through each setting you want to make.

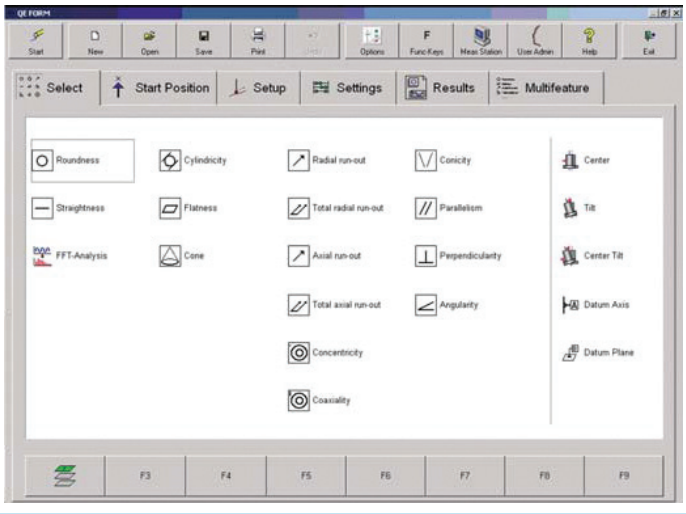
The **Easy Form software** records each step of your measurements. No matter whether you want to repeat the most recent measurements or decide to combine various measurements and evaluations of a workpiece in a feature sequence, programs can be created interactively in the **Easy Form teach-in mode**.

You can save your measuring tasks under one of the programmable function keys.

EasyForm is based on highly optimized **MarWin** measurement and evaluation routines and can be combined with other MarWin modules. EasyForm operates under the Windows® operating system and features functions for user administration, network support and for electronic storage of records, and can be expanded for future options.

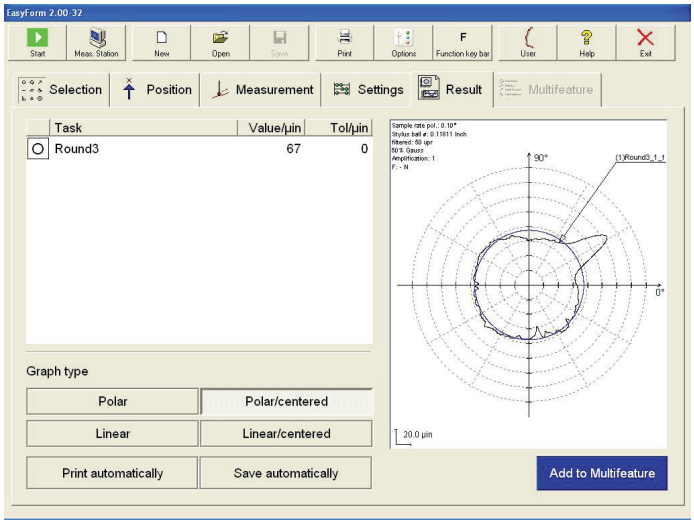
The easiest way of operating a measuring instrument.

- Intuitive user interface for immediate measurements
- Interactive, automatic program creation
- 3D representation of cylindricity, flatness and total run-out in color or also with grid lines and interactive graphic preview
- Immediate display of measuring results on the screen
- Concise measuring records on the screen, as a file (also in the network) or on paper (any Windows printer)
- Operating system: Windows®

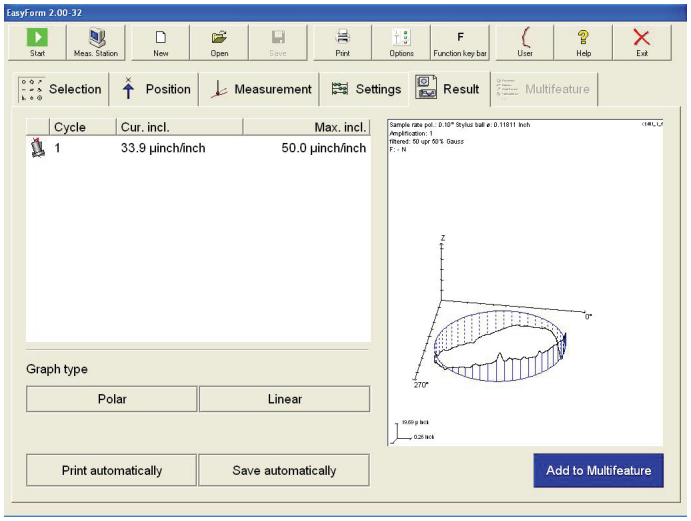


EasyForm Touchscreen Software

In order to be able to identify production errors immediately and eliminate them as quickly as possible, metrology is more important than ever for testing form and positional deviations. It helps you to minimize time consuming and costly reworking and rejection rates. But these measurements must not place undue stress on your workforce. It must be able to perform them quickly, easily and without the potential of operator error. Clear icons and logical defaults minimize the need for data entry.

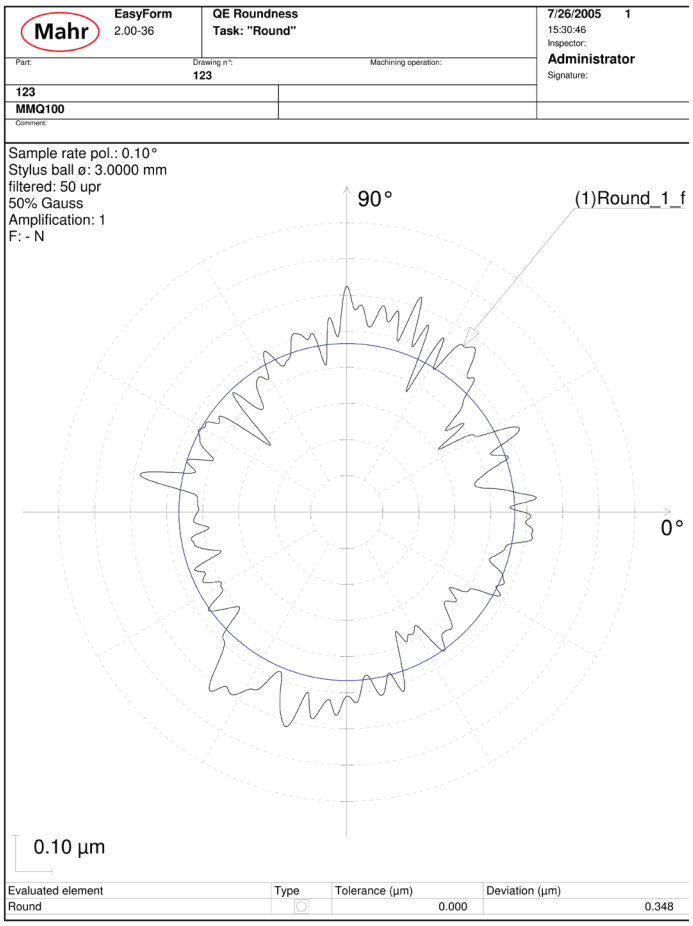


Workpiece alignment is supported by the computer. The measuring position is automatically recorded by the software. Detailed 3D graphics add to the information content of your measurement results. Moreover, you can also interactively rotate the graphic as desired for optimum presentation of the measurement result.

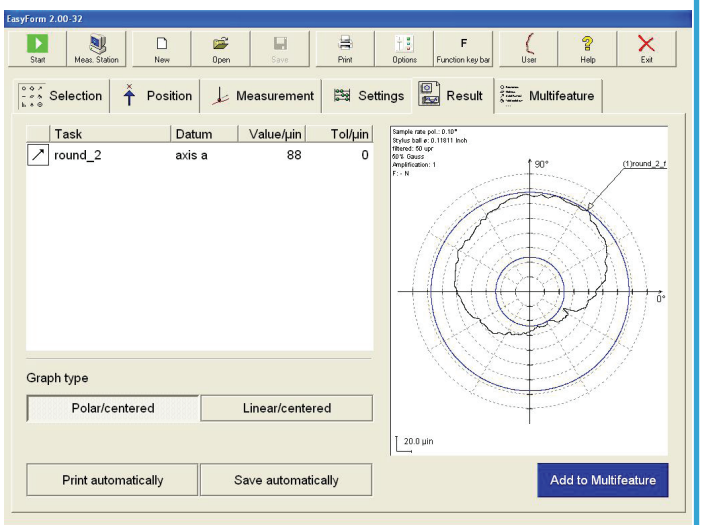


The 32 touchscreen function keys can be identified with images or drawings of your workpieces and assigned to the relevant measuring programs. This means that only one touch is required to carry out the relevant measurement. It is also possible to create a measuring run without any programming knowledge. Furthermore, the closed system is protected by user administration from unintentional changes.

EasyForm Touchscreen Software



This means that you cannot only measure the quality of your products in compliance with standards, but also depict it in a clear and informative manner. Naturally, the measuring records can be stored electronically, documented in paperless form and sent electronically, e.g. by e-mail. The versatile Windows® PC peripherals with their high resolution printers also enable perfect documentation of your measurement results in color or black and white.



Probe T20W

The inductive **T20W** probe is universally applicable. The fact that the probe arm can be moved in a range of 190° and that there are a variety of clamping options for the probe means that measurements can also be performed in areas that are difficult to access. You can combine easily exchangeable probe arms with a variety of styluses in order to adapt the probe to the relevant measurement tasks or workpieces.

T20W probe with probe arm range of 190°

- Measuring range± 1,000 µm
- Measuring force adjustable from 0.01 N to 0.12 N
- Switchable measuring direction
- Exchangeable probe arm
- Free travel limitation adjustable in contacting direction
- Clamping shaft dia. 8 mm (0.31 in)

Formtester MMQ 100 - Technical Data

Measuring station MMQ 100	**Order no. 2185805** (with Desktop PC and Monitor)
Measuring station MMQ 100	**Order no. 2185912** (with all-in-one PC)
Roundness measuring device, C-axis	
Roundness deviation (µm+µm/mm measuring height)**	0.05 + 0.0006
Roundness deviation (µm+µm/mm measuring height)*	0.025 +0.0003
Axial run-out deviation (µm+µm/mm measuring radius)**	0.04 + 0.0006
Axial run-out deviation (µm+µm/mm measuring radius)*	0.020 +0.0003
Centering and tilting table	Manual rough and fine adjustment
Table diameter	160 mm (6.30 in)
Table load capacity, centric	200 N (44.96 lbf)
Rotational speed (rpm) 50 Hz / 60 Hz	5 / 6
Vertical unit, Z-axis	
Positioning path	300 mm (11.81 in)
Positioning	manual
Horizontal unit, X-axis	
Positioning path	180 mm (7.09 in)
Positioning	manual
Measuring volume	
Test diameter up to	375 mm (14.76 in)
Measuring height up to	470 mm (18.50 in)
Distance C-/Z-axis	190 mm (7.48 in)
Dimensions, weight	
Length	470 mm (18.50 in)
Width	300 mm (11.81 in)
Height	545 mm (21.46 in)
Weight approx.	28 kg (61.73 lbs)
Connection data	
Mains voltage	(V/Hz-VA) 230 (115) / 50 (60)-20

*Values as max. deviation from reference circle LSC at 20 °C ± 1 °C (68 °F ± 1 K) in anti-vibration environment, filter 15 upr, 5 rpm and standard probe arm with ball dia. 3 mm

.**All values to DIN ISO 1101 at 20 °C ± 1 °C (68 °F ± 1 K) in anti-vibration environment, filter 15 upr LSC, 5 rpm and standard probe arm with ball dia. 3 mm. Tested on standard using separation methods.

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