

2nd edition
2020

Mahrlights

In this edition:

MarSurf M 310 Set:

Mobile roughness measuring instrument with superior convenience

Info | Page 2

Integrated wireless:

Best performance in every step

Info | Page 4

MarSurf PS 10 mobile:

Simple and intuitive to use

Info | Page 19

MarSurf XC basic:

Simple and highly accurate measuring

Info | Page 24

Precimar ICM 100 IP:

For the practical inspection of measuring equipment

Info | Page 26

MarForm MMQ:

The form measuring station for outstanding accuracy

Info | Page 30



Mobile roughness measurement – **guaranteed success!**

We're used to being able to access our data anytime anywhere on our smartphones. Why shouldn't we be able to do it with a measuring instrument too? That is exactly what Mahr's new MarSurf M 310 provides you with: a flexible all-rounder for the mobile recording and evaluation of measuring data. Thanks to its ease of operation and robust design, this new Mahr product is perfect for use in production, where dirt and dust clog the instrument and users performing quality control often have limited knowledge.

Advantages

- Simple operating concept for intuitive handling without training
- Pre-programmed functionalities and automatic filter selection (auto cutoff) during measurement – no specialized knowledge necessary
- Large, bright display for ease of use and maximum overview
- Transfer of measuring records and data optionally via Bluetooth or cable
- Easy traceability of measuring results
- Optional thermal printer to print out results and profiles
- Wide range of accessories offers you superior flexibility
- Well protected against dirt and dust for use in virtually any environment
- Always at hand: The integrated calibration standard is always available for monitoring
- Micro USB interface for remote control using ASCII commands, e.g. using software for statistical process control
- Save measuring programs

Status at a glance

We have equipped the MarSurf M 310 with two easily visible status LEDs so that you can see the instrument status with one quick look. Depending on the color of the signal, you can see if measurement is underway, data are being transferred or if there might be an error. Thanks to the display, you can also see the charging status of your M 310.

Robust in every aspect

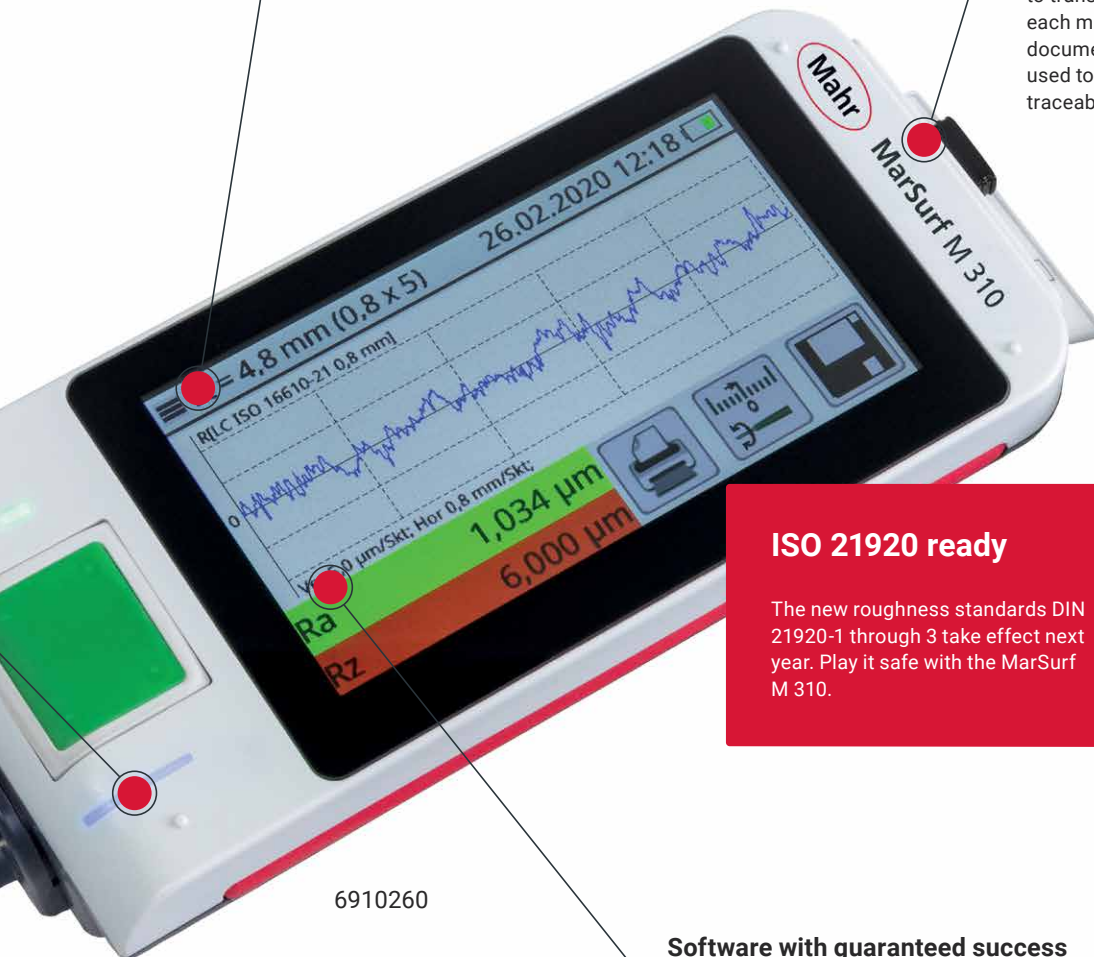
Whether it's during the incoming inspection, production or in the open air: the new MarSurf M 310 is equipped for almost every environment. Thanks to the robust skidded probe system, the mobile measuring instrument is also less sensitive to vibration. And thanks to its open skid, it's easy to clean the PHT probe.

State-of-the-art optics, perfect display

It's clear: a large, high-resolution, backlit 4.3 inch TFT display is what characterizes the MarSurf M 310's state-of-the-art appearance and precisely displays your measuring results. The touchscreen makes it intuitive to use - just like you are used to with your smartphone.

IATF ready

Fitted with the reliable MarConnect Duplex interface, the MarSurf M 310 makes it possible to transfer a measuring equipment ID with each measurement. This way you can safely document which measuring instrument was used to conduct a test, guaranteeing the traceability of your measuring results.



ISO 21920 ready

The new roughness standards DIN 21920-1 through 3 take effect next year. Play it safe with the MarSurf M 310.

6910260

£ 3510

MarSurf M 310 SET

Software with guaranteed success

MarSurf M 310 – the measuring technology for everyone: this measuring instrument delivers reliable roughness parameters, even without specialized knowledge or training. This software is simple and intuitive to use and it features clear menu structures and a wide range of pre-programmed measuring functions, forming the basis for guaranteed measuring success.



Sample application: MarSurf M 310 SET with printer (order no. 6910267)

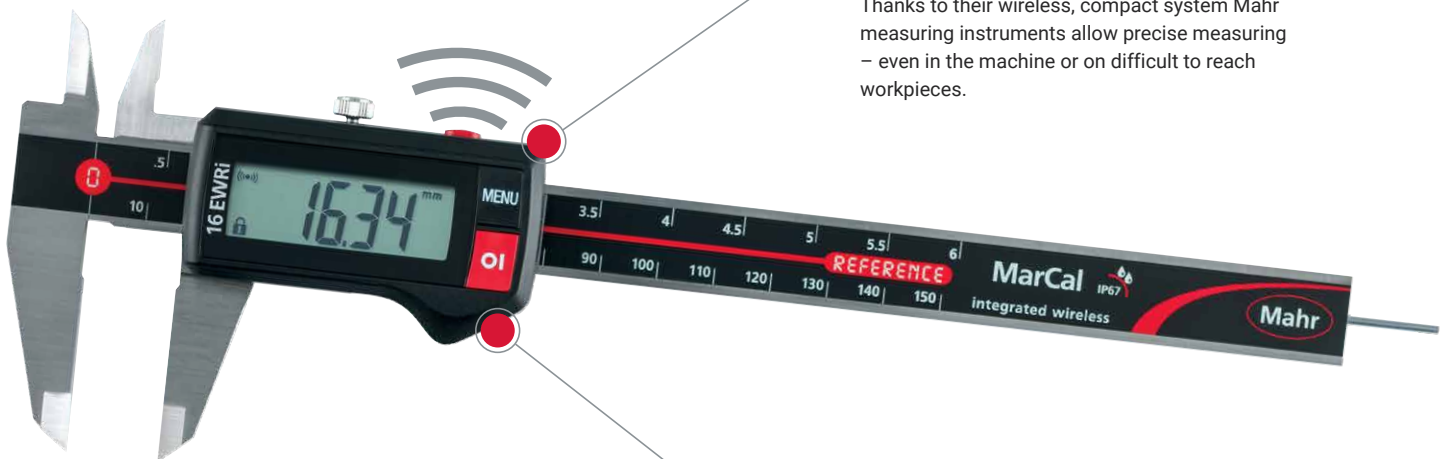
Order no.	Product	Measuring range	Probe	Details	List price	Offer price
		µm			£	£
6910260	MarSurf M 310 SET	350	Skidded probe system 2 µm stylus tip	Memory for min. 1500 PDF measuring records and 500,000 measuring results, expandable up to 32 GB using microSD card	3735	3510
6910267	MarSurf M 310 SET with printer	350	Skidded probe system 2 µm stylus tip	Also with USB/Bluetooth printer and docking station to directly print profiles, MRC and ADC curves and measuring results	4185	3870

Best performance in every step

The key to successful production is intelligent, efficient quality control. This comes down to both the simple and precise recording of measuring values and structured data processing. Mahr's portfolio of wireless devices offers maximum freedom of movement, allowing faster and more specific measurements along with full transparency. In this way you can increase your mobility without having to compromise on the traceability of measuring steps along the entire value chain.

Full mobility

Measure autonomously and without restriction. Thanks to their wireless, compact system Mahr measuring instruments allow precise measuring – even in the machine or on difficult to reach workpieces.



Free software

Enjoy the benefits of MarCom Professional 5.2 interface software and transfer measuring data individually and conveniently to your Windows applications or CAQ software.

Integrated transmitter

Eliminate risks such as cable breaks and wear and tear. These types of hazard are now a thing of the past with integrated wireless technology.



Inexpensive

Use your wireless connection for the same price as cabled. By purchasing a USB receiver stick (i-stick) for your computer, you can operate up to eight measuring devices at the same time and thus save on the additional expense of connecting cables.

MARCAL | DIGITAL CALIPERS

Integrated Wireless – Conveniently transmit data



£ 163

MarCal 16 EWRI



£ 200

MarCal 30 EWRI

Compact and handy

always within reach



£ 202

MarCal 16 EWRI-H

As tough as they come

with carbide-tipped outer
measuring surfaces



£ 293

MarCal 30 EWRI

Order no.	Product	Measuring range	Resolution	Depth rod	Details	List price	Offer price
		mm	mm			£	£
4103400	16 EWRI	0 – 150	0.01	round	IP67, with integrated wireless	204	163
4103402	16 EWRI	0 – 150	0.01	square	IP67, with integrated wireless	204	163
9105795	16 EWRI	0 – 150	0.01	round	Starter pack incl. i-Stick	291	212
9105796	16 EWRI	0 – 150	0.01	square	Starter pack incl. i-Stick	291	212
4103373	16 EWRI-H	0 – 150	0.01	round	IP67, carbide-tipped measuring surfaces and integrated wireless	269	202
4126755	30 EWRI	0 – 150	0.01		IP67, with integrated wireless	367	293
4126754	30 EWRI	0 – 200	0.01		IP67, with integrated wireless	414	331
4126756	30 EWRI	0 – 300	0.01		IP67, with integrated wireless	478	383
4126751	30 EWRI	0 – 25	0.01		IP67, with integrated wireless	250	200

Accessories for measuring instruments with integrated wireless

4102220	i-stick	Wireless receiver for measuring instruments with integrated wireless	86	69
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MARCAL | DIGITAL CALIPERS

Digital with reference system – a reliable choice



The standard

in the workshop

4103010

£75

MarCal 16 ER

£111

MarCal 16 EWR



The insensitive

for production and workshop

4103300



£194

MarCal 16 EWR-H

4103073

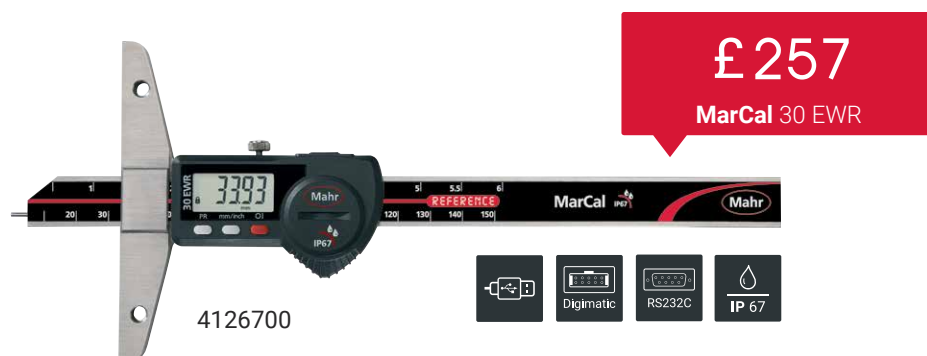
As tough as they come

with carbide-tipped outer measuring surfaces

Order no.	Product	Measuring range	Resolution	Depth rod	Details	List price	Offer price
		mm	mm			£	£
4103010	16 ER	0 – 150	0.01	round		102	75
4103012	16 ER	0 – 150	0.01	square		102	75
4103205	16 ER	0 – 200	0.01	square		160	121
4103207	16 ER	0 – 300	0.01	none		200	150
4103300	16 EWR	0 – 150	0.01	round	IP67	152	111
4103302	16 EWR	0 – 150	0.01	square	IP67	152	111
4103304	16 EWR	0 – 200	0.01	square	IP67	211	158
4103306	16 EWR	0 – 300	0.01	none	IP67	284	213
4103073	16 EWR-H	0 – 150	0.01	round	IP67, carbide-tipped measuring surfaces	228	194

MARCAL | DIGITAL CALIPERS

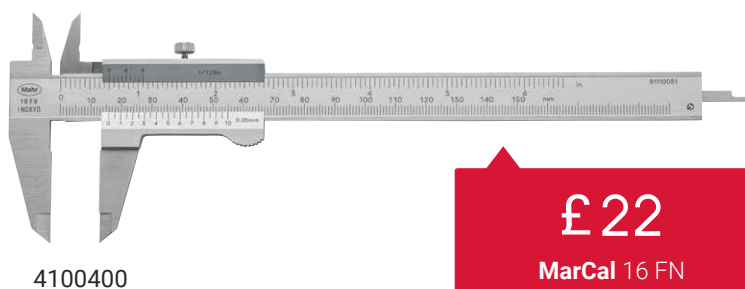
The depth gage for every application



Order no.	Product	Measuring range	Resolution	Details	List price	Offer price
		mm	mm		£	£
4126700	30 EWR	0 – 150	0.01	IP67, with data output	322	257
4126699	30 EWR	0 – 200	0.01	IP67, with data output	374	300
4126701	30 EWR	0 – 300	0.01	IP67, with data output	423	338

MARCAL | VERNIER CALIPERS

Reliable and robust – analog with scale display



Order no.	Product	Measuring range	Resolution	Depth rod	Details	List price	Offer price
		mm	mm			£	£
4100400	16 FN	0 – 150	–	square	Vernier value 0.05	27	22
4100401	16 FN	0 – 200	–	square	Vernier value 0.05	72	55
4100402	16 FN	0 – 300	–	square	Vernier value 0.05	177	133

MICROMAR | DIGITAL MICROMETERS

The choice is yours: with data output or integrated wireless



4157010



4157011



4157100

MICROMAR | DIGITAL MICROMETERS

Outside micrometer sets, perfectly tailored to your needs



£ 1094

Micromar 40 EWRi

40 EWRi set 4157115



£ 745

Micromar 40 EWRi-V



40 EWRi-V set 4157150

Order no.	Product	Measuring range	Resolution	Details	List price	Offer price
		mm	mm		£	£
4157010	40 ER	0 – 25	0.001		151	121
4157011	40 EWR	0 – 25	0.001	IP65	188	140
4157012	40 EWR	25 – 50	0.001	IP65	255	185
4157100	40 EWRi	0 – 25	0.001	IP65, integrated wireless	261	209
4157101	40 EWRi	25 – 50	0.001	IP65, integrated wireless	307	246
4157115	40 EWRi	0 – 100	0.001	IP65, integrated wireless, 4 micrometer screws in set	1368	1094
4157120	40 EWRi-L	0 – 25	0.001	IP65, integrated wireless, quick adjustment	324	259
4157121	40 EWRi-L	25 – 50	0.001	IP65, integrated wireless, quick adjustment	369	295
4157020	40 EWR-L	0 – 25	0.001	IP65, data output, quick adjustment	315	252
4157021	40 EWR-L	25 – 50	0.001	IP65, data output, quick adjustment	359	288
4157050	40 EWR-V	0 – 25	0.001	IP65, data output, quick adjustment	909	727
4157150	40 EWRi-V	0 – 25	0.001	IP65, integrated wireless, quick adjustment	932	745

Accessories for measuring instruments with integrated wireless and data cable connection

4102603	DK-U1	Bidirectional USB data cable with power supply	88	70
4102606	DK-D1	Digimatic data cable	77	62
4102220	i-stick	Wireless receiver for measuring instruments with integrated wireless	86	69

MICROMAR | DIGITAL MICROMETERS

Ready for anything with our outside micrometer and inner micrometer screws

The basic

for the workshop



4134000

£ 38

Micromar 40 A



£ 215

Micromar 40 SA/SET

4134050

Measure holes

in one movement



4487762

£1775

Micromar 844 AS/SET



MICROMAR | INNER MICROMETERS

Analog or digital – precision guaranteed

£ 1714

Micromar 40 EWR/SET



4191162



£ 1339

Micromar 44 AS/SET

4190352

Order no.	Product	Measuring range	Resolution	Details	List price	Offer price
		mm	mm		£	£
4134000	40 A	0 – 25	–	Scale graduation value 0.01 mm	50	38
4134001	40 A	25 – 50	–	Scale graduation value 0.01 mm	77	58
4134050	40 SA/SET	0 – 100	–	4 micrometer screws in set	287	215
4487760	844 AS/SET	6 - 12	0.0005	including setting rings 8 mm, 10 mm	1688	1349
4487761	844 AS/SET	12 - 20	0.0005	including setting ring 16 mm	1503	1202
4487762	844 AS/SET	20 - 50	0.0005	including setting rings 25 mm, 40 mm	2219	1775
4487763	844 AS/SET	50 - 100	0.0005	including setting rings 60 mm, 85 mm	2687	2149
4191160	44 EWR/SET	6 – 12	0.001	IP52, data output, including setting rings 8 mm, 10 mm	1584	1267
4191161	44 EWR/SET	12 – 20	0.001	IP52, data output, including setting ring 16 mm	1377	1102
4191162	44 EWR/SET	20 – 50	0.001	IP52, data output, including setting rings 25 mm, 40 mm	2142	1714
4191163	44 EWR/SET	50 – 100	0.001	IP52, data output, including setting rings 60 mm, 85 mm	2574	2059
4190350	44 AS/SET	6 – 12	–	including setting rings 8 mm, 10 mm	959	767
4190351	44 AS/SET	12 – 20	–	including setting ring 16 mm	740	590
4190352	44 AS/SET	20 – 50	–	including setting rings 25 mm, 40 mm	1674	1339
4190353	44 AS/SET	50 – 100	–	including setting rings 60 mm, 85 mm	1989	1591

MARTEST | DIAL TEST INDICATOR MEASURING DEVICE

Highly sensitive measurements



4305200

£ 65

MarTest 800 S



4308200

£ 91

MarTest 800 SGM



4306200

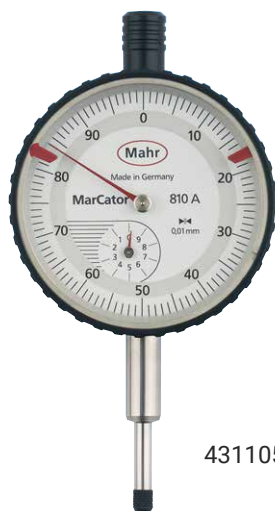
£ 103

MarTest 800 SL

Order no.	Product	Measuring range	Graduation value	Details	List price	Offer price
		mm	mm		£	£
4305200	800 S	± 0.4	0.01	Dial face ø 28 mm, measuring anvil length 14.5 mm	81	65
4307200	800 SG	± 0.4	0.01	Dial face ø 38 mm, measuring anvil length 14.5 mm	81	61
4308150	800 SM	± 0.1	0.002	Dial face ø 28 mm, measuring anvil length 14.5 mm	103	82
4308200	800 SGM	± 0.1	0.002	Dial face ø 38 mm, measuring anvil length 14.5 mm	113	91
4306200	800 SL	± 0.25	0.01	Dial face ø 28 mm, measuring anvil length 41.24 mm	128	103

MARCATOR AND MILLIMESS | MECHANICAL DIAL INDICATOR AND DIAL COMPARATOR

The large high contrast dial face allows quick and reliable readings



4311050

£ 30

MarCator 810 A



4332000

£ 108

Millimes 1010

£ 144

Millimes 1003



4334000

Order no.	Product	Measuring range		Graduation value		Details	List price	Offer price
		mm	µm	mm	µm		£	£
4311050	810 A	10		0.01		High contrast dial face	40	30
4335000	1002		± 25		0.5	High sensitivity and accuracy	324	259
4334000	1003		± 50		1	High sensitivity and accuracy	180	144
4334001	1003 XL		± 130		2	High sensitivity and accuracy	180	144
4332000	1010	± 0.25		0.01		High sensitivity and accuracy	135	108

MARCATOR | DIGITAL DIAL INDICATORS

Easy to operate and practical functions



£ 351

MarCator 1087 Ri



4337663

HR



RS232C



£ 458

MarCator 1087 R-HR

4337695

Order no.	Product	Measuring range	Resolution	Details	List price	Offer price
		mm	mm		£	£
4336010	1075 R	12.5	0.01	LOCK function	140	104
4336020	1075 R	12.5	0.005	LOCK function	189	141
4336030	1075 R	12.5	0.001	LOCK function	282	221
4337130	1086 R	12.5	0.01	ABS, LOCK, Tol function	264	188
4337620	1086 R	12.5	0.0005	ABS, LOCK, Tol function	326	233
4337621	1086 R	25	0.0005	ABS, LOCK, Tol function	389	292
4337697	1086 R-HR	12.5	0.0001	ABS, LOCK, TOL function, high resolution	464	372
4337660	1087 R	12.5	0.0005	ABS, LOCK, TOL function, Max/Min//Max-Min	409	307
4337661	1087 R	25	0.0005	ABS, LOCK, TOL function, Max/Min//Max-Min	467	350
4337695	1087 R-HR	12.5	0.0001	ABS, LOCK, TOL function, high resolution	572	458
4337624	1086 Ri	12.5	0.0005	ABS, LOCK, TOL function, integrated wireless	375	301
4337625	1086 Ri	25	0.0005	ABS, LOCK, TOL function, integrated wireless	424	339
4337663	1087 Ri	12.5	0.0005	ABS, LOCK, TOL function, Max/Min//Max-Min, integrated wireless	439	351
4337665	1087 Ri	25	0.0005	ABS, LOCK, TOL function, Max/Min//Max-Min, integrated wireless	497	398

Accessories for measuring instruments with integrated wireless and data cable connection

4102603	DK-U1	Bidirectional USB data cable with power supply	88	70
4102606	DK-D1	Digimatic data cable	77	62
4102220	i-stick	Wireless receiver for measuring instruments with integrated wireless	86	69

Digimar 816 CL

Height measuring instrument

- Perfect for accurate measurements in production and the workshop



£ 3497

Digimar 816 CL

4429031

Digimar 817 CLM

Height measuring instrument

- With Quick Mode. Rapid measurements with maximum accuracy even in 2D mode



£ 4140

Digimar 817 CLM

4429011

Digimar 814 SR

Height Measuring and Scribing Instrument

- Exact positioning by handwheel



£ 449

Digimar 814 SR

4426100



Clamping lever

for quickly securing the slide unit

Handwheel

for easy positioning and measuring

Order no.	Product	Measuring range	Resolution	Details	List price	Offer price
					£	£
4429030	816 CL	0 – 350	0.01, 0.001	Error limit (2.8 + L/300) L in mm	3978	3101
4429031	816 CL	0 – 600	0.01, 0.001	Error limit (2.8 + L/300) L in mm	4482	3497
4429010	817 CLM	0 – 350	0.01, 0.005, 0.001, 0.0005, 0.0001	Error limit (1.8 + L/600) L in mm	5220	3690
4429011	817 CLM	0 – 600	0.01, 0.005, 0.001, 0.0005, 0.0001	Error limit (1.8 + L/600) L in mm	5760	4140
4429012	817 CLM	0 – 1000	0.01, 0.005, 0.001, 0.0005, 0.0001	Error limit (1.8 + L/600) L in mm	8910	6683
4426100	814 SR	0 – 350	0.01	Digit height 12 mm, handwheel for positioning and measuring	567	449
4426101	814 SR	0 – 600	0.01	Digit height 12 mm, handwheel for positioning and measuring	986	788

MILLIMAR | EVALUATION INSTRUMENT AND MEASURING PROBE

Smart and versatile

Mahrlights



£ 733
Millimar C 1200

5312010

£ 533
Millimar 1318

£ 209
Millimar P 2004 M



5323010



5313180

Order no.	Product	Numerical display	Resolution	Details	List price	Offer price
		µm	µm		£	£
5312010	Millimar C 1200	± 5000	0.1	High resolution, high contrast TFT color display	861	733

Order no.	Product	Measuring range	Measuring force	Details	List price	Offer price
		mm	N		£	£
5323010	P 2004 M	± 2	0.75	Measuring pin mounted in ball-bearing guide	246	209
5323011	P 2004 T	± 2	0.75	Measuring pin mounted in ball-bearing guide	246	209
5313180	1318	- 0.3 ... 1	0.25 +/- 0.05	Dial test indicator inductive probe	626	533



The image shows a Mahr MarSurf PS 10 handheld surface roughness meter. It has a white and grey body with a red stripe. The 4.3-inch touch display shows a blue line graph of surface roughness data. Text on the screen includes 'Ra', 'Rz', 'Rmax', '23,363 µm', '19,325 µm', '4,421 µm', 'Ver 100 µmStk: Not 0.8 mmStk', 'Rt = 4.8 mm (0.8 x 5)', 'RtCISO 16610-21 0.8 mm', and '03.02.2016 13:03'. There are icons for a folder, a refresh symbol, and a gear. A green button is located below the screen.

Mahr | MarSurf PS 10

Measuring data to go for your quality assurance

We're used to being able to access our data anytime anywhere on our smartphones. Why shouldn't we be able to do it with our measuring instruments too? The MarSurf PS 10 is a flexible and portable all-rounder which not only allows you to record measurements, but also to open the measuring data. Its compact design makes the PS 10 your ideal companion for measuring tasks on the go. Whether horizontal, vertical or upside down – benefit from simple, mains-independent handling, even in small spaces. The data is backed up immediately – by saving measuring records automatically as a PDF. This means you can have both your measuring instrument and measurement evaluation at hand at all times – simple as that!

Product highlights:

- Intuitive operation of the 4.3" touch display
- Measuring principle: Stylus method for roughness measurement
- Save 500,000 measuring results internally
- Lightweight: just 500 g
- Memory can be expanded to 32 GB
- Automatic cutoff selection

For more information go to:

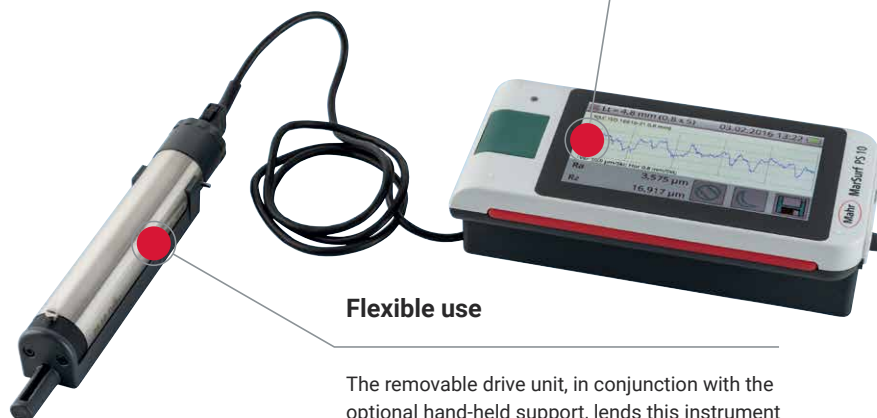
www.mahr.com

Simple and intuitive to use for more measuring convenience

Mahr's entry-level surface metrology instrument is intuitive and simple to use. The 4.3" TFT touch display can be turned in any direction. The removable drive unit makes the MarSurf PS 10 flexible in production and manufacturing. It features an integrated but removable calibration standard. Measuring records can be saved in the instrument itself as PDF files. Alternatively, they can be transferred using MarCom.

Extremely easy to operate with detailed profile display

The large 4.3" high-resolution and backlit TFT touch display allows intuitive operation (just like a smartphone) and precise representation of the measuring profile.



Flexible use

The removable drive unit, in conjunction with the optional hand-held support, lends this instrument added versatility where space is limited, e.g. in holes or when measuring small parts.

6910230

Perfect evaluation and documentation

The PS 10 automatically creates a PDF measuring record without the need for any additional software. The measuring record can be easily transferred to a PC via the USB port. Alternatively, measuring data can be evaluated in the MarSurf XR 1 and XR 20 roughness software or the measurements can be sent to Excel or SPC programs using the MarCom software.



Always at hand

The calibration standard stays in the instrument and can be checked at any time.



£1798

MarSurf PS 10



6910230

£6002

MarSurf M 400



6910404



Order no.	Product	Measuring range	Probe	Details	List price	Offer price
6910230	PS 10	µm 350	Skidded probe system	min. 3900 profiles, min. 500,000 results, min. 1500 PDF measuring records, expandable to 32 GB with microSD card	£2229	£1798
6910404	M 400	+/- 250 (up to +/-750 with 3x probe arm length)	Skidless probe system	Over 50 surface parameters for R-, P- and W-profiles according to current ISO/JIS or MOTIF standards (ISO 12085)	£8402	£6002

Compact – convenient – cost-effective for added measuring convenience

MarSurf XR 1. The entry-level device for convenient surface metrology at the right price. This PC-based instrument provides all the usual parameters and profiles specified in international standards both in the measuring room and the production environment. MarSurf XR 1 is Mahr's advanced roughness evaluation software.

£13680

MarSurf XR 1 with ST-G



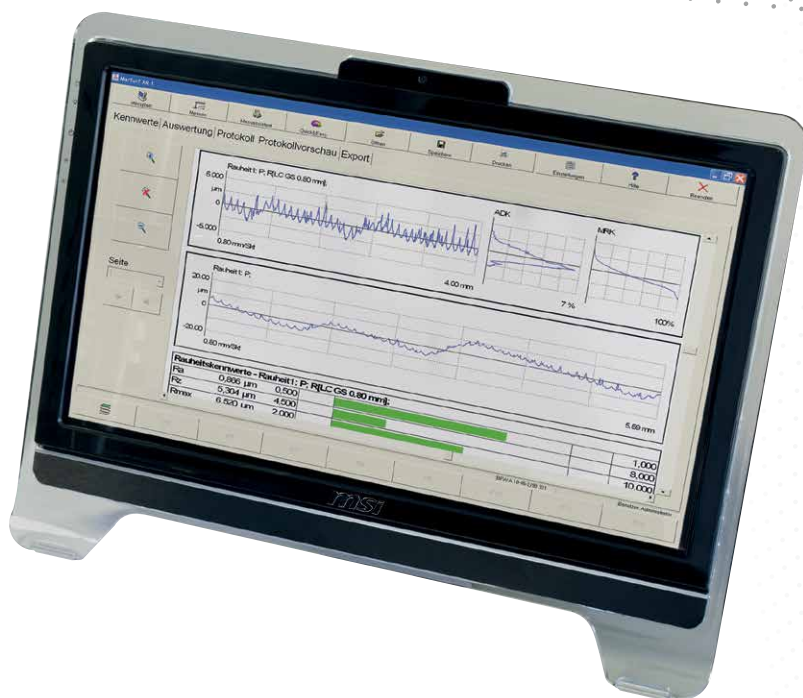
9056373

Product highlights:

- Unique Bluetooth technology, which allows a wireless connection between the evaluation unit and the drive unit if necessary! Range up to 4 m
- Automatic selection of filters and traversing length conforming to standards
- ARC function and polynomial filter for form elimination
- Save measuring programs
- Direct data transfer from drive unit to evaluation instrument
- Display calibration and maintenance dates, dynamic calibration function

Advantages of MarSurf SD 26 drive unit:

- Motorized probe zero setting over 7.5 mm
- Use skidless probe BFW 250
- Can measure measuring lengths up to 26 mm
- Minimal Rz residual noise
- Measuring speeds 0.2 mm/s; 0.5 mm/s and 1.0 mm/s



Sample application: MarSurf XR 1 with ST-G (vee-block, workpiece and monitor not included in pack contents)

For more information go to:
www.mahr.com

Order no.	Product	Details	Offer price
9056373	MarSurf XR 1	Set with ST-G measuring stand, SD 26 drive adapter and MarWin EasyRoughness software	£ 13680

Optional accessories			
6710529	MarSurf CT 120	X-Y positioning table	on request
9967510	Commissioning	Commissioning of MarSurf XR 1	on request
9968079	Level 1 training	1 day on-site training (must follow commissioning)	on request

The basic measuring station for simple and highly accurate measuring

- By combining the measurement and evaluation system with the CD 120 drive unit, you can perform contour measurements in a measuring field of up to 120 mm long and 50 mm high.
- With tried-and-tested, patented probe arm holder and easy switching of probe arms for specific applications
- Collision guard
- Adjustable measuring force from 2 mN to 120 mN
- Operation and positioning is controlled via the software in a special measuring station view
- Programmed measuring routine
- Easy to operate

Product highlights:

- The CD 120 drive unit is a high-precision long-distance contour drive unit for the accurate calculation of radii, distances, angles and other contour elements for measuring lengths up to 120 mm.
- MarSurf XC basic including control unit, EasyContour software with XC2 software functionality and operating instructions
- Drive unit CD 120
- Manual measuring stand consisting of aluminum baseplate 800 x 330 mm with 400 mm manual height adjustment
- Holds the drive unit
- Standard calibration sphere
- Small CT120 XY-table
- CT120 XY-table angle adjustment



Advantages of MarSurf XC basic:

- This computer-assisted measuring station allows comprehensive and fast evaluation of measuring results, saving you time that can be spent on other tasks.
- The small, handy measuring station can also be used on the go, thus saving space and adding flexibility.
- The creation of detailed measuring records increases the transparency of your measuring results and process sequences.

£ 11610

MarSurf XC *basic*



9036395

Sample application: MarSurf XC *basic*
(price excludes monitor, keyboard and mouse)

For more information go to:
www.mahr.com

Order no.	Product	Details	Offer price
9036395	MarSurf XC <i>basic</i>	MarSurf XC <i>basic</i> including control unit, contour software, CT120 and operating instructions	£ 11610
Optional accessories			
9960852	Training	1 day commissioning with basic user training	on request

All illustrations and technical data are without guarantee. All prices shown are recommended retail prices.
The net prices are shown in £, they exclude sales tax and are valid from September 15th, 2020 until October 31st, 2020

Fast and reliable results

This compact desktop instrument is designed for easy operation and fast test procedures. It also considerably increases efficiency thanks to automatic measuring. Furthermore, the innovative, ergonomic design ensures that every move is spot on.

- Over 60% time saving
- Easy handling and toolless operation
- Versatile for a multitude of measuring devices
- Intuitive, software-assisted operation
- Supports a wide range of standards
- Work effortlessly without losing concentration

Fast & reliable data collection

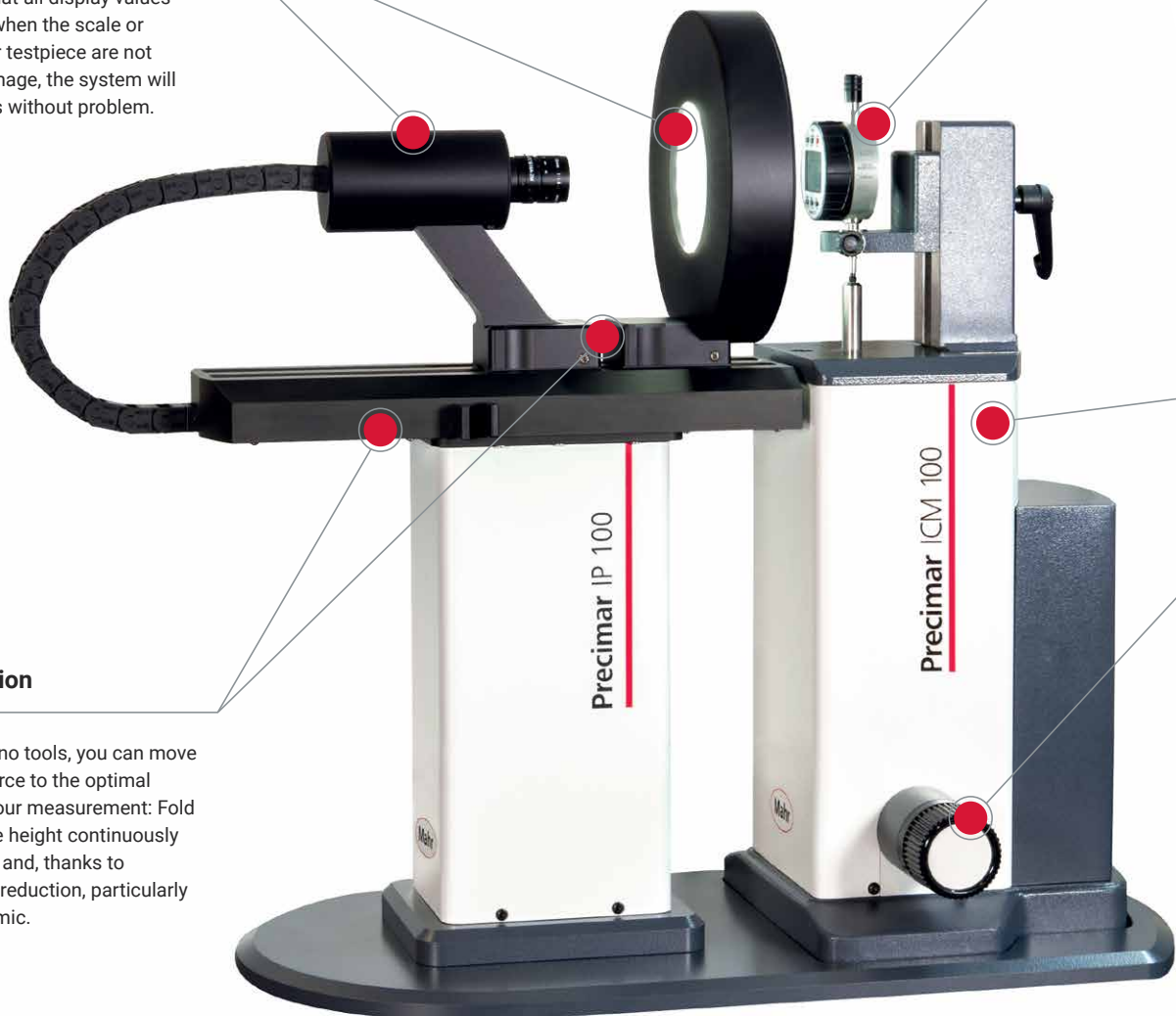
The powerful USB 3.0 camera and sturdy LED lighting guarantee that all display values are clearly legible. Even when the scale or numerical display of your testpiece are not exactly centered in the image, the system will read the displayed values without problem.

One-handed operation

Using just one hand and no tools, you can move the camera and light source to the optimal height and position for your measurement: Fold down the lever, adjust the height continuously – done. Handling is easy and, thanks to spring-supported weight reduction, particularly comfortable and ergonomic.

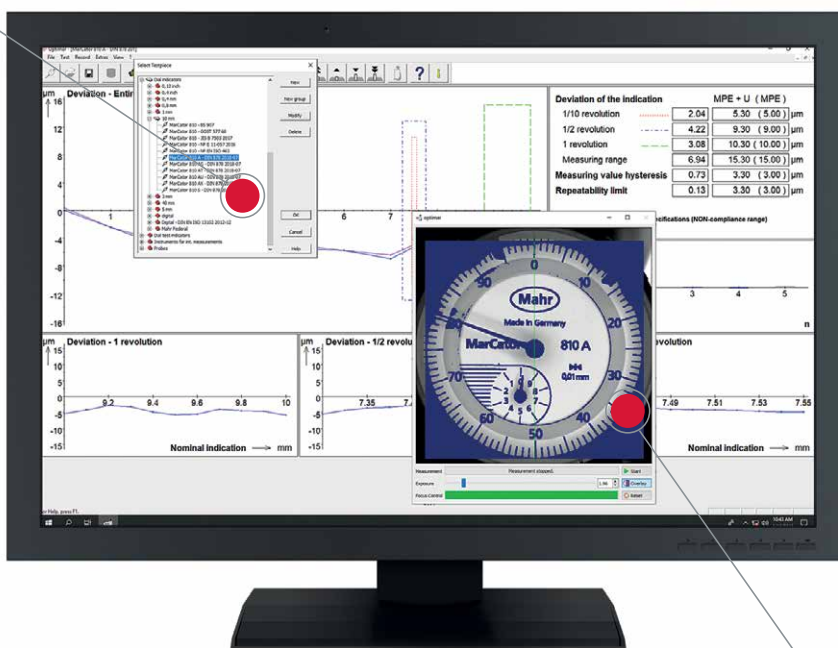
£22500

Precimar ICM 100 IP



Programmed for versatility

Over 266 measuring instruments are pre-programmed in Mahr's own operating software. Simply select which measuring instrument you would like to check during setup. You will save precious time and can be confident that your testpiece is correctly created in the system. You can even continue to use existing, individually created testpiece data sets.



Setup made easy

Good to go in a matter of minutes – thanks to software support with live visualization. You can see at a glance whether the camera is focused and the lighting is sufficient. Visual feedback in real time ensures that every movement is spot on.

Universal & reliable

The Precimar ICM 100 IP based on the tried-and-tested Precimar ICM 100 dial indicator test station – also known as Optimar 100. This versatile, market-tested solution can be used for checking analog and digital dial indicators as well as dial comparators by a wide range of manufacturers. It provides traceable measuring results conforming to standards in a measuring range of up to 100 mm.

Manual mode

Do you want to check your testpieces manually in individual cases? You can still do so with easy handwheel operation. In manual mode, the camera serves as a magnifying glass. Thanks to the enlarged live image, you can read the display values more easily, thus making manual work faster and more reliable.

Order no.	Product	Measuring spindle measuring range	Digital resolution	Details	Offer price
		mm / inch	µm		£
5351010	Precimar ICM 100 IP	100 / 4	0.02	Incremental measuring system, USB 3.0 CMOS camera. Price excludes PC, mouse, keyboard, monitor and commissioning	22500

Upgrade kit accessories					
5351050	for Precimar Optimar 100 (5320005)			Price excludes commissioning	on request
5351060	for Precimar ICM 100 (5351000)			Price excludes commissioning	on request
5351070	for Precimar ICM 100 (5351005)			Price excludes commissioning	on request

PRECIMAR | LENGTH MEASURING BENCH

Robust construction makes it suitable for production-related use



Sample application:
Precimar SM 60 with MarCator 1086 R

Order no.	Product	Measuring range	Application range	Mount \varnothing	Details	List price	Offer price
		mm	mm	mm		£	£
5357360	SM 60	0 – 25	0 – 60	8	Size of table \varnothing 60 mm, mass 9 kg	1472	1079

Suitable dial indicators from the Mahrlights range

Order no.	Product	Measuring range	Resolution	Details	List price	Offer price
		mm	mm		£	£
4337621	1086 R	25	0.0005	ABS, LOCK, Tol function	389	292
4337625	1086 Ri	25	0.0005	ABS, LOCK, TOL function, integrated wireless	424	339

Precise and simple at a glance

Measure/calculate geometric elements using automatic edge detection e.g. on stamped and bending parts, plastic parts and electronic boards.

CNC Measuring microscopes

- Motorzoom with autofocus
- 3-axis CNC control unit
- LED ring light, switchable and dimmable in 4 segments
- Solid hard granite base
- Excellent accuracy and reliability due to the optical incremental measurement system

Optional:

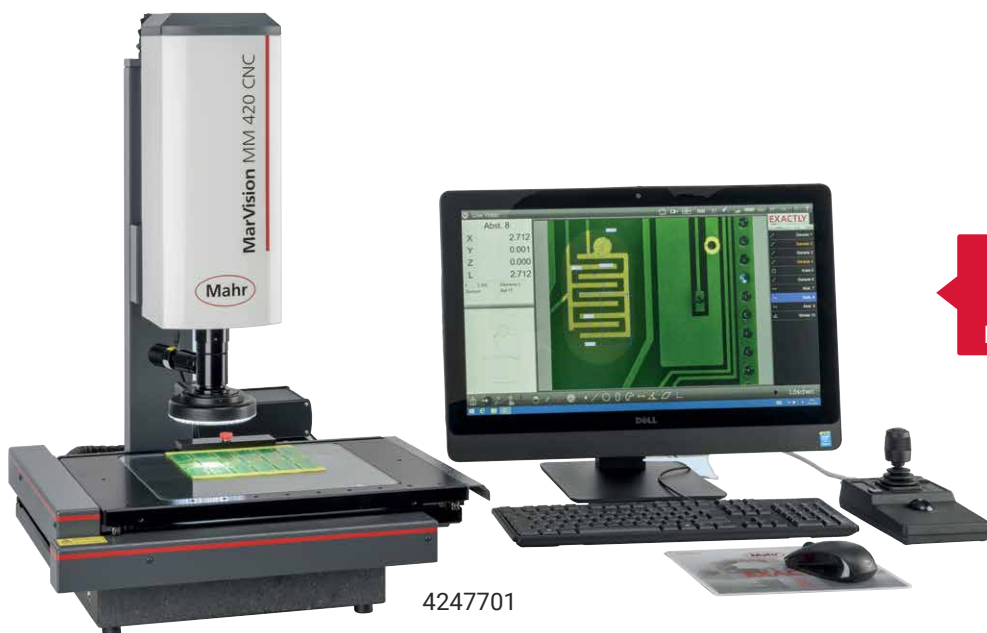
- Telecentric transmitted lighting
- Coaxial top lighting
- Probe option TP20
- Macro zoom 8x to 116x, large visual field with 5 MP camera

Display unit with M3 software

- 23" touchscreen with keyboard and mouse
- Graphical display with dimensioning
- Pallet measurement / series measurement
- Statistics (minimum, maximum, spread, standard deviation, 6-sigma etc.)
- Stitching (of several individual images to form one large image)

Optional:

- Create and import DXF data
- BESTFIT adjustment
- Thread measuring module
- Cable insulation module



4247701

£27450

MarVision MM 420 CNC

Order no.	Product	Measuring range X/Y/Z mm	Magnification	Details	List price £	Offer price £
4247601	MM 420, Zoom lens	200 / 100	35x - 225x	with quick adjustment	19170	17010
4247701	MM 420 CNC	200 / 100 / 200	35x - 225x	Motorzoom with autofocus	29835	27450

MARFORM | FORM MEASURING MACHINE

Compact design for use on work bench or in measuring room

The **perfect solution** with **EasyForm**

- Accurate and fast measuring results
- Reliable thanks to mechanical bearings
- Portable: thanks to light weight and compact dimensions
- Fast computer-assisted workpiece alignment
- Digital encoder in Z and X send the measuring position directly to the software
- Suitable for use in workshops as no compressed air connection required
- No keyboard or mouse required with optional touchscreen



9056594

Optimized for the most frequent form measuring tasks:

- Roundness (including in one section)
- Flatness (from a circle trace)
- Concentricity
- Coaxiality
- Radial runout
- Axial runout
- Plane parallelism from opposite circles
- Straightness of a calculated axis
- Fourier/waviness analysis included with EasyForm as standard
- Option: Vibration velocity analysis for roller bearings
- Option: Bar-to-bar height evaluation for commutators

£12060

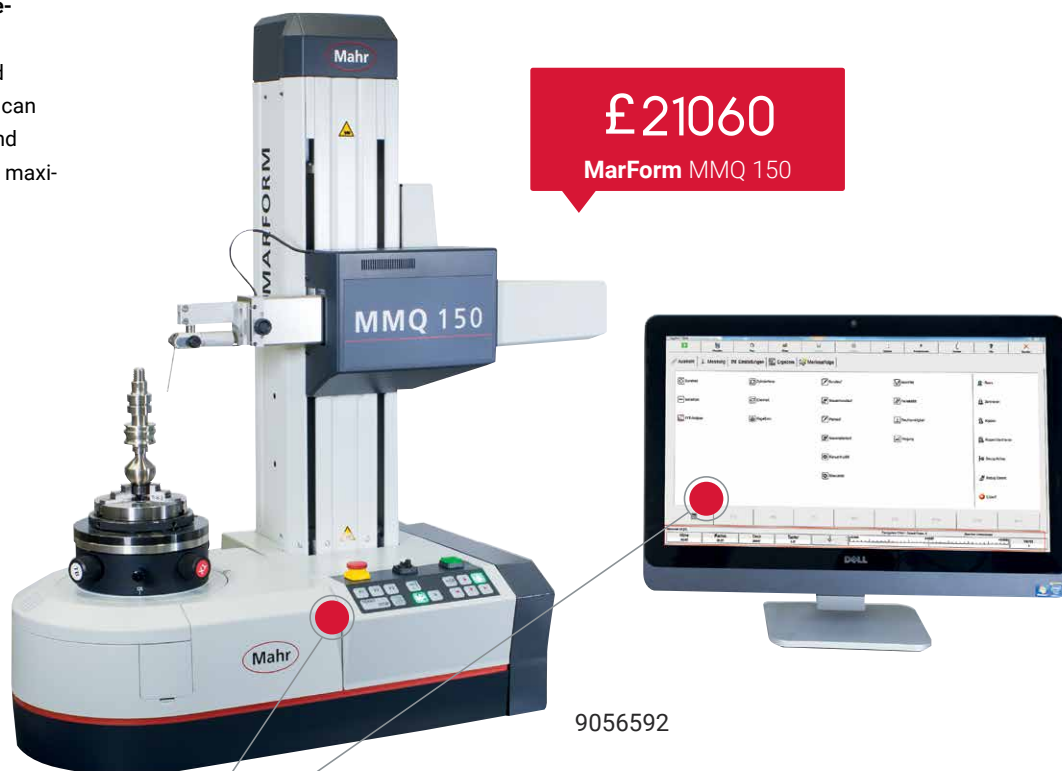
MarForm MMQ 100

The **automatic form measuring station** optimized for high-precision cylindricity testing

Fully automated measuring sequences

Thanks to automatic C-, Z- and X-axes, measuring sequences can be performed automatically and independently of the user with maximum repeatability.

Sample application:
MarForm MMQ 150 (Price excludes monitor)



Simple & intuitive data collection

The MarWin-based EasyForm software is easy to use and intuitive to learn. No experience of programming is required. In just a few steps you will have a detailed measuring record. User measuring programs can be started via 32 function keys on the EasyForm user interface or via the 3 assignable program keys on the MMQ 150 control panel.

Order no.	Product	Details	Offer price
			£
9056594	MarForm MMQ 100	MarForm MMQ 100 including MarWin 12 EasyForm software package and geared screw chuck	12060
9056592	MarForm MMQ 150	MarForm MMQ 150 including motorized T20W measuring probe and operating instructions	21060
5480281	MarWin 12 EasyForm	Software package	including
6710620	geared screw chuck	Rim chuck Ø 100 mm with flange	including

Optional accessories

Commissioning of MarForm MMQ 100 by a skilled service technician	on request
Commissioning of MarForm MMQ 150 by a skilled service technician	on request



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