Mahr

Mahr | A passion for detail

Edition 1

2020

Mahrlights



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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 | Integrated Wireless – Conveniently transmit data



4103400

€ 181.00
MarCal 16 EWRi



4103373

€ 224.00
MarCal 16 EWRi-H

As tough as they come

with carbide-tipped outer measuring surfaces

€ 222.00
MarCal 30 EWRi



4126751

Compact and handy

always within reach



4126755

€ 326.00
MarCal 30 EWRi

Order no.	Product	Measuring range	Resolution	Depth rod	Details	List price	Offer price
		mm	mm			EUR	EUR
4103400	16 EWRi	0 – 150	0.01	round	IP67, with integrated wireless	~~226.50~~	181.00
4103402	16 EWRi	0 – 150	0.01	square	IP67, with integrated wireless	~~226.50~~	181.00
9105795	16 EWRi	0 – 150	0.01	round	Starter pack incl. i-Stick	~~323.00~~	236.00
9105796	16 EWRi	0 – 150	0.01	square	Starter pack incl. i-Stick	~~323.00~~	236.00
4103373	16 EWRi-H	0 – 150	0.01	round	IP67, carbide-tipped measuring surfaces and integrated wireless	~~299.00~~	224.00
4126755	30 EWRi	0 – 150	0.01		IP67, with integrated wireless	~~408.00~~	326.00
4126754	30 EWRi	0 – 200	0.01		IP67, with integrated wireless	~~460.00~~	368.00
4126756	30 EWRi	0 – 300	0.01		IP67, with integrated wireless	~~531.00~~	425.00
4126751	30 EWRi	0 – 25	0.01		IP67, with integrated wireless	~~278.00~~	222.00

Accessories for measuring instruments with integrated wireless				
4102220	i-stick	Wireless receiver for measuring instruments with integrated wireless	~~96.00~~	77.00

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MarCal | Digital with reference system – a reliable choice



The standard

in the workshop

4103010

€ 83.00
MarCal 16 ER



€ 123.00
MarCal 16 EWR

The insensitive

for production and workshop

4103300



4103073

As tough as they come

with carbide-tipped outer measuring surfaces

€ 190.00
MarCal 16 EWR-H

Order no.	Product	Measuring range	Resolution	Depth rod	Details	List price	Offer price
		mm	mm			EUR	EUR
4103010	16 ER	0 – 150	0.01	round		~~113.50~~	83.00
4103012	16 ER	0 – 150	0.01	square		~~113.50~~	83.00
4103205	16 ER	0 – 200	0.01	square		~~178.00~~	133.50
4103207	16 ER	0 – 300	0.01	none		~~222.50~~	167.00
4103300	16 EWR	0 – 150	0.01	round	IP67	~~169.00~~	123.00
4103302	16 EWR	0 – 150	0.01	square	IP67	~~169.00~~	123.00
4103304	16 EWR	0 – 200	0.01	square	IP67	~~234.50~~	176.00
4103306	16 EWR	0 – 300	0.01	none	IP67	~~316.00~~	237.00
4103073	16 EWR-H	0 – 150	0.01	round	IP67, carbide-tipped measuring surfaces	~~253.00~~	190.00

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MarCal | The depth gage for every application



4126700

€ 286.00
MarCal 30 EWR

Order no.	Product	Measuring range	Resolution	Details	List price	Offer price
		mm	mm		EUR	EUR
4126700	30 EWR	0 – 150	0.01	IP67, with data output	~~358.00~~	286.00
4126699	30 EWR	0 – 200	0.01	IP67, with data output	~~416.00~~	333.00
4126701	30 EWR	0 – 300	0.01	IP67, with data output	~~470.00~~	376.00

MarCal | Reliable and robust – analog with scale display



4100400

€ 22.80
MarCal 16 FN

Order no.	Product	Measuring range	Resolution	Depth rod	Details	List price	Offer price
		mm	mm			EUR	EUR
4100400	16 FN	0 – 150	–	square	Vernier value 0.05	~~30.50~~	22.80
4100401	16 FN	0 – 200	–	square	Vernier value 0.05	~~80.50~~	60.50
4100402	16 FN	0 – 300	–	square	Vernier value 0.05	~~197.00~~	147.50

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Micromar | The choice is yours: with data output or integrated wireless



€ 134.00
Micromar 40 ER

4157010



€ 167.00
Micromar 40 EWR



4157011





€ 232.00
Micromar 40 EWRi

4157100

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Micromar | Outside micrometer sets, perfectly tailored to your needs



40 EWRi set 4157115

€ 1216.00
Micromar 40 EWRi



40 EWRi-V set 4157150

€ 828.00
Micromar 40 EWRi-V

Order no.	Product	Measuring range	Resolution	Details	List price	Offer price
		mm	mm		EUR	EUR
4157010	40 ER	0 – 25	0.001		~~167.50~~	134.00
4157011	40 EWR	0 – 25	0.001	IP65	~~208.50~~	167.00
4157012	40 EWR	25 – 50	0.001	IP65	~~283.00~~	226.00
4157100	40 EWRi	0 – 25	0.001	IP65, integrated wireless	~~290.00~~	232.00
4157101	40 EWRi	25 – 50	0.001	IP65, integrated wireless	~~341.00~~	273.00
4157115	40 EWRi	0 – 100	0.001	IP65, integrated wireless, 4 micrometer screws in set	~~1520.00~~	1216.00
4157120	40 EWRi-L	0 – 25	0.001	IP65, integrated wireless, quick adjustment	~~360.00~~	288.00
4157121	40 EWRi-L	25 – 50	0.001	IP65, integrated wireless, quick adjustment	~~410.00~~	328.00
4157020	40 EWR-L	0 – 25	0.001	IP65, data output, quick adjustment	~~350.00~~	280.00
4157021	40 EWR-L	25 – 50	0.001	IP65, data output, quick adjustment	~~399.00~~	320.00
4157050	40 EWR-V	0 – 25	0.001	IP65, data output, quick adjustment	~~1010.00~~	808.00
4157150	40 EWRi-V	0 – 25	0.001	IP65, integrated wireless, quick adjustment	~~1035.00~~	828.00

Accessories for measuring instruments with integrated wireless and data cable connection				
4102603	DK-U1	Bidirectional USB data cable with power supply	~~98.00~~	78.00
4102606	DK-D1	Digimatic data cable	~~86.00~~	69.00
4102220	i-stick	Wireless receiver for measuring instruments with integrated wireless	~~96.00~~	77.00

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Micromar | Ready for anything with our outside micrometer and inner micrometer screws

The basic

for the workshop



4134000

€ 42.00
Micromar 40 A



4134050

€ 239.00
Micromar 40 SA/SET

Measure holes

in one movement



4487762



€ 1972.00
Micromar 844 AS/SET

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Micromar | Analog or digital – precision guaranteed

€ 1904.00

Micromar 44 EWR/SET



4191162



€ 1488.00

Micromar 44 AS/SET

4190352

Order no.	Product	Measuring range	Resolution	Details	List price	Offer price
		mm	mm		EUR	EUR
4134000	40 A	0 – 25	–	Scale graduation value 0.01 mm	~~56.00~~	42.00
4134001	40 A	25 – 50	–	Scale graduation value 0.01 mm	~~85.50~~	64.00
4134050	40 SA/SET	0 – 100	–	4 micrometer screws in set	~~319.00~~	239.00
4487760	844 AS/SET	6 - 12	0.0005	including setting rings 8 mm, 10 mm	~~1875.00~~	1499.00
4487761	844 AS/SET	12 - 20	0.0005	including setting ring 16 mm	~~1670.00~~	1336.00
4487762	844 AS/SET	20 - 50	0.0005	including setting rings 25 mm, 40 mm	~~2465.00~~	1972.00
4487763	844 AS/SET	50 - 100	0.0005	including setting rings 60 mm, 85 mm	~~2985.00~~	2388.00
4191160	44 EWR/SET	6 – 12	0.001	IP52, data output, including setting rings 8 mm, 10 mm	~~1760.00~~	1408.00
4191161	44 EWR/SET	12 – 20	0.001	IP52, data output, including setting ring 16 mm	~~1530.00~~	1224.00
4191162	44 EWR/SET	20 – 50	0.001	IP52, data output, including setting rings 25 mm, 40 mm	~~2380.00~~	1904.00
4191163	44 EWR/SET	50 – 100	0.001	IP52, data output, including setting rings 60 mm, 85 mm	~~2860.00~~	2288.00
4190350	44 AS/SET	6 – 12	–	including setting rings 8 mm, 10 mm	~~1065.00~~	852.00
4190351	44 AS/SET	12 – 20	–	including setting ring 16 mm	~~822.00~~	656.00
4190352	44 AS/SET	20 – 50	–	including setting rings 25 mm, 40 mm	~~1860.00~~	1488.00
4190353	44 AS/SET	50 – 100	–	including setting rings 60 mm, 85 mm	~~2210.00~~	1768.00

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MarTest | Highly sensitive measurements



€ 71.50
MarTest 800 S

4305200



€ 100.50
MarTest 800 SGM

4308200



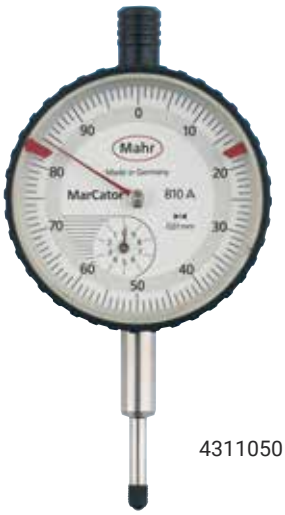
€ 114.00
MarTest 800 SL

4306200

Order no.	Product	Measuring range	Graduation value	Details	List price	Offer price
		mm	mm		EUR	EUR
4305200	800 S	± 0.4	0.01	Dial face ø 28 mm, measuring anvil length 14.5 mm	~~88.50~~	71.50
4307200	800 SG	± 0.4	0.01	Dial face ø 38 mm, measuring anvil length 14.5 mm	~~90.50~~	68.00
4308150	800 SM	± 0.1	0.002	Dial face ø 28 mm, measuring anvil length 14.5 mm	~~114.00~~	91.00
4308200	800 SGM	± 0.1	0.002	Dial face ø 38 mm, measuring anvil length 14.5 mm	~~126.00~~	100.50
4306200	800 SL	± 0.25	0.01	Dial face ø 28 mm, measuring anvil length 41.24 mm	~~142.50~~	114.00

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MarCator and Millimess | The large high-contrast dial face enables quick and reliable readings



€ 33.00
MarCator 810 A

4311050

€ 120.00
Millimess 1010



4332000

€ 160.00
Millimess 1003



4334000

Order no.	Product	Measuring range		Graduation value		Details	List price	Offer price
		mm	µm	mm	µm		EUR	EUR
4311050	810 A	10		0.01		High contrast dial face	~~44.00~~	33.00
4335000	1002		± 25		0.5	High sensitivity and accuracy	~~360.00~~	288.00
4334000	1003		± 50		1	High sensitivity and accuracy	~~200.50~~	160.00
4334001	1003 XL		± 130		2	High sensitivity and accuracy	~~200.50~~	160.00
4332000	1010	± 0.25		0.01		High sensitivity and accuracy	~~149.50~~	120.00

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MarCator | Equipped for every application – with easy operation and practical functions



€ 116.00
MarCator 1075 R

4336010



€ 413.00
MarCator 1086 R-HR

4337697



4337624

€ 334.00
MarCator 1086 Ri



€ 272.00
MarCator 1086 R

4337620

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€ 390.00
MarCator 1087 Ri



4337663

€ 509.00
MarCator 1087 R-HR



4337695

Order no.	Product	Measuring range	Resolution	Details	List price	Offer price
		mm	mm		EUR	EUR
4336010	1075 R	12.5	0.01	LOCK function	~~155.00~~	116.00
4336020	1075 R	12.5	0.005	LOCK function	~~210.00~~	157.00
4336030	1075 R	12.5	0.001	LOCK function	~~313.00~~	235.00
4337130	1086 R	12.5	0.01	ABS, LOCK, Tol function	~~293.00~~	220.00
4337620	1086 R	12.5	0.0005	ABS, LOCK, Tol function	~~362.00~~	272.00
4337621	1086 R	25	0.0005	ABS, LOCK, Tol function	~~432.00~~	324.00
4337697	1086 R-HR	12.5	0.0001	ABS, LOCK, TOL function, high resolution	~~516.00~~	413.00
4337660	1087 R	12.5	0.0005	ABS, LOCK, TOL function, Max/Min//Max-Min	~~454.00~~	341.00
4337661	1087 R	25	0.0005	ABS, LOCK, TOL function, Max/Min//Max-Min	~~519.00~~	389.00
4337695	1087 R-HR	12.5	0.0001	ABS, LOCK, TOL function, high resolution	~~636.00~~	509.00
4337624	1086 Ri	12.5	0.0005	ABS, LOCK, TOL function, integrated wireless	~~417.00~~	334.00
4337625	1086 Ri	25	0.0005	ABS, LOCK, TOL function, integrated wireless	~~471.00~~	377.00
4337663	1087 Ri	12.5	0.0005	ABS, LOCK, TOL function, Max/Min//Max-Min, integrated wireless	~~488.00~~	390.00
4337665	1087 Ri	25	0.0005	ABS, LOCK, TOL function, Max/Min//Max-Min, integrated wireless	~~552.00~~	442.00

Accessories for measuring instruments with integrated wireless and data cable connection				
4102603	DK-U1	Bidirectional USB data cable with power supply	~~98.00~~	78.00
4102606	DK-D1	Digimatic data cable	~~86.00~~	69.00
4102220	i-stick	Wireless receiver for measuring instruments with integrated wireless	~~96.00~~	77.00

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Digimar 816 CL
Height measuring instrument

- Perfect for accurate measurements in production and the workshop



€ 3885.00
Digimar 816 CL

4429031

Digimar 817 CLM
Height measuring instrument

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



€ 4480.00
Digimar 817 CLM

4429011

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Digimar 814 SR
Height Measuring and Scribing Instrument

- Exact positioning by handwheel



€ 504.00
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
		mm	mm		EUR	EUR
4429030	816 CL	0 – 350	0.01, 0.001	Error limit (2.8 + L/300) L in mm	~~4420.00~~	3445.00
4429031	816 CL	0 – 600	0.01, 0.001	Error limit (2.8 + L/300) L in mm	~~4980.00~~	3885.00
4429010	817 CLM	0 – 350	0.01, 0.005, 0.001, 0.0005, 0.0001	Error limit (1.8 + L/600) L in mm	~~5800.00~~	4060.00
4429011	817 CLM	0 – 600	0.01, 0.005, 0.001, 0.0005, 0.0001	Error limit (1.8 + L/600) L in mm	~~6400.00~~	4480.00
4429012	817 CLM	0 – 1000	0.01, 0.005, 0.001, 0.0005, 0.0001	Error limit (1.8 + L/600) L in mm	~~9900.00~~	6930.00
4426100	814 SR	0 – 350	0.01	Digit height 12 mm, handwheel for positioning and measuring	~~630.00~~	504.00
4426101	814 SR	0 – 600	0.01	Digit height 12 mm, handwheel for positioning and measuring	~~1095.00~~	876.00

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Millimar | Smart and versatile



5312010

€ 814.00
Millimar C 1200

€ 592.00
Millimar 1318



5323010



5313180

€ 232.00
Millimar P 2004 M

Order no.	Product	Numerical display	Resolution	Details	List price	Offer price
		µm	µm		EUR	EUR
5312010	Millimar C 1200	± 5000	0.1	High resolution, high contrast TFT color display	~~957.00~~	814.00

Order no.	Product	Measuring range	Measuring force	Details	List price	Offer price
		mm	N		EUR	EUR
5323010	P 2004 M	± 2	0.75	Measuring pin mounted in ball-bearing guide	~~273.00~~	232.00
5323011	P 2004 T	± 2	0.75	Measuring pin mounted in ball-bearing guide	~~273.00~~	232.00
5313180	1318	- 0.3 . . . 1	0.25 +/-0.05	Dial test indicator inductive probe	~~696.00~~	592.00

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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

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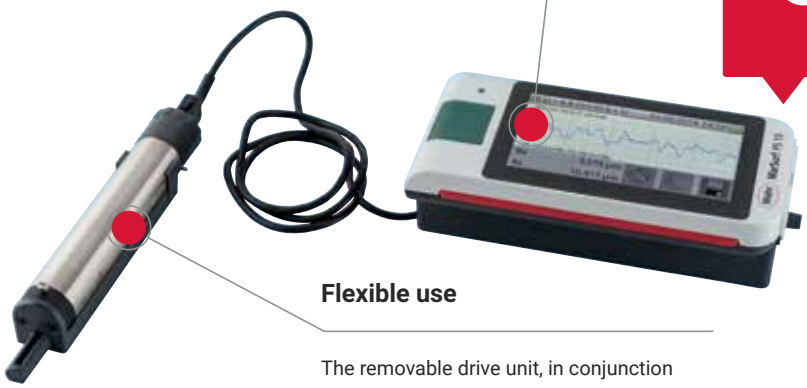
Simple and intuitive to use
for more measuring convenience

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.

€ 1998.00
MarSurf PS 10



6910230

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.



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.



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MarSurf | The best of the mobile devices

€ 3223.00
MarSurf M 300 C



6910431

€ 3223.00
MarSurf M 300



6910401

€ 6995.00
MarSurf M 400



6910404

Order no.	Product	Measuring range	Probe	Details	List price	Offer price
		µm			EUR	EUR
6910230	PS 10	350	Skidded probe system	min. 3900 profiles, min. 500,000 results, min. 1500 PDF measuring records, expandable to 32 GB with microSD card	~~2470.00~~	1998.00
6910431	M 300 C	350	Skidded probe system	integrated memory, max. 40,000 results, max. 30 profiles	~~4605.00~~	3223.00
6910401	M 300	350	Skidded probe system	integrated memory, max. 40,000 results, max. 30 profiles	~~4605.00~~	3223.00
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)	~~9335.00~~	6995.00

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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.

€ 9900.00
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

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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	Introductory price
			EUR
9056373	MarSurf XR 1	Set with ST-G measuring stand, SD 26 drive adapter and MarWin EasyRoughness software	9900.00

Optional accessories			
9058327	All-In-One PC	with touchscreen and Win 10 operating system	on request
6710529	MarSurf CT 120	X-Y positioning table	on request
9967510	Commissioning	Commissioning of MarSurf XR 1	on request
3027221	24" TFT monitor		on request
9968079	Level 1 training	1 day on-site training (must follow commissioning)	on request

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Most **accurate and fast** contour measurements yet

Measuring stations from the MarSurf CD series set new standards when it comes to checking contours. Shorter measuring times, huge versatility and easy handling will noticeably increase your productivity. Careful testing is paramount wherever surface structures affect the functioning or appearance of components. Mahr has perfected the stylus method which is widely used across the world. Mahr's MarSurf surface metrology combines top quality, maximum expertise and perfect know-how.



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Speedy measuring and retooling

- Short measuring times thanks to high positioning and measuring speeds
- Z-axis with full CNC-capability for automatic operation
- Change the probe system quickly without the need for tools thanks to magnetic mounting – without having to recalibrate
- Automatic probe arm detection speeds up measuring sequences and prevents measurement errors

Flexible and versatile on the job

- The large workpiece support plate has enough space even for bulky workpieces
- Large measuring range for a wide range of applications – 70 mm as standard and up to 100 mm with extra-long probe arm
- Maximum handling flexibility thanks to support plate with 50 mm bore dimension and plug-in guide stops
- Wide selection of probe arms and accessory parts

Combines **precision and robustness**

- New probe arm system combines robustness and dynamics for precise measuring results, even in harsh manufacturing environments
- Low workpiece setup height and integrated TY-adjustment ensure a stable base and lower residual noise values when measuring.

Models of different measuring stations

Order no.	Product	X-axis 140 mm	X-axis 280 mm	Z-axis 350 mm	Z-axis 600 mm	Angle adjustment
6269000	MarSurf CD 140 BG 11	x		x		
6269001	MarSurf CD 140 BG 12	x		x		x
6269002	MarSurf CD 140 BG 21	x			x	
6269003	MarSurf CD 140 BG 22	x			x	x
6269004	MarSurf CD 280 BG 11		x	x		
6269005	MarSurf CD 280 BG 12		x	x		x
6269006	MarSurf CD 280 BG 21		x		x	
6269007	MarSurf CD 280 BG 22		x		x	x

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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.

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9036395

€ 14900.00
MarSurf XC *basic*

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

For more information go to:
www.mahr.com

Order no.	Product	Details	Introductory price
			EUR
9036395	MarSurf XC ***basic***	MarSurf XC *basic* including control unit, contour software, CT120 and operating instructions	14900.00

Optional accessories			
9064901	MarWin PC	PC - MarSurf with Win 10 operating system	on request
3027221	24" TFT monitor		on request
9960852	Training	1 day commissioning with basic user training	on request

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Fast and reliable results

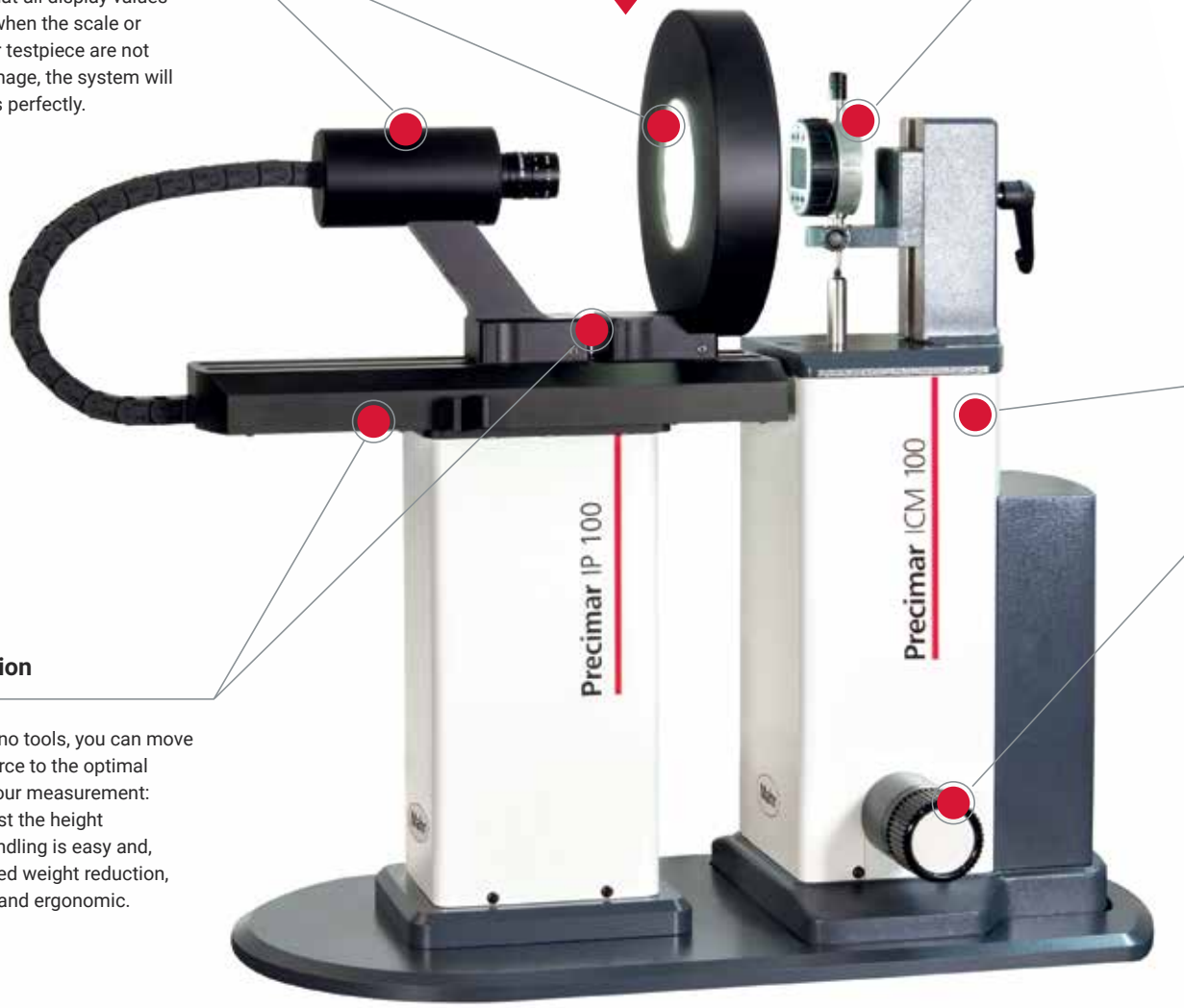
This compact desktop instrument is designed for easy operation and fast test procedures. It also considerably increases efficiency thanks to automatic measuring. Furthermore, the innovative, ergonomic design ensures that every move is spot on.

- 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

€ 25500.00
Precimar ICM 100 IP

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 perfectly.



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.

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Programmed for versatility

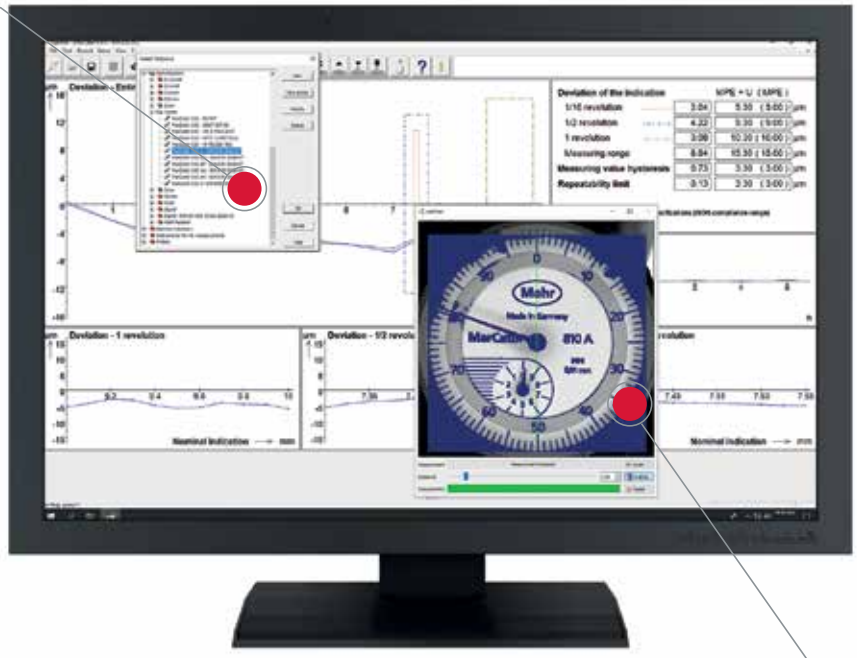
Over 266 measuring instruments are pre-programmed in Mahr's own operating software. Simply select which measuring instrument you would like to check during setup. You will save precious time and can be confident that your testpiece is correctly created in the system. You can even continue to use existing, 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	Introductory price
		mm / inch	µm		EUR
5351010	Precimar ICM 100 IP	100 / 4	0.02	Incremental measuring system, USB 3.0 CMOS camera. Incremental measuring system, USB 3.0 CMOS camera. Price excludes PC, mouse, keyboard, monitor and commissioning	25500.00

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

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Precimar | The length measuring bench: rugged construction makes it suitable for use close to production



Clamping lever

for securing the contact

Mount

for measuring equipment (digital dial indicator, probes, etc.)

5357360

Clamping screw

for securing the support table

Lifting lever

for easy positioning of the measuring probe

€ 1299.00
Precimar SM 60



Sample application:
Precimar SM 60 with arCator 1086 R

Order no.	Product	Measuring range	Application range	Mount ø	Details	List price	Offer price
		mm	mm	mm		EUR	EUR
5357360	SM 60	0 – 25	0 – 60	8	Size of table ø 60 mm, mass 9 kg	~~1635.00~~	1299.00

Suitable dial indicators from the Mahrlights range

Order no.	Product	Measuring range	Resolution	Details	List price	Offer price
		mm	mm		EUR	EUR
4337621	1086 R	25	0.0005	ABS, LOCK, Tol function	~~432.00~~	324.00
4337625	1086 Ri	25	0.0005	ABS, LOCK, TOL function, integrated wireless	~~471.00~~	377.00

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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.

- 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
- 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

€ 30500.00

MarVision MM 420 CNC

Order no.	Product	Measuring range X/Y/Z	Magnification	Details	List price	Offer price
		mm			EUR	EUR
4247601	MM 420, Zoom lens	200 / 100	35x - 225x	with quick adjustment	~~21300.00~~	18900.00
4247701	MM 420 CNC	200 / 100 / 200	35x - 225x	Motorzoom with autofocus	~~33150.00~~	30500.00

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Mahr | MarForm MMQ 100 with EasyForm

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

€ 13400.00

MarForm MMQ 100

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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)



9056592

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. Dedicated measuring programs can be conveniently run via 32 freely available function keys from the EasyForm user interface or via 3 program softkeys in the control panel of MMQ 150.

Order no.	Product	Details	Offer price
			EUR
9056594	MarForm MMQ 100	MarForm MMQ 100 including MarWin 12 EasyForm software package and geared screw chuck	13400.00
9056592	MarForm MMQ 150	MarForm MMQ 150 including motorized T20W measuring probe and operating instructions	23400.00
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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