



BOWERS GROUP

Special Offers



Spring / Summer 2017

Valid until 30th September 2017 (subject to availability)



Partners in Precision

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Welcome from Bowers

Providing the right solution for any measurement need is the ethos of Bowers, as such we supply equipment, ranging from the small hand tool to the exceptionally precise calibration machines designed for controlled conditions and laboratory use. The development of precision measuring instruments is an ongoing task so we balance creating our own solutions with supplying some of the most prestigious third party products, where we feel they are a complementary fit with our product offering and customer requirements.

This leaflet gives you a sample of the precision measuring equipment we have available, as well as examples of how some have been used by customers in multiple industries. To make the purchase easier we have added discounts and these will be valid until **30 September 2017**. For more information on how we can assist you with your measurement needs call us on **08708 50 90 50** or e-mail us on **sales@bowersgroup.co.uk**



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Trimos V4 Basic Manual Height Gauge

The V4 vertical measuring instruments have been developed for the most difficult workshop environments.

The display unit provides functions that are directly accessible and depicted with symbols that are easy to understand. This allows for easy and quick handling even by unqualified personnel. The large 2-line 'Black Mask' display offers an exceptional contrast in all lighting conditions, a unique characteristic on the market.

The V4 is equipped with a second probe holder as well as with an air cushion for easy displacement on the measuring table. The programmable function buttons on the handle allow quick access to the most used functions.



Features:

- Measuring range: 400 and 700mm
- Extremely easy to use
- Electronically adjustable measuring force
- Autonomy: 40 h (lithium-ion batteries)
- Probes up to 450mm long available
- Vast range of accessories
- All adjustments possible without tools
- RS232 and USB interfaces

Trimos V4 Digital Height Gauge

Code No	Range (mm)	List Price
20-V4-400	407	£3,200.50
20-V4-700	711	£3,723.50



Trimos V5 Manual / Motorised Height Gauge

The vertical measuring instrument V5 is the descendant of the legendary V+ line; universally recognised for its ease of use and high quality.

It's clear display and user-friendly functions offer exceptional ease of use. But that's not all, the V5 is equipped with a revolutionary displacement hand-wheel offering it's user the choice of displacement mode of the measuring carriage; either manual or motor-driven. Neither mode is compromised, which means that the user who prefers a manual instrument will not notice a difference from a classic manual instrument, and the same applies to the motor-driven displacement.

The design of the V5 with its side probe holders revives an old Trimos tradition: they enable measuring with long, robust probes guaranteeing excellent repeatability.

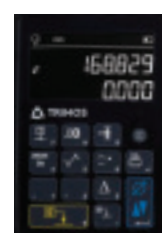


Features:

- Measuring ranges: 400, 700 and 1100mm
- Extremely easy to use
- Electronically adjustable measuring force
- Manual and motor-driven displacement
- Vast range of accessories
- All adjustments possible without tools
- RS232 and USB interfaces
- Probes up to 450mm long available

Trimos V5 Height Gauge

Code No	Range (mm)	List Price	Special Offer Price
20-V5-400	407	£4,211.50	£3,790.00
20-V5-700	711	£4,926.50	£4,434.00
20-V5-1100	1110	£7,867.00	£7,080.00





Bowers XT3 Sets with Digital Display, Head, Ring and UKAS Certification

Bowers' XT3 digital internal micrometers offer a new ergonomic design - including a larger and clearer LCD display - along with IP67 electronics protection and proximity output; allows bi-directional communication giving greater flexibility for data acquisition and storage. The extended mechanical travel of the XT range means that special heads can also be manufactured to accommodate users' most awkward measuring problems. Measuring heads for threads, splines slots, grooves, deep-holes and many more applications are available.



WiFi

Option

RS232

USB

Features:

- Ergonomic design with larger, clearer LCD swivel display
- IP67 electronics
- Simple 2-button operation
- 4 preset memories
- Proximity RS232/USB output
- Bi-directional communication
- Range 2-300mm
- 2-6mm 2 point / 6-300mm 3 point measurement
- Resolution 0.001mm
- Tungsten carbide measuring faces on all 3-point heads from 12.5mm
- Blind bore measurement from 2mm - 6mm and above 12.5mm
- Extensions available above 6mm for deep hole measurement
- Setting rings included with individual instruments and sets
- UKAS certificates supplied as standard with all setting rings
- UKAS certificates supplied as standard with all gauges
- Serial number on all digital readouts and measuring heads
- Heads with special anvils available to suit specific customer requirements (e.g. Threads, grooves, 2-point, spherical, splines etc)
- Bore gauges manufactured according to DIN 863, part 4
- Supplied in fitted wooden case



SXTD3M-XT3



SXTD6M-XT3

Sets: Supplied with one digital display unit, heads, rings and UKAS Certification

Code No	Range (mm)	Measuring Heads	Setting Rings	List Price	Special Offer Price
SXTD3M-XT3	6-10	2	1	£995.50	£846.00 D
SXTD4M-XT3	10-20	3	2	£1,203.50	£1,022.00 D
SXTD5M-XT3	20-50	3	2	£1,656.00	£1,408.00 D
SXTD6M-XT3	50-100	3	2	£1,839.50	£1,563.00 D
SXTD7M-XT3	100-150	2	1	£1,534.00	£1,304.00 D
SXTD8M-XT3	150-200	2	1	£2,126.50	£1,807.00 D
SXTD9M-XT3	100-200	4	2	£3,406.00	£2,895.00 D

Bowers XT Holematic Sets and Large Sets

Bowers' XT3 Holematic offers a new ergonomic design - including a larger and clearer LCD display - along with IP67 electronics protection and proximity output; allows bi-directional communication giving greater flexibility for data acquisition and storage. The extended mechanical travel of the XT range means that special heads can also be manufactured to accommodate users most awkward measuring problems.



WiFi

Option

RS232

USB

Features:

- New ergonomic design with larger, clearer LCD swivel display
- IP67 Electronics
- Simple 2-button operation
- 4 preset memories
- Proximity output
- Bi-directional communication
- RS-232C output
- Range 2-300mm
- 2-6mm 2 point/ 6-300mm 3 point measurement
- Resolution 0.001mm
- Tungsten carbide measuring faces on all 3-point heads from 12.5mm
- Blind bore measurement from 2mm - 6mm and above 12.5mm
- Extensions available above 6mm for deep hole measurement
- Setting rings included with individual instruments and sets
- UKAS certificates supplied as standard with all setting rings
- UKAS certificates supplied as standard with all gauges
- Serial number on all digital readouts and measuring heads
- Heads with special anvils available to suit specific customer requirements (e.g. Threads, grooves, 2-point, spherical, splines etc)
- Bore gauges manufactured according to DIN 863, part 4
- Supplied in fitted wooden case



SXTH3M-XT3



SXTH9M-XT3

Sets: Supplied with digital pistol grip, heads, rings and UKAS Certification

Code No	Range (mm)	Measuring Heads	Setting Rings	List Price	Special Offer Price
SXTH3M-XT3	6-10	2	1	£1,028.50	£874.00 D
SXTH4M-XT3	10-20	3	2	£1,216.00	£1,034.00 D
SXTH5M-XT3	20-50	3	2	£1,592.00	£1,353.00 D
SXTH6M-XT3	50-100	3	2	£1,780.50	£1,513.00 D
SXTH7M-XT3	100-150	2	1	£1,592.00	£1,353.00 D
SXTH8M-XT3	150-200	2	1	£2,126.50	£1,807.00 D

Large Sets: Supplied with digital pistol grip, heads, rings and UKAS Certification

Code No	Range (mm)	Measuring Heads	Setting Rings	List Price	Special Offer Price
SXTH9M-XT3	100-200	4	2	£3,406.00	£2,895.00 D
SXTH10M-XT3	6-20	5	3	£1,575.00	£1,339.00 D
SXTH11M-XT3	20-100	6	4	£2,942.00	£2,500.00 D



Case Study

Accurate and quick

Bowers has a range of calipers, some of which are designed by us, some by our selected partners, below is how Koso Kent Introl Ltd, renowned for supplying specially designed high-quality valves for use in the most severe conditions, purchased a UniCal to assist them with their in-process inspection.

Ring type joint flanges, more frequently referred to as RTJ flanges create a very efficient metal to metal seal. Vital to the effectiveness of the seal is the accuracy of the RTJ groove diameters.

"Although our previously used vernier had given us excellent service, we felt that a modern digital instrument would further improve this important gauging function. Now in constant use, our new UniCal has significantly improved the accuracy and repeatability of our RTJ groove diameter measuring routines. As the gauge is so light and responsive, our operators are able to securely locate its anvils into RTJ grooves whilst the component is still located in the machine tool. The UniCal's smooth action and highly visible digital readout means that extremely precise diameter results can be achieved in half the time previously taken."

Bowers UniCal is an ingenious multi-purpose digital caliper that is designed to accurately perform a wide range of measuring tasks. Available in standard 300mm, 600mm and 1000mm capacities, with larger versions available upon request, Bowers' revolutionary shop-floor proof instruments boast tough, lightweight reinforced beams, giving them incredible strength."

Martin Croft



Sylvac also offer a range of calipers that we believe assist customers, which is why we have highlighted Sylvac's S-Cal EVO Caliper below as part of this spring promotion.

Sylvac S_Cal EVO Caliper - Without Output

Features:

- Max. error 20 µm
- IP67 protected
- Absolute system
- Automatic wake-up
- Powered by standard CR2032 battery
- Battery life up to 3 years



Sylvac S_Cal EVO Caliper

Code No	Description	Range (mm)	Note	List Price	Special Offer Price
30-810-1502/NO	Sylvac S_Cal EVO	0-150	With flat depth rod	£102.00	£76.50 Q
30-810-1522/NO	Sylvac S_Cal EVO	0-200	With flat depth rod	£172.00	£129.00 Q

ACCRETECH SURFCOM Flex Portable Surface Roughness Evaluation

As a mobile surface measurement instrument the SURFCOM Flex automatically detects the feed unit being used. The operation is performed via the membrane keypad and the data can be stored with the profile image, transmitted, or printed on the spot with the integrated printer. SURFCOM Flex is easy, fast and precise in operation and robust for use in a demanding production environment.

Features:

- Small, lightweight and flexible
- 3.5" colour display
- USB interface
- Integrated thermal printer
- High-performance battery for mobile use

Additional Features:

- SURFCOM FLEX 35B-40A-45A
– combination with the Handysurf series
- SURFCOM FLEX 50A
– combination with the SURFCOM 130 series



ACCRETECH SURFCOM Flex

Code No	Description	List Price	Special Offer Price
15-SF35B	SURFCOM Flex 35B	£3,061.00	£2,755.00
15-SF50A	SURFCOM Flex 50A	£6,126.50	£5,514.00

Case Study

Beyond what the eye can see

The world of metrology ensures that quality control in every little detail counts, we are therefore very pleased to be working with ACCRETECH as their partner in the UK representing all aspects of surface, form and geometry measurement equipment. The extensive range of ACCRETECH products has been created with a powerful combination of sophisticated hardware, software and patented technology. For rotational measurement, the roundness testing machines incorporate an air-bearing table, which allows exceptional levels of accuracy by increasing stability and avoiding drive vibration. ACCRETECH's new ACCTEE software offers combined measurement and analysis in one programme with graphical output to help the user easily assess and analyse the measurement results on the roundness and contour tracing machines. ACCRETECH's experience of surface roughness testing is demonstrated in their range of portable and benchtop surface finish testers, all of which allow manufacturers to easily detect imperfections that could impact the components technical functionality; these potentially microscopic deviations can be costly if gone unheeded.

ACCRETECH's product range has been designed to suit all budgets and reduce wastage and cost for customers. These attributes and their level of expertise is why we represent ACCRETECH in the UK.

"Working with Bowers was an easy choice, we wanted to work with a company who had similar values to ourselves and understands the necessity of accuracy in all that they do. Bowers epitomise this with their years of experience in bore gauging and of course customer service."

Gursel Ak – Regional Sales Manager, Accretech Europe



EUROPE

Micro/Macro Vickers Hardness Tester FALCON 500 Series

The FALCON 500 series, Micro Vickers, Vickers and Micro Brinell hardness testing machines improve conventional hardness testing methods and focus on eliminating user influence on the test results. The unique force actuator system utilises an electronically controlled closed loop system and advanced force sensor technology to achieve absolute accuracy, reliability and repeatability, on each of the forces used for a test.

IMPRESSIONS software allows file storing, test programme setting and storing, image zoom, auto focus, limit settings, conversions to other hardness scales, system setup and (remote) control, pattern testing (CHD/Nht/Rht) and widely contributes to the high reproducibility of test results. Fully automatic image evaluation combined with intuitive operator software avoids operator influence on the test results.

Features:

- Load cell, closed loop force control
- IMPRESSIONS operator control
- Auto brightness
- Auto contrast
- Auto sharpness
- Auto focus
- Automatic indent measurement
- 2 indenter positions, 4 objective positions
- 5mp HD camera
- High power LED vertical illuminator with filter position
- Anti-collision system
- Powerful Embedded Micro Controller; MS Windows, 80gb dual SSD data storage keyboard & mouse
- 15" portrait mode, HD industrial touch screen on adjustable table stand

Optional Accessories:

- Overview camera
- Click & Go software option (requires motorised X-Y stage & Overview camera)
- Pattern testing (requires motorised X-Y stage)
- CHD, Nht, Rht (requires Pattern testing and motorised X-Y stage)
- Certified indenters
- Certified hardness test blocks
- Motorised X-Y stage
- 2nd indenter position
- 150mm Ø table
- Choice of objectives (see specification leaflet)
- V-anvil for 1-6mm
- V-anvil for 4-20mm



W-501

FALCON 500 Series Tester

Code No	Description	List Price	Special Offer Price
W-501	3gf – 2kgf, Vickers & Knoop	£23,799.00	£20,229.00
W-511	1gf – 62.5kgf, Vickers, Knoop & Brinell	£33,174.00	£28,198.00

CV Shore Durometers - Analogue

These advanced Shore Scale Durometers provide fast easy-to-read instruments ideal for testing rubber, plastic, leather and all other soft materials. The gauges can be used in hand held mode or mounted onto a sturdy bench stand for improved accuracy and repeatability.

Features:

- Fast and easy to read
- Hand-held operation or via optional bench stand
- Supplied with a setting / reference block
- Portable
- Available in either Shore A or Shore D
- Supplied with UKAS calibration certificate

CV Shore Durometers - Analogue

Code No	Description	List Price	Special Offer Price
SHA0001	Analogue Shore 'A' Scale	£374.00	£330.00 C
SHD0002	Analogue Shore 'D' Scale	£374.00	£330.00 C



Leeb Hardness Tester with External Probe

This is the most recent Leeb portable hardness tester from Innovatest. The digital display shows hardness values in all common hardness scales, making this a versatile product. This precision measuring instrument is equipped with re-chargeable batteries providing over 20 hours continuous operation.

Features:

- New design with built-in thermal printer
- Test results appear directly on the large display
- Easy to operate menu
- 2.8 inch colour TFT LCD screen

Leeb Hardness Tester with External Probe

Code No	Description	List Price	Special Offer Price
W-5310	Leeb Hardness Tester with External Probe	£2,345.00	£1,993.00 I



Dual Display Surface Roughness Tester

Portable surface roughness tester from Innovatest, offering a large measuring range suitable for most materials, including flat, outer cylinder and sloping surface.

Features:

- Pocket-size and economical price
- Measures flat, outer cylinder and sloping surfaces
- Large measuring range suitable for most materials
- Both Rz and Rz parameters in one instrument

Dual Display Surface Roughness Tester

Code No	Description	List Price	Special Offer Price
W-3100	Dual Display Surface Roughness Tester	£1,214.00	£1,031.00 I





Case Study

A Whole New Level of Measurement Capability

Flexibility is key to providing customers with what they need. The FT2-E touch screen can be utilised on more than one projector. This example is how Cambridge Vacuum Engineering took delivery of an R400 with the FT2-E touch screen to dimensionally check various sub-contract manufactured components and customer samples. Although Cambridge Vacuum Engineering have all components manufactured to a high standard, they still require a further selection of tests in order to ensure that they are suitable for their needs.

A variety of these checks, including measurements for angles, forms and radii, are now carried out on the Baty R400 Profile Projector. The components in question are manufactured in many different sizes and configurations, and each one can now be checked in the same way. Cambridge Vacuum Engineering previously used standard measuring tools such as micrometers, Verniers and height gauges to measure components and cover the majority of their requirements. When asked how the BATY 400 assisted them they replied;

"The Baty unit has provided us with a whole new level of measurement capability. It really comes into its own when checking measurement data provided by the supplier. Although we currently only take advantage of a small percentage of what the Baty unit is capable of doing, I'm confident that as time goes on we will get more and more use out of it, and thoroughly explore its full capabilities."

Roy



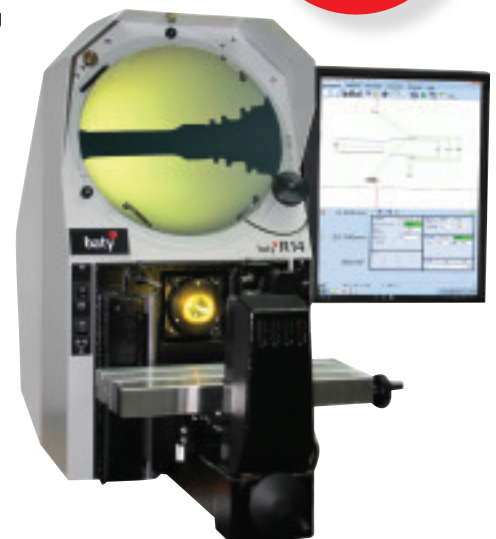
Baty R14 FT2-E Horizontal Bench Mounted Profile Projector

R14 Projector Features:

- 0.5 micron X,Y measuring resolution
- 340mm (14") screen with 90° crosslines and chart clips
- Built in helix adjustment
- Sturdy steel construction with chrome plated slotted cast iron work stage
- X10 magnification lens included
- Profile illumination with air cooled lamphouse
- Fibre optic surface illumination

FT2-E Display Readout:

- Complete touch screen DRO with 2D Fusion Touch software
- Built in high quality optical edge sensor
- Full component reporting, output to excel and/or PDF, SPC data and tolerancing
- Full graphical representation with simple intuitive dimensioning
- DXF import as an alternative to transparent overlays



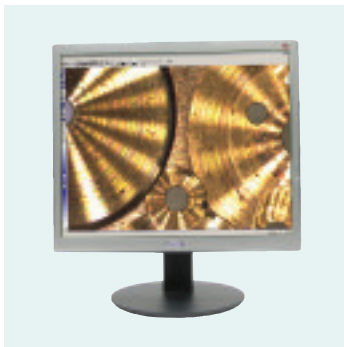
R14 FT2-E Horizontal Bench Mounted Profile Projector

Code No	Description	List Price	Special Offer Price
R14-FT2-E	Horizontal projector with Fusion 2D Touchscreen DRO & optical edge detection	£7,815.00	£6,995.00

Baty Venture 3030 CNC Vision System

Venture 3030 CNC Features:

- Fully automated CNC operation
- Includes CNC controlled high magnification autofocus zoom lens
- Renishaw TP20 touch probe kit included with vision and touch probe calibrated masters
- Rackmount controller, 2 x 19" monitors, keyboard, mouse & joystick included as standard
- 300mm x 300mm large X/Y measurement range, 165mm in Z with adjustable dovetail slide
- High resolution 0.5 micron scales
- Programmable segmented LED light ring, collimated profile illumination and coaxial TTL light
- Advanced 3D error mapping
- Heavy duty stage with high quality cross roller bearings
- Teach and repeat programming
- Advanced video edge detection tools with filters
- Fully dimensioned component view with data output to Excel/PDF
- Full range of reporting options including integrated SPC output
- DXF import/export
- Scan and best fit to DXF
- Auto program from DXF function
- Optional 3D CAD model integration (STEP, IGES)
- 2 days on-site training included



- CNC Zoom
- TP20 Touch Probe kit
- Rackmount Controller
- 2x 19" monitors
- Calibration slide
- Packing, delivery, installation and training

Venture 3030 CNC

Code No	Description	List Price	Special Offer Price
AB3-V-3030	Baty Venture 3030 CNC vision system, auto focus and zoom	£26,609.00	£23,995.00



Sylvac F60T Scan Machine Introduction

The F60T from Sylvac is the next generation of Sylvac Scan systems used in a variety of application areas such as shaft measurement, turned part optical inspection as well as aerofoil and camshaft inspection.

The new F60T is part of a new family of optical scan systems from Sylvac and is an all new machine, with the emphasis on higher productivity and lower cost of ownership.

Higher productivity is achieved by a very high scan rate, a full 300mm long component is scanned in less than 3 seconds, with full thread inspection capability with the F60T model with a 30° inclination.

Lower cost of ownership is achieved with all new mechanics, electronics and camera system along with a completely new set of service diagnostic tools to reduce the time taken to resolve service issues along with much faster calibration routines.

Features:

- New design including optics and camera
- New easy to use tailstock with quick release tooling
- New rotary headstock with quick release tooling
- New Integrated calibration master in waterproof protective housing
- New mechanics, completely new, slide, chassis, counter balance
- New door & light curtain
- New temperature sensors to monitor environmental changes
- New LED status light



Technical Specification

Measuring range:	Diameter 60mm Length 300mm
Holding capacity:	Diameter 120mm Length 315mm
Max error μm diameter:	$<1 = D/100$
Max error length:	$<3 = L/200$
Repeatability diameter:	<0.5
Repeatability length:	<2.0
Tilting (threads):	30 degrees
Rotation speed:	1 rps
Max part weight:	10Kg

Sylvac Scan F60T

Code No	Description	Special Introductory Price
30-909-4065	F60T Sylvac Scan Introductory Price Offer	£57,371.00

Pricing: Whilst every effort is made to ensure accuracy and prices, the prices should be used as a guide only. We recommend you contact the sales office for exact pricing information.