



BOWERS METROLOGY

AUTUMN / WINTER 2011

Valid until 31st March 2012 (subject to availability)

www.bowers.co.uk

Special Offers

Diavite DH8 Surface Finish Tester

See page 9 for details.

NEW



Bowers XTD/XTH Digital Bore Gauge Sets

See pages 4 and 5 for details.



10% OFF

Sylvac D300S Digital Display

See page 10 for details.

NEW



Bowers MicroGauge 2-Point Bore Gauge

See page 3 for details.



NEW

HEIGHT GAUGING

Trimos Altia Digital Height Gauge

The tough range of **Trimos Altia Height Gauge** offers impressive repeatability and accuracy for most workshop-measuring situations at an affordable price. Multiple useful functions are accessed through a simple keypad and displayed on a high definition digital display.

WiFi

RS232

Features:

- Surface distances
- Depths
- External / Internal diameters / centreline distances as standard
- Min / Max Facility
- Squareness deviation
- Metric / Imperial conversion
- Supplied with Setting Master
- RS-232 output



User Friendly

The large digital display allows an easy and convenient reading. The probing indicator guarantees excellent accuracy.

Trimos Altia

Code	Description	List Price	
20-0350	Digital Height Gauge - 370mm / 14"	£2,352.00	
20-0600	Digital Height Gauge - 620mm / 24"	£2,945.00	

**SEND DATA TO
WINDOWS-BASED SOFTWARE:**

**FREE SOFTWARE (30-1521)
AND PC CABLE (30-925-5608)
PACKAGE WITH EVERY ORDER**

Bowers MicroGauge 2-Point Bore Gauge Sets

The new MicroGauge 2-point bore gauging system has been designed specifically for the measurement of small bores between 1.0 - 6.0 mm. Featuring a completely new digital readout and extremely compact overall dimensions, the MicroGauge is truly a pocket-sized instrument. Digital readout and measuring head together are about the same size and format as a ballpoint pen which represents a big advantage for those needing to measure small precision parts and who need to have their gauge with them all the time. The clear LCD display is easily set using only two buttons and results are shown with switchable 0.01/0.001/0.0005 mm resolution. Data transfer is via Proximity-RS232 or Proximity-USB output. The measuring heads are equipped with spherical hard-chromed contact points and are set in appropriate setting rings. Like all Bowers bore gauging products the MicroGauge system is available as individual instruments or as full sets. All setting rings are supplied as standard with UKAS certification.



Features:

- System range : 1-6mm
- New slimline digital display
- Switchable resolution 0.01/0.001/0.0005mm
- Simple 2-button operation
- Clear LCD display
- Data output : RS232 / USB proximity sensor
- Linearity : Diameter 1.0-1.5 max 2% of measuring travel, min 0.001mm. Diameter 1.5-6 max 1% of measuring travel, min 0.001mm
- Repeatability : 0.001mm
- Available as individual instruments or sets
- UKAS-certificates as standard with all setting rings
- Hard-chromed ball-contacts
- Depth-stops available

NEW



MicroGauge with proximity cable

Bowers MicroGauge Sets		
Code	Range (mm)	Introductory Price
SMG001M	0.95-1.55	£1,005.00
SMG002M	1.50-2.45	£636.00
SMG003M	2.25-4.25	£915.00
SMG004M	3.65-6.35	£745.00

BORE GAUGING

Bowers XTD Digital Bore Gauge Sets

Bowers XT Digital Xtreme internal micrometers give the operator the advantage of traditional quality ratchet gauges allied to advanced IP65 electronics. 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 on request.

The Bowers XT range of internal micrometers can be supplied as individual instruments or in complete sets. All XT instruments give the user the advantage of extended measuring travel with fixed anvils and UKAS certification of both measuring head and setting ring as standard.



Features:

- IP65 Electronics
- Simple 2-button operation
- Large easy-to-read display
- 3 preset memories
- RS-232C output
- Range 2 – 300 mm (0.080" -12")
- 2-6mm 2 point / 6-300mm 3 point measurement
- Resolution 0.001mm / 0.00005"
- Tungsten carbide measuring faces on all 3-point heads from 12.5mm
- Blind bore measurement from 2mm-6mm and above 12.5mm (0.500")
- Extensions available above 6mm
- Ratchet stop to ensure consistent 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 case



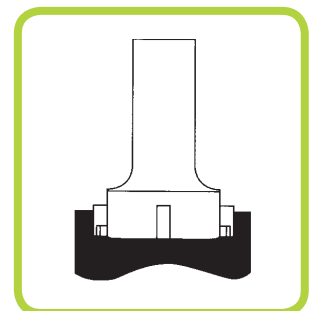
10% OFF



COMPLETE WITH UKAS CERTIFICATION

SETS Supplied with digital display unit, heads, rings and UKAS

Code	Range (mm)	Measuring Heads	Setting Rings	List Price	Special Offer Price	
SXTD3M	6-10	2	1	£882.00	£794.00	Q
SXTD4M	10-20	3	2	£1,067.00	£960.00	Q
SXTD5M	20-50	3	2	£1,469.00	£1,322.00	Q
SXTD6M	50-100	3	2	£1,631.00	£1,468.00	Q



Blind Bore measuring above 12.5mm diameter (0.500")

Bowers XTH Digital Pistol Grip Bore Gauge Sets

Bowers XT Holematic Xtreme bore gauge incorporates an ergonomic pistol grip handle with an advanced trigger action, giving the user the advantages of both speed of operation and a constant measuring pressure. The clear digital display, superior IP65 electronics and application range of 2 to 300mm ensures ease of use and assured accuracy.

The XT Holematic pistol grip range of bore gauges can be supplied as individual instruments or in complete sets. All XT instruments give the user the advantage of extended measuring travel with fixed anvils and UKAS certification of both measuring head and setting ring as standard.



Features:

- IP65 Electronics
- Simple 2-button operation
- Large easy-to-read swivel display
- 3 preset memories
- RS - 232C output
- Self-centring heads
- Constant measuring pressure
- Fast, accurate measurement
- Range 2-300mm (0.080"-12")
- 2-6mm 2 point / 6-300mm 3 point measurement
- Resolution 0.001mm (0.00005")
- Tungsten carbide measuring faces on all 3-point heads from 12.5mm
- Blind bore measurement from 2mm-6mm and above 12.5mm (0.500")
- Extensions available above 6mm
- Setting rings included with individual instruments and sets
- UKAS certificates supplied as standard with all setting rings
- UKAS certificates supplied as standard with all pistol grip gauges
- Serial number on all gauges 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 case



SETS Supplied with digital display unit, heads, rings and UKAS

Code	Range (mm)	Measuring Heads	Setting Rings	List Price	Special Offer Price
SXTH3M	6-10	2	1	£912.50	£821.00 Q
SXTH4M	10-20	3	2	£1,078.50	£970.50 Q
SXTH5M	20-50	3	2	£1,412.50	£1,271.50 Q
SXTH6M	50-100	2	1	£1,579.00	£1,421.00 Q

LARGE SETS Supplied with digital pistol grip, heads, rings and UKAS

Code	Range (mm)	Measuring Heads	Setting Rings	List Price	Special Offer Price
SXTH10M	6-20	5	3	£1,397.50	£1,258.00 Q
SXTH11M	20-100	5	3	£2,610.50	£2,350.00 Q

Ultrasonic Portable Hardness Tester CV-HV450

Portable hardness tester for accurate testing on metals, plastics and ceramics.

Features:

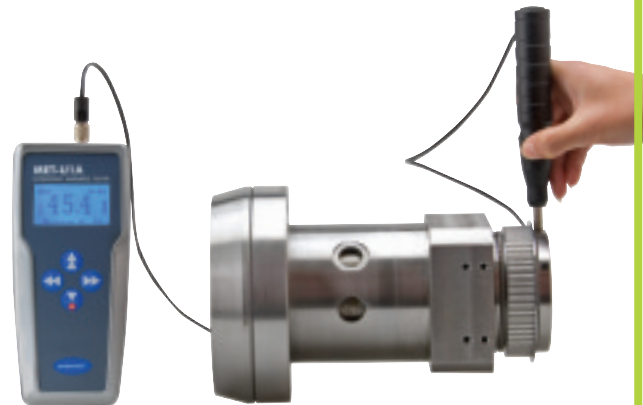
- Uses UCI principle of hardness testing
- Suitable for hardness testing of metals, plastics and ceramics
- Rockwell (HRC), Brinell (HB), Vickers (HV) and Shore (HSD)
- Leaves almost no visible indent on the tested article surface

Standard Delivery:

- Main unit
- U1 ultrasonic probe
- Power unit
- Battery: NiMh, C size
- Carrying case
- CV Instruments certificate
- User and installation manual

Optional Accessories:

- Hardness reference test blocks
- Precision holding fixture for probe
- Battery operated grinder
- Changeable headpiece to probe
- Probe stand



Portable Hardness Tester - CV-HV450

Code	Description	List Price	Special Offer Price
W-HV450	Ultrasonic Portable Hardness Tester	£3,595.00	£3,236.00
W-HV450/10	Stand for HV450 probe	£1,695.00	£1,525.00

CV Hardness Tester - TH-170 Series

Handheld dynamic metal hardness tester with integrated Impact device D.

Features:

- Impact device D integrated: no cables!
- Wide measuring range
- Direct display of hardness scales Rockwell HRB, HRC, Vickers HV, Brinell HB, Shore HS, Leebs HLD
- For all metallic materials
- Provides testing at any angle
- Simple handling and low test expenditure
- High accuracy $\pm 0.5\%$
- Clear LCD display showing all functions and parameters
- Conforms to ASTM A 956 and DIN 50156
- Optional printer TA-220 available



10% OFF



CV Rockwell Type Hardness Tester - TH-170 Series

Code	Description	List Price	Special Offer Price
W-TH170	Universal type	£1,295.00	£1,166.00

Premium Micro-Vickers Hardness Tester EW-410 / 420 Series

Motorised turret with analogue or digital measurement microscope and easy to use integrated hardness calculator.

Features:

- Two models available with 10gf - 1Kgf or 10gf - 2Kgf depending on model
- Fully automatic 4 position turret for Micro Vickers/Knoop measurements
 - Choice of turret configuration
 - 3 objectives and 1 indenter (up to 3 objectives for measuring)
 - 2 objectives and 2 indenter (Vickers & Knoop)
 - Dual indenter (Vickers/Knoop) turret optional
- High resolution analogue eyepiece
- Conversion to Rockwell scales
- Built in high speed printer
- New user friendly display interface



Analogue eyepiece



Digital eyepiece



Standard Delivery:

- Main unit
- Manual X-Y stage
- Objectives according to model (10x & 20x or 10x, 20x & 40x)
- Analogue eyepiece 15x
- Digital eyepiece 15x (DAT models)
- Vickers test block
- Built-in thermal printer
- RS-232 data output
- 4 adjustable feet
- Spare halogen bulb
- Fuse
- Installation & user's manual
- Eseyaw quality certificate

For a full list of Optional Accessories visit www.bowers.co.uk

Premium Micro-Vickers Hardness Tester

Code	Description	List Price	Special Offer Price
W-412AAT	1 KG Analogue, 2 objectives for measuring/observation	£7,150.00	£6,793.00
W-413AAT	1 KG Analogue, 3 objectives for measuring/observation	£7,650.00	£7,268.00
W-412DAT	1 KG Digital, 2 objectives for measuring/observation	£8,650.00	£8,218.00
W-413DAT	1 KG Digital, 3 objectives for measuring/observation	£9,350.00	£8,883.00
W-422AAT	2 KG Analogue, 2 objectives for measuring/observation	£7,750.00	£7,363.00
W-423AAT	2 KG Analogue, 3 objectives for measuring/observation	£8,150.00	£7,743.00
W-422DAT	2 KG Digital, 2 objectives for measuring/observation	£9,150.00	£8,693.00
W-423DAT	2 KG Digital, 3 objectives for measuring/observation	£9,650.00	£9,168.00

CV Surface Roughness Tester - TR-200

RS232

The comprehensive, hand-held **TR-200** represents the ideal multi-function solution for surface roughness testing. This compact gauge has a large measuring range, easy-to-read, backlit graphical and text display and is suitable for a wide variety of applications.



DataView PC Software

Technical Specification

Roughness parameter	Ra, Rz, Ry, Rq, Rt, Rp, Rmax, Rm, R3z, S, Sm, Sk, tp
Assessed profiles	Primary profile (P), Roughness profile (R) Tp curve (material ratio Mr)
Profile recording magnification Vv:	200x - 20000x Vh: 20x, 50x, 200x
Standard	Conforms ISO / DIN / JIS / ANSI (menu selectable)
Measuring system	Metric μm , imperial pinch
Display resolution	0.001 μm / 0.04 μinch
Display features	Detector stylus position indicator Battery level indicator, Direct printing, Direct display of parameters and profiles
Data output	RS-232 port
Measuring range	Ra, Rq : 0.01 - 40.0 μm Rz, Ry, Rp, Rt, R3z : 0.02 - 160 μm Sm, S : 2 - 4000 μm Tp : 1 - 100% (% Ry)
Cut-off lengths	0.25mm / 0.8mm / 2.5mm
Evaluation length Ln	1-5 cut-off

Standard Delivery:

- Certificate
- Main unit, Stylus TS100
- Protection nose piece
- Steel support for standalone use
- Roughness test plate Ra
- Charger, carrying case

Optional Accessories:

- A large range of accessories are available including TA220 printer, pickups/extensions, measuring platform, PC software.

CV Surface Roughness Tester

Code	Description	Special Offer Price
W-TR200	TR-200 Surface Roughness Tester	£1,748.50

ORDER W-TR200 AND RECEIVE DATAVIEW SOFTWARE FOC WORTH £431.00

Diavite DH8 High Precision Surface Roughness Meter

New high precision surface roughness meter for universal use in workshops and inspection rooms. VH model for use with probes with skids only. VHF model for use with probes with and without skids.

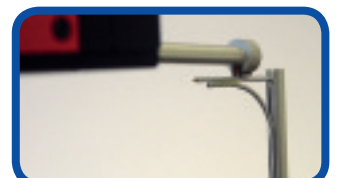
Features:

- Automatic calibration
- Memory for 50 measurements
- 5 measuring lengths, all selectable between 0.5 and 15.0 mm
- Selectable measuring speed
- Calibration for max. 8 tracers
- 8 measuring programs
- Choice of many types of tracers to solve nearly all measuring tasks, also customer specific ones
- User friendly comprehensive multilingual menu guidance
- Tolerance indication for measuring values exceeding permissible allowance set
- Key lock for It, Lc and R to prevent any settings being changed by mistake during measuring procedure
- USB output for data transfer (Option: Bluetooth)
- Choice of capable software programmes DIASOFT (optional)
- Numerous accessories for many applications, needed for working with skid less tracers

NEW



NEW FEATURES ADDED TO THE DIAVITE DH7



Diavite DH8 High Precision Surface Roughness Meter

Code	Description	Introductory Price
13-3053	Diavite DH8 Surface finish tester VH	£3,635.00
13-3051	Diavite DH8 Surface finish tester VHF	£4,163.50

Sylvac S_View D300S Digital Display

The new **S_View D300S** digital display from Swiss Metrology manufacturer, Sylvac is able to display the absolute displacement position of Sylvac's extremely accurate transducer probes, to a resolution of 0.1um. The D300S has a highly visible 8.5 inch LCD digital display and is capable of accepting readings from 2 Sylvac probe inputs (P2-P50) and 6 USB inputs from Sylvac instruments. The new readout can memorise previously input configurations and values and recall both individual or group preset values. Each of the D300S's channels has a separate maths function, whilst all channels have switchable numeric / analogue and statistical displays.

Features:

- Digital display with 8.5" touch screen
- 2 probe inputs for Sylvac P2 to P50
- 6 USB inputs for Sylvac instruments
- Perfect to combine with multi-gauging system
- Linearity correction on 25 points for each channel
- Software able to handle up to 64 instruments simultaneously
- Memorising of configurations and values
- RJ-45 Ethernet connector
- Individual Preset or by group
- Math functions for each channel
- Switchable numeric, analogue and statistics display for each channel
- Has the capacity to connect up to 64 Sylvac transducer probes via the D302 / D304 multiplexers (sold separately)

NEW

- 1 Touchscreen 8.5"
- 2 ON/OFF button for LCD
- 3 Numeric keyboard
- 4 Navigation keyboard
- 5 ON/OFF switch
- 6 Capacitive probes inputs
- 7 RS-232 instrument input
- 8 RS-485 input
- 9 VGA output
- 10 Opto-coupled digital output
- 11 2 inputs for external contacts
- 12 RJ-45 Ethernet
- 13 USB Device connector
- 14 6 USB Host inputs
- 15 24VDC connector
- 16 Audio jack connector



Contact sales@bowers.co.uk for pricing information

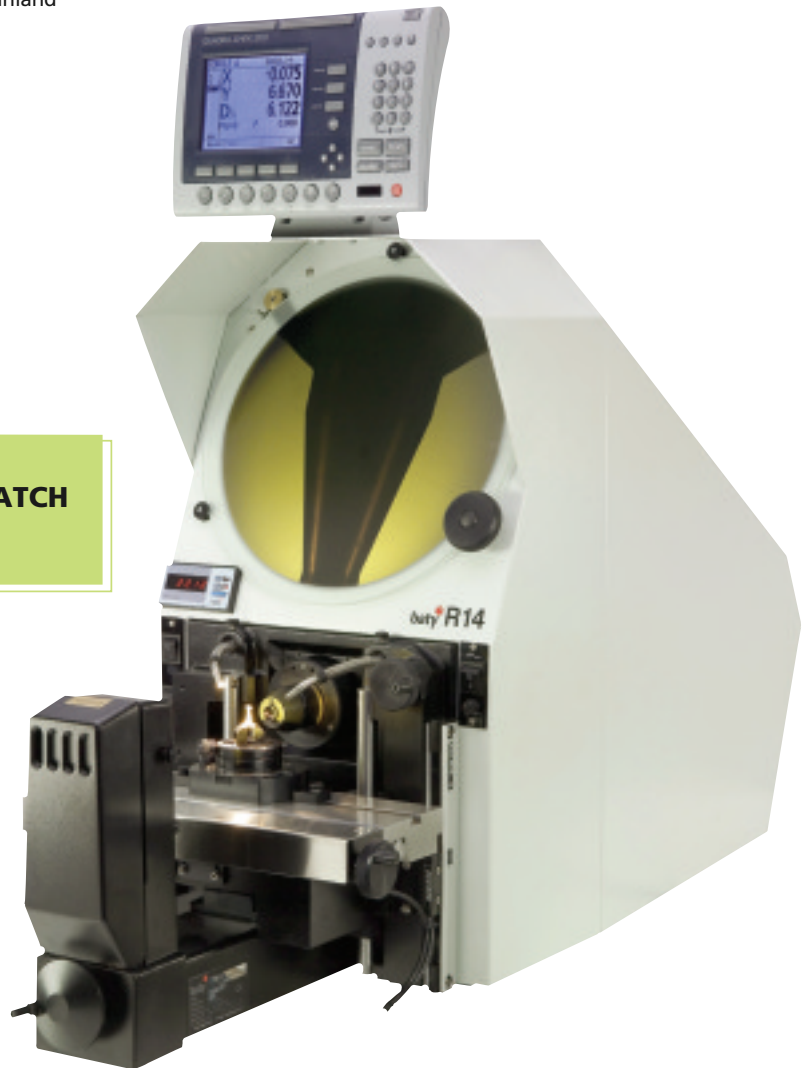
Baty R14 GXL Horizontal Bench Profile Projector

Bowers Metrology Group member, Baty International's R14 bench mount profile projector with its 340mm screen combines high accuracy non-contact measurement and inspection with a large 175mm x 100mm measuring range.

Features:

- 340mm diameter screen with 90° cross lines and chart clips
- Profile illumination with halogen lamp and green filter
- Cast iron Workstage with machined slot for holding accessories
- Measuring range of 175mm lateral and 100mm vertical
- 0.5 micron resolution as standard
- Digital angle protractor
- 2 axis Digital display, with Geometric functions for skew alignment, angle radii measurement, pitch circle diameter and construction of intersect points
- x10 magnification lens
- Surface illumination - fibre optic
- Packing & Carriage, Commissioning & Training to UK Mainland

SPECIAL OFFER PRICE £4,995
AVAILABLE FOR IMMEDIATE DESPATCH
CONTACT sales@baty.co.uk
FOR MORE INFORMATION



CALIPERS & INDICATORS

Sylvac S_Cal ONE Workshop Caliper

Features:

- Robust
- Water resistant
- Swiss measuring system
- Large digits (9.6mm)
- Simple and intuitive functions

BUY TWO GET 3RD FREE



Technical Specification

30-910-2502

Measuring range	0-150mm (6")
Resolution	0.01mm (0.0005")
Max. Error G μm	20*
Thumb wheel device *	Optional
Zero setting	•
Simple and intuitive functions	•

* >100 mm : 30 μm / DIN 862

S_Cal ONE Workshop Caliper

Code	Description	Range	List Price	
30-910-2502	S_Cal ONE	0-150mm (6")	£84.00	Q

Sylvac S_DIAL WORK

Features:

- Integrated, ergonomic lifting device (can be removed)
- Large LCD digital readout
- Direct metric/inch conversion
- Preset
- Zero setting
- Extended battery life of 3,300 hours
- Selection of measuring direction
- Programmable functions by PC
- Lithium CR2302 battery included
- Multiplication Factor Function
- Programmable 3rd Button
- Auto Shut Off Option
- Duplex System
- Dual Output – Proximity /Powered opto
- Coloured tolerance display



Sylvac S_DIAL WORK

Code	Description	Range	Resolution	Special Offer Price	
30-805-5301	S_DIAL WORK	12.5mm / 0.5"	0.001mm / 0.00005"	£332.00	Q
30-805-5501	S_DIAL WORK	25mm / 1.0"	0.001mm / 0.00005"	£368.00	Q