



BOWERS GROUP

Special Offers and New Products



Autumn / Winter 2018/19

Valid until 31st March 2019 (subject to availability)



Partners in Precision

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BOWERS GROUP

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 **31st March 2019**. 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**



Case Study

Moore & Wright Calipers Monitor Growth of Critically Endangered Spider Tortoises at Paignton Zoo

Keepers at Paignton Zoo in Devon are using Moore & Wright calipers to measure the growth and development of critically endangered spider tortoises. As the first zoo in the UK to successfully breed the spider tortoise Paignton Zoo are in the process of rearing the youngster, before sending the reptile on to another zoo to further extend the breeding programme.

Precise and Accurate Measurement Method

It is very important to closely monitor the spider tortoise whilst it is reared. Measurements taken from the width of the spider tortoise's shell are a good indicator of healthy growth and development. Precise and accurate measurements are a must, as well as ensuring that the measurement process causes no unnecessary disruption to the reptile. Due to the size of the tortoise, a method was needed that would very precisely determine measurements down to fractions of a millimetre. Boasting an accuracy of $\pm 0.1\text{mm}$ / $\pm 0.004"$, manufactured from glass reinforced nylon material, the Moore & Wright Plastic Dial Calipers are highly durable, as well as precise, accurate and perfect for repeatable measurement.

"We use the Moore & Wright Plastic Dial Calipers because we like the ease of reading the measurement from them. They are so simple and straightforward that it's easy for lots of different people to use them, and still get the same result. They're so simple to read. The calipers give us very precise measurements, which for such a small animal is essential for monitoring the healthy growth and development of a species that is classed as Critically Endangered. They give us nice accurate results every time!"

Dr Katy Upton

Senior Keeper, Lower Vertebrates & Invertebrates Department at Paignton Zoo

Sylvac SYLCOM

The latest software from Sylvac. Sylcom allows a connection between most of the Sylvac instruments, either by USB or Bluetooth. The universal software can be used to display values in different modes, to upload the drawings of parts with dimensions, to show the agreed level of tolerances and to show the pass / fail readings. All of this data can be exported out to Excel for use in reports. The Sylcom Advance Package allows connection to multiple probes and instruments via the M-bus modules.

Standard Features:

- Can connect up to 16 different devices, 8 if using Bluetooth
- Can export data to Excel
- Has tolerances and control limits, selectable display mode, multigauges mode, sequence mode, user management and configuration of digital indicator menu

Advanced Features:

- Can link up to 128 devices or 40 BT devices (5 Dongles 8 Instruments per Dongle)
- Software requirements: Windows 7 / 8.1/ 10 64-Bit processor
- Hardware requirements: From Intel i5 and 4Gb RAM (8Gb recommended)



Sylvac SYLCOM

Code No	Description	List Price
30-981-7132	Sylcom Standard	£535.50 I
30-981-7232	Sylcom Advanced	£749.00 I
30-981-7245	Sylcom Pro	£880.00 I
30-981-7161	Sylvac VMux Dongle (Single Licence)	£248.50 I



Bowers is very pleased to announce that all Bowers XT-BT list prices are reduced

XT3 Bluetooth Digital Bore Gauge Multi Display Sets

Bowers' XT3 BT digital internal micrometers offer an ergonomic design - including a larger and clearer LCD display - along with IP67 electronics protection, proximity output with built-in Bluetooth; both allow 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.

Features:

- Ergonomic design with larger and clearer LCD display
- IP67 electronics
- Simple 2-button operation
- 4 preset memories
- Proximity RS232/USB output with built-in Bluetooth Low Energy (BLE)
- Bi-directional communication
- Range 2-300mm (0.080"-12")
- 2-6mm 2 point / 6-300mm 3 point measurement



WiFi

Option

RS232

USB

SXTD5U-BT with
Digital Readout
for each 3pt head

Sets: Supplied with digital display unit with each head, setting rings and UKAS

Code No	Range (mm)	Measuring Heads	Setting Rings	List Price	Special Offer Price
SXTD3U-BT	6-10	2	1	£1,759.50	£1,409.50 D
SXTD4U-BT	10-20	3	2	£2,018.50	£1,668.50 D
SXTD5U-BT	20-50	3	2	£2,737.00	£2,237.00 D
SXTD6U-BT	50-100	3	2	£3,233.50	£2,483.50 D

**UP TO
£750
OFF**

Case Study

Bernard Holmes Precision Reduces Reject Rates to Zero with Bowers Group's Bore Gauges

Precision engineering company Bernard Holmes Precision Ltd has succeeded in its aim for zero customer rejects. The company specialises in both CNC and conventional machining in a wide range of materials, with customers from a variety of sectors. Many of the precision components measured require bore measurement, therefore the company was keen to upgrade its kit to include digital gauges, as well as expand the variety of bore micrometers available for use.

"The Best Bore Mics Out There!"

Based in Billingborough in Lincolnshire, Bernard Holmes Precision Ltd specialises in CNC turning and milling of high end precision components, and can cater for either large or small batches, manual or CNC multi axis machining. Employing more than 20 people, it's diverse customers are from a huge range of sectors; from bulk handling to hydraulics manufacturers, and everything in-between.

Zero Customer Rejects

The company has a long reputation of machining complex components with great accuracy. They have a team of extremely skilled precision engineers who ensure that every component is made exactly to the customers' requirements. The inspection team ensure that components are checked before they leave the factory as the company aim for zero customer rejects.

"We decided to start replacing some of our more used and abused bore mics that we bought over 15 years ago with shiny new ones. It's not until I had a walk around our shop that I realised how many we have and how often they get used. They are the best bore mics out. And what a great investment! They've paid for themselves!"

Russell Thackray
Production Director at Bernard Holmes Precision Ltd

Repeatable and Accurate Bore Measurement

Russell Thackray continued: "We use the Bowers micrometers every day; they are an integral part of our quality management. Not only are they easy to use, they are repeatable and accurate. The most important thing is that we trust the readings implicitly. Because we know that we can trust them 100% we have several other brands of mics that sit in the cupboard unused. I know that the lads can pick up the Bowers mics and use them properly; there's no learning curve, no training, and they are clear and easy to read." Bowers Group's micrometers are compact and light, and ergonomically designed to be easy to use.

MicroGauge Large Sets

The MicroGauge 2-point bore gauging system has been designed specifically for the measurement of small bores between 1.0-10.0mm. Featuring a 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 0.01/0.001/0.0005mm 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: 1-10mm
- 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 1.5-10 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
- Stand available as an option



SMG004M

SETS: including digital readout, measuring heads and setting rings with UKAS certificate

Code No	Range (mm)	List Price	Special Offer Price	
SMG001M	0.95-1.55	£1,121.50	£897.20	H
SMG002M	1.50-2.45	£710.00	£568.00	H
SMG003M	2.25-4.25	£1,021.50	£817.20	H
SMG004M	3.65-6.35	£831.50	£665.20	H
SMG005M	6.15-10.35	£1,515.00	£1,212.00	H

Floating Table and Adaptor

Code No	Description	List Price	Special Offer Price	
FTS001	Floating Table Stand	£811.00	£648.80	D
MGSA	MicroGauge Adapter	£59.50	£47.60	D



FST001 and MGSA

Floating Table Stand, code FTS001, and the adapter, code MGSA, will need to be purchased to use the MicroGauge as shown above



Sylvac Hi_Gauge ONE Smart

Digital Height Gauge with Bluetooth from Sylvac. Tagged as IoT ready as the Integrated Bluetooth Wireless Technology give wireless connectivity. By introducing the external diameter ball probe as a constant value you can use the Hi_Gauge ONE Smart to measure groove widths, distances and diameters making this device a very flexible instrument.



Features:

- Robust conception
- Integrated Bluetooth® Wireless Technology
- Equipped with a new carriage blocking system
- Bi-directional measurements
- Quick manual displacement
- Locking device
- Fine adjustment
- Favourite function key
- Two references
- Smart Inductive Sensor (SIS)
- Scriber included
- Diameter Measurement Function



Sylvac Hi_Gauge ONE Smart

Code No	Range (mm)	Resolution (mm)	Maximum Error (µm)	Repeatability (µm)	Launch Price
30-840-0406	400	0.01	40	10	£850.00
30-840-0606	600	0.01	50	10	£950.00

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.

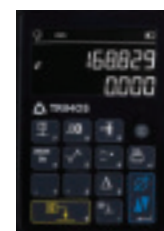
The design of the V5 with its side probe holders revives an old Trimos tradition: they enable measuring with long, robust probes guaranteeing excellent repeatability.

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	£4,296.00	£3,495.00
20-V5-700	711	£5,025.50	£3,995.00
20-V5-1100	1110	£8,024.50	£6,795.00



Trimos Wireless Data Transfer System

For the NEW V Series Height Gauge.

Features:

- A simple module to send data, connect the wireless module to the serial port of the instrument
- Quick and easy transfer of data to PC,s via a USB dongle
- OTA transmission to standard office software
- Trimos Data Transfer Software available to download FREE OF CHARGE on <https://www.bowersgroup.co.uk/downloads/uk/>



Wireless Data Transfer

Code No	Description	Launch Price
20-TA-EL-022	Wireless Data Transfer Kit (Includes Wireless Module and Smart USB Dongle)	£360.00
20-TS-EL-021	Additional Wireless Module (for addition instruments)	£315.00
30-981-7161	Sylvac VMux Dongle (Single Licence)	£248.50





Bench Hardness Tester

The Fenix 200 AR is a new fast and affordable Rockwell testing machine with high quality long life mechanics and readings from a precision analogue indicator. The load is applied from a dead weight force actuator, with solid test load selector design. The newly designed C frame made out of steel (no casting) provides 100% more rigidity compared to traditional casted designs and assures excellent GR & R results, even after many years of use.

Features:

- Rockwell scales A, B, C, D, E, F, G, H, K, L, M, P, R, S, V
- Test loads, pre-load 10kgf, main-load 60, 100, 150kgf
- Adjustable hydraulic force speed damper
- Adjustable dial indicator with 0.5 HR Rockwell units
- Throat depth 150mm, Working height 240mm
- Rockwell EN-ISO 6508, ASTM E-18, JIS Z 2245
- Machine weight (net) 126kg, Machine dimensions H765mm/W270mm/D555mm
- The Fenix-200ACL loadcell, closed loop, force feedback system is a unique feature in this class of instrument



Pre-release product



Fenix Range

Code No	Operating Temperature	Rockwell Scales	Weight	Hardness Scale	Test Load Application	Testing Range	Launch Price
W-Fenix-200AR	10C - 30C	A, B, C, D, E, F, G, H, K, L, M, P, R, S, V	126 kgs	Rockwell	pre-load 10kgf, main-load 60, 100, 150kgf	10 - 150 kgf	£2,995.00
W-Fenix-200ACL	10C - 30C	A, B, C, D, E, F, G, H, K, L, M, P, R, S, V	116 kgs	Rockwell	pre load:10 kgf. main loads 15,625,25,30,3125, 60,62.5,100,125,150,187.5 kgf	10 kgf - 187.5 kgf	£3,575.00

Case Study

Special Testing Ltd Expands Testing Facility with Innovatest Hardness Tester

Bowers Group has supplied leading materials testing company Special Testing Ltd with an Innovatest hardness tester for its new hardness testing facility based in Sheffield. Typically used to test metallic samples of materials involved in the manufacture of components for the oil and gas, nuclear, marine, aerospace and construction industries, the Innovatest Load Cell Closed Loop Brinell Hardness Tester NEXUS 3200 Series is a high quality, compact, Brinell hardness tester with video measuring system. The unit boasts simultaneous conversion to Rockwell, Vickers, Brinell and Leeb rebound testing, an indent ZOOM function, and fully automatic indent measurement.

New Hardness Testing Facility

As part of its mechanical, metallurgical, corrosion and analytical testing services, Special Testing Ltd has invested in a new hardness testing facility. Continued investment in high quality hardness testing equipment means that the company can now carry out Brinell Hardness Testing, Rockwell Hardness testing, Vickers Hardness testing, Vickers Micro Hardness testing and Micro hardness analysis under laboratory conditions.

"The hardness tester from Bowers Group is a really easy to use piece of kit; we use it every day. Unlike the old free standing hardness testers, this one can be mounted on a desk, so it's really handy for the testing environment. Although it's unlikely that we'll move the machine now it's in place, we do have the option as it's quite easy to move."

Alex Roe BEng
Mechanical Testing Technician at Special Testing Ltd

Quick and Simple Sample Measurement Process

Measuring a sample is a quick and simple process; it's easy to see the image on the screen and the useful measuring scope is very user friendly. We like the way that you can save the results and revisions in a table on the screen; that's really handy when we are completing hardness surveys rather than just one off measurements. The demand for hardness surveys has increased over the past few years as more people try to meet the very highest levels of accuracy, enabling them to sell material in the confidence that it is certified to a particular grade, and pass these assurances to their customers. The hardness tester takes away all ifs, buts, and maybes from the testing process. It is very accurate and removes all uncertainty for our customers."

Portable Hardness Testers

A range of portable hardness testers with highly visible results in either a digital or analogue format. This range of portable devices offer affordable but highly accurate on-site testing in workshops and field operations. Users are assured highly accurate and reliable measurement. Able to test large size workpieces which are assembled, unable to cut or inconvenient to move.



W-INMR/01



W-MRD01



W-TH110



W-TH1100

Portable Hardness Testers

Code No	Description	List Price	Special Offer Price
W-INMR/01	Analogue Magnetic Portable Hardness Tester	£2,754.00	£2,478.60
W-MRD01	Digital Magnetic Portable Hardness Tester	£3,800.00	£3,420.00
W-TH110	Universal Hardness Tester (Leeb Principle)	£1,769.00	£1,415.20
W-TH1100	Universal Hardness Tester (Leeb Principle)	£1,070.00	£856.00



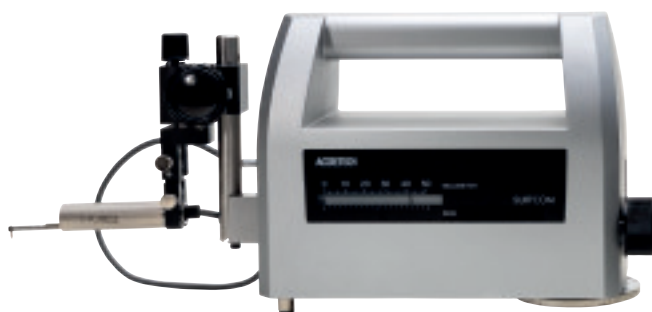
Surfcom Touch

Entry-level model for surface measurements for various production applications, especially suitable for small and medium-sized companies.

**EUROPE**

Features:

- Excellent price-performance ratio
- Simple and self-explanatory user interface with 7-inch touch display
- Depending on the application, up to three different feed units can be combined with the evaluation unit
- Automatic detection of the feed unit
- User-friendly, multilingual user software
- USB/Micro USB interface for extended data storage and transfer to the evaluation software (supportware II)
- Evaluation unit with integrated printer
- High-performance battery for mobile use



Surfcom Touch

Code No	Description	Launch Price
15-S-TCH3582	Surfcom Touch 35B, R2µm with printer	£4,010.00
15-S-TCH40A2	Surfcom Touch 40A, R2µm with printer	£5,185.00
15-S-TCH45A	Surfcom Touch 45A, R5µm with printer	£7,016.00
15-S-TCH50A	Surfcom Touch 50A, R2µm with printer	£8,250.00
15-S-TCH550-11	Surfcom Touch 550, bench top	From £18,900.00

WYLER Digital Inclinometers - Clinotronic S

The Clinotronic S keeps all of the features of the Clinotronic PLUS, like its reliability, accuracy and ease of use, however the Clinotronic S includes the latest technology.

Features:

- **Wireless Functionality** - Clinotronic S can be connected to an Android or iOS device which can then be used as remote displays. The new features makes the instrument much more versatile and opens up new applications for use
- **Excellent display** - The large colour display is back-lit and has a high contrast giving excellent readability, even under adverse conditions like in the workshop or under a machine
- **User friendly** - The completely redesigned user interface allows for very intuitive handling
- **Adjusted to local gravity** - To ensure best possible accuracy the Clinotronic S can be adjusted to local gravity



Technical Specification

Clinotronic PLUS

Measuring range	+/- 45 deg
Settle time	ca.5 seconds
Sensitivity	0.02 mm/m
Working temp.	0 to 40° C
Output	RS 485
Battery	Standard AA 1.5V
Housing	Aluminium hard anodised
Dimensions	100 x 75 x 30mm
Weight	400g



Clinotronic S

Code No	Description	Launch Price
60-015-S-XG45	Clinotronic S without inserts	£1,634.00
60-015-S-HG45	Clinotronic S with magnets all sides	£1,820.00
60-015-S-PG45	Clinotronic S Threaded holes on all sides	£1,727.00

Case Study

Carlin Motorsport Keeps a Level Head with WYLER Digital Inclinometer

Bowers Group has supplied Carlin, a professional motor racing team, with several WYLER Clinotronic PLUS Digital Inclinometers. The inclinometers are used in the workshop, garage, and at the track, making them a key tool in the set up and maintenance of Carlin's motorsport cars. Carlin is one of the largest teams outside Formula 1, with race experience in a variety of championships including British F3, Porsche Supercup, World Series by Nissan, Formula Renault 3.5, A1GP, FIA Formula 3 European Championship, GP3 Series and GP2 Series. Some of today's most successful drivers have passed through the doors of Carlin, with famous names including F1 drivers Sebastian Vettel, Daniel Ricciardo, Kevin Magnussen and Daniil Kvyat.

Ideal for Use in the Set up Garage and on the Circuit

F3 Chief Mechanic Ian Grant said: "The Clinotronic is very versatile; we use it in a variety of ways both in the set up garage and out on the circuit. For such a small piece of kit it is actually very important! It's obviously absolutely vital that the guys have the cars set up perfectly. Any discrepancies with regard to angles on various parts of the car can affect speed and the efficiency of the braking system, so the inclinometer is an incredibly important tool for us. We rely heavily on it and place our trust in it." The inclinometers are used in the workshop on a daily basis for

setting up surface tables. In this instance, the inclinometer is used in its absolute function to check that the surface table is level before work on the car commences. It is then used on various parts of the vehicle whilst the car is mounted on the surface table.

Using the Inclinometer in its Relative and Absolute Function

Several important criteria are measured using the inclinometer. Machined areas on the chassis are used as a reference point, where the inclinometer is set to its relative function in order to act as a guide for relative measurements. The relative function is also used to set the angles of the wings in relation to the chassis. The steering is checked; Carlin engineers set the inclinometer relative to the chassis and then place it on top of the steering wheel to set the angle to zero. The camber and caster of the wheels are also checked, ensuring the correct wheel alignment of the vehicles. Carlin engineers use the Clinotronic inclinometer at the race track to establish a level patch for any adjustments and maintenance to vehicles as required. In this instance, it is used in its absolute function to ensure that the patch is completely flat. If a car crashes, or if a driver is struggling with a set up issue and the car needs to be adjusted, the patch can be used as a level base to ensure all measurements are accurate.

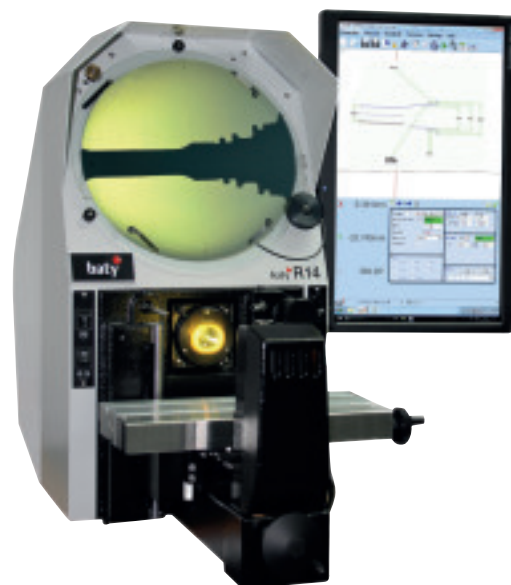
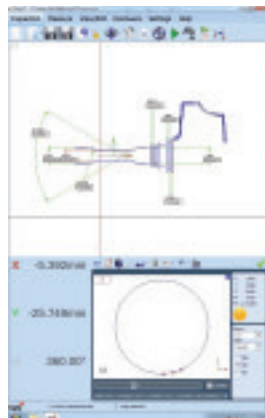


Projector Retrofit from Baty for Profile Projectors

This simple plug and play retrofit improves speed, accuracy and ease of reporting for 2D measurement. The innovative package includes everything required to transform your existing profile projector regardless of age into a new style machine with improved functionality. This package can be installed on all Baty profile projectors as well as the majority of other branded machines.

Features:

- 22" Full HD touch screen monitor with stand or mounting arm
- Intel NUC mini PC with Fusion FT2-E touch screen metrology software
- Interface box for connection to existing Heidenhain / ACU-RITE / Mitutoyo scales
- Optical edge sensor and screen mounting bar
- All necessary cables to convert from your existing scales



Projector Retrofit from Baty for Profile Projectors

Code No	Description	List Price From
R14-FT2	Horizontal projector with Fusion 2D Touchscreen DRO	£2,940.00

NOTE: Price is dependent upon the scale type used, and includes installation and basic training.

Baty Venture XT Fusion V4

Continually updating our range and it's capability ensures that our customers get a diverse range of product options to help overcome any of their measurement issues. As such we are taking this opportunity to give you the first chance to see the new BATY offering. The Venture XT is a newly styled vision system that includes an extended 200mm measuring range in the Z axis and a new column design with integral Z axis counter balance. In addition there are faster X-Y axis drives, a touch screen, greater field of view and magnification – up to 12 x zoom. The enhancements to this new product also include a major redesign of the software giving users the following features:

Features:

- Self-calibrating zoom lens with Field of View error correction
- Improved auto-focus can now find and measure from a distance in one move
- Image stitching – allows a large XY area to be scanned and displayed as a single image
- Live overlays, dimensions and features on the camera (stitched) image. This is extremely useful for driving the machine to features and showing where the features appear in relation to the rest of the unmeasured the part
- One grab measurement of all features in the Field of View
- One click measurement tool
- All features in area tool
- Make curve scan tool from DXF – no more lost edges on badly prepared or dirty parts
- Optional CAD comparison with touch probe programming from 3D model



VENTURE XT TOUCH



VENTURE XT 3D CNC

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.