

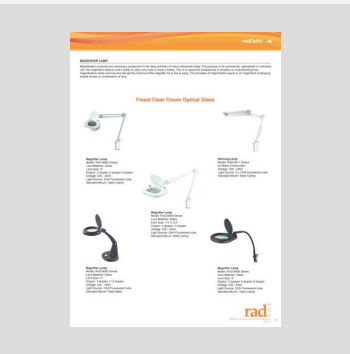


radOptic - Magnifier

Brand.....radOptic

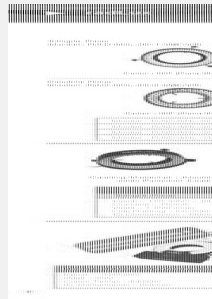
Description

Our magnifier are suitable for many task, which required a combination of good lighting and magnification. they are widely applied in Medical, Beauty, Optical Industries, SMT electronics, and etc .



radLux - LED Illumination for Microscopy

Brand.....radLux





radOptic - RAD-SZJ-7045

Brand.....radOptic

Description

STEREO ZOOM MICROSCOPE RAD-SZJ7045/ RAD-SZJ7045TR

New optical system of **RAD-SZJ-7045** Stereo Zoom Microscopes produce sharp and crystal clear images with excellent flatness and contrast. The images are brighter and more distinct even as the periphery of the field of view. With their large zoom range and long-working distance, they are ideal for high-magnification, high-resolution observation in biological research, precision-oriented semi-conductor and other industries.

Features

- Viewing head: 45° inclined, 360° rotatable binocular head or trinocular head.
- The inter-pupillary distance adjustable between 54-76mm; both diopter adjustment of range ± 5mm
- Eyepiece: Wide field, high-eyepoint eyepiece. It can observe image of observation specimen with glasses
- Objectives: Zoom objective magnification 0.7X-4.5X
- Magnification range: Between 3.5X-180X
- Working distance: 100mm, special maximum working distance can provide more working space for you 30mm-165mm

radOptic - RAD-SZ-6745 / RAD-SZ-6745ESD

Brand.....radOptic

Description

Optical system of **RAD-SZ-6745** Stereo Zoom microscopes produce **sharp and crystal clear** images with **excellent flatness** and **contrast**. The images are brighter and more distinct even as the periphery of the field of view. With their large zoom range and long-working distance, they are ideal for high-magnification, high-resolution observation in biological research, precision-oriented semi-conductor and other industries.

Features

- Viewing head: 45° inclined, 360° rotatable binocular head or trinocular head. The inter-pupillary distance adjustable between 55-75mm; both diopter adjustment of range ± 5mm
- Eyepiece: Wide field, high-eyepoint eyepiece. It can observe image of observation specimen with glasses
- Objectives: Zoom objective magnification 0.67X-4.5X
- Magnification range: Between 2X-225X
- Working distance: 100mm, special maximum working distance can provide more workign space for you 26mm- 287mm





NanoPrep II - Silicon back side Preparation system

Brand..... RKD

Description

Back side thinning and more

The NanoPrep CNC II is designed to perform in package die thinning and polishing along with special machining functions for sample preparation. The die thinned and polished by the NanoPrep CNC II are suited to all back side procedures such as IR emission microscopy and FIB editing. It can make gaskets and other fixtures for use with RKD Engineering, Nisene and NSC decapsulators. It can also perform mechanical decapsulation, removal of heat spreaders and heat sinks. It provides an easy to use solution for total back-side device preparation.

The NanoPrep CNC II is a small, specially designed, CNC milling machine controlled by a graphic touch screen user interface that allows for the operator to select the desired function and enter the key device measurements. There is no need to know anything about machining or "G Code" to operate the NanoPrep CNC II although a computer interface is provided that allows "G Code" programming.

UltraPrep II - Silicon Back Side Preparation System

Brand..... RKD

Description

Large die back side thinning with minimal thickness variation

The UltraPrep II is designed to perform in package die thinning and polishing along with special machining functions for sample preparation. The die thinned and polished by the UltraPrep are suited to all back side procedures because of the near uniform finished silicon thickness. It can also perform removal of heat spreaders and heat sinks, and the removal of plastic and die attach material to expose the die in plastic packages. It provides an easy to use solution for total backside device preparation. The UltraPrep is a small, specially designed, CNC machining system controlled by a graphic user interface that allows for the operator to select the desired function and enter the key device measurements.

Automatic tool touch-down and profiling functions coupled with video alignment make setting up on a device fast and easy. There is no need to level the device as the UltraPrep will accurately profile the die surface and then move the tool according to the stored surface contour. This allows for thickness uniformity on die that are not flat or warped.





MegaEtch - Dual Acid Decapsulation

Brand..... RKD

Description

MEGA ETCH is an Automated Mixed Acid Decapsulator, with advanced feature integration to enable high productivity. This Decapsulator easily and rapidly opens even the most delicate COB packages by delivering precise, micro-aliquots of nitric, sulfuric, or acid mixes to the package with no sample damage.

The delivery of each micro-aliquot is done with sufficient pressure to create extreme turbulence in the etched cavity that greatly accelerates the rate of encapsulate removal. Very low, precise acid temperatures, combined with high micro-aliquot delivery rates allow for the decapsulation of copper wired devices with no wire or metallization damage. An exclusive acid delivery function can be selected that delivers the highest pulse rate possible while consuming less than maximum acid volumes. The specially designed acid heat exchanger can accurately control acid temperature down to **10oC and up to 250oC**, with flow rates to 8ml. per minute using pulse mode. Such high acid pulse rates achieve reasonable etch times even at the lowest temperatures.

Elite Etch ESD - Dual Acid Decapsulation for Copper ICs

Brand..... RKD

Description

Elite Etch - ESD is an Automated Mixed Acid Decapsulator, with advanced feature integration to enable high productivity. This Decapsulator easily and rapidly opens even the most delicate packages by delivering precise, micro-aliquots of nitric, sulfuric, or acid mixes to the package with no sample damage.

The delivery of each micro-aliquot is done with sufficient pressure to create extreme turbulence in the etched cavity that greatly accelerates the rate of encapsulate removal. Very low, precise acid temperatures, combined with high micro-aliquot delivery rates allow for the decapsulation of copper wired devices with no wire or metallization damage. An exclusive acid delivery function can be selected that delivers the highest pulse rate possible while consuming less than maximum acid volume. The specially designed acid heat exchanger can accurately control acid temperature down to **10oC and up to 250oC**, with flow rates to 8 ml. per minute using pulse mode. Such high acid pulse rates achieve reasonable etch times even at the lowest temperatures.





Elite Etch - Dual Acid Decapsulator

Brand..... RKD

Description

Automated Acid Decapsulation was invented and patented by Dr. Ben Winsick more than 25 years ago. Dr. Winsick moved from the Netherlands to join National Semiconductor in Santa Clara, California during this period.

From his pioneering approach to IC package decapsulation until now there have been only a few minor improvements, but no real breakthroughs in decapsulator design - until now.

The Elite Etch from RKD Engineering is an Automated Mixed Acid Decapsulator that enables high productivity through the integration of advanced features, made possible by the use of modern materials and design concepts. RKD's Elite Etch Decapsulator rapidly and easily opens even the most delicate packages by delivering precise, micro aliquots of nitric, sulfuric, or mixes of these acids to the package with no sample damage.

The RKD Elite Etch Acid Decapsulator incorporates many engineering innovations. A monolithic etch head assembly machined from premium grade silicon carbide is used for unsurpassed acid resistance. Coupled with an active nitrogen gas monitoring and purge system this monolithic design reduces the fuming of any residual acids left on the etch head after a decap process - a common problem with less sophisticated designs. Our choice of monolithic silicon carbide also enables short heat-up times.

EliteEtch Cu - Dual Acid Decapsulator

Brand..... RKD

Description

The Elite Etch-Cu from **RKD Engineering** is an Automated Mixed Acid Decapsulator, with advanced feature integration to enable high productivity. This Decapsulator rapidly and easily opens even the most delicate packages by delivering precise, micro-aliquots of nitric, sulfuric, or acid mixes to the package with no sample damage. The delivery of each microaliquoh is done with sufficient pressure to create extreme turbulence in the etched cavity that greatly accelerates the rate of encapsulate removal. Very low, precise acid temperatures, combined with high micro-aliquot delivery rates allow for the decapsulation of copper wired devices with no wire or metallization damage. An exclusive acid delivery function can be selected that delivers the highest pulse rate possible while consuming less than maximum acid volume. The specially designed acid heat exchanger can accurately control acid temperature down to **15oC and up to 250oC**, with flow rates to 8 ml. per minute. The high acid pulse rates achieve reasonable etch times even at the lowest temperatures. The Elite Etch operates at temperatures up to 250oC enabling operational versatility with any combination of acids.





SM20 Profile Projector

Brand.....BATY

Description

The **Baty Shadomaster SM20** with its 500mm screen and high specification presents the capability to make simple comparative measurements through to complex results storage and tolerancing with SPC capability.

The vertical light beam configuration is ideally suited for workpieces which are more readily mounted flat or horizontally.

Standard features

- 500mm screen with 90 degree crosslines and chart clips
- Angled screen for easy viewing
- Profile illumination with halogen lamp and green filter
- Single lens mounting
- Lens magnification choice: x5, x10,x20, x25, x50 and x100
- Helix adjustment of light source for accurate thread form projection
- 250mm x 125mm stage measuring range
- Digital angle measurement

SM350 Profile Projector

Brand.....BATY

Description

The **SM350** is an all new design. This vertical 14" / 350mm screen bench projector features an option where the focus axis can also be used as a 3rd measurement axis.

This enables Z axis height measurements to be taken using a touch trigger probe. Another new feature is the option of a three lens turret for instant lens changes without re-calibration.

Standard Features

- Fully usable 340mm screen
- Digital screen protractor
- Built in helix adjustment
- Sturdy all-steel design
- Cross roller bearings
- Quick release 'X' and 'Y' travel
- Erect image
- Easy-view vertical screen
- Large stage travel 10"(250mm) x 5"(125mm)
- Rotating chart clips
- Fibre optic illumination for surface measurement
- Includes 10x lens





SM300 Profile Projector

Brand.....BATY

Description

300mm screen projector with multi-function readout unit, printer and data output

Standard features

- Top quality profile projector highly versatile and easy to operate
- Large travel range 150mm x 50mm (6"x 2") as standard
- ㄅ Linear scale stage with 0.001mm resolution
- Fine ground glass screen for clear image with cross hairs
- Screen complete with cross hair lines and chart clips
- Built-in profile and surface illumination
- 10x, 20x, 50x, 100x projection lenses available
- Data output via RS-232 interface
- Display-readout unit DC300 included in standard delivery

R600 Profile Projector

Brand.....BATY

Description

The Baty R600 with its 600mm (24") screen and high specification, presents the capability to make simple comparative non-contact measurement through to complex CNC programmed measuring sequences with SPC capability.

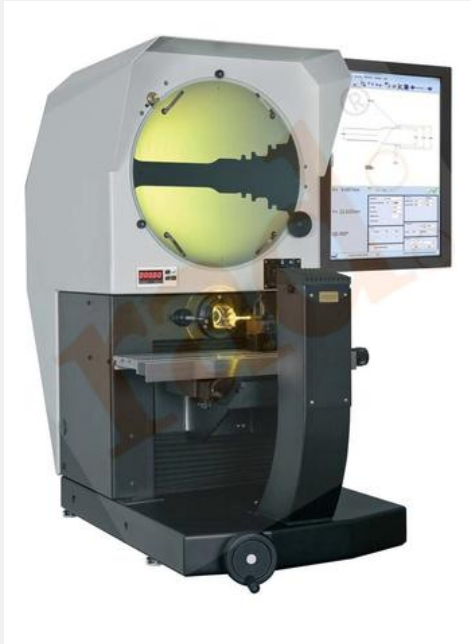
The horizontal light beam configuration is ideally suited to large machined or turned workpieces for mounting in vee blocks and centres, or customised features

Standard features

- 600mm (24") screen with 90° cross lines and chart clips
- Heavy duty work stage with 450mm x 200mm (18" x 8") measuring range and 2 machine slots for workpiece holders
- Angular rotation of $\pm 15^\circ$ on workstage for measuring threadforms or cutting tools
- Vertical 200mm (8") Y axis power driven with joystick control
- Lens magnification choice – x5, x10, x20, x25, x50, x100



- 4 position rotating lens turret for ease of lens changing
- Profile illumination with halogen lamp and green filter
- ヲ Screen hood and curtains for use in bright ambient light conditions
- Digital angle measurement



R400 Profile Projector

Brand.....BATY

Description

The Baty R400 bench mount profile projector with its 400mm screen combines high accuracy non-contact measurement and inspection with a large 300mm x 150mm measuring range.

Choice of digital readouts and automatic profile edge detection. The horizontal light path configuration is ideal for checking machined components that can be secured to the workstage using a range of optional accessories from the Baty fixture family. The robust design of the R400 makes it suitable for both the shop floor and standards room.

Standard features

- 400mm (16") screen with 90° crosslines and chart clips
- Profile illumination with halogen lamp and green filter
- ヲ Lens magnification choice: x10, x20,x25, x50 and x100
- Surface illumination (fibre optic)
- Helix adjustment of light source for accurate thread form projection
- Workstage with two machined slots for holding accessories
- Workstage measuring range of 300mm (12") x 150mm (6")
- Digital angle measurement

R14 Profile Projector

Brand.....BATY

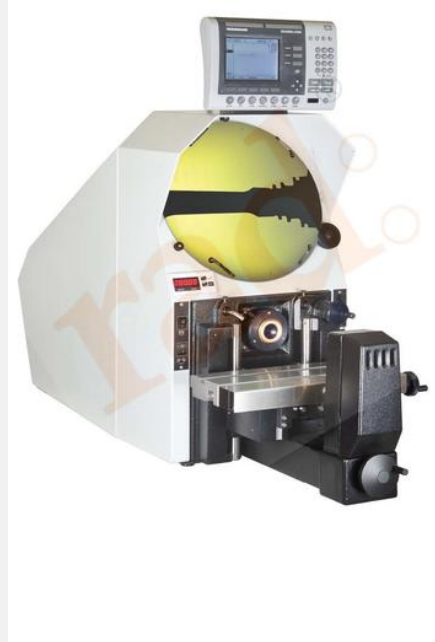
Description

The Baty 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.

Choice of digital readouts and optional automatic profile edge detection. The horizontal light path configuration is ideally suited to machined parts that can be secured to the workstage using a range of optional accessories from the Baty fixture family. The compact and robust lightweight chassis makes the R14 ideal for workshop environments.

Standard features

- 340mm (14") screen with 90°crosslines and chart clips
- ヲ Profile illumination with halogen lamp and green filter
- ヲ Lens magnification choice: x10, x20,x25, x50 and x100
- ヲ Surface illumination (fibre optic)
- ヲ Helix adjustment of light source $\pm 7^\circ$ for accurate thread form projection
- Workstage with machined slot for holding accessories
- ヲ Workstage measuring range of 175mm (7") x 100mm (4")
- Digital angle measurement to 1 minute



ShadoMaster

Brand.....BATY

Description

The ShadoMaster is a horizontal camera based video inspection system that is particularly aimed at turned part measurement.

The cast iron stage has tooling slots aligned with the optical path to facilitate the mounting of work holding fixtures such as vee-blocks and centres.

A selection video edge scanning tools are used to scan the profile of the shaft and Baty's Fusion software converts this scanned data into a dimensioned drawing of the measured part.

Interchangeable fixed objective lenses are used to determine the field of view and pixel size which can be sub-micron for close tolerance requirements.

The VI-3015H can measure shafts up to 300mm in length with a maximum diameter of 150mm providing the overall weight does not exceed 15kg.

Standard system features include:

- ヲ Collimated profile light ideal for shaft measurement
- Choice of 5 fixed objective lenses from 20x - 200x
- 300mm x 150mm measuring range.
- Programmable LED surface illumination with Autofocus for pocket depth measurement
- ヲ Integral Windows 7 controller
- Helix light adjustment for screw thread measurement
- Auto program from CAD

Venture Plus

Brand.....BATY

Description

The Venture Plus range includes all of the standard Venture features with a little more... measuring range that is.

Large Measurement Volume

The Venture Plus is available in four models:

VP-6460 with 640mm x 600mm
x 250mm measuring range

VP6490 with 640mm x 900mm
x 250mm measuring range

VP101040 with 1000mm x 1000mm x
400mm measuring range

VP100150 with 1000mm x 1500mm
x 400mm measuring range

The bridge type construction is all aluminium resulting in low inertia and low thermal mass. Air bearings are used on all axes and a granite Y beam

is used for increased accuracy. This ensures that the machine will expand and contract uniformly with temperature changes ensuring minimal distortion and errors.

Ambient temperature can be compensated for within the Fusion software making Venture Plus ideal for use on the shop floor.

Complete with our standard zoom optics and lighting, Venture Plus offers the same level of camera based functionality as every other Venture.

Standard CNC System Features

Include:

- Teach and repeat programming
- Programmable segmented LED lighting
- ʘ High resolution 0.5µm scales for increased accuracy
- CAD import / export
- Scanning & best fitting
- Fully dimensioned part view
- SPC included
- One click output to Excel™
- Autofocus
- Renishaw TP20 touch probe joint





Venture Touch - 3D Manual & Autofocus

Brand.....BATY

Description

The highly successful Venture range includes both manual and full CNC systems that cover two standard measuring ranges:

The VI-2510 has a 250mm x 125mm x 165mm X, Y, Z measuring capacity and the VI-3030 has 300mm x 300mm x 165mm.

Whether manual or CNC, we believe the newly revised Venture range includes more functionality as standard than any other vision system package on the market.

Venture Touch 3D

This advanced Vision system combines a manually operated X-Y measuring stage with a motorised Z axis. The advantage of this is that the servo motor driven Z axis can provide the all-important autofocus function for Z axis measurement without operator influence.

Other standard features include zoom optics, collimated profile lighting, TTL (coaxial surface lighting) and a 64 LED fully programmable segmented surface lighting system.

Standard Venture Touch system features include:

- ㊦ High resolution 0.5µm scales for increased accuracy
- ㊦ 6.5:1 Zoom optics (with optional CNC control)
- ㊦ Programmable segmented LED lighting system
- Z axis dovetail slide mount for increased Z axis capacity
- ㊦ High precision cross-roller stage
- ㊦ Ultra-smooth plain rod drives
- ㊦ Auto video edge detection tools
- ㊦ Auto programming
- Motorised autofocus
- Full HD touch screen display

VUMASTER - 2D Manual / 2D CNC

Brand.....BATY

Description

VuMaster is a manual 2D vision system with a massive difference.

Due to its innovative absolute 2D scale system, the newly designed VuMaster does not have a conventional moving stage or encoders – just a floating measuring camera that moves anywhere in the measuring range. The result is fast, accurate, 'non contact' measurement over a much larger measuring range – 400mm x 300mm to be exact!

Because the camera moves and the part stays still, there is often no need for expensive and time consuming work holding devices.

VuMaster is either operated manually or by CNC control. Inspection routines can be recorded and stored. When played back in manual mode, these 'programs' guide the operator through a pre-defined inspection procedure recreating the same lighting

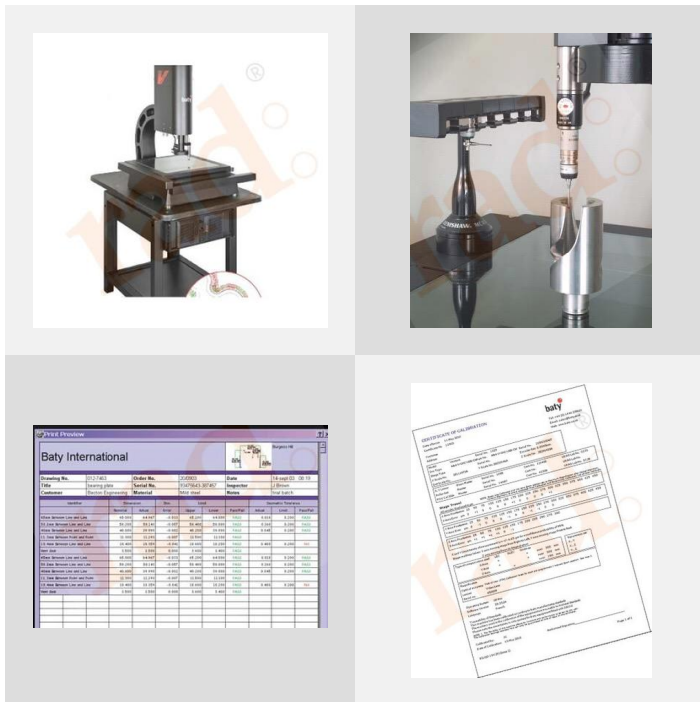


conditions and using 'Video Edge Detection' to automatically 'capture' feature data. For CNC models this process happens automatically.

Finally, a report is generated in the form of a fully dimensioned drawing of the measured part.

Standard features

- ☺ Large 400mm x 300mm measuring range
- ☺ Sturdy construction with a granite base
- ☺ Supplied with Fusion Touch 2D vision software
- ☺ Colourmap measuring technology
- ☺ Programmable collimated profile lighting
- ☺ Teach and repeat part programming
- ☺ Advanced video edge detection
- ☺ Digital zoom
- ☺ Supplied with stand, rack mount PC and touch screen monitor
- ☺ Programmable segmented LED surface ring light
- ☺ Motorised autofocus
- ☺ Image grab
- ☺ Auto inspection playback
- ☺ CNC and Manual models available



VENTURE - 3D CNC

Brand.....BATY

Description

Venture CNC models take the power of fusion software one stage further by completely automating the inspection process. Now advanced features like scanning and best fitting can be done quickly without taking up the time of skilled operators.

CNC Programming is a simply teach and repeat process. Just measure the part once and full CNC program is created automatically. The zoom lens can also be controlled so that magnification changes are recorded into the program.

Standard CNC System Features Include:

- Teach and repeat programming
- Programmable segmented LED lighting
- High resolution 0.5um scales for increased accuracy
- CAD import / export
- Scanning & best fitting
- Fully dimensioned part view
- SPC included
- One click output to Excel
- Autofocus
- 165mm Z axis measuring range on adjustable dovetail slide
- 250mm x 120mm and 300mm x 300mm XY stages available
- Auto program from CAD

Radiant Advanced Devices Sdn. Bhd.

No. 24, Jalan Imigresen, 10400, George Town, Penang, Malaysia
 Tel.....+6 04 210 1390
 Fax.....+6 04 210 1391
 E-Mail.....enquiry@radiant-ad.com
 Website.....www.radiant-ad.com

