PUT THE TIME AND MONEY SAVING BENEFITS OF THE LASER MICROGAGE 2D TO WORK FOR YOU.

The Laser Microgage 2D is compact, easy to use, and intuitive. It makes alignments and measuring possible using incredibly high standards and measuring resolutions as precise as 0.0001 inch (2.5 microns) at ranges of 150 feet (45 meters) and longer.

Pinpoint’s headquarters and state of the art manufacturing facility is located on Boston’s North Shore.

LASER MICROGAGE 2D BENEFITS

- Improves machinery efficiency
- Reduces equipment down time
- Extends machinery life
- Increases manufacturing profits
- Reduces dependence on outside contractors
- Allows for a fast return on investment
- Versatile design can be used in many places
- Supports preventative maintenance programs
- Easy to use
PINPOINT’S LASER MICROGAGE 2D IS THE CHOICE OF INDUSTRY PROFESSIONALS

From ocean going vessels to machine shops to aircraft manufacturers, the Microgage 2D is being used in a wide variety of industrial measuring and alignment tasks. Users appreciate the ease of use and the convenience of having two-axis measuring capability and precise measurements to 0.0001 inch.

Visit www.pinlaser.com for a partial list of our satisfied customers and a comprehensive list of Laser Microgage 2D benefits.
The Microgage 2D receiver detects instantly if a linear run is straight and true. Detect even the slightest deviations in long machinery beds, profile assemblies, measure machinery deflection, track alignment, and more.

Set the laser transmitter on our adjustable rotating base to define a flat plane of laser light for measuring surface flatness and aligning components and assemblies in a precise plane. Perfect for profiling machine beds, adjusting web and roller systems, checking gantry travel, setting tracks and rails, and positioning machinery.

Expand the options for geometric measuring and alignment with the 90-Line Right Angle. The 90-Line redirects the laser beam at a precise right angle, enabling the digital receiver to provide measurements of squareness. Applications include: adjusting the Z axis on machine tools, squaring machinery and equipment, aligning gantry rails and cross bridges, adjusting web and roller systems, checking gantry travel, setting tracks and rails, and positioning machinery.
PARALLELISM MEASUREMENTS

Easily achieve pairs of parallel lines by moving the 90-Line Right Angle to different locations along the beam path and comparing readings along each line. Check assemblies, align rolls and idlers, adjust web systems, position tracks and guide rails, adjust gantry and stage systems, position moving slides, and other applications.

RUN OUT MEASUREMENTS

Attach the Microgage receiver to a moving machine slide or assembly and measure the run-out in the travel. Multiple machinery axes can be checked and measurements made over long distant runs. Quickly find worn machinery areas and create compensation tables or use the Laser Microgage to re-align machine travel. High precision readings are ideal for machine tools, printer heads, scanners and other moving mechanical devices.

LATHE AND SPINDLE ALIGNMENT

Placing a laser in a machine tool spindle or collet or in a lathe chuck projects a precise laser reference line for measurements. Locating the Microgage receiver on the tool holder, tailstock, bar feeder, and other machinery elements is a precise and easy way to check alignment and verify that the machine runs straight and true. These quick, precise measurements are ideal for lathes, CNC turning centers, boring machines and other spindle based tools.
The Microgage laser forms a precise reference beam for checking bore alignment, parallelism, runout, and centerline position. The laser reference beam can be adjusted and centered inside single or multiple bore tubes. The Microgage receiver, supported on a variety of mounts, can check bore position, concentricity, parallelism, and other geometric features. Ideal for checking piston and ram alignment, adjusting propulsion shafts and bearings, evaluating engine bore tubes, and extruder screw alignment.

A precision level on the laser transmitter allows for leveling and adjusting the laser reference beam to align and level machinery and production equipment. A series of adjustable mounts for the laser transmitter and other Pinpoint accessories, expand the capabilities for gantry alignment, checking machine tools, squaring axes, measuring runout and travel errors, and many other applications.
PINPOINT’S LASER MICROGAGE 2D: MADE FOR THE MOST EXACTING JOBS, BUILT WITH DEMANDING PRECISION

Our customers expect nothing but the highest standards in our innovative, intuitive, solidly built measuring instruments. After all, precision is our goal.

- EASY TO USE
- PRECISE MEASURING AND ALIGNING CAPABILITIES
- TWO- OR FOUR-AXIS MEASUREMENT PER RECEIVER
- HANDLES UP TO FOUR VERSATILE RECEIVERS
- KEYPAD ALLOWS EASY DATA ENTRY AND CONTROL
- DISPLAY PROVIDES EASY INSTRUCTIONS
- OPERATES OVER LONG WORKING RANGES
- CLEAR READABLE LCD GRAPHICS DISPLAY
- ALIGNMENT UPDATE IN REAL TIME
- BATTERY OPERATED
- RUGGED COMPACT LASER AND RECEIVER DESIGN
- HIGHLY PORTABLE, FITS INTO COMPACT CASE
- COMPUTER INTERFACE AND SOFTWARE OPTIONS
- EXPANDABLE KITS COVER ALL APPLICATIONS

Visit www.pinlaser.com for a partial list of our satisfied customers and a comprehensive list of Laser Microgage 2D benefits.

SATISFIED MICROGAGE CUSTOMERS

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### MICROGAGE 2D PRODUCT SPECIFICATIONS

#### MEASURING SYSTEM:
- **Measurement Resolution:** 0.0001 inch (2.5 micron)
- **Measurement Range:** ±0.350 inch dual axis X-Y ± 0.5” single axis (±9mm or ±13mm)
- **Operating Distance:** 0 to 150 feet standard (>150’ optimized) (45 meters)
- **Measurement Accuracy:** ±0.0002 inch or 1% of measurement (5 micron)

#### LASER CHARACTERISTICS:
- **Laser Source:** Laser Diode, 635 Nm, < 1mW, Class IIIA (Class II Available)
- **Laser Beam Accuracy:** < 2 arc-seconds
- **Laser Beam Repeatability:** < 1 arc-second
- **Laser Level:** Bubble, machinists level < 10 arc-second
- **Laser Power:** 4 AA-Alkaline batteries
- **Laser Run Time:** > 20 hours per battery set
- **Laser Controls:** On/Off switch, laser on, low battery
- **Laser Dimensions:** 8” long x 2” wide x 3” high (203mm x 51mm x 76mm)
- **Laser Mounting Points:** 1/4-20 and 10-32 mounting holes
- **Laser Housing:** Solid machined aluminum & hard anodized coating

#### RECEIVER CHARACTERISTICS:
- **Active Detection Area:** .750 inch x .750 inch (19mm x 19mm)
- **Protective Window:** Bandpass filter, metallic coating
- **Receiver Dimensions:** 2.00” high x 2.00” wide x 2.00” deep (51mm)
- **Receiver Mounting:** 1/4-20 and 10-32 mounting holes
- **Receiver Cable:** 10’ long, reinforced cladding, black

#### DISPLAY CHARACTERISTICS:
- **Display Unit:** Multi, dual-axis processing system
- **Display Inputs:** Up to 4 dual-axis receivers at one time
- **Display Screen:** LCD graphic screen 5.0” x 3.0” (127mm x 76mm)
- **Display Controls:** Keypad, zero, function, multi-purpose keys
- **Display Information:** X/Y data, signal, functions, alignment steps
- **Display Units:** Inch, MM, Mils, Custom
- **Display Resolution:** 0.0001 inch (2.5 micron)
- **Display Processing:** Multiple user programs for alignment
- **Display Connections:** 4 Receiver inputs, USB, Aux, Serial
- **Display Interface:** USB & Serial RS232c
- **Interface Communication:** Pinpoint Capture (Windows-based)
- **Display Power:** 2 C-cell Alkaline
- **Display Run Time:** > 30 hours per battery set
- **Display Housing:** Solid machined aluminum & hard anodized coating
- **Display Housing Design:** Flip-up display, reversible handle
- **Display Housing Dimensions:** 12” long x 5” wide x 2” high (305mm x 127mm x 51mm)
- **Operating Conditions:** 30° to 130° F (–10° to +55°C), Humidity 0–95%, non-condensing