# RAZORGAGE AUTOMATIC SAW MEASURING SYSTEMS

## RAZORGAGE ST



## BETTER BY DESIGN

Programmable saw stops and pusher systems that have set a new standard for accuracy, repeatability and dependability

## RazorGage ST Automatic Saw Measuring System



The RazorGage ST Automatic Saw Measuring System is at the heart of our product line. Whether you use the ST as an automatic pusher or a measuring stop, this digital measuring fence can be used with a chop saw, upcut saw, downcut saw, drill press, haunching, notching and punching machines.

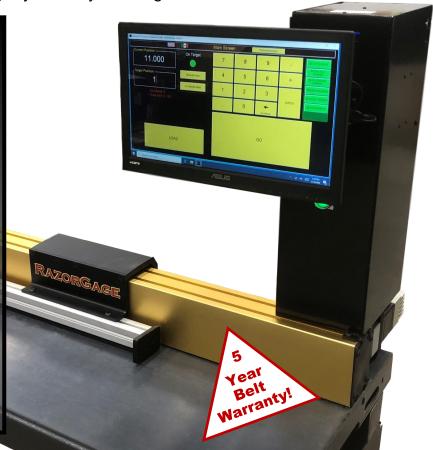
When looking to improve the output and efficiency for your operations, the RazorGage ST offers the highest degree of accuracy, repeatability and long lasting dependability.

This system features a hi-performance motion controller that reacts quickly to jambs, eliminating stretched belts.

The carriage assembly features a Hiwin hardened & ground, linear bearing rail with 2 recirculating ball bearing blocks just like you see on CNC machining centers for near friction-free motion, maximum rigidity, accuracy and long life.

#### **FEATURES**

- Windows PC with hi-resolution touch screen
- Networks easily using ethernet or WiFi and has tons of features
- Store 1000s of cutlists
- Optional optimizing software reduces waste material. Sorts cutlists into 1000's of groups according to multiple criteria, and much more
- Fraction Keys adjust position in just a few key strokes
- Uses the same linear bearings found on CNC machining centers
- Near zero backlash planetary gearhead & drive pulley
- ♦ 5 Year Belt Warranty
- Available in stroke lengths up to 60'

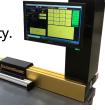


#### PC Options

#### WINDOWS 10 PRO TABLET

Our most popular interface. Supports all RazorGage functionality. Transfer data via Ethernet, Wi-Fi, Bluetooth, or

USB port.





#### **WINDOWS 10 PRO TOWER**

Includes a hi-resolution touch screen monitor. Cables pass through foam compression opening to prevent dust and chip penetration. Multiple USB & Ethernet port, Bluetooth, & Wi-Fi. Extra space makes this a perfect enclosure for RazorGages with custom machine control functions.

#### **OUR PREMISE**

An automatic saw measuring system only benefits your business if you can trust it to position accurately every day.

#### MECHANICAL FACT

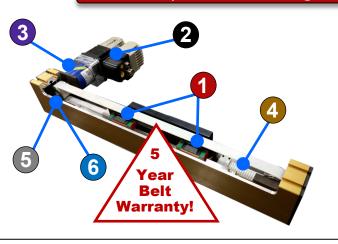
Since most automatic saw measuring systems calculate stop position based on motor rotation, drive component precision is crucial to long term accuracy.

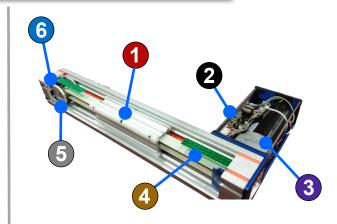
#### OUR CONCLUSION

- The conclusion is simple the quality of the drive components directly affects return on investment.

RazorGage continually exceeds expectations due to the design and quality of our components.

#### Compare RazorGage to other Positioners





The RazorGage positioning carriage mounts on two re-circulating ball bearing blocks sliding on a hardened & ground steel rail. Just like you see on CNC machining centers!





Competitor uses plastic strips sliding on aluminum as the positioning carriage bearing.

RazorGage electronics are sealed inside IP54 rated housing impervious to chips.





Electronics sensitive to chips are inadequately protected.

RazorGage utilizes a planetary gearhead with 3 load paths transmitting torque & less than 7 arc minutes of backlash to maximize accuracy.





Spur gear style reducer others use, with 1.2 gear teeth transmitting load, is prone to excessive backlash.

RazorGage uses no sensors for homing or end of travel eliminating the need for failure prone components and wiring.





Contamination sensitive sensors inside the beam require long cable runs around sharp corners.

30 tooth drive pulley used on RazorGages has a larger bend radius increases belt life and twice the teeth to resist tooth shear.





15 tooth pulley competitor uses, has a tighter bend radius reducing belt life and half the teeth to resist tooth shear.

The RazorGage drive pulley is machined to match the belt tooth profile eliminating backlash.



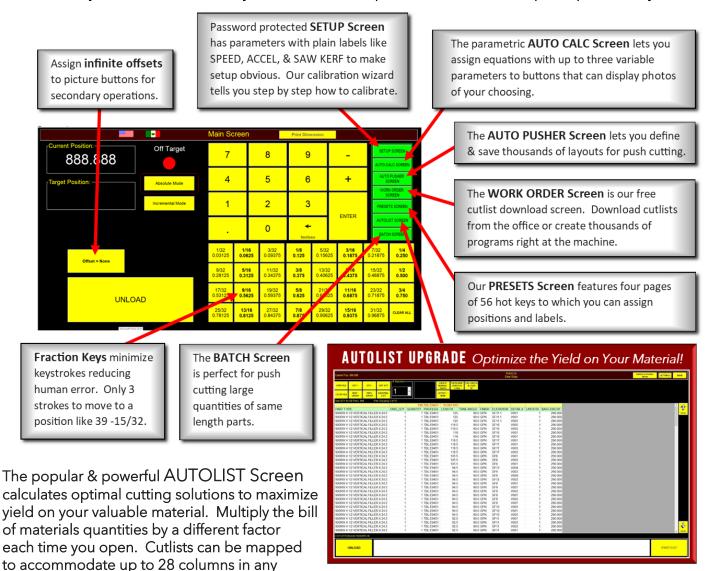


Standard pulleys have 1/64" clearance allowing backlash which reduces accuracy.

## RazorGage ST Better Software

The WINDOWS application software provides a bright, bold user interface. No menus to memorize. Operation is obvious. Setup and calibration functions are just a screen touch away.

Built-in functions such as fraction keys, pages of Presets, the Work Order screen, the Auto-Pusher screen and the Batch screen, help eliminate operator mistakes and improve productivity.



order and sort that list by multiple criteria. As a stop, just touch a line item and the RazorGage moves to position. Pressing the PART CUT button decrements quantity. Items are crossed off when the quantity reaches zero. Enter available clear length for an optimized solution. Switch between pusher & stop any time. Include the Tool Safe Sensor to automate the operation!

#### System Options & Accessories

- Tables Heavy Gauge, Powder Coated Steel
  - 34.5" to 44.5" in height (adjustable)
  - Surfaces 1/4" Solid PVC, PVC Rollers, Steel Rollers ◆ Miter Stop
- **Table Attachment Bracket**
- Chop Saw Table Works with all saw brands

- Label Printer & Stand
- Basic or Gang Stop Extension
- Standard or Heavy Duty Gripper
- Front to Back Adjustable Bracket



#### **TABLE OPTIONS**



- Height adjusts from 34.5" to 44.5"
- 3 surface options;
  - ⇒ 1/4" Solid PVC Sheet
  - ⇒ PVC Rollers
  - ⇒ Steel Rollers
- Durable powder coat finish

#### **CHOP SAW TABLE**



- Height adjusts from 34.5" to 44.5"
- Works with all saw brands
- Durable powder coat finish
- Saw platform adjust to allow perfectly flat transition from table to saw

#### TABLE ATTACHMENT BRACKET



- Easy to adjust height and front-to-back table position for perfect transition to the work surface and fence
- Secures table to machine to eliminate movement
- Durable finish

#### **LABEL PRINTER & STAND**



Print paper labels to help keep your parts organized.

Printer can be purchased with or without the printer stand

#### **BASIC STOP EXTENSION (BSE)**



- Allows the material Stop to be adjusted so it extends close to the blade
- Available in 2' to 6' lengths

Picture shows 2' BSE attached to RazorGage

#### **GANG STOP**



- Use when pushing boards that are stacked or placed side by side
- Standard size-13" wide x 3.5" high
- Custom sizes available

#### **GRIPPER**



- Grips material so it doesn't roll away when being pushed on a roller table
- Only works on hollow extrusions or solid material that has a "fin" like feature.

#### **HEAVY DUTY GRIPPER**



- Grips heavier material so it doesn't roll away when being pushed on a roller table
- Only works on hollow extrusions or solid material that has a "fin" like feature

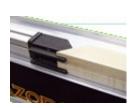
#### ADJUSTABLE BRACKET



• Front-to-Back adjustability for the extension arm

Shown with "birds mouth" stop which is used for double miter saw stop applications

#### MITER STOP



Safely secures 45° mitered ends against the stop when pushing material



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### RazorGage ST Specifications

#### **Technical Details**

Accuracy: ±.004" over 12 feet if calibrated with a capable

measuring device. **Repeatability:** 001"

Push Force: 200 lb at 10 ips

Max Speed: 55 ips

Power Regd: 120 VAC / 10 Amps

Interface: Hi-resolution Touchscreen with Standard Enclosure or

Optional Tower PC

**Networking:** Wifi or Ethernet Operating System: Windows 10 Pro **Length:** Available in 4~60 Foot Stroke

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