

Product Features

200 FPM Feed Rate: The AS-150-MAX provides high throughput up to 200 FPM V-Scoring feed rate. The PCB is moved through the cutting zone with accurate, uniform speed, which is fully adjustable via software control.

Fixed Cutter Design: Twin Z-Axis drive systems are mounted to the rigid steel frame to reduce vibration and simplify calibration, maintenance and construction of the cutter assemblies. Because the PCB is moved in the X and Y, and the cutters are fixed (except score depth control via the top and bottom Z-Axis) the stability of the system results in a dramatic improvement in the repeatability and overall accuracy of the finished product.

Rigid I-Beam Construction: The AS-150-MAX's super-structure is comprised of a rigid I-Beam base, and a thick welded steel frame providing outstanding system rigidity and mass.

Windows® based visual programming: AccuSystems' industry leading software control system provides for complete system control and nearly self-explanatory operation through the use of a graphical user interface. The system displays a board figure with representative score lines to reduce operator error, and stores past jobs for quick and easy retrieval and set-up.

Lifetime Software Upgrades: AccuSystems will provide software upgrades at no charge. As improvements are made in the software that do not effect the functionality of the AS-150-MAX model, an upgrade disk will be made available at no charge.

PC Based Control System: AccuSystems uses the finest computer peripherals available for a highly reliable control center. The base system includes a high-resolution color monitor and pointing device that maximizes the benefits of the graphical user interface.

On-site Installation and Training: AccuSystems provides 2 days of on site installation and training to the pertinent customer staff. Installation includes initial turn on, testing and tuning of the system. Training includes theoretical and practical scoring applications as well as maintenance training. The customer must provide PCB's that are ready for scoring, for 'live' training to take place. All training is designed to make the customer self sufficient despite the availability of outstanding support from AccuSystems. Customer is responsible for all travel and lodging expenses of the installer.

Machine Crating: Domestic crating provides quality crating for airfreight and/or air ride van shipping. Machine is bolted to a wooden skid and 'shrink wrapped'. Other crating is available and is quoted on a case-by-case basis.

1-Year Factory Warranty On Parts and Labor: AccuSystems provides an outstanding 1-year machine parts and labor warranty.

Product Specifications

The AS-150-MAX will perform to the following specifications as delivered from the factory. Preventative maintenance, operator diligence and PCB material qualities can greatly impact the resultant score line.

| Measurement | Specifications (US) | Specification (Metric) |
|---|------------------------------|-------------------------|
| 'Y' Axis Positioning Resolution | ± 0.000050 inches | ± 0.00127 mm |
| 'Y' Axis Positioning Accuracy | ± 0.0004 inches | ± 0.01016 mm |
| 'Y' Axis Score to Score Accuracy | ± 0.002 inches | ± 0.0508 mm |
| 'X' Axis Positioning Resolution | ± 0.0002 inches | ± 0.00508 mm |
| 'X' Axis Positioning Accuracy | ± 0.005 inches | ± 0.127 mm |
| 'X' Axis Jump Score Accuracy (start/stop) | ± 0.100 inches | ± 2.54 mm |
| | ± 0.200 inches top to bottom | ± 5.08 mm top to bottom |
| 'Z' Axis Positioning Resolution | ± 0.000050 inches | ± 0.00127 mm |
| 'Z' Axis Positioning Accuracy | ± 0.0001 inches | ± 0.00254 mm |
| 'Z' Axis Scoring Accuracy (each side) | ± 0.001 inches | ± 0.0254 mm |
| | ± 0.002 inches on the web | ± 0.0508 mm on the web |

Note: The above machine performance specifications are at 0-200 FPM scoring speed, 0-75 FPM positioning speed (subject to score depth and base material).

| Feature | Benefit |
|--|--|
| Tooling Hole Registration | Accurate Alignment |
| Tooling Pins - 0.125" Diameter Standard | Other sizes available |
| Up to 200 FT/MIN Cutting 75 FT/MIN Positioning Speeds | Increased productivity and broader processing window |
| English/Metric and Absolute/Relative Programming | Flexible Programming modes for all users |
| Virtually unlimited Programs / Lines per Program | Large storage capacity of complex programs |
| Fully customizable password protection / user rights | Maintain security of system by user administration |
| Software - Windows Environment / Accu-Score Version 2.0 | Easy to learn - familiar, visually oriented and intuitive |
| Offline Programming option available | Networkable solution for CAM/Engineering departments |
| Panel size range 5.5" x 5.5" up to 24" x 24" (28" Optional) | Handles all common sizes up to and including large panels |
| Panel Thickness Range 0.020" to 0.125" (most cases) | Wide range of material thicknesses supported |
| First Score Line - 0.250" from tooling hole (0.187" Optional) | Allows for close scores which increases panel usage |
| Designed and Manufactured in USA from highest quality components | Customer commitment is built in |
| Clamping - Manual, Two (2) Corner | Simple operation, good stability for typical PCB's |
| Light Curtain Safety System | Instantaneous, non-defeatable safety protection with reduced cycle times |
| Controller - IBM Compatible PC / 4-Axis DSP Controller | Fast, standardized, cost effective off the shelf components |
| Cutter Drive - Fixed, AC Synchronous Motors | Stable system results in overall accuracy and repeatability |
| X, Y and Z-axis drives - Closed loop servo motors | Full feedback for highest accuracy |
| Power - Single Phase 240 VAC, 50/60HZ 10A (30A breaker) | Low power consumption |

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| AS-150_ProductDefinition.pdf | Revision A | 01/01/01 |
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Installation and Facilities Requirements

All site preparations are the responsibility of the customer and must be completed prior to arrival of the machine and subsequent installation.

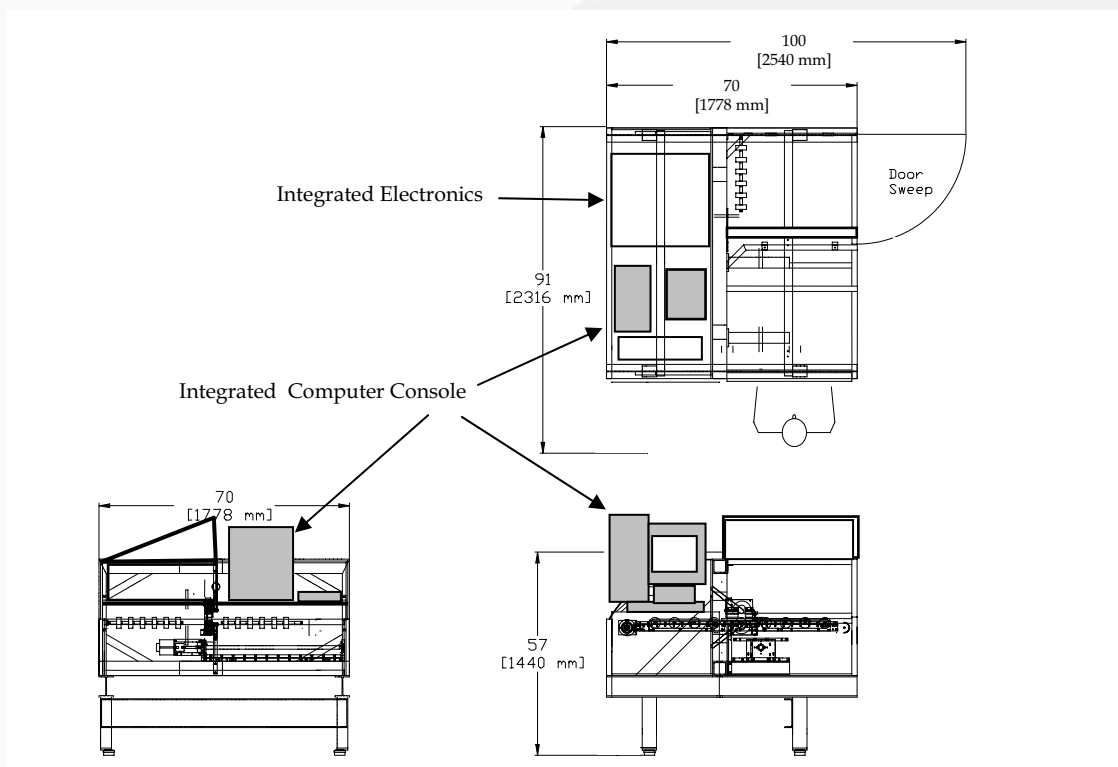


Figure 1: AS-150-MAX
Overall Machine
Dimensions

Utilities & Dimensional Requirements

Specification

| | |
|--------------------|--|
| Power | 240VAC, 10A, 50/60Hz, Single Phase, 30A Breaker Recommended (Uninterruptible power supply recommended) |
| Vacuum | 200 CFM@ 40" Static Pressure (3" Hg) |
| Machine Footprint | See Figure 1, 70 x 70 x 60 inches (approximate) |
| Wall Clearance | See Figure 1, 24 inches for Right and Left Side only |
| Environmental | Clean, cool, and dry environment free of chemical vapors |
| Crated Size/Weight | 84 x 84 x 60 inches/750 lbs (approximate) |

Note: Utilities are required for installation and proper machine operation.