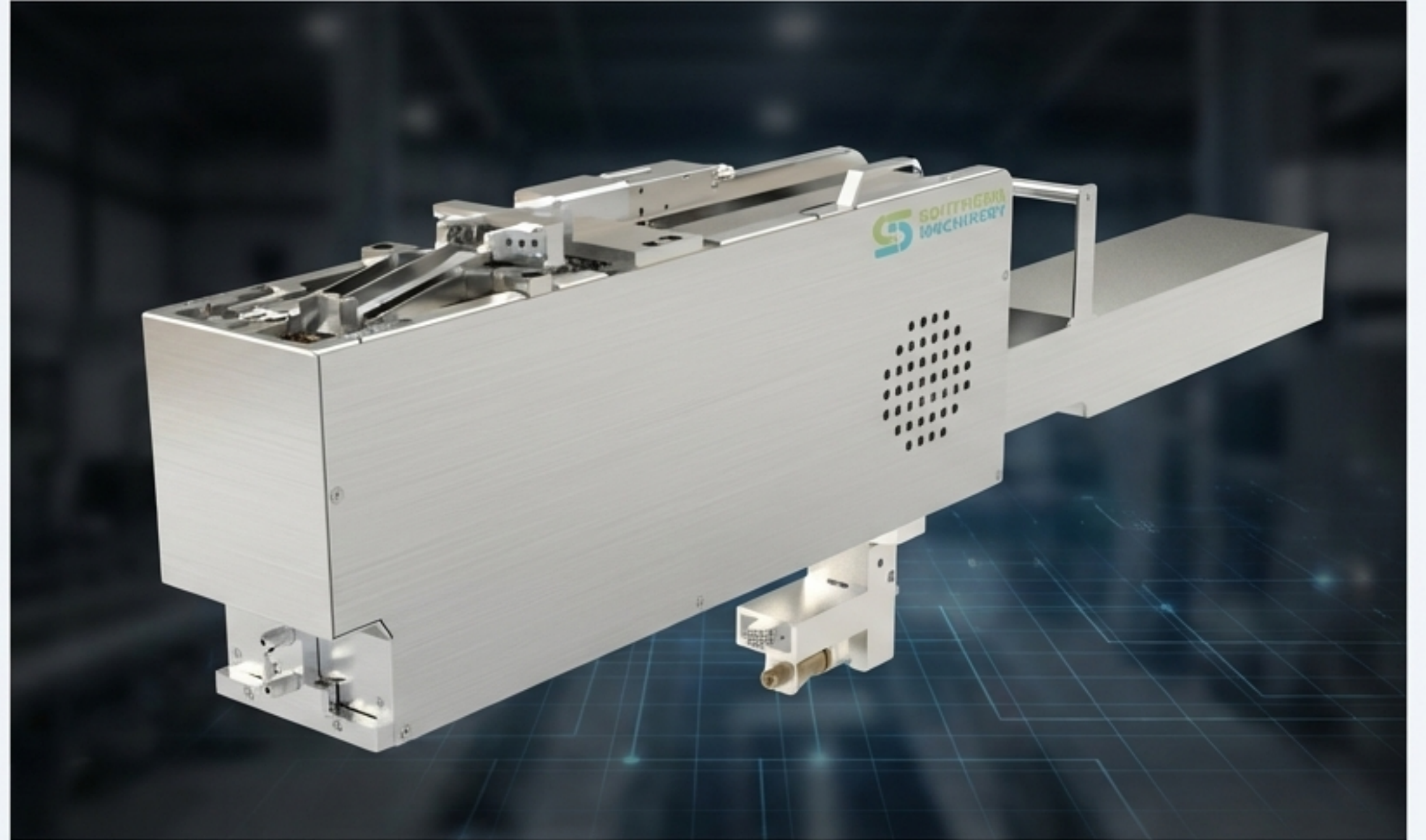
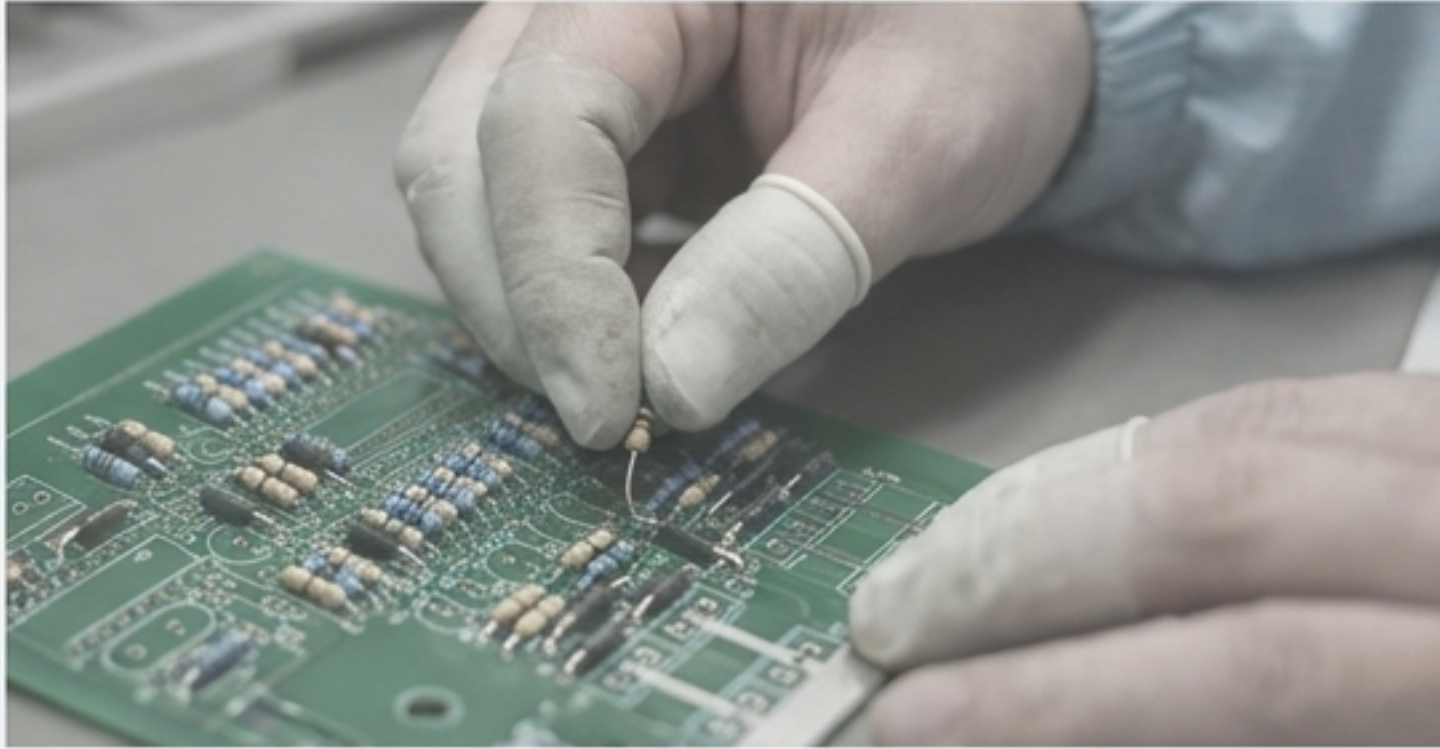


# The Evolution of Odd-Form Insertion

Introducing the Southern Machinery SAF1001 Axial Tape Feeder





## The Final Bottleneck: THT Integration in the Modern SMT Line.

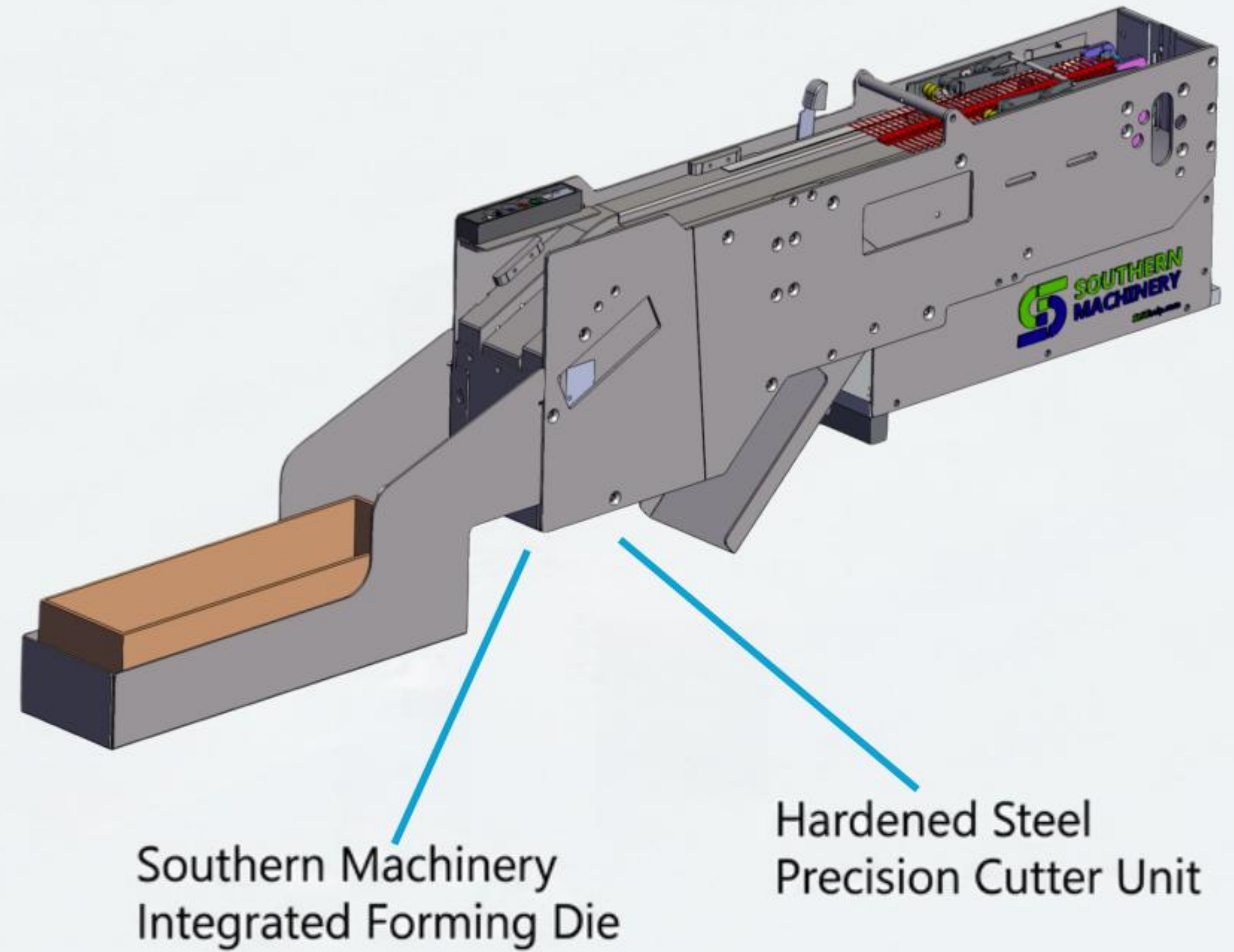
Even in the most advanced SMT lines, Through-Hole Technology (THT) components like axial resistors, diodes, and capacitors are essential. However, the manual insertion of these "odd-form" parts breaks the flow of automation, creating significant inefficiencies.



- ✘ **Reduced Throughput:** Manual handling creates a chokepoint, slowing down the entire production line.
- ✘ **Increased Labor Costs:** High dependency on manual labor for a repetitive, low-value task.
- ✘ **Inconsistent Quality:** Risk of human error leading to placement inconsistencies and higher defect rates.

# Automation Made Accessible. Precision Made Standard.

The Southern Machinery SAF1001 is engineered to eliminate the THT bottleneck. It seamlessly integrates into your existing line, transforming a manual process into a high-speed, fully automated operation with proven reliability for 24/7 manufacturing.



## High-Speed Performance

0.8 seconds per component

## Compact Footprint

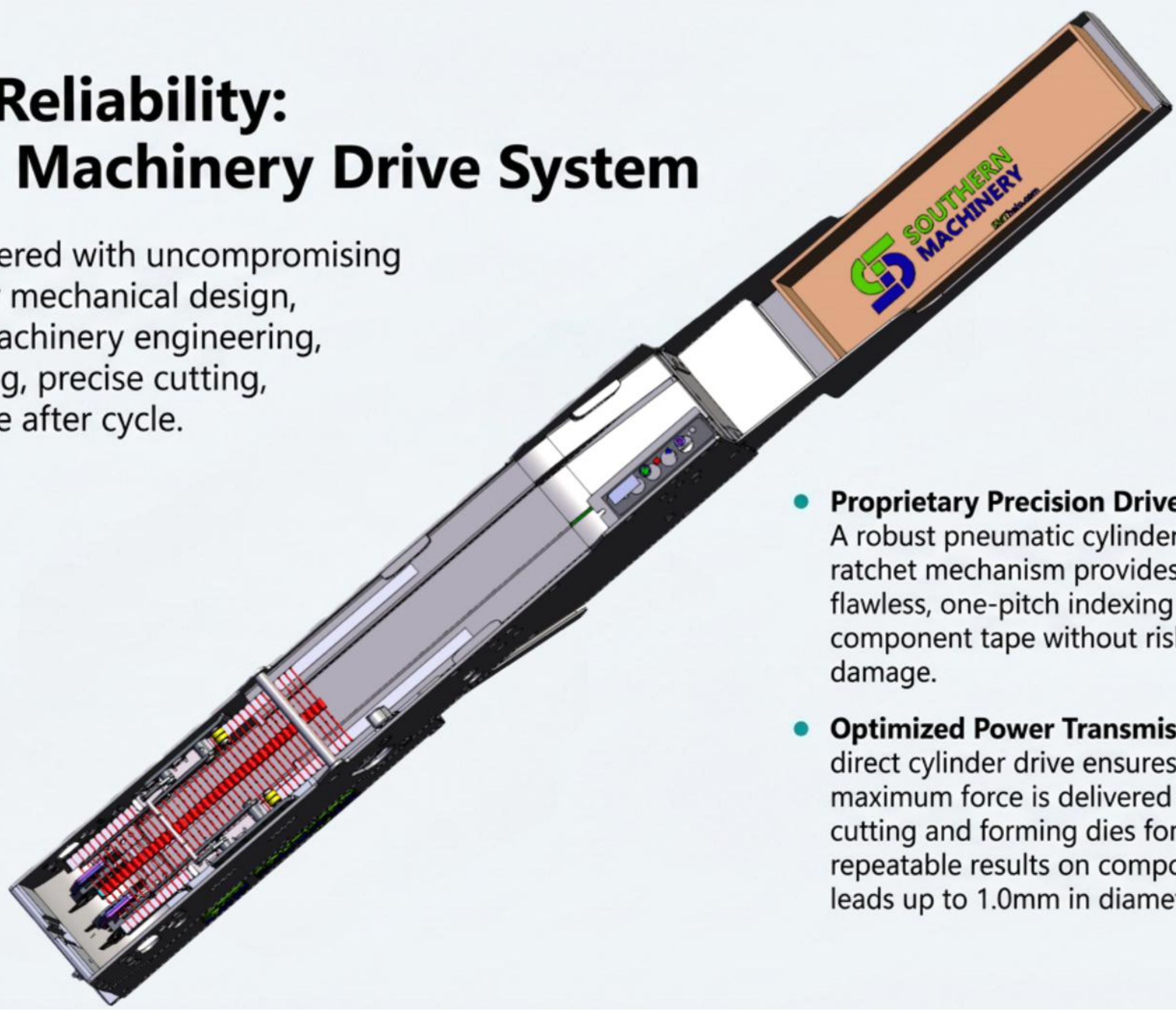
730mm x 95mm design

## U-Shaping & Trimming

Precise, single-process operation

# The Heart of Reliability: The Southern Machinery Drive System

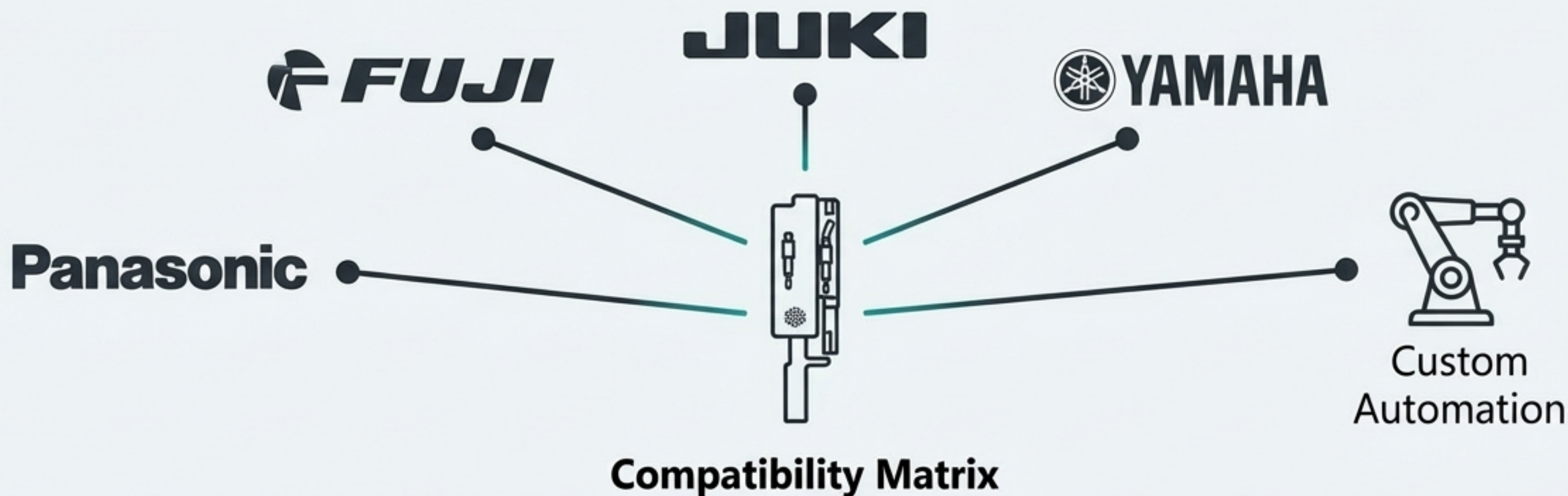
Every component is delivered with uncompromising accuracy. Our proprietary mechanical design, perfected by Southern Machinery engineering, ensures consistent feeding, precise cutting, and perfect forming, cycle after cycle.



- **Proprietary Precision Drive System:** A robust pneumatic cylinder and ratchet mechanism provides flawless, one-pitch indexing of the component tape without risk of damage.
- **Optimized Power Transmission:** The direct cylinder drive ensures maximum force is delivered to the cutting and forming dies for clean, repeatable results on component leads up to 1.0mm in diameter.

# The Universal Asset for Your Production Floor.

The SAF1001 is designed for multi-platform integration. It's a flexible solution that adapts to your equipment and your components, not the other way around.



## Machine Integration

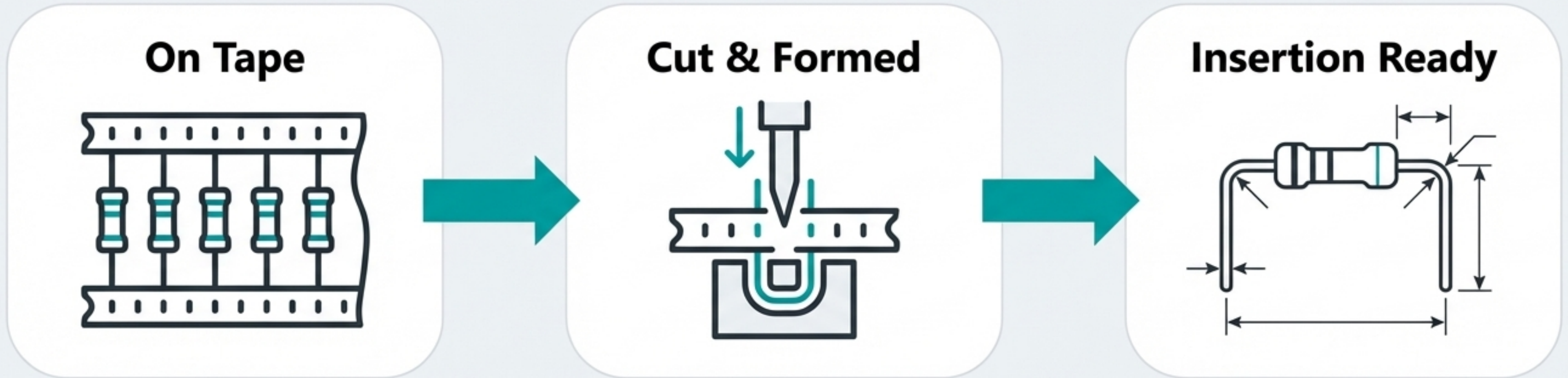
Plug-and-play compatible with industry leaders including Panasonic, Fuji, JUKI, and YAMAHA, as well as custom robotic automation cells.

## Component & Tape Standards

Fully supports EIA-296-F standards. Easily adjusts for standard tape widths (e.g., 26mm, 52mm) and component pitches (e.g., 5mm, 10mm).

# From Reel to Ready in a Single, Synchronized Step.

The SAF1001 is a complete component preparation station. It combines feeding, cutting, and forming into one efficient process, delivering perfectly prepared components for insertion every time.



- **All-in-One Processing:** Feeds components from tape, cuts leads to precise lengths, and forms them for insertion.
- **Adaptable Forming:** Standard U-forming for horizontal mounting. Interchangeable dies are available for vertical (F-form) mounting to maximize PCB density.

# Intelligent Operation for a Smarter Factory

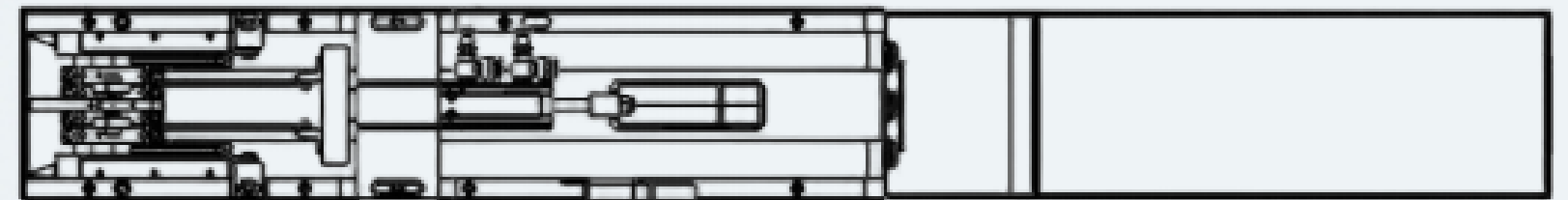
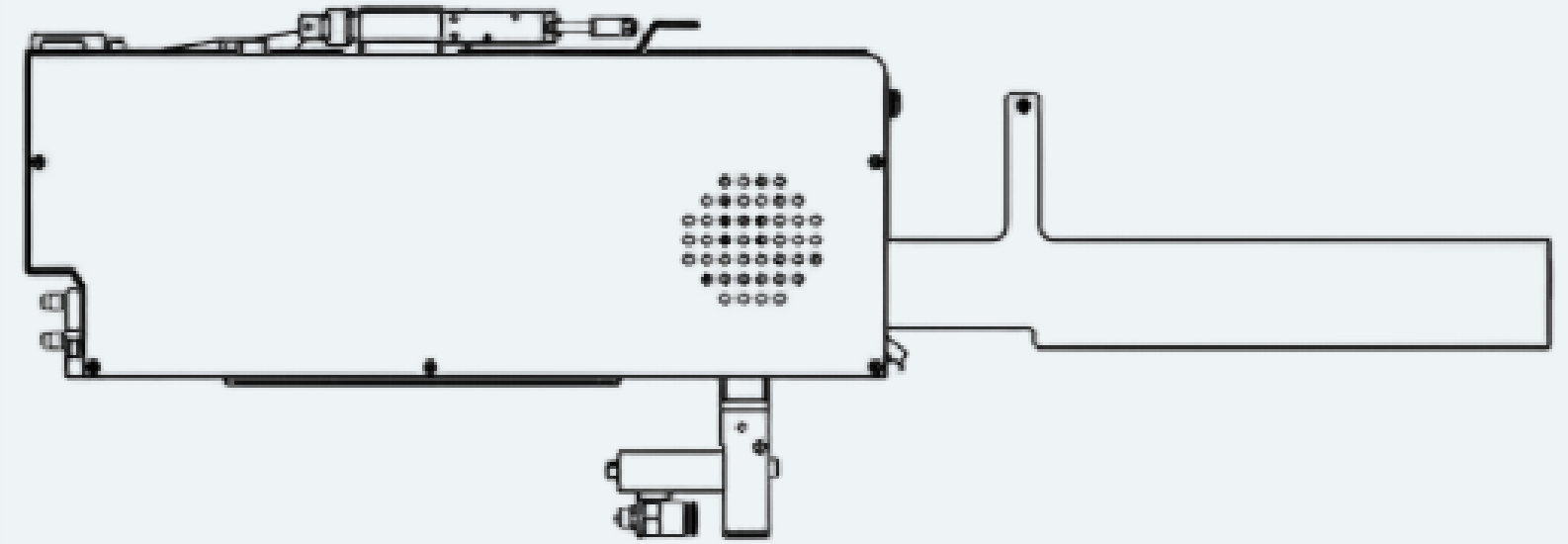
The SAF1001 is an intelligent node in your production ecosystem, designed for maximum uptime and data integration.



**Process Security:** High-resolution fiber optic sensors provide real-time jam detection and empty tape alerts, preventing mis-picks and line stoppages.



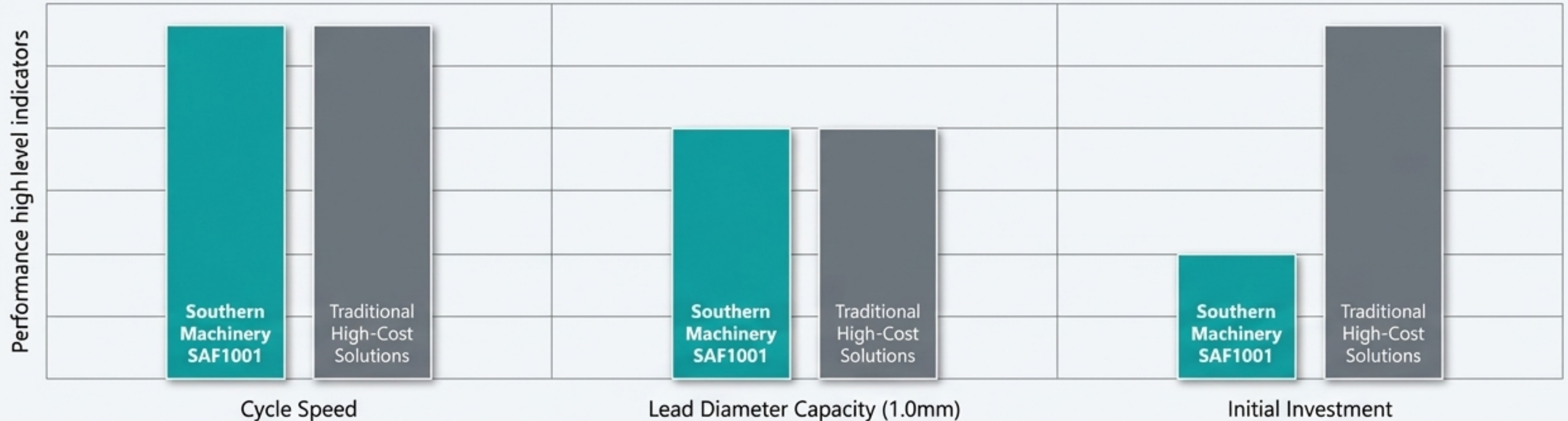
**Industry 4.0 Ready:** Features seamless IO communication for easy integration with placement machines. Offers optional connectivity for factory MES (Manufacturing Execution Systems).



# World-Class Performance. Superior Return on Investment.

Southern Machinery delivers performance that meets or exceeds Traditional High-Cost European Solutions. The SAF1001 provides an equivalent level of speed and reliability without the premium investment cost, maximizing your ROI and lowering your total cost of ownership.

## Performance Comparison: Southern Machinery vs. Traditional High-Cost Solutions



**Lower Initial Investment + Reduced TCO = Faster ROI**

# SAF1001: Technical Specifications at a Glance.

Category	Parameter	Specification
Performance	Feeding Speed	0.8 sec / component
	Feeding Accuracy	±0.3 mm
Power & Air	Working Voltage	DC 24V
	Working Air Pressure	0.5 MPa (0.4–0.6 MPa range)
Physical	Dimensions (L×W×H)	730 × 95 × 212 mm
	Weight	8 Kg
Component	Applicable Types	Taped Resistors, Diodes, Jumper Wires
	Max Wire Diameter	≤ 1.0 mm
	Supported Tape Widths	35mm, 64mm, 92mm (customizable)
Control	Communication Mode	IO Communication or Standalone Operation

# Empower Your Production Line Today.

When you choose Southern Machinery, you gain more than a machine; you gain a dedicated manufacturing partner committed to your success. We provide global service, Shenzhen-based manufacturing expertise, and complete line solution design.

Contact us for a personalized consultation and ROI analysis for your production line.



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