Fastener Insertion System Versatility and Ease of Setup

The 824™ WindowTouch® 5e brings you:
1. Easier and faster tooling setup combined with the most reliable fastener feeding
2. Best workpiece accessibility
3. Easier and faster programming
4. Best Operator Ergonomics
5. Energy Saving

Learn how Haeger’s mission can become your profitability
- Are you still handling your parts multiple times?
- Are you still manually feeding the majority of your fasteners?
- Are you still experiencing substantial setup times on both new and repeat jobs?
- Are you still under the assumption that setting up automatic tooling is too complicated or too time consuming?

Are you still experiencing:
- Missing fasteners?
- Fasteners inserted in the wrong location?
- Fasteners inserting on the wrong side of the part?
- Parts scratched due to manual feeding in combination with multiple handlings?

We have taken your feedback seriously for many years and have developed multiple solutions to address the challenges you are facing. The integration of all these solutions are found in the 824™ WindowTouch® 5e.

Easier and Faster Tooling Setup

MAS 350 – New Modular Autofeed System.
A unique new drive system in combination with a complete new bowl design incorporating all the latest bowl feeding technologies.
A long list of advantages, but what does this mean to you?
- Tool Change reduced from 3 minutes to 3 seconds through a one piece tool module.
- No more manual bowl settings required. Software automatically sets the proper vibration rate, air ejection time and required air pressure to allow for failure free fastener feed. From a full bowl down to the last one out. Reliable Feeding. Faster Changeover. No Training Required.
- Larger bowl design in combination with new drive allowing for fastener sizes M1.5 through M10 all to be fed in the same bowl.
- Deeper Bowl design in combination with new bowl tooling design allowing for fastener lengths up to 30mm all to be fed in the same bowl.
- New drive design allows for a single tool piece, resulting in faster and easier tool changes.
- Change in bowl material resulting in fasteners becoming less dirty from "air dust" or individual rubbing
- Lower mounting position allowing for easier filling and emptying.

New T-Bracket and Shuttle with integrated Connectors eliminating alignment challenges.
Fastest and easiest setup in the industry. Reduced from 2 minutes to 10 seconds without having to think about which connector goes where. On traditional machines, an operator had to change multiple air-lines and sensor cables, unnecessarily delaying changeover times. In addition, operators required training for alignment of the T-Bracket and shuttle, which has been eliminated with this new system. New re-designed Shuttle Plate Jaw Pins, eliminating breakage and saving cost for replacement and downtime.

Pre-aligned Base Plate
A pre-aligned base plate allows for easy tool holder changeover. No alignment of tools required. Where a tooling re-alignment after tool holder replacement used to take up to 5 minutes, this setup time has now been completely eliminated.
Fastener Insertion System - Best Workpiece Accessibility

Lower Support Arm. 200mm more access on lower support arm.

Through the use of built-in reinforcements and a change in frame design, the 824™ WindowTouch® 5e now offers more accessibility on the lower support arm.

The "Star Design" Turret Insertion System (TIS) allows for access in "U-Shaped profiles". Compared to a round Turret Design, the Star Design offers maximum accessibility for a variety of pre-formed workpieces. The Turret Insertion System clamps the tools in position while providing Position Feedback, eliminating the famous "missing fastener" error.

The turret arms are individually removable, allowing for even more access while the position feedback (and process control) remains present.

Manual J-Frame with 24" (610mm) throat depth. Changeover from Automatic Top Feeding to using a J-Frame is now done within seconds. This makes it a more attractive to use feature for a variety of pre-formed workpieces. The Haeger J-Frame solution allows for insertion under flanges up to 1mm from the bending line.

J-Frame in combination with ABFT (Automatic Bottom Feed Tool). Unique in the industry is the Automatic Bottom Feeding of Nuts in combination with a J-Frame to maximize productivity and increase ergonomics for those workpieces requiring installation under return flanges.

Automatic Tooling:
Upper Tools, Lower Tools and Shuttle Plates are compatible with previous Haeger machine models. The One-Piece Multi-module for the MAS-350 Autofeed System reduces total components per set from 5 to 4.
**Best Operator Ergonomics:**
Operator control pendant can be adjusted in 6 directions, allowing for easy access and a great view of screen instructions while standing up or sitting down.

**Energy Saving:**
New variable speed hydraulics reduce energy consumption up to 30% compared to conventional hydraulic systems.

**Easier and Faster Programming:**
The ALL NEW intuitive Insertion Logic® Software with Insertion Graphics and Integrated Statistic Process Control allows for more functionality while reducing programming time.

Insertion Logic® provides you with the recommended operating time for the part programmed and monitors and stores any corrected errors during the insertion process, allowing you to provide this data with your deliveries to your customers.

---

**Specifications**

- **Force Range**: Adjustable 800 lbs. (3.6 kN) to 16,000 lbs. (72 kN)
- **Throat Depth**: 24" (610 mm)
- **Stroke Length**: Adjustable 0 to 8.5" (0 to 220 mm)
- **Electrical**: 208 to 575 V 3 phase - 50 or 60 Hz
- **Motor**: 5 HP 3 Phase Low 16 A 208-240 V / High 9.6 A 380-480 V
- **Oil Tank Reservoir**: 22 gallons (83 liters)
- **Speed**: up to 1,400 insertions per hour
- **Repeatability**: ±2% of force setting
- **Weight**: 3,000 lbs. (1,361 kg)
- **Footprint**: 59"L x 40"W x 94"H (1499 mm x 1016 mm x 2388 mm)
- **Fastener Range**: .256 to 1/2" (M2 to M12)

For more information on the 824™ WindowTouch® 5e and other Haeger® products, visit our website at [www.haeger.com](http://www.haeger.com) or contact your authorized Haeger® distributor.