

SPECIFICATIONS

Force Range	450 LBF(2 kN) to 12,814 LBF(57 kN)
Repeatability	±1% of Force Setting
Max Riveting Capacity	M10 Nut M8 Stud M6 Standoff Carbon Steel
Throat Depth	25 inches(635 mm)
Throat Height	18 inches(450 mm)
Stroke	8 inches(200 mm)
Fastener Sizes	2-56 to 3/8-16 (M2 to M10)
Pump	Dual
Touch Screen	10 inches(254 mm)
Control Panel	Touch Screen
Main Power	1.5 kW
Current	4A
Hydraulic Oil	46/32
Oil Tank Reservoir	11.9 Gallons(45 Liters)
Air Pressure	73-102 psi(0.5-0.7 Mpa)
Power Supply	380V 3 Phase 50-60Hz
Size (D*W*H)	62.2in x 42.1in x 86.6in (1,580mm x 1,070mm x 2,200mm)
Weight	2,535.3 LBS(1,150 kg)



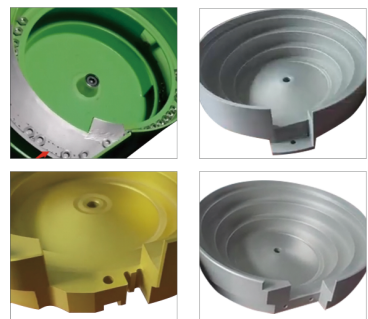
FASTENER INSERTION TECHNOLOGIES

STF-22 4B™

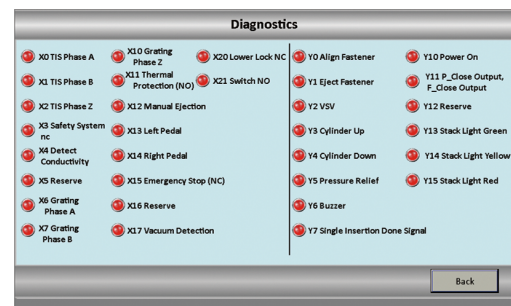


Power Options:

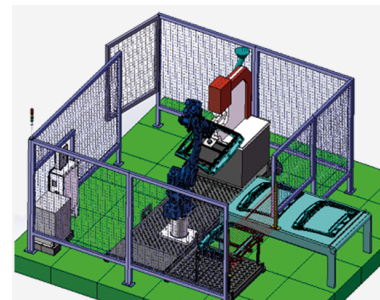
220V, 240V, 400V
415V, 480V
50-60Hz



Modular Automatic-Feed System (MAS)



Robot Riveting Cell



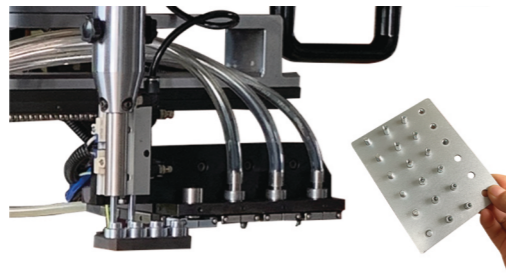
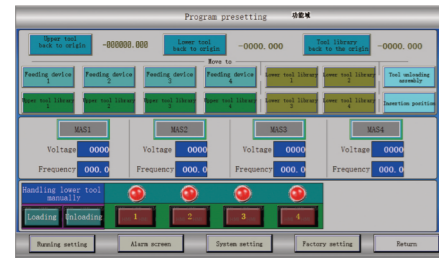
Robot Riveting Workstation



For inquiries, please contact: sales@pencomsf.com
www.pencomsf.com

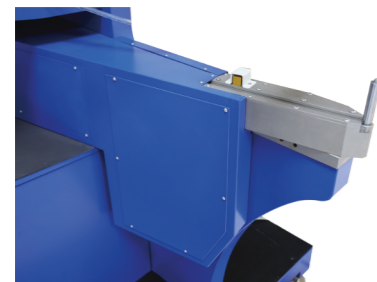
A: 4 Station Automatic Upper Tool Changer

The upper tool uses a vacuum absorption method to automatically switch tools during operation. It includes a tool library with 4 upper tool positions and 4 feeding devices, giving it a total of 8 pre-programmed positions. This allows the system to handle up to 4 different fastener sizes and types in a single process. It can insert one fastener every 2.5 seconds, and switch tools in just 3 seconds, helping to speed up production while reducing manual effort.



B: 4 Station Automatic Lower Tool Changer

It consists of two parts: the Lower Tool Library and the Handling Lower Manual Tool Indexes, which together allow positioning of up to 4 different tools in the lower tool holder.



C: Ergonomics

Operator control panel is adjustable in 2 directions.

D: Safety System

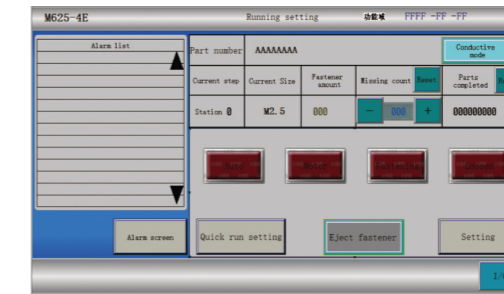
This feature reduces risk and harm to operators. As the press is in motion, it will stop when encountering a foreign object.



E: Easier and Faster Programming

- Up to 4 different fasteners can be installed in a single part.
- The batch counter tracks both the number of fasteners and the number of completed parts.

- Each station can be configured to have its own individual Force, Dwell Time, and Fastener QTY.
- Up to 4 stations can be used independently, without requiring all stations to be used simultaneously.
- The system will monitor the vacuum value in real time, and if the air pressure drops too low, the machine will trigger a prompt alarm to prevent missed counts.



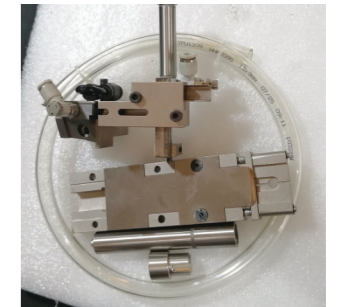
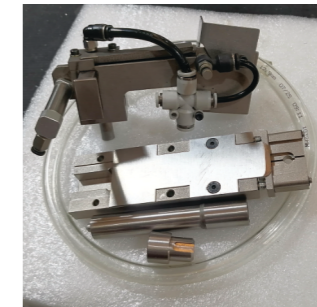
Station	Y-axis	Upper tool	Lower tool	Part	Force	Fastener to insert	Dwell time	Frequency	Setting	Feeding	Back time	Sub fastener	Sub time
1	NO	0	0	00.0	000	000	000	000.0	00.0	00.0	000	000	0.00
2	NO	0	0	00.0	000	000	000	000.0	00.0	00.0	000	000	0.00
3	NO	0	0	00.0	000	000	000	000.0	00.0	00.0	000	000	0.00
4	NO	0	0	00.0	000	000	000	000.0	00.0	00.0	000	000	0.00

Station	Fastener type	Part material	Size	Ref force	Force value	Dwell time	Program name
1	Standoff	Carbon Steel	M2.5	000	00	000	AAAAAAAAAAAAAAAA
2	Standoff	Carbon Steel	M2.5	000	00	000	AAAAAAAAAAAAAAAA
3	Standoff	Carbon Steel	M2.5	000	00	000	AAAAAAAAAAAAAAAA
4	Standoff	Carbon Steel	M2.5	000	00	000	AAAAAAAAAAAAAAAA

F: 4 Set MAS Modular Auto Feed Systems

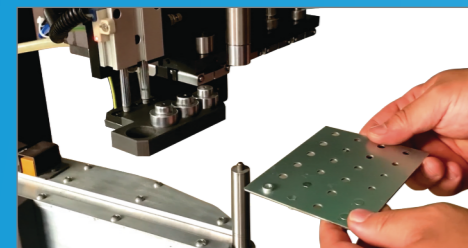
The MAS system offers fast and easy tooling setup, ensuring smooth and efficient changeovers.

- The automatic tool on the vibration bowl can be set up quickly with just one screw.
- It comes with a high-quality vibration bowl and a smart controller that adjusts voltage and frequency using piezoelectric technology.
- The Modular Auto Feed System can feed nuts, studs, and standoffs from M2 to M6 in size, with a maximum length of 25mm for studs and standoffs.
- The vibration bowl is made of aluminum, making it more lightweight and textured.

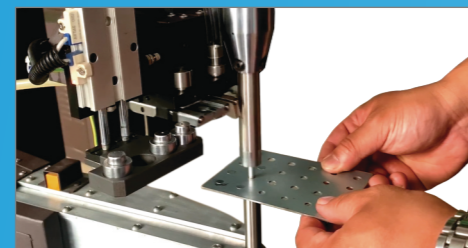


Automatic Tooling Order Number (Standard 4 Set of Tools and Type Optional)

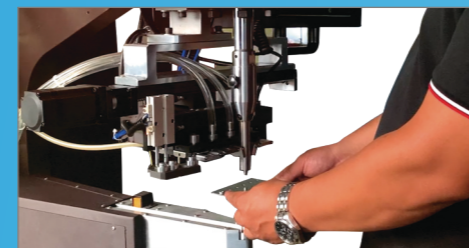
1. Shuttle Nut Tooling System



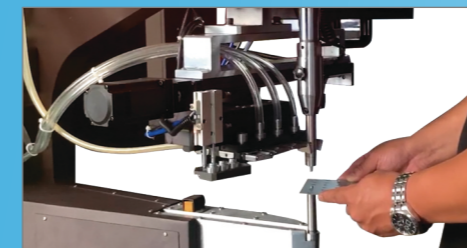
2. Shuttle Blind Standoff Tooling System



3. Shuttle Stud Tooling System



4. Shuttle Standoff Tooling System



For inquiries, please contact: sales@pencomsf.com
www.pencomsf.com