SPECIFICATIONS

Force Range 450 LBF(2 kN) to 21,807 LBF(97 kN)

Repeatability $\pm 1\%$ of Force Setting

Max Riveting Capacity M10 Nut M8 Stud M6 Standoff Carbon Steel

Throat Depth 25 inches(650 mm)
Throat Height 18 inches(450 mm)
Stroke 8 inches(200 mm)

Fastener Sizes 2-56 to 1/2-13 (M2 to M12)

Pump Dua

Touch Screen 10 inches(254 mm)
Control Panel Touch Screen

Main Power3 kWCurrent8AHydraulic Oil46/32

Oil Tank Reservoir 18.5 Gallons(70 Liters)
Air Pressure 87 psi(0.6 Mpa)
Power Supply 380V 3 Phase 50-60Hz

Size (D*W*H) 61.5in x 42in x 87.4in (1,560mm x 1,070mm x 2,220mm)

Weight 2,425 LBS(1,100 kg)



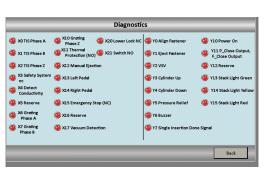
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Power Options:

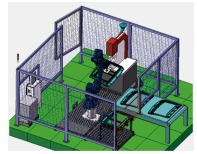
220V, 240V, 400V 415V, 480V 50-60Hz







Robot Riveting Cell



Robot Riveting Workstation



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



FASTENER
INSERTION
TECHNOLOGIES



TTF_22 10_20_23 TTF_22 10_20_23

A: Positive Stop System

This type of adjustable control energizes a solenoid valve to extend or retract the cylinder at the appropriate time. When the extend valve is energized, the cylinder begins to extend and it moves until it hits a stop at the end of its travel. When the solenoid for retraction is energized, the shaft will begin to retract until it hits the stop at the end of its travel. This is an advantage in softer materials such as PCB, plastic, and

B: Easier and Faster Programming

Single Station Setting: Operators can set the force,



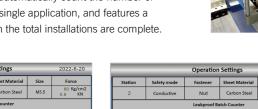
Multi-Station: This screen allows the operator to insert more than one fastener dwell time, and up travel from this single station screen. in a program. Each station can be configured to have its own individual force, dwell time, fastener quantity, and up travel.

			Mu	lti-Station	Setup		
Program	Name	TMS1	Г-M3.5-8-Z	No	. 1	+1 S	aved Code
Station	Force	Dwell (Sec)	Fastener to Insert	Up Travel (Sec)	Auto Feed	Fastener Code	Set Up
1	60	0.00	6	0.00	⊘	TMSF-M3.5-8-2	Setup
2	60	0.00	2	0.00	0	NCCT-M3-0:97-Z	Setup
3	90	0.00	3	0.00	0	585T-M4-10-Z	Setup
4	90	0.00	2	0.00	0	585T-W5-15-Z	Setup
						Produ	ct Programs

When the fastener fails to feed into the shuttle in the automatic feed program, the upper tool will continue its downward motion to press; however, the batch counter will not count the insertion.

C: Automatic Turret Insertion System (ATIS)

- A. Install up to four different fasteners in one program. Turning the turret will automatically convert to the appropriate pressure and dwell time.
- B. The PLC connected to the turret will follow the programming instructions for each individual fastener installation.
- **C.** The batch counter will automatically count the number of installed fasteners in a single application, and features a buzzer to indicate when the total installations are complete.

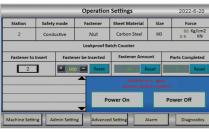


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Station 1: TMST-M3.5-8-Z

			Op	eration	Settings			2022-6-20
Station	Safety	mode	Fas	stener	Sheet Material	Siz	e	Force
3	Condi	uctive	St	tand	Carbon Steel	M	1	90 Kg/cm2 0.9 KN
			Lea	kproof Ba	tch Counter			
Fastener to	Insert	Faster	ner be Ir	nserted	Fastener Amo	unt	F	Parts Completed
3]	+ 00	0 🖃	Reset	40 R	eset		Reset
				Po	wer On		Po	ower Off
Machine Settir	ng Ad	lmin Setti	ng	Advanced	i Setting A	llarm	ı	Diagnostics

Station 3: SBST-M4-10-Z



Station 2: NCCT-M3-0.97-Z

			Op	peration	Settings			2022-6-20	
Station	Safety	mode	Fa	istener	Sheet Material	Siz	e	Force	
4	Cond	uctive	s	tand	Carbon Steel	M5		90 Kg/cm2 0.9 KN	
			Le	akproof Ba	tch Counter				
Fastener to	Insert	Faste	ner be l	Inserted	Fastener Amo	unt	P	arts Completed	
2]	+ 1	E	Reset	53 R	eset		Reset	
_				Po	wer On		Power Off		
Machine Settin	ng Ac	lmin Setti	ng	Advanced	d Setting A	Marm		Diagnostics	

Station 4: SBST-M5-15-Z



D: Programs

A 10-inch touch screen stores up to 200 customized programs and fastener databases.



Program 0000	ATU-12 Quick Release	Program 0000		Naming Progn
Program 0000	ATU-10 Quick Release	Program 0000		*****
Program 0000	RSM-10 Quick Release	Program 0000		No. 00
Program 0000		Program 0000		
Program 0000		Program 0000		Save
Program 0000		Program 0000		Load Progra
Program 0000		Program 0000		
Program 0000		Program 0000		Former
Program 0000		Program 0000		
Program 0000		Program 0000		0000
Product 0000		Program 0000		
Program 0000		Program 0000		Next
			Multi-Station Setup	Back

E: Ergonomics

Operator control panel is adjustable in 2 directions.

F: Laser Locating

This system allows the operator to see where each fastener will be installed with precision.

G: Safety System

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

Optional

H: Modular Automatic-Feed System (MAS)

MAS handles nuts, studs, and standoffs ranging from M2 to M6 (2-56 to ¼-20) and a maximum length of 25mm (1in). This system features a high-quality vibration bowl for the movement of parts, and a variable frequency vibration controller.

Manual Tooling Package

Including 31, 33, or 49 piece manual tool kits, J-frame, and fixing base.















J-frame and fixing base is perfect for boxes, flanges, and other hard to reach or maneuver locations.

Automatic Tooling System (Optional)

1. Shuttle Nut Tooling System















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

TTF_22 10_20_23 TTF 22 10 20 23