## **Grant** Riveters

Since 1860

www.grantriveters.com

## RIVETING KITS

Grant Riveting Kits are a low cost solution for short-run production, prototyping and repair. Sold in several configurations, these kits are capable of producing flat, beveled, round, conical or other shaped heads on solid or tubular rivets, pins and posts up to 1/4" diameter. Our kits can roll metal over, curl rims, crimp, swage or shape metal to fasten and join many types of assemblies.



#### Riveting Kit #4-5 Includes:

- Orbital Tool Holder 6°
- 1/2" Dia. Tool Adapter
- Five Shaped Peens:
- Flat
- 6º Inverted
- Low Crown
- Piloted Peen for 1/8" Dia. Tubular Rivet
- Piloted Peen for 3/16" Dia. Tubular Rivet
- Allen Wrench
- **■** Spanner Wrench
- Pin Wrench
- Hand Crafted Wooden Box

Riveting Kit #4-5 Shown

Riveting Processes





800-227-2150 Ext. 102

## Increase your capabilities Grant Riveting Kits will produce results!

### Five reasons to buy a Grant Riveting Kit

- Produce better quality and appearance of clinched heads.
- Provide a controlled riveting process which produces consistent results.
- Fast, easy setups and one to two second cycle times.
- Easy to install on your existing drill press or milling machine.
- When you're ready to upgrade, your riveting kit mounts directly to your new Grant Riveter.



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Grant Riveters has integrated the Process Inspector® control system into our standard riveter to guarantee your operator is forming perfect parts consistently. This user friendly control alerts the operator to non-conforming parts while providing real-time force and distance data. The state of the art control package is a custom PLC/HMI configured specifically for riveters featuring an all-in-one color touch screen control with a digital readout offering easy set up of force and distance triggers. Programs are automatically generated with simple input of high low distance and force\* data which are saved to your preferred name.

\*Force feature is sold as an option.

Riveting Systems, LLC dba/ Grant Riveters - 90 Silliman Avenue, Bridgeport, Connecticut 06605 U.S.A. Phone: (203) 366-4557, Fax: (203) 366-0370, Email: sales@grantriveters.com

#### FEATURES OF RIVETING MACHINES

• Rapid feed to depth with calibrated rivet head height readout

• End of stroke fine feed cushioning

· Fasten rivets to a precise depth or force

Rigid construction

• Precise Orbital or Spin-Roller motion

• Easy to service and maintain

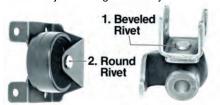
• Anti-tie-down dual palm buttons or foot switch control

• Standard accessories include anti-rotation Peen locking device.

• Micrometer stop allows for precise adjustment of stroke length

#### **APPLICATIONS:**

Precision adjustment of riveting force, time, stroke and speed allows our riveters to be more versatile and offer better control in a wider variety of applications. The Grant riveter can be used for all types of jobs from free pivoting joints to torque resistant joints to tight riveted joints.







Over 350,000 riveters sold utilizing Grant's multi-process forming processes: Orbital, Twin-Spin, Multi-Spin and Spin-Press forming technologies.

- Electronics / Electrical parts
- Automotive parts
- Aerospace
- Hardware
- Hand tools
- Industrial
- · Lawn / Garden tools and assemblies
- Medical / Surgical instruments



- Interchangeable Multi-process techniques
- Fastens to a force or a depth
- Inspects the fastened assembly
- HMI/PLC Touch-Screen control
- Standard I/O is 22 inputs and 21 outputs
- Pre-wired I/O for ease of tool integration
- Calibrated setups for easy change over
- Two year warranty industrial hardened
- · Standards advanced features included
- The most features at the lowest price

The most advanced assembly system!

Four Process
All in one machine!

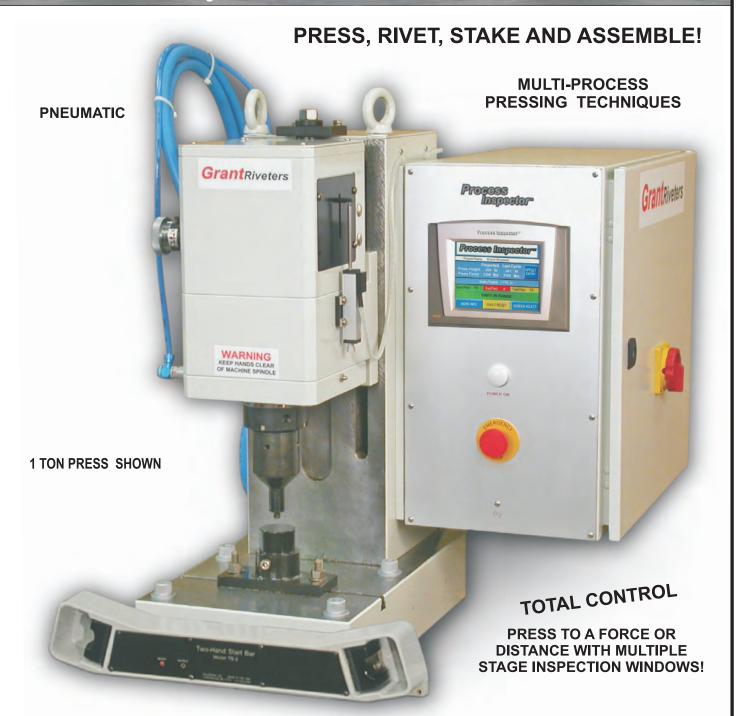


Technical Data		Model-003	Model-005	Model-008	Model-012	Model-016	
3 - 1 - 3		Inch mm	0.12 3	0.20 5	0.32 8	0.50 12	0.63 16
Adjustable Stroke Inch mm		0 - 1.18 0 - 30	0 - 1.18 0 - 30	0 - 1.77 0 - 45	0 - 1.77 0 - 45	0 - 1.77 0 - 45	
Force Output at 5.5 Kg/Cm <sup>2</sup> Kg 80 PSI Lbs		216 480	400 904	973 2194	1678 3783	3442 7760	
Motor 3PH HP 230/460V, 50/60Hz Kw		0.25 0.18	0.5 0.37	0.75 0.56	1.0 0.74	1.5 1.12	
Throat Depth Inch mm			4.33 110	4.72 120	5.51 140	7.87 200	7.87 200
Shut Height Inch mm		Inch mm	7.0 180	7.0 180	8.9 225	11.0 280	8.7 220
Adjustable Time Sec.		Sec.	0.1 - 10 seconds	0.1 - 10 seconds	0.1 - 10 seconds	0.1 - 10 seconds	0.1 - 10 seconds
Overall Dimensions	Length	Inch mm	17.1 435	17.1 435	22.4 570	24.6 625	25.0 635
	Width	Inch mm	20.0 510	20.0 510	21.7 550	24.4 620	26.6 675
	Height	Inch mm	36.0 915	36.0 915	45.3 1150	52.8 1340	58.0 1475
Standard Features are Wit			Machine Surfaces are Hand Scraped With Chromed Quill for Durability	Two Speed Spindle Advance With Oversized Ports	Automatic Lubrication to Back Side of Roll Forming Tools	Highest Grade Product With Festo Pneumatics & Siemens Electrics	Standard Two Year Warranty





## GrantRiveters.com Since 1860 Www.grantriveters.com



Grant Riveters has integrated the Process Inspector® control system into our standard press to guarantee your operator is pressing perfect parts consistently. This user friendly control alerts the operator to non-conforming parts while providing real-time force and distance data. The state of the art control package is a custom PLC/HMI configured specifically for presses featuring an all-in-one color touch screen control with a digital readout offering easy set up of force and distance triggers. Programs are automatically generated with simple input of high low distance and force\* data into a two-stages of the program. Each program is saved to your preferred name. \*Force feature is sold as an option.

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#### FEATURES OF PRESS MACHINES

• Rapid feed to depth with calibrated rivet head height readout

• End of stroke fine feed cushioning

• Press parts to a precise depth or force

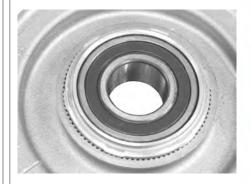
• Optional two-stage window for detecting slip fit tolerances

- Rigid construction
- Easy to service and maintain
- Anti-tie-down dual palm buttons or foot switch control

• Micrometer stop allows for precise adjustment of stroke length

#### **APPLICATIONS:**

Precision adjustment of pressing force, time, stroke and speed allows our presses to be more versatile and offer better control in a wider variety of applications. The Grant press can be used for all types of jobs from pressing parts like bearings into bores, riveting, staking and assembling.





#### **HIGHLIGHTS:**

- Quick change tooling
- Press to a force or a depth
- Inspects the fastened assembly
- HMI/PLC Touch-Screen control
- Standard I/O is 22 inputs and 21 outputs
- Pre-wired I/O for ease of tool integration
- Calibrated setups for easy change over
- Two year warranty industrial hardened
- Standards advanced features included
- The most features at the lowest price

The most advanced assembly system!

**C€** compliant Metric Press

Grant Riveters has sold over 350,000 machines worldwide. We specialize in pressing and riveting type machinery with over 150 years of experience.

- Electronics / Electrical parts
- Automotive parts
- Aerospace
- · Bearing pressing and riveting
- Hardware
- Hand tools
- Industrial
- Component assembly
- · Medical / Surgical

Technical Data		Model - 1/4T	Model - 1/2T	Model - 1T	Model - 2T	Model - 4-1/2T
Press Capacity		1/4 Ton	1/2 Ton	1 Ton	2 Ton	4-1/2 Ton
Adjustable Stroke		0 - 1.18" 0 - 30 mm	0 - 1.18" 0 - 30 mm	0 - 1.77" 0 - 45 mm	0 - 1.77" 0 - 45 mm	0 - 1.77" 0 - 45 mm
Force Output at 7 Kg/Cm² 100 PSI		273 Kg 600 Lbs	514 Kg 1130 Lbs	1245 Kg 2740 Lbs	2148 Kg 4725 Lbs	4409 Kg 9700 Lbs
Throat Depth		4,33° 110 mm	4.72" 120 mm	5.51" 140 mm	7.87" 200 mm	7.87" 200 mm
Shut Height		9.5" 242 mm	9.5" 242 mm	10.5 267 mm	15.0" 385 mm	17.5" 445 mm
Ajustable Time		0.1-10 sec.	0.1-10 sec.	0.1-10 sec.	0:1-10 sec.	0.1-10 sec.
Overall Dimensions	Lenght	17.1" 435 mm	17.1" 435 mm	22.4" 570 mm	24.6° 625 mm	25.0" 635 mm
	With	20.0" 510 mm	20.0" 510 mm	21.7" 550 mm	24.4" 620 mm	26.6" 675 mm
	Hight	18.5" 470 mm	25" 635 mm	33" 838 mm	39.5" 1003 mm	48.5" 1232 mm
Standard Features		Machine Surfaces are Hand Scraped With Chrome Quill for Durability	Two Speed Spindle Advance with Oversize Ports	Process Inspector Control PLC/HMI All-in-One! Press to a force or a distance	Highest Grade Product With Festo Pneumatics & Siemens Electrics	Unprecedented Standard Two Year Warrant





#### X-Y-Z HIGH-SPEED RIVETING SYSTEMS



Grant Riveters offers the most affordable X-Y-Z multi-process riveting systems in the world today! Our versatile riveting systems are configured with Orbital, Spin or Impact fastening technologies. Our X-Y-Z Riveting System is offered with x-y travel speeds from 35 inches per second and up. Typical applications with multiple riveting locations at different elevation are ideal. Forming time per rivet is usually .2 to .75 seconds per rivet. Our X-Y-Z semi-automatic riveting systems are designed to provide the highest quality riveted part in a extremely ridged constructed machine. We are so positive that we offer you our standard two-year warranty.

Specializing in Orbital, Twin-Spin Roller, Multi-Spin Roller, Spin-Press Burnishing, Impact, Squeeze Riveting and Hydro-Pneumatic Cylinders and Pressing Systems



### Forming The Future Through Assembly Technologies

Our X-Y-X multi-process riveting systems start at \$65,000 for a basic X-Y-Z multi-process riveting system. The system will allow the riveter to be operated in depth mode or in the Grant EOS pressure mode. In this designed system the product assembly is actuated in the X and Y motion. Grant manufactures several other X-Y-Z systems offering our state of the art 100% Real-Time Monitoring, Control and Inspection System. Our more advanced system is digital and replaces the standard EOS pressure system. Additional features include an integrated 4-stop rotary 90° index table allowing the operator to load parts into one of the four fixture nests located on the rotary table top. The multi-process riveter is mounted on the X-Y actuator mechanism and is capable of the same high speed capabilities as our basic system.



X-Y-Z riveting systems are available in 1/16", 1/8", 3/16", 1/4" semi-tubular diameter rivet capacities. For solid steel rivet diameter capacities we offer Orbital, Twin-Spin roller, and Spin-press burnishing forming technologies. X-Y-Z riveting systems are available in 3mm, 5mm, 8mm, 12mm and 16mm capacities.

Our systems are designed with the operator in mind. We have spent extensive hours in design of the mechanical and electrical control systems. Our X-Y-Z riveters are easy to operate with a minimal human interface. Select the desired program with one button control and start to run your daily production.

Each X-Y-Z riveting system includes light curtains and surround safety guarding with easy access interlocked right hand and left hand doors. Our safety system is redundant offering you maximum operator protection.



Grant Riveters method is the "Tailor-Made" System of fitting the machine to the job - rather than the common practice of attempting to fit the job to a standard stock model riveter.



Call Today! 800-227-2150

# GrantRiveters

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### **Multi-Process Riveter**



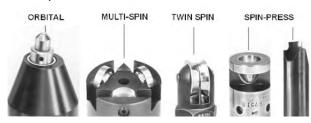
Total Control!

Fasten to a Force or Distance

#### The Grant Method is the "Tailor-Made" System of Fitting the Machine to the Job

- rather than the common practice of attempting to fit the job to some standard stock model Riveter.

For that reason the comprehensive Grant line includes all of the recognized methods of Riveting, including Orbital, Spinning, Impact, Squeeze and Press type, in both single and multiple spindles; our Riveters and Presses are offered in Pneumatic, Pneumatic Oil Intensified, Hydraulic and Servo-Electric models. Special designs to order. Also manufacturers of Automatic X-Y-Z Riveting Machines, Tube Sealing and Special Machines.



The Grant Riveter is the only Multi-Process riveter - offering four processes in one machine!

### Simple & Easy Set Up



### Riveting Kit

Grant Riveting Kits are ideal for prototyping, maintenance, light production and production repair providing an easy solution for the fastening of tubular, semi-tubular and solid steel rivet shanks up to 1/4" diameter\*.

\*Based on a Series I Bridgeport Mill



The Grant Riveting Kit is very economical allowing your company to perform state of the art riveting operations without the equipment costs. Best of all our Riveting Kits will allow you to develop your product and production volumes and when you are ready to purchase equipment our Riveting kit will fit directly into your new Grant Riveter.

**grant**riveters.com **800-227-2150** 



#### **Multi-Process Riveter**



Grant Riveters implements the new Process Inspector™, a unique system to guarantee your operator is forming perfect parts consistently. This user friendly control alerts the operator to non-conforming parts while providing real-time force and distance data. This state of the art control package is a custom PLC/HMI featuring an all-in-one color touch screen control with a digital readout offering easy set up of force and distance triggers. Programs are automatically generated with simple input of high low distance and force data which are saved to your preferred name.

### Riveting Kit

Grant Riveting Kits are simple and easy to use. The kit mounts directly to your Bridgeport, Mill or Drill Press. Just align the machine spindle to the rivet post to be formed, set your spindle RPM speed and your ready to go. Its as simple as that!



Grant Riveters offers a variety of Riveting Kits that are fit to your specific needs. We will select the process that best suits your forming application. Our Multi-Process forming techniques are unique and offer you total control. No matter what Grant Riveting Kit you have, when you are ready to purchase a Grant riveting machine, you can be assured that your Riveting Kit will mount directly into your new riveter.

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