

PennEngineering®

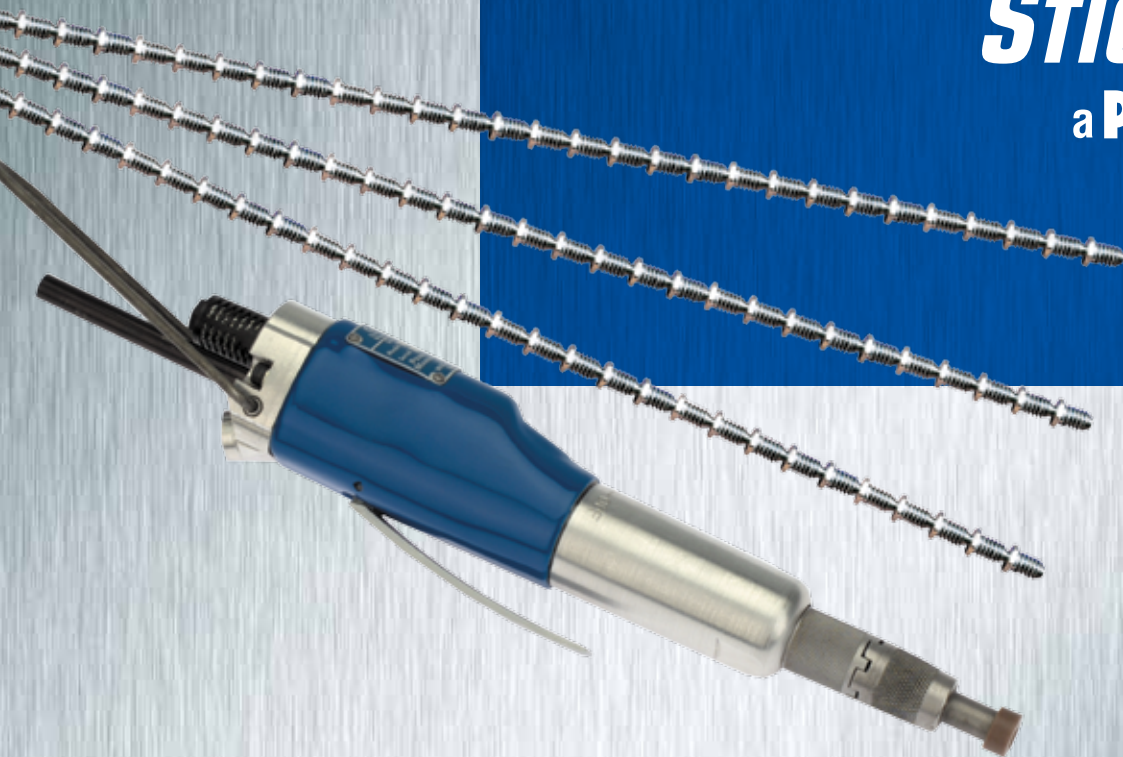
SMALL SCREW INSERTION SYSTEM

BULLETIN

SST

STICKSCREW®
a **PEM**® Product

416
REV 616



THE STICKSCREW® SYSTEM

The STICKSCREW® system offers manufacturers an extremely fast, accurate and efficient method of small screw insertion. The StickShooter® driver is designed to accommodate interchangeable nose assemblies allowing quick changeover from one hex size to another.

This simple, low cost system combines a lightweight driver and “sticks” of up to 130 per 12” serially connected hex head screws. Simply insert the stick in the driver, advance to the second screw, squeeze the trigger, place the tip of the rotating screw into the hole and the screw is driven home, twisting off cleanly when precise seating torque is reached.

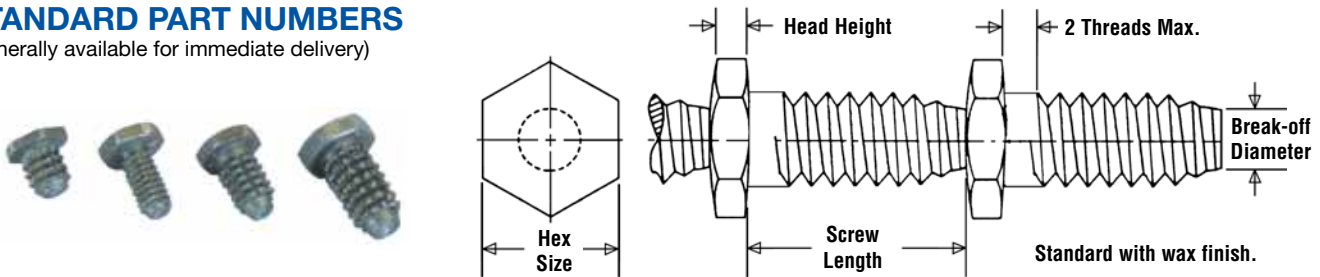
Custom screw designs, finishes, and coatings are available to meet the needs of specific applications.

The STICKSCREW® system benefits include:

- **Self-contained system.** No expensive tooling, jigs, or fixtures are required.
- **Eliminates manual driving of screws.** Saving time and reducing operator fatigue.
- **Torque reliability.** Seating torque is built into the screw eliminating torque testing and ensuring the assembly is properly fastened.
- **Minimum operator training.** System can be applied to your production line with minimal training.
- **Inventory control simplified.** No loose or mixed screws. Less shelf space required.
- **Major productivity increase in small screw insertion.** Productivity increases are greater as screw diameters decrease since difficulty in handling loose screws is eliminated.
- **Interchangeable nose assemblies** enable quick tooling changeover for all screw hex sizes.

STANDARD PART NUMBERS

(Generally available for immediate delivery)



All dimensions are in inches.

UNIFIED	Thread Size	Thread Type (1)	Catalog Part Number	Fastener Material	Hex (Nom.)	Screw Length ±.006	Hole Size +.003 -.000	Head Height ±.010	OD Thread Major +.004" -.003"	Screws Per Stick	Break-off Diameter ±.003	Break-off Torque ± 15 in oz.
	#2-56	Thread Cutting	00STC258	400 series stainless steel	5/32"	.125	.073	.035	.084	73	.052	60
	#2-56	Thread Cutting	00STC2512	400 series stainless steel	5/32"	.187	.073	.035	.084	52	.052	60
	#3-48	Thread Cutting	00STC358	400 series stainless steel	5/32"	.125	.086	.040	.097	70	.058	94
	#3-48	Thread Cutting	00STC3512	400 series stainless steel	5/32"	.187	.086	.040	.097	50	.058	94
	#4-40	Thread Cutting	00STC458	400 series stainless steel	5/32"	.125	.096	.040	.110	70	.059	95
	#4-40	Thread Cutting	00STC4512	400 series stainless steel	5/32"	.187	.096	.040	.110	50	.059	95
	#6-32	Thread Cutting	00STC6512	400 series stainless steel	3/16"	.187	.124	.045	.136	49	.070	120
	#6-32	Thread Cutting	00STC6516	400 series stainless steel	3/16"	.250	.124	.045	.136	38	.070	120

All dimensions are in millimeters (except hex size).

METRIC	Thread Size	Thread Type (1)	Catalog Part Number	Fastener Material	Hex (Nom.)	Screw Length ±0.15	Hole Size +0.08	Head Height ±0.25	OD Thread Major +0.1 -0.15	Screws Per Stick	Break-off Diameter ±0.08	Break-off Torque ± 0.1 (N•m)
	M3 x 0.5	Thread Cutting	00STCM358	400 series stainless steel	5/32"	3.18	2.62	1.07	2.97	69	1.58	0.7
	M3 x 0.5	Thread Cutting	00STCM3512	400 series stainless steel	5/32"	4.75	2.62	1.07	2.97	49	1.58	0.7

(1) Thread cutting screw may be used in tapped hole. Performance may vary. Consult our technical department. For evaluation purposes, we will be happy to demonstrate and/or test standard product in your application.



THE STICKSCREW® SYSTEM

CUSTOM SCREWS

(If standard part will not meet your requirements)

To order a custom screw, simply choose the product variable from each of the 7 categories listed below. Our technical staff will be happy to assist you to select the proper size and type of screw to meet your requirements.

1 Thread Type	Machine	Thread Forming	Thread Cutting											
2 Thread Size	#0-80	#1-72	#2-56	#3-48	#4-40	#6-32	#8-32	M1	M1.6	M2	M2.5	M3	M3.5	M4
3 Material	Steel	CDA-360 Brass ⁽²⁾	2011 Aluminum	400 Series Stainless Steel	300 Series Stainless Steel									
4 Hex Size	3/32	1/8	5/32	3/16	2.4mm	3.2mm	4.8mm							
5 Screw Length (Any increment)	From 1/16 to 5/16	From 1.5mm to 8mm												
6 Head Height	From .030" to .060"	From 0.76mm to 1.5mm												
7 Finish	Zinc ⁽³⁾	Black Oxide	Wax	MicroLoc™	Plain ⁽⁴⁾	Dri-Loc®	Vibra-Seal®	Teflon®						

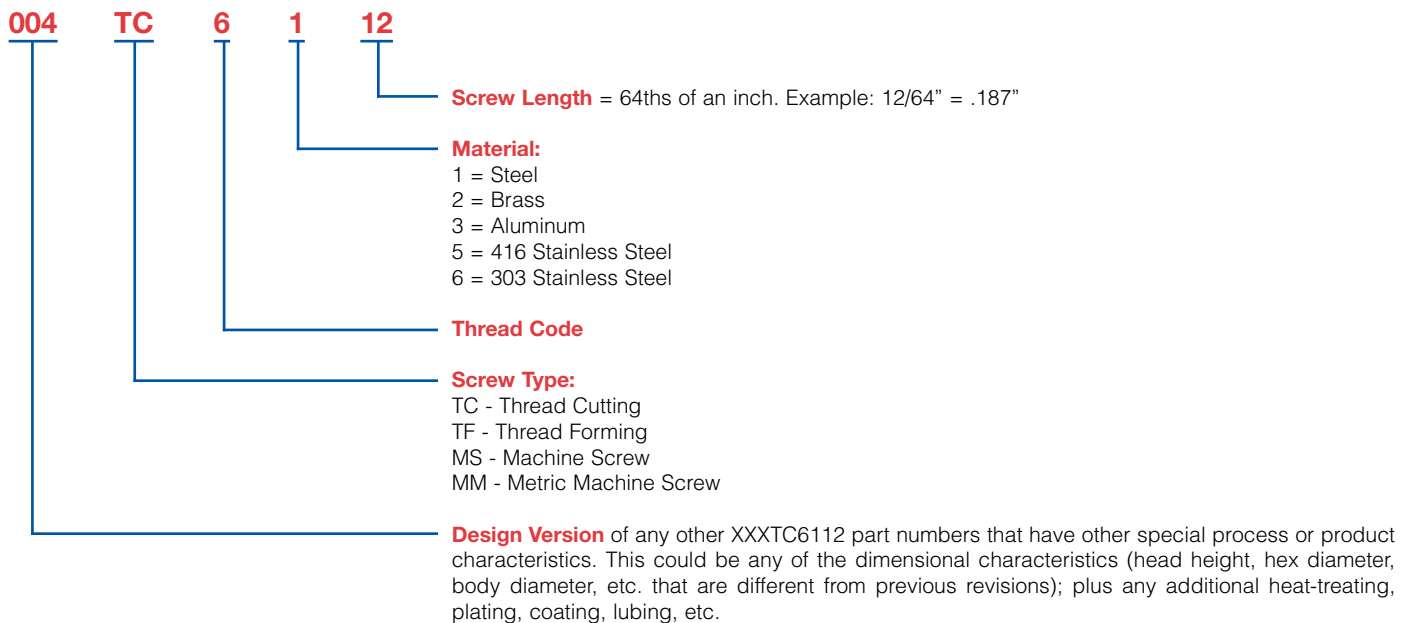
(2) Chromate finish is available on brass screws to prevent tarnishing.

(3) Standard on steel.

(4) Standard for brass, aluminum, and stainless steel.

Dri-Loc® and Vibra-Seal® are registered trademarks of Loctite Corporation. Teflon® is a registered trademark of Dupont.

CUSTOM SCREW PART NUMBER DESIGNATION



THE STICKSCREW® SYSTEM

OPERATION



1) Load - Insert the stick into the back of the driver and advance to the second screw.



2) Drive - Squeeze the trigger to start the driver. Place the tip of the rotating screw into the hole and the screw is driven home, twisting off cleanly when precise seating torque is reached. The next screw is automatically indexed into the driving position.

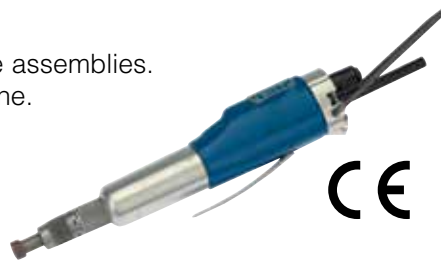
Go to StickScrew portion of our website to see video of tool operation.

TOOLS

Our StickShooter™ air tools are lightweight, ergonomic, and quiet. These tools provide years of reliable operation. If needed, service and parts are available from the factory.

- Trigger activates pneumatic motor.
- Non-marring tip.
- Interchangeable and adjustable nose assemblies.
- Operates on 90 P.S.I. using 1/4" air line.

Adjustable Nose Assembly No.	Screw Hex Size	Nose Assembly Length
OD50019	3/32 (.09375")	1"
OD50020	3/32 (.09375")	2"
OD50022	1/8 (.125")	1"
OD50023	1/8 (.125")	2"
OD50024	5/32 (.15625")	1"
OD50025	5/32 (.15625")	2"
OD50026	3/16 (.1875")	1"
OD50027	3/16 (.1875")	2"



In-Line StickShooter™
Model IL-2000



Nose assemblies are easily interchangeable



FlexArm™ Assembly Arm Solutions

- Allows a higher level of consistent quality to be maintained.
- Operator can position the driver to the part more accurately.

Other arms available for unique requirements. For more information contact:



Regulatory compliance information is available in Technical Support section of our website. © 2016 PennEngineering.

Specifications subject to change without notice. See our website for the most current version of this bulletin.

PennEngineering®



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