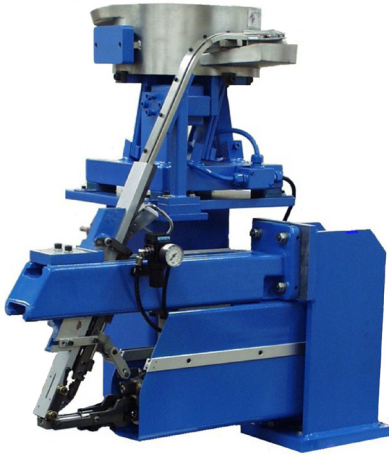




DIXON AUTOMATIC TOOL, INC.

Products for Automated Assembly

Model SD-122 Horizontal Screw/Nut Driver



Feed System Information

Feed System	Vibratory Feeder Bowl
Bowl Size	228.6 - 914mm (9 - 36 in.)
Track	Inline Gravity Fed Track, Vibratory Inline Fed or Drop Tube
Escapement	Mechanically Linked Standard Optional Air Escapement

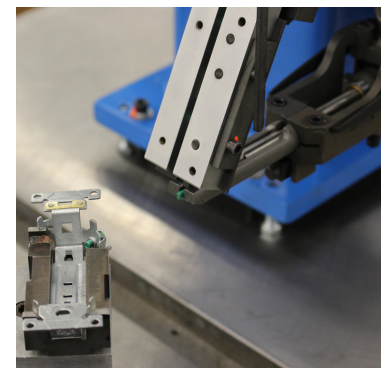
Piece Part Information

SD-122 Style	Incline Gravity	Vibratory Inline	Drop Tube
Shank Diameter	2.84mm-6.35mm (.122 in. - .250 in.)	Max 25.4mm (1.0 in.)	2.2mm-22mm (0.08 in. - 0.87 in.)
Shank Lengths	Max 25.4mm (1.0 in.)	Max 50.8mm (2.0 in.)	Max 50.8mm (2.0 in.)
Head Diameters	Max 14mm (.56 in.)		Max 50.8mm (2.0 in.)

The Model SD-122 Screw/Nut Driver is ideally suited for automatic applications where the fastener needs to be driven horizontally into a piecepart. The driving head can also be mounted at a specific angle if required. The Driver is fully automatic and equipped with a vibratory feeder bowl system. Several methods may be used to convey the fasteners from the feeder bowl to the transfer escapement: an inclined steel track or a gravity or blow fed tube. The transfer escapement places each fastener into the placement jaws of the driving head. The placement jaws hold the fastener's shank in position until the fastener is engaged in the workpiece. The driving head has built-in sensing to confirm proper insertion of each fastener into the workpiece. The baseplate size is determined by the size of the feeder bowl system. The driving head can provide wide range of driving speeds and torque capacities using either pneumatic or DC electric motors. Each head can be equipped to drive fasteners to a Torque or Depth setting.



Above: Close-up view of the horizontal driving head



Above: Typical driving application.

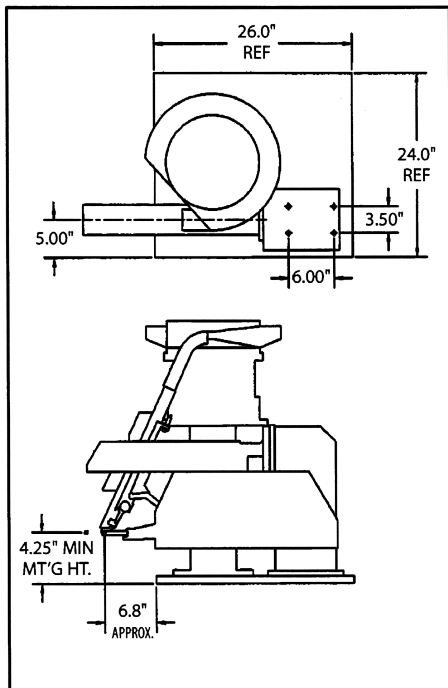
Right: Example fasteners used in a Model SD-122 Screw/Nut Driver.



SD-122 Screw Driving Head



SD-122 Dimensional Data



NOTE: We reserve the right to make further technical changes without notice.
CAD drawings are available

Note: Baseplate varies with bowl size:
12-inch ID bowl shown

Standard 100 Series Screw/Nut Driving Head Components

Head Stroke	50.8mm, 76.2mm, 101.6mm, 127mm (2 in., 3 in., 4 in., 5 in.)
Torque	Std: 0.5 - 13.5 Nm (4 - 120 in.-lbs.)
Proximity Switches	Std: 24 VDC PNP Others Optional
Valves	Four-way pneumatic valve (24 VDC)
Pneumatic Motor Speeds	250 to 3000 RPM
Air Supply	6.3 Bar (90 PSI)

100 Series Depth Options

Depth Settings	Std: ± 2 turns Optional: $\pm 1/2$ turn
Drive to Depth	Yes

100 Series Torque Options

Clutches	<ul style="list-style-type: none"> 0.45 - 2.8Nm (4 - 20 in.-lbs.) 1.36 - 3.3Nm (12 - 30 in.-lbs.) 2.8 - 5.6Nm (20 - 50 in.-lbs.) Note: 4.5Nm (40 in.-lbs.) and above requires a commercial pneumatic motor with clutch.
Higher Torque Option	13.5 - 20.3Nm(120 - 180 in. lbs.) available with optional head stiffener

Optional Motors

DC Electric	<ul style="list-style-type: none"> Transducer torque control Torque/angle control Note: All brands supported
Servo Motor	Current sensing torque control



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