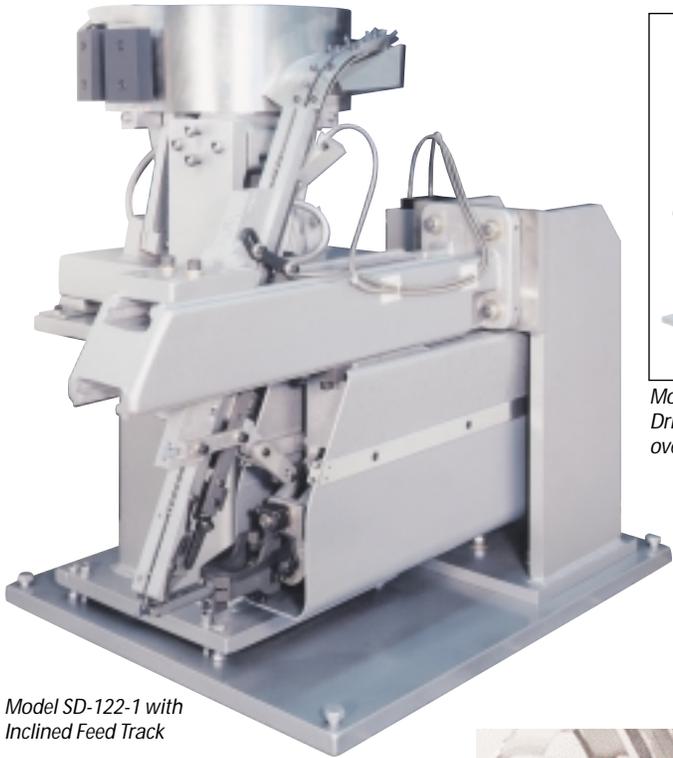




# Model SD-122 Screw/Nut Drivers



Model SD-122-1 with Inclined Feed Track

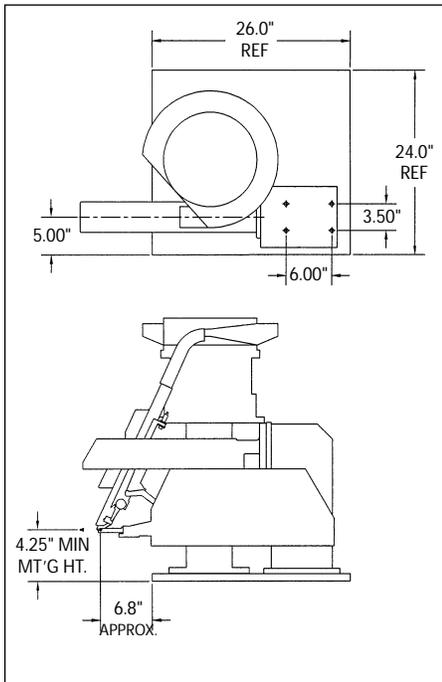


Model SD-122-1 Screw/Nut Driver with Sound Enclosure over Feeder and Supply Hopper

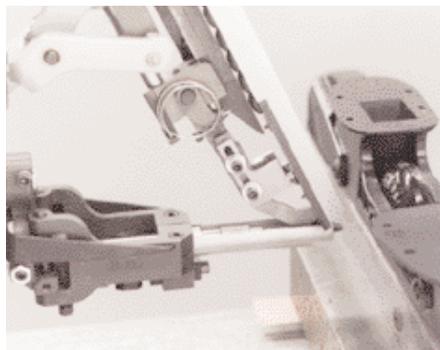
The Model SD-122 Screw/Nut Drivers are designed to drive threaded parts horizontally. Depending upon the geometry of the threaded part or fastener, the method of transferring the part to the placement jaws from the feeder may vary considerably. The mounting structure for the feed system and driver must be designed accordingly. This mounting structure can allow the driving head to be positioned at almost any angle to suit the customer's requirements.

The Model SD-122 Screw/Nut Driver is available with 2 in. (51mm), 3 in. (76mm), 4 in. (102mm), and 5 in. (127mm) head strokes. This Screw/Nut Driver can be furnished with a range of driving speeds and torque capacities using either DC electric or pneumatic motors. A torque and depth sensing control verifies when a fastener is properly driven during each driving cycle. Torque control settings range from 4 inch-lbs. (.5 Nm) to 120 inch-lbs. (13.5 Nm). Torque accuracy can be achieved in various ways depending on the torque requirement and specific driving application. Mechanical and electrical clutches satisfy a range wide of torque specifications, in addition to "stall" torque and DC electric torque/angle applications. Depth settings can be held to plus or minus two (2) turns with standard tooling. Closer depth tolerances can be achieved with optional controls.

## Dimensional Data



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



Typical Driving Applications



Typical Threaded Parts for Model SD-122-1

Fasteners are oriented and fed from a vibratory bowl feeder and the bowl size is selected to suit the fastener being fed. Bowl sizes can range from 6 inches (153mm) to 36 inches (914mm). Several basic options may be used to deliver the threaded piece part or fastener to the driving head's placement jaws. Each piece part is captivated within the jaws until it is properly engaged into the workpiece. The placement jaws are then opened mechanically.

# Model SD-122 Screw/Nut Drivers

*Model SD-122-3 Screw/Nut Driver with Horizontal Inline Feed Track, Sound Enclosure and Supply Hopper.*



*Typical Threaded Parts for Model SD-122-3*

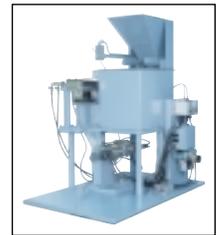


*Threaded Plastic "Lure" driven onto a pharmaceutical component.*

*SD-122-2 Screw/Nut Driver with Blow Fed or Drop Tube delivering fasteners to placement jaws of driver*



*Typical Threaded Parts for Model SD-122-2*



*SD-122-2 Screw/Nut Driver with Sound Enclosure over Feeder and Supply Hopper*

## Driving Head Features:

### **Air Motor (Standard)**

Reversible or nonreversible rotation with various torque ranges and speeds. Optional DC electric motors available.

### **MC-9 Control-Pac**

Four-way valve and junction box with terminal strip. Other voltages and switch styles optional. Standard proximity switches are 24 VDC (PNP) pre-wired.

### **Sensing Control Assembly**

Mechanism provides good-part sensing for both torque and depth applications.

### **Proximity Switch**

Three proximity switches provided: **returned** position, **intermediate** (usually made just prior to screw entering work, typically used for a reject timer), **goodpart** (forward).

### **Optional Blocking Air Motor Valve**

Optional valve package used to control depth of fastener engagement to plus or minus 1/2 turn.

### **Head Cover**

*(shown in small photo at right)*  
Slides upward for access to head.



*Head Cover cut away for illustration purposes*



*Main office and factory*

**DIXON AUTOMATIC TOOL, INC.**

2300 Twenty-Third Ave., Rockford, IL 61104 U.S.A

Phone: 815 / 226-3000 • FAX: 815 / 226-8613

E-mail: sales@dixonautomatic.com

www.dixonautomatic.com