

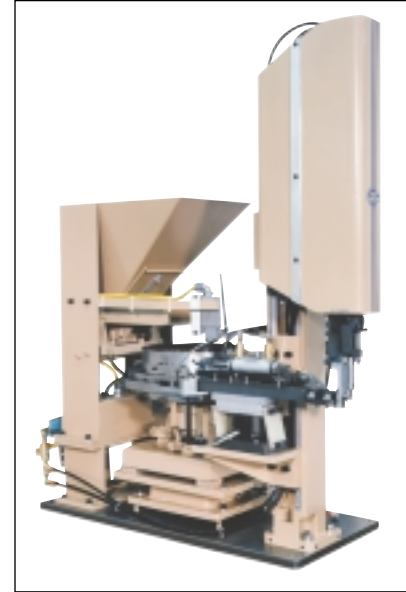
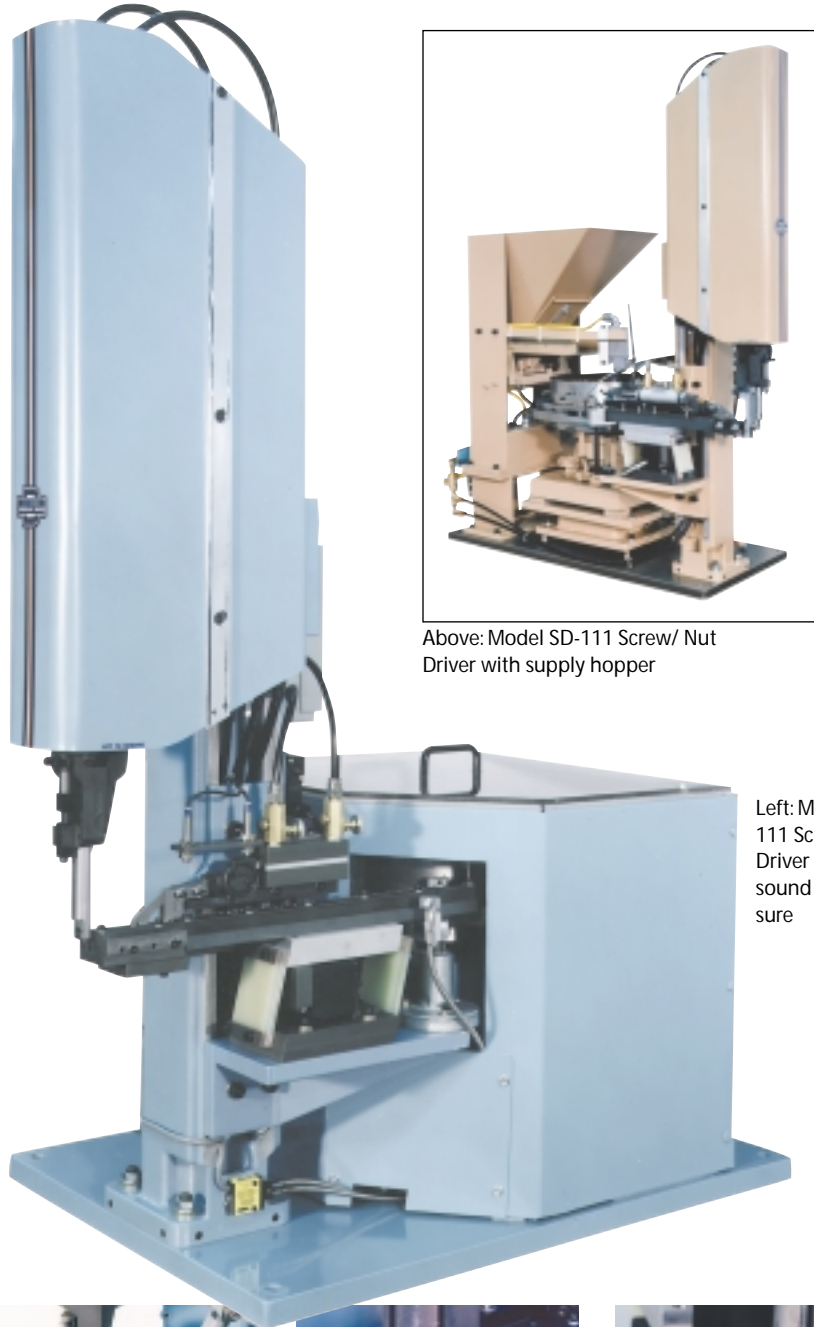


Model SD-111 Screw/Nut Drivers

The Model SD-111 Screw/Nut Driver is available with 2 in. (51 mm), 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.

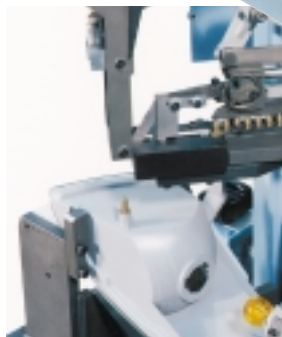
Fasteners are oriented and fed from a vibratory bowl feeder. The bowl size is selected to suit the fastener being fed. Bowl sizes can range from 6 inches (153mm) to 36 inches (914mm). The fasteners are fed into an inline vibratory track to an escapement mechanism. As an optional feature, a fiber-optic sensor can be installed to shut off the vibratory bowl feeder when the track is full. The escapement transfers and positions one fastener at a time into the placement jaws of the driving head. Each fastener is captivated within the jaws until the fastener's thread is properly engaged. The placement jaws are then opened mechanically.

The Model SD-111 Screw/Nut Driver is designed for a broad range of threaded parts and fasteners with extremely short body lengths and with captivated washers or wire clamps.



Above: Model SD-111 Screw/ Nut Driver with supply hopper

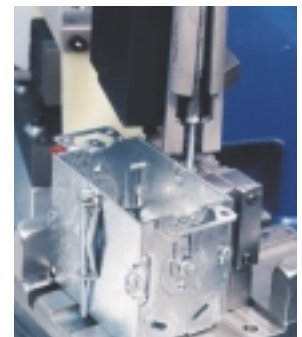
Left: Model SD-111 Screw/Nut Driver with sound enclosure



Typical Stud Driving Application



Typical Nut Driving Application



Typical Screwdriving Application

Model SD-111 Screw/Nut Drivers

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 (3) 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

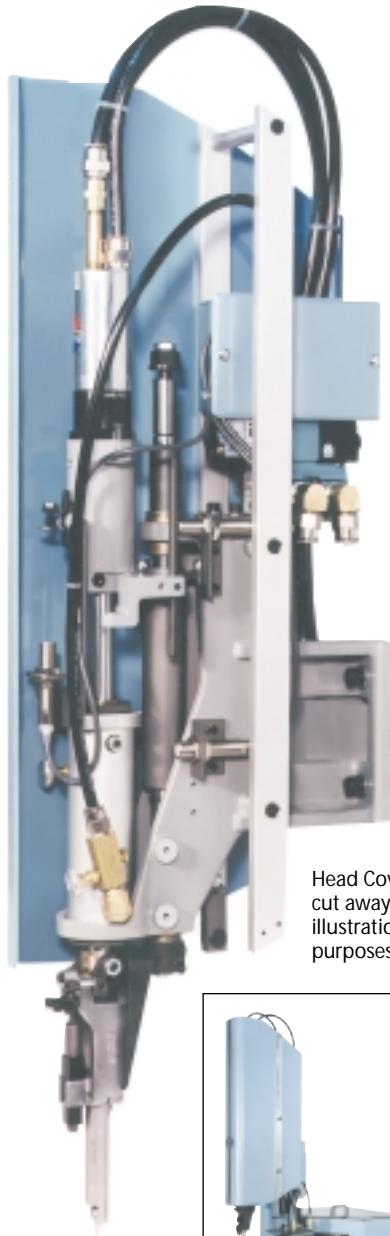
Optional valve package used to control depth of fastener engagement to plus or minus 1/2 turn.

Head Cover

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



Typical Threaded Parts

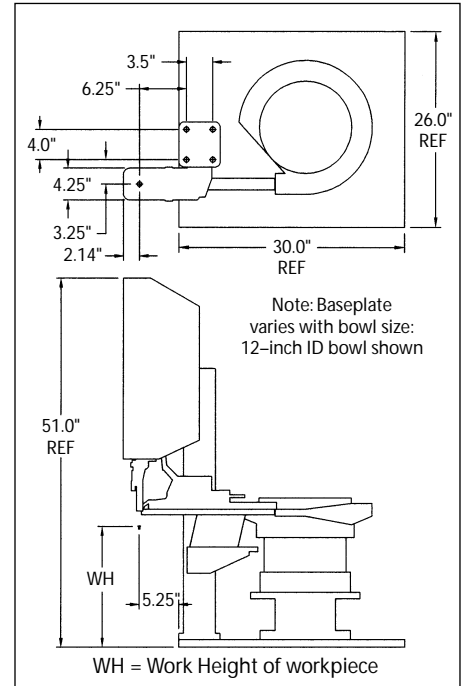


Head Cover cut away for illustration purposes

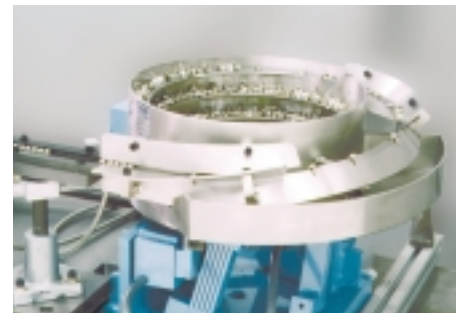


SD-111

Dimensional Data



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



Typical Bowl Feeder



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