



Model SD-110 Screwdrivers



Model SD-110 Screwdriver with DC electric drive motor. Options include torque monitoring, or torque and angle control.



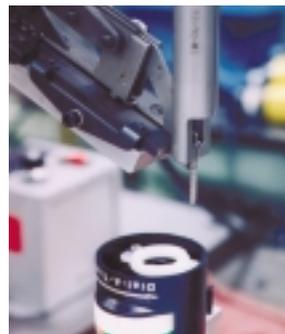
Model SD-110 Screwdriver with optional Magnetic Particle Clutch mounted on a Base with customized fixture.



The Model SD-110 Screwdriver is available with 2 in. (51 mm), 3 in. (76mm), 4 in. (102mm), and 5 in. (127mm) head strokes. This Screwdriver 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 wide range 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 range from 6 inches (153mm) to 36 inches (914mm). Fasteners are fed into an incline track to an escapement mechanism at the lower end of the feed track. The escapement transfers and positions one fastener at a time into the placement jaws of the driving head. Each fastener is held in the jaws until the fastener's thread is properly engaged. The placement jaws are then opened mechanically.

The Model SD-110 Screwdriver is ideally suited for a broad range of assembly applications where accuracy and dependability is required in an automatic process.



Left: Typical Screwdriving Applications

Model SD-110 Screw 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

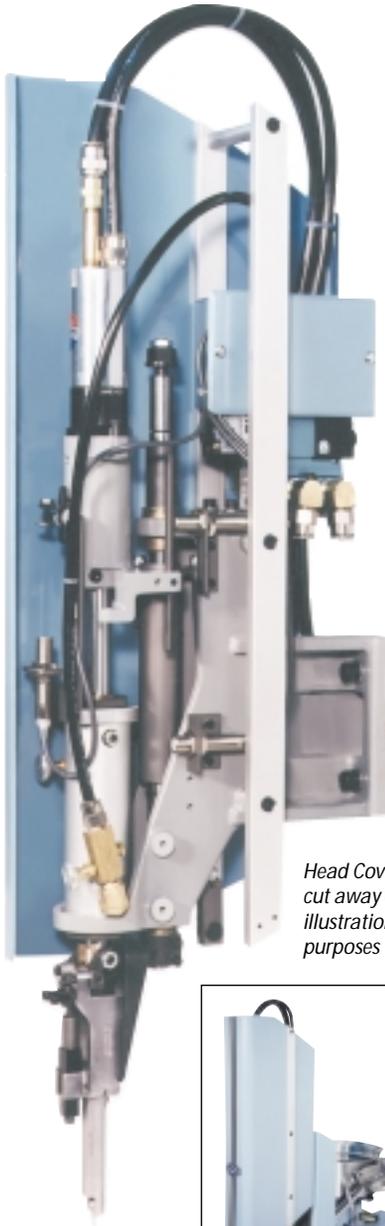
Optional valve package used to control depth of fastener engagement to plus or minus 1/2 turn.

Head Cover

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



Typical Fasteners

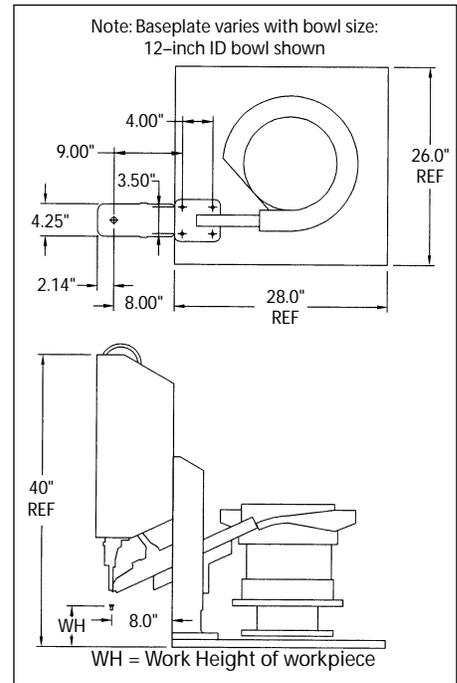


Head Cover
cut away for
illustration
purposes



SD-110

Dimensional Data



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



Typical Bowl Feeder



Main office and factory

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