

MODEL 3300

DIXON STANDARD SCREWDRIVING CELL

[OPTIONAL PART PLACING HEADS]

PROGRAMMABLE X-Y FIXTURE

- HANDS FREE ASSEMBLY
- INCREASED PRODUCTION
- EASILY RETOOLED
- COST EFFECTIVE
- QUALITY ASSURANCE
- PANEL PROGRAMMABLE

Dixon's Standard Screwdriving Cell is complete with an Auto-fed Screwdriving Head with Feed System, a programmable Cartesian Slides and Fixtures, Machine Base, Guarding, and Controls. The Screwdriving Cell can be tooled to drive fasteners into multiple work pieces fixtured on the Cartesian slide. The Screwdriving Cell is ideally suited for applications that require random placement of fasteners into a wide selection of work pieces. The placement work area on the slides is 305mm x 305mm. Our basic cell design enables easy retooling, and reprogramming for future product changes. The Cell can be used for part placement assemblies by replacing the Screwdriver Head with a Part Placement Head. (see chart below).

SCREWDRIVING/PLACING HEAD OPTIONS

Both Blow-Fed or Track-fed Heads are standard and listed in the following tables.

Screwdriving/Placing Head Types



SD-2000 Series



AP-1000 Series



SD/AP-100 Series

Driving Heads are selected based on the fastener size and torque requirements. For part placement applications, the placement head is selected based on the pressing force requirements.

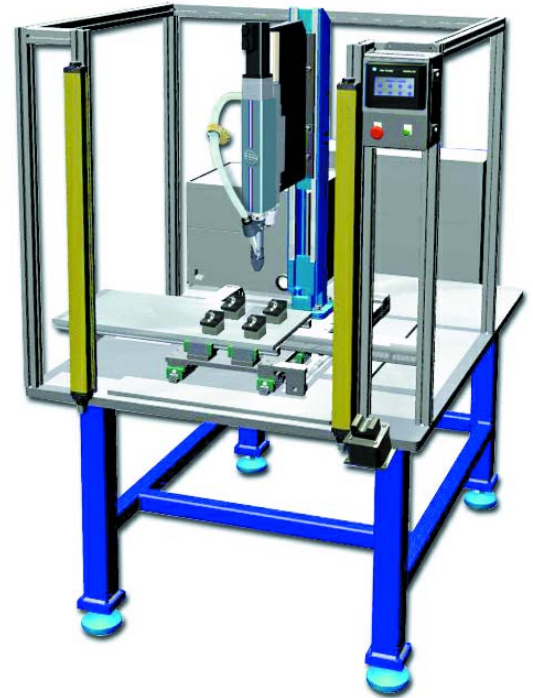
Screwdriving Head Options

Head Model	Torque Range	Max. Head Diameter	Max. Screw Length	Bit Thrust @90 psi / 6 Bar	Feed Type
SD-100	.50 - 13.5 Nm	14.2 mm	50.8 mm	378 N	Track
SD-2010	.03 - 1.4 Nm	7 mm	30 mm	106 N	Blow
SD-2020	.20 - 4.0 Nm	11 mm	50 mm	164 N	Blow
SD-2030	.80 - 11 Nm	15 mm	70 mm	258 N	Blow
SD-2040	1.5 - 42 Nm	24 mm	100 mm	422 N	Blow

Placing Head Options

Head Model	Max. Diameter	Max. Length	Pressing Force	Feed Type
AP-100	14.2 mm	50.8 mm	178-778 N	Track
AP-1000	15 mm	70 mm	178-889 N	Blow

Certified To ISO 9001:2000



CONTROLS

An easy to use operator interface provides the following functionality:

- Servo System With Servo Controller
- Touch Screen Panel
- Easy Programmability
- Standard Error Messaging
- Nema 12 Electrical Enclosure

GUARDING

A complete standard guard package that includes the following:

- Aluminum Extrusion Structure
- Light Curtains
- Mesh Guard Panels
- One Opto-Touch Hand Tie Down

60th Anniversary



Celebrating over 60 years in providing our customers with innovative solutions to their automated assembly needs.

DIXON AUTOMATIC TOOL, INC.

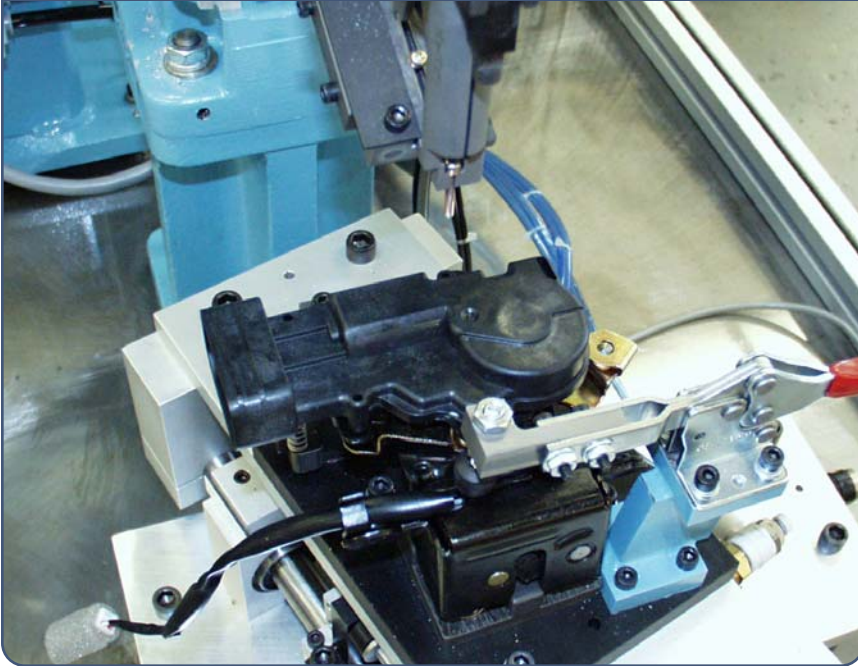
PRODUCTS GROUP

2300 23rd Ave. Rockford, IL 61104
 Phone: (815) 226-3000 Fax: (815) 226-8613
 www.dixonautomatic.com



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Sample Application



Typical Configuration



Options And Accessories

Screwdriver Heads:

Pneumatic Motors*:

- Adjustable Mechanical Clutch
- Stall Torque Sensing

DC Electric Motors:

- Transducer Torque Control
- Transducer Torque / Angle Control
- Current Sensing Torque Control

Servo Motors:

- Velocity Control
- Torque/Angle Control

Depth Control Features:

- Standard Proximity Switches Sense Forward And Return Positions*
- Analog Output Of Precision Depth Setting

Driving Precision:

- Torque Control
- Depth Control $\pm 1/2$ Turn
- Depth Control ± 2 Turn*

Optional Placer Heads:

Strokes:

- 50.8 mm - 200 mm

Pressing Force:

- 178 N - 889 N

Pressing Depth Precision:

- ± 0.063 mm (Fastener Dependent)

Specifications:

- Voltage Standard (120V 60Hz)
- Air Supply (80-100 psi)

Controls*:

- On Screen Coordinate Programming
- Built In Error / Troubleshooting Functions
- Andon Stack Light
- Ready Light To Enter Light Curtain
- Diagnostics Including Password And I/O Diagram
- PLC Controlled
- Modem Access (Optional)

Feeder Bowls:

- Drum Fed
- Vibratory Feeder

Feeders are selected based on the customers part requirements. Feeder bowls up to 533 mm.

Nesting / Fixturing:

- 305 mm x 305 mm Cartesian Slide Work Area
- Total Fixture and Part Weight Up To 4.5 kg For Typical Motion Profiles

Base With Adjustable Feet*:

- Leveling Feet
- Welded Construction
- Ground Mounting Surface

Base sizes up to 1219 mm x 1676 mm. Size is determined by bowl size in conjunction with Customer Target part size

* Indicates standard equipment

Contact Us for other Dixon Products

- Automatic Screwdrivers
- Automatic Part Placers
- Automatic Nut Runners
- Assembly Work Cells
- Automatic Presses
- Handheld Screwdrivers
- Vibratory Feed Systems
- Access Modem for Remote PLC Programming

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