

MODEL 3200

DIXON STANDARD SCREWDRIVING CELL

[OPTIONAL PART PLACING HEADS]

MANUAL X-Y SLIDE WITH FIXTURES

- HANDS FREE ASSEMBLY
- INCREASED PRODUCTION
- EASILY RETOOL
- COST EFFECTIVE
- QUALITY ASSURANCE
- FIXTURE POSITIONING TEMPLATE

Dixon's Standard Screwdriving Cell is complete with an Auto-fed Screwdriving Head with Feed System, An X-Y Slide and Fixture, Machine Base, Guarding, and Controls. The Screwdriving Head and manually positioned Fixture are tooled for the specific fastener and work piece. Our basic Cell design enables retooling for future product changes. The Cell can be used for a part placement assembly 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/AP-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.

Driving 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:

- Touch Screen Panel
- Standard Error Messaging
- Nema 12 Electrical Enclosure

GUARDING

A complete standard guard package that includes the following:

- Aluminum Extrusion Structure
- Cycle Initiation By Opto Touch Button And Templated Probe
- 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

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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)

Controls*:

- 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:

- Fixturing for X-Y pattern

Specifications:

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

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 the size of the Customer's Target part

* 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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