



# Auto-fed Pick and Place Stations

## Model AP-360 and Customized "P&P" Part Placers

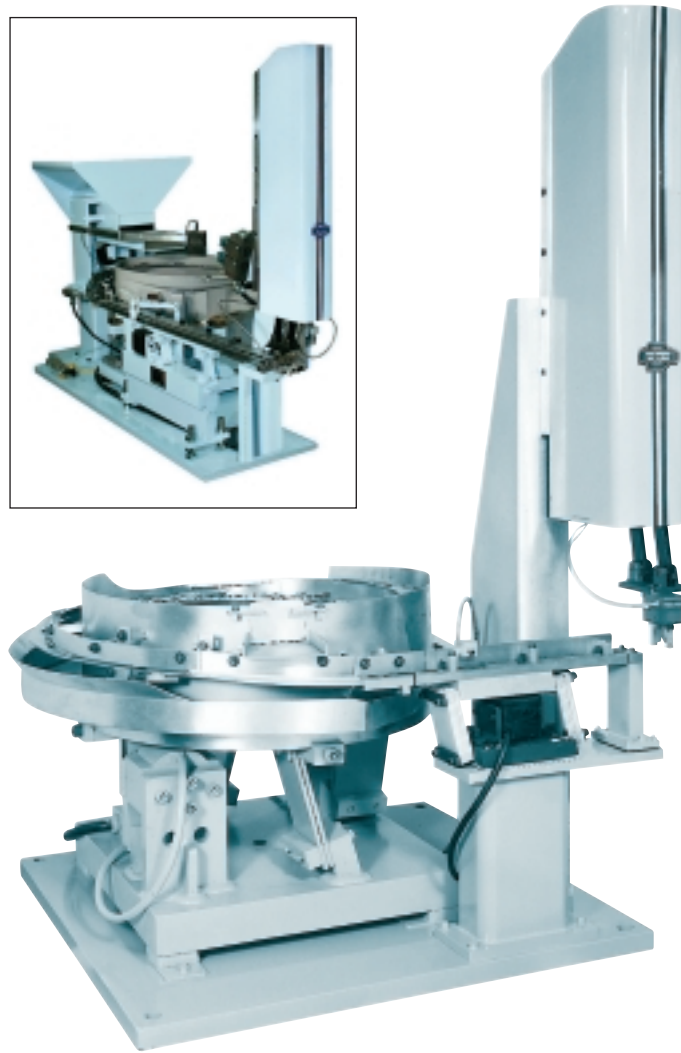
### **Model AP-360 Pick and Place Station**

Complete with vibratory bowl feeder, optional supply hopper, inline vibratory feed track, and feeder controls with full-track sensors.



### **Model AP-360 Pick and Place Station**

complete with vibratory bowl feeder, in-line vibratory feed track, and pneumatic gripper jaws.

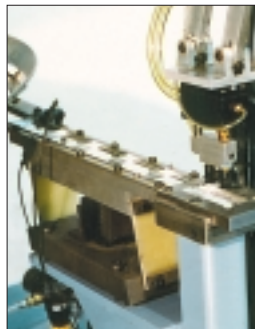


- **High cycle rates**
- **Precise repeatability**
- **Compact design**
- **Easy to apply**

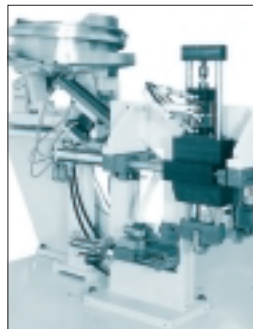
The Pick and Place AP-360 Models can achieve placement rates as high as 82 cycles per minute. Cycle rates however, are effected by payload weights. The placing head has a unique drive mechanism that is actuated by an air cylinder. A precision cam guides the motion linkage that supports the mounting plate and placement jaws. The cam controls the pickup and placing motions. The AP-360 Models are available in two horizontal stroke lengths. The dimensions are shown (other side of sheet). The vertical strokes of each model can be adjusted to meet variable pickup and placement heights. An optional support column allows the placing head to be adjusted over a 10.25-inch (260mm) work area. The Model AP-360 Pick and Place Head can be used in confined work areas due to the compact design. The Head can also be used as an excellent means in removing completed assemblies from a work holding fixture in an automatic process.



**Model AP-360** tooled for a dentistry product, which fed and placed soft rubber piece parts onto nylon output gears.



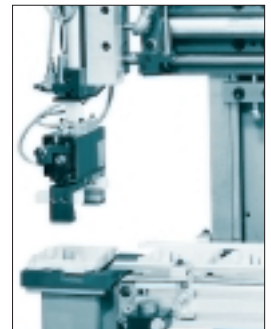
**Model AP-360** tooled to feed and place cosmetic trays onto an index table. Vacuum cups are used to carry the trays.



**Customized Pick and Place Pressing Station** complete with vibratory bowl feeder and an inclined dual feed track. The station is equipped with dual placement grippers to press two electrical elements into a workpiece on a palletized conveyor.



**Customized Pick and Place Station** mounted on a support bridge, and tooled to feed, place, and press two corner support brackets at a time into a metal frame with 600-pounds (2.7 kN) force.

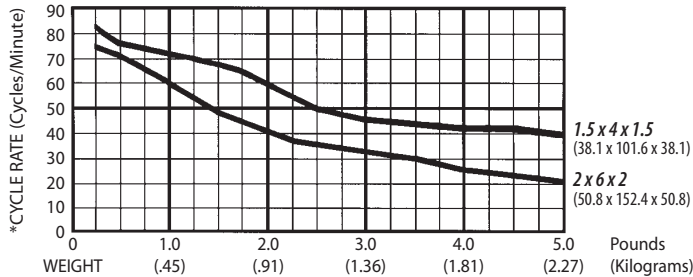


**Customized Pick and Place Station** with an 8-inch (203mm) horizontal stroke, tooled to feed, and place plastic heater control housings onto a palletized index system.

# Auto-fed Pick and Place Stations

## Model AP-360 and Customized "P&P" Part Placers

### Cycle Rate Chart at Various Payload Weight



\* Does not include dwell time or gripper time.

### Cycle Rates at Various Payload Weight

Payload Weight LB (KG)	Cycle Rate (Cycle/Min.)		Cycle Times (Seconds)	
	CAM Path 1.5 x 4 x 1.5 (38.1 x 101.6 x 38.1)	CAM Path 2 x 6 x 2 (50.8 x 152.4 x 50.8)	1.5 x 4 x 1.5 (38.1 x 101.6 x 38.1)	2 x 6 x 2 (50.8 x 152.4 x 50.8)
	.25 (.11)	82	74	.73
.50 (.23)	76	70	.79	.86
.75 (.34)	74	64	.81	.94
1.00 (.45)	72	60	.83	1.00
1.25 (.57)	70	54	.86	1.11
1.50 (.68)	68	48	.88	1.25
1.75 (.79)	66	44	.91	1.36
2.00 (.91)	60	40	1.00	1.50
2.25 (1.02)	54	38	1.11	1.58
2.50 (1.13)	50	36	1.20	1.67
3.00 (1.36)	46	34	1.30	1.76
3.50 (1.59)	44	31	1.36	1.94
4.00 (1.81)	42	28	1.43	2.14
4.50 (2.04)	42	25	1.43	2.40
5.00 (2.27)	40	22	1.50	2.78

### Dimensions (see Dimensional Data and Motion Diagrams to right)

CAM (IN.)	A	B	C	D
1.5x4x1.5	4.000 (101.6)	1.476 (37.5)	6.75 (171.5)	5.25 (133.4)
2x6x2	6.000 (152.4)	2.136 (54.25)	7.75 (196.9)	6.25 (158.75)

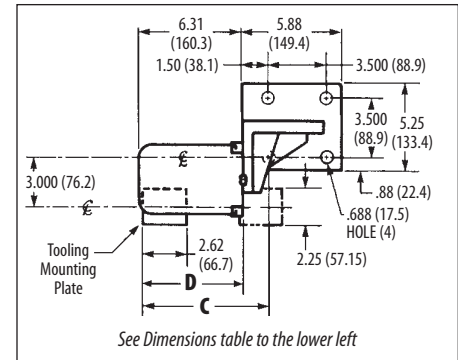
\* These dimensions are correct only when the pickup and placing positions are on the same plane.

NOTE: All dimensions are given in inches with millimeters in parentheses.



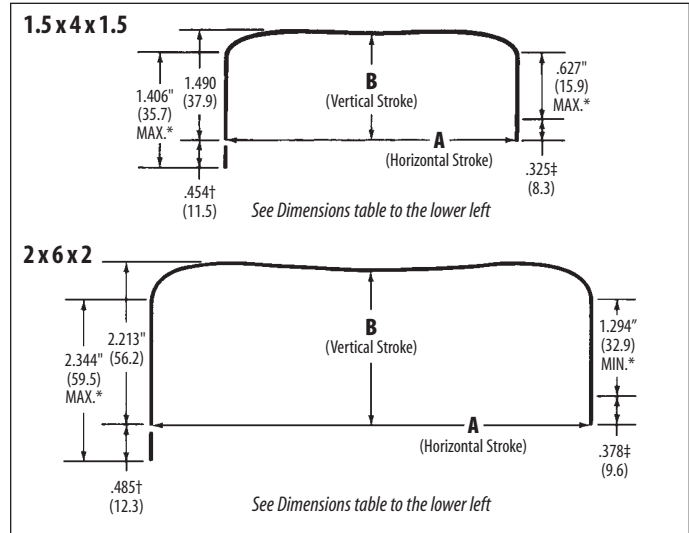
Standard  
AP-360 Pick  
and Place Head

### AP-360 Dimensional Data



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

### Motion Diagrams



The vertical strokes at the pickup and placing positions normally are the same. If necessary, either vertical stroke can be adjusted within the limits shown.

\* Straight-line motion † Maximum addition ‡ Maximum reduction



## DIXON AUTOMATIC TOOL, INC. Products Group

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