

# PROCESS PLATFORM: CENTURY® C-720 SERIES

## PRECISION BATCH DISPENSING FOR SEMICONDUCTOR APPLICATIONS

Designed for batch production, the Century® C-720 Series system provides exceptional dispensing accuracy and reliability for underfill, dam & fill, cavity fill, die attach, encapsulation, and other semiconductor operations.

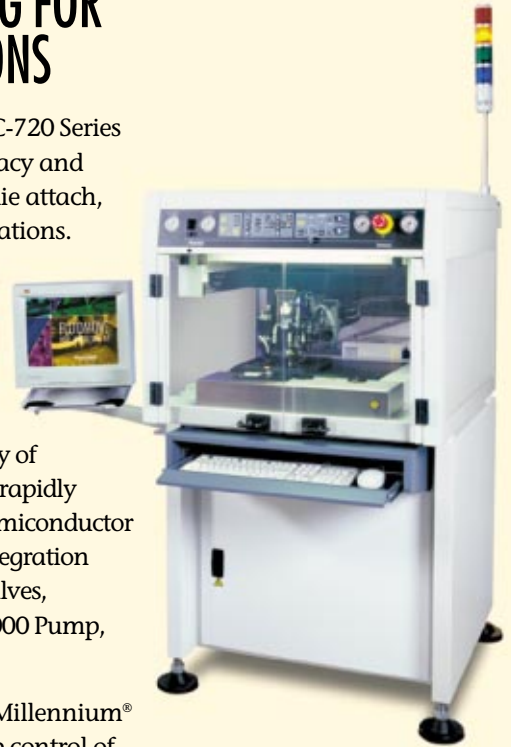
Offering an unmatched combination of cost-effectiveness, performance, and flexibility, this CE-certified system is optimal for low-to medium-volume production, as well as lab and prototype environments.

The C-720 system accommodates a wide variety of fluids, processes, and substrates used in today's rapidly expanding microelectronics applications for semiconductor package and board assembly. It allows easy integration with a wide variety of Asymtek's pumps and valves, including the DP-3000 Linear Pump, the DV-6000 Pump, and the DV-7000 Heli-flow™ Pump.

The advanced process control module brings Millennium® technology to the C-720 system for closed-loop control of key process parameters for both flip chip epoxy underfilling and general-purpose IC encapsulation. The system offers technologically advanced features not found on the base unit, including patented Mass Flow Calibration (MFC) for reliable fluid delivery, and an automatic Pattern Recognition System for identification of local and global fiducials.

Settings and parameters developed using the advanced process control module can be easily transferred to an inline Millennium platform when production needs exceed batch process capacities. This allows for process expansion with minimal configuration downtime and seamless transition from engineering development to inline production.

Several options can be added to the C-720 system to meet specific application requirements, including CADImport software for surface mount adhesive and solder paste dot dispensing, and a dual-action dispensing head. The C-720 system is fully supported by Asymtek's exclusive Fluidmove® for Windows NT® (FmNT) software, providing dispense programming control within a familiar Windows® environment.



### FEATURES

- Fully enclosed, CE-approved batch dispensing for a wide range of semiconductor applications
- Fluidmove for Windows NT software for easy-to-use programming control
- Configurable for single- and dual-valve fluid dispensing
- Patented Mass Flow Calibration automatically compensates for changes in fluid viscosity
- Pattern Recognition System for accurate identification of global and local fiducials
- Automated thermal management for reliable substrate heating and full temperature control of fluid delivery

Packaging - Processing

**Bid on Equipment**

1-847-683-7720

[www.bid-on-equipment.com](http://www.bid-on-equipment.com)

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# CENTURY® C-720 SYSTEM SPECIFICATIONS:

## MOTION SYSTEM:

Type: Brushless DC Stepper Motor  
 X-Y Velocity: 508 mm/s (20 in./s) maximum  
 381 mm/s (15 in./s) default  
 Z-Axis Velocity: 102 mm/s (4 in./s)  
 X-Y Repeatability: ±0.025 mm (0.001 in.), 3 sigma  
 Z-Axis Repeatability: ±0.025 mm (0.001 in.), 3 sigma  
 X-Y Resolution: ±0.025 mm (0.001 in.), 3 sigma  
 Z-Axis Resolution: ±0.025 mm (0.001 in.), 3 sigma  
 Positional Accuracy: ±0.13 mm (0.005 in.), 3 sigma

## DISPENSE AREA:

Single Dispense Head: 432 x 356 mm (17 in. x 14 in.)  
 Dual Dispense Head: 285 x 345 mm (11.2 in. x 13.6 in.)  
 Note: Dispense area is valve-configuration dependent.

## VISION AND LIGHTING:

Vision: ITI vision system with Pattern Recognition System  
 Targeting Offset Camera  
 Lighting: NER DOAL® (Diffuse On-Axis Light™)

## COMPUTER:

Computer: Pentium®-based PC, monitor, mouse

## SOFTWARE:

User Environment: Fluidmove® for Windows NT®  
 Operating System: Windows NT

## FLUID DELIVERY METHOD:

DP-3000 Linear Pump  
 DV-6000 Pump  
 DV-7000 Heli-flow™ Pump

## OTHER STANDARD FEATURES:

Workstation  
 Needle heater  
 Needle sensor  
 Vacuum purge station  
 Heated vacuum tooling plate; 457 x 356 mm (18 x 14 in.)  
 Dual-action plumbing

## Century Process Control Module:

2-channel PID heat controller

## Millennium® Advanced Process Control Module:

Mass Flow Calibration (MFC)  
 4-channel PID heat controller  
 Software-programmable setpoints

## FACILITIES REQUIREMENTS:

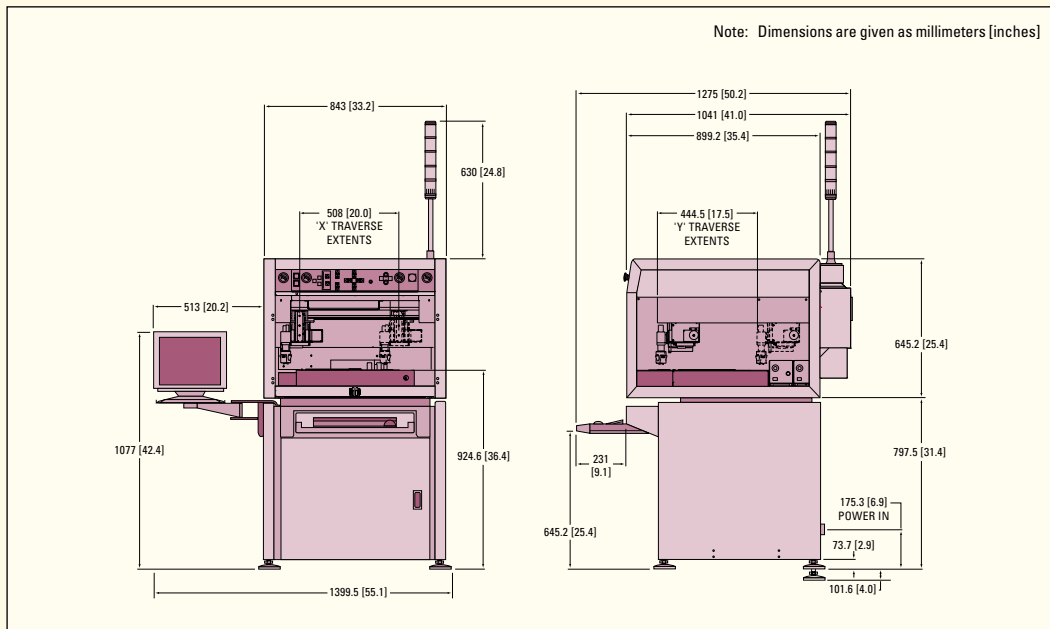
System Footprint: See illustration  
 Power Mains: 100/120/220/240 VAC, 50/60 Hz, 30 A  
 Air Supply: 620 kPa (90 psi, 6.2 Bar), up to 255 l/min (9 SCFM) maximum depending on configuration  
 System Weight: 363 kg (800 lbs.)  
 Noise: <70 dBA  
 Standards Compliance: CE

## OPTIONAL FEATURES:

CADImport software program  
 Dual Moritex lighting  
 Dual-action dispensing head; Available with two DV-6000s or one DV-6000 and one DP-3000  
 Temperature controller, single channel  
 Height sensor  
 Light beacon  
 Low fluid sensor  
 Low air pressure alarm

Additional options are available. Contact us for further information.

Please contact these locations for the name of your local representative:



## HEADQUARTERS

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