Dispensing Solutions

State-Of-The-Art
Material Dispensing
And Control Systems
The Next Generation Material Dispensing Control System

Johnstone’s AutoStream™ PC sets the benchmark for the next generation of material dispensing control systems. This compact, PC-based system delivers sophisticated process monitoring and control capabilities in an easy-to-use graphic format that is welcomed by both computer users and non-users alike.

All dispensing information is present on a single touch-sensitive Production screen. Graphic gauges and control buttons simulate familiar last-generation analog systems to simplify operator training. Unlike last-generation controls the AutoStream PC is fast, flexible, precise, and nearly maintenance-free.
AutoStream 1K
Single-Component Precision Dispensing Systems

1K - DISPENSING HEAD
Johnstone’s single-component metered dispensing system is a lightweight design for robot end-of-arm tooling applications. The 1K systems are designed for applications below 60cc in volume and are ideal for use with the Johnstone AutoStream PC control system in producing automotive enclosures using single-component materials.

- Volumetric monitoring does not require inline flow meters
- Suitable for pedestal or robot mounting
- Stream flow or extrusion dispensing for all single-component structural adhesives and weld-through expandable sealers
- 500 to 800 mm/second tool speed in most applications; higher or lower speeds available if required
- Close-coupled design for instant flow response at nozzle
- Quick, precise and repeatable pressure/flow control response to dynamic robot command signal changes

This graphic representation of the dispensing head helps users better understand the system. The AutoStream PC is designed to make viewing system operation and troubleshooting as simple as possible.
AutoStream 1KC
Single-Component Dual Shotmeter Dispense Systems

1KC - HIGH-VOLUME DISPENSING HEAD
Johnstone’s lightweight dual shotmeter dispense system provides unlimited volume output of single component materials. Higher volume output enables quicker cycle times and is ideal for applications that require volumes greater than 60cc. Also, the AutoStream 1KC is ideal for use with the Johnstone AutoStream PC control system.

Dual/alternating shotmeter design delivers continuous volume output at programmed pressures from 0-2,000 psi for stream and extrusion capabilities

Volumetric monitoring does not require inline flow meters

Suitable for pedestal, robot, boom or end-of-arm mounting

Stream flow or extrusion dispensing for all single-component structural adhesives and weld-through expandable sealers

High flow rate capability enables 500 to 800 mm/second tool speeds for antiflutter stitch bead, roof-bow, and paint shop sealing applications

Dispense pressure is developed at the metering system; does not require a high-pressure pump

Close-coupled design for instant flow response at nozzle

Point of application temperature and flow control
AutoStream 2K
Two-Component Precision Dispensing Systems

2K - DISPENSING HEAD

Johnstone’s two-component precision dispensing system is a lightweight design for robot end-of-arm tooling applications. The 2K systems are available in 1:1, 2:1, and 4:1 mixing ratios, and are ideal for use with the Johnstone AutoStream PC control system in producing automotive enclosures using two-component materials.

- Volumetric monitoring does not require inline flow meters
- Suitable for pedestal or robot mounting
- Stream flow for all two-component structural adhesives and after-hem materials
- 500 to 800 mm/second tool speed in most applications; higher or lower speeds available if required
- Close-coupled design for instant flow response at nozzle
- Point of application temperature and flow control
- Dispense pressure is developed at the metering system; does not require a high-pressure pump

No mixing tube? Nozzle not installed correctly? With the AutoStream PC’s graphical interface, you can see these things and many more before they become a problem.
Johnstone AutoStream material dispensing systems set the standard for productivity, precision, and reliability in tough industrial applications around the world. As a supplier of both pressure regulated and metered systems, Johnstone is able to design AutoStream systems with characteristics that are optimal for your application without regard for “what’s in inventory.”

In addition to the world’s best automated dispensing systems, Johnstone Assembly Solutions also offers:

**PRODUCTS**
- 5-, 30-, 55-, and 300-gallon fluid delivery systems and 20 liter for global markets
- Manual dispensing systems
- Lubrication dispensing equipment

**SERVICES**
- On-site or in-house training
- On-site service
- Process development
- Robot path programming
- Material testing
- Equipment reconditioning
- Specialty design and build

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**Johnstone Manual 1KC System**

The Johnstone Manual 1KC System is designed for situations where manufacturing robots are neither practical nor financially feasible. They are designed with the operator in mind and make manual application of all types of single component materials simple, accurate, and fast. The manual 1KC is also suitable for handling pressure sensitive materials, including glass bubbles.

- Dual/alternating shotmeter design delivers continuous volume output at programmed pressures from 0-2,000 psi for stream and extrusion capabilities
- Replaces mastic regulator; eliminating material degradation
- Multiple gun usage from single station
- Eliminates pressure surges throughout material dispensing
- Lower pump operating pressures, creating less wear over the life of the system
A Fault and Diagnostics Screen with complete fault logging simplifies system troubleshooting. In addition, “Smart Faults” automatically triggers the appropriate “Help” files for each fault message. Pumping systems are also graphically presented to facilitate material monitoring in continuous duty applications.

The graphical Setup Screen places all 63 system variables in front of the user, with password protection for setup and body ID settings. Up to 32 different body styles, limits, and targets can be programmed, and both a name and a number on the Production Screen identify each body style. Faults are also user-definable as Major or Minor using the Setup Screen.

Other standard features of the AutoStream PC control include real-time dispense accuracy tracking for Statistical Process Control; the ability to produce system-performance Histograms; an integral 3.5-inch floppy drive for information retrieval; complete on-line mechanical and electrical component service guides; and a sophisticated Help system with “Root Cause Analysis” problem solving technology.
## AutoStream Dispensing System Specifications

<table>
<thead>
<tr>
<th>PC Controller</th>
<th>1K Dispensing Head</th>
<th>1KC Dispensing Head</th>
<th>2K Dispensing Head</th>
</tr>
</thead>
<tbody>
<tr>
<td>The AutoStream™ PC System includes everything PC-based systems have to offer and more! It is the benchmark against which all future systems will be measured.</td>
<td>Component Dispenser is the new standard of accuracy in automotive material dispensing applications. When teamed with the Johnstone AutoStream PC control system, it is ideal for dispensing materials used in all Body Shop and Paint Shop dispensing applications with volumes less than 60cc.</td>
<td>This is the newest technology combining shotmeter precision with uninterrupted and unlimited volume output, for all Body Shop and Paint Shop dispensing applications above 60cc in volume.</td>
<td>The 2K Two-Part Dispenser is the industry's fastest, most accurate way to apply 2-part materials. When teamed with the Johnstone AutoStream PC control system, it is ideal for dispensing adhesives used on automotive closure applications.</td>
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<tr>
<td><strong>Hardware:</strong> 600x800 Active Matrix (TFT) Touchscreen 3.5&quot; Floppy Drive On-Board Ethernet Capability</td>
<td>• 500 to 800 mm/second tool speed in most applications; higher or lower speed available if required  • Point of application temperature and flow control  • Close-coupled design for instant flow response at nozzle  • Volumetric monitoring does not require inline flow meters  • Stream flow or extrusion dispensing for all single-component structural adhesives and weld-through expandable sealers  • Suitable for pedestal or robot mounting</td>
<td>• Volumetric monitoring does not require inline flow meters  • Suitable for pedestal or robot base, boom or e.o.a. mounting  • High flow rate capability enables 500 to 800 mm/second tool speeds for antiflutter stitch bead, roof-bow, and paint shop sealing applications  • Dispense pressure is developed at the metering system; does not require a high-pressure pump  • Close-coupled design for instant flow response at nozzle  • Point of application temperature and flow control</td>
<td>• 500 to 800 mm/second tool speed in most applications  • Dispense pressure is developed at the metering system, does not require a high-pressure pump  • Point of application temperature and flow control  • Close-coupled design for instant flow response at nozzle  • Volumetric monitoring does not require inline flow meters</td>
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<tr>
<td><strong>Software:</strong> Windows 2000, XP  All screens just &quot;2 clicks away&quot; Graphical representation aids throughout  • All operating information available on PC  • &quot;Smart Faults&quot; automatically opens dedicated Help file for current fault. Let AutoStream PC tell you how to fix it!  • Fault tracking and I/O map makes diagnostics fast, easy, and powerful  • Simple Setup Screen walks you through the setup process  • Complete Pump Monitoring for remote pump diagnostics; option available  • SPC Screen with process histogram graphically illustrates your process  • Comprehensive Help files online  • Complete service guides and electrical diagrams included on-screen</td>
<td>Specifications:</td>
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<td>Specifications:</td>
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<td><strong>Volume Range per Dispense</strong></td>
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<tr>
<td></td>
<td>1cc - 60cc</td>
<td>2cc - ∞</td>
<td>1cc - 45cc</td>
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<td></td>
<td><strong>Temperature Range</strong></td>
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<td></td>
<td>50°F - 150°F</td>
<td>5°F - 150°F</td>
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<td></td>
<td><strong>Max. Dispense Pressure</strong></td>
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<tr>
<td></td>
<td>2,000 psi</td>
<td>2,000 psi</td>
<td>1,6000 psi</td>
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<td></td>
<td><strong>Required Feed Pressure</strong></td>
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<td><strong>Required Feed Pressure</strong></td>
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<tr>
<td></td>
<td>500 psi</td>
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<td><strong>Max. Flow Rate</strong></td>
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<td></td>
<td>1,200cc/minute</td>
<td>1,6000 psi</td>
<td>2,500cc/minute</td>
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<td></td>
<td><strong>Weight</strong></td>
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<tr>
<td></td>
<td>27 lbs.</td>
<td>75 lbs.</td>
<td>35 lbs.</td>
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<td><strong>Suggested Applications</strong></td>
<td>Antiflutter (Stitch Bead)  Roof-Bow Adhesives  After-Hem Sealing  Closure Adhesives</td>
<td><strong>Suggested Applications</strong></td>
<td>Paint Shop Sealing Applications  Antiflutter Stitch Beads  Roof-Bow  Mastic and Adhesive Applications</td>
</tr>
</tbody>
</table>

**60cc volume or less**

**60cc volume or more**