

# Advanced Technology Adhesive Application System



## *Innovative adhesive dispensing system brings flexible, expandable capabilities to nonwovens disposables manufacturing*

The Nordson Advanced Technology (AT) Adhesive Application System meets the changing requirements of the nonwovens disposables industry with a unique design built to be flexible, expandable and easily serviced.

This efficient, modular design helps minimize the number of melters needed in a manufacturing environment and allows reconfiguration or expansion in the field with a minimum of parts, time and manpower. This reconfiguration can be as simple as changing from one pump to another, or as complex as adding pumps or a larger holding capacity to an existing melter.

Customers can order a single adhesive tank with up to two pumps, a dual tank with up to four pumps and drives, or twin tanks to pump two different adhesives. Tanks, which range in size from 25 to 200 kg capacity, can be upgraded after installation as production needs change.

Either single- or dual-stream pumps of various output ranges can supply applications or metered heads and pump stations.

### [Control system provides seamless interface to your production process.](#)

The ATS melter is available with several control options using industry-standard PLC controls. Choices include the Allen-Bradley PLC-5, SLC-500 and ControlLogix processors, and the Siemens PLC control. The operator interface is provided through a touch screen on the melter, through the main machine PLC, or through a remote control panel using a Supervisory Control and Data Acquisition (SCADA) software package.

### [Do-it-yourself service helps reduce downtime.](#)

Removable panels, modular design and assembly kits offer easy access and simple parts changes for the ATS melter. All service access panels, hose ports, controls and other vital areas are located on the front or back of the unit for easy servicing. The motors are mounted on sliding platforms that can be pulled out for convenient access.

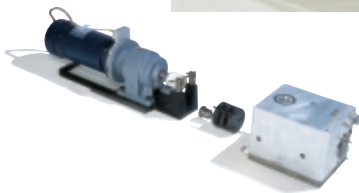


Pumps can be changed or added right in your own plant using a pump and manifold assembly kit. Release-coated tank surfaces also ease adhesive cleanup jobs.

### [Features and Benefits](#)

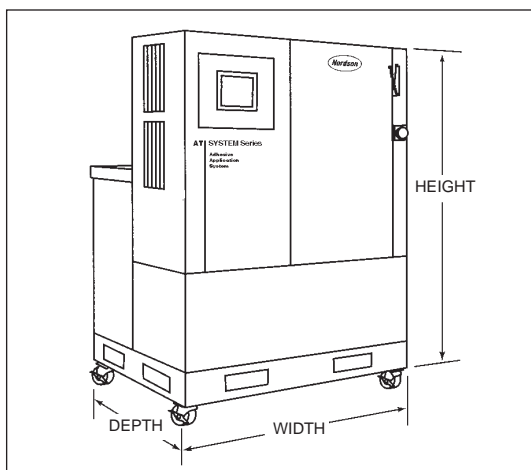
- **All pump and manifold assemblies reconfigure easily** in the field for application flexibility.
- **Tank capacity can be upgraded** to a larger size, or two tanks can be installed to handle two different adhesives.
- **All single-stream pumps are interchangeable**; all dual-stream pumps are interchangeable.
- **System utilizes industry-standard PLC controls** for seamless integration.
- **Precision gear pumps operate independently** in a multiple-pump configuration, offering different pump rates as needed.
- **Pump shut-off valve permits pump replacement** or reconfiguration without draining the system, saving hours of downtime.
- **Pre-pump filter contains large objects** without inhibiting melt rate or pump rate.
- **All surfaces exposed to hot melt adhesive are release-coated** for easy cleaning.

Twin-tank configuration can pump two adhesives from a single melter.



Pumps can be changed or added easily in your plant using a pump and manifold assembly kit.

## Dimensions



| Model     | Height*             | Width               | Depth               |
|-----------|---------------------|---------------------|---------------------|
| Single    | 1630 mm<br>(64 in.) | 917 mm<br>(36 in.)  | 1100 mm<br>(43 in.) |
| Dual/Twin | 1780 mm<br>(70 in.) | 1350 mm<br>(53 in.) | 1100 mm<br>(43 in.) |

\* Add 140 mm (5.5 in.) to height for caster wheels.

## Specifications

| ATS Melter:                              | Single  | Dual   | Twin   |
|--|---|--|--|
| <b>Tank Capacity:</b>                    | 25 kg (55 lb)<br>50 kg (110 lb)<br>100 kg (220 lb)  | 50 kg (110 lb)<br>100 kg (220 lb)<br>200 kg (440 lb) | 25 kg (55 lb ea.)<br>50 kg (110 lb ea.)<br>100 kg (220 lb ea.) |
| <b>Maximum Weight:</b><br>(w/o adhesive) | 600 kg (1320 lb)  | 1000 kg (2200 lb)                                    | 1000 kg (2200 lb)  |
| <b>Hose Capacity:</b>                    | 4   | 8  | 8  |
| <b>Maximum Melter Current:</b>           | 35 A at 400 V Wye<br>60 A at 230 V Δ  | 64 A at 400 V Wye<br>100 A at 230 V Δ                | 64 A at 400 V Wye<br>100 A at 230 V Δ                          |
| <b>Number of Adhesives:</b>              | 1   | 1  | 2  |
| <b>Operating Temperature Range:</b>      | 65 to 200°C (150 to 392°F)  |  |  |
| <b>Temperature Stability:</b>            | Air: ±2°C (±3.6°F)<br>Adhesive: ±1°C (±1.8°F)   |  |  |
| <b>Pump Rate:</b>                        | 0.29 to 76.55 (SS) kg/hr/stream<br>(0.64 to 168.77 lb/hr/stream)<br>0.29 to 23.55 (DS) kg/hr/stream<br>(0.64 to 51.93 lb/hr/stream) |  |  |
| <b>Operating Pressure:</b>               | 0 to 85 bar (0 to 1200 psi)   |  |  |
| <b>Hose Sizes:</b>                       | 8 mm I.D. (.314 in. I.D.)<br>13 mm I.D. (.406 in. I.D.)<br>16 mm I.D. (.625 in. I.D.)   |  |  |
| <b>Adhesive Viscosity:</b>               | 1 to 50 Pa-s (1,000 to 50,000 cps)  |  |  |
| <b>Melt Rate:</b>                        | 34 kg/hr/manifold (75 lb/hr/manifold)<br>68 kg/hr/grid (150 lb/hr/grid)   |  |  |
| <b>Voltage:</b>                          | 200-240 VAC Δ, 50/60 Hz<br>380-415 VAC Wye, 50/60 Hz  |  |  |



**ISO 9000**

QUALITY SYSTEMS

*For more information, talk with your Nordson representative or contact your Nordson regional office.*

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