



Hot Melt Dispensing Systems

# Assemblies, Industries & Materials

# **Assembly Examples**

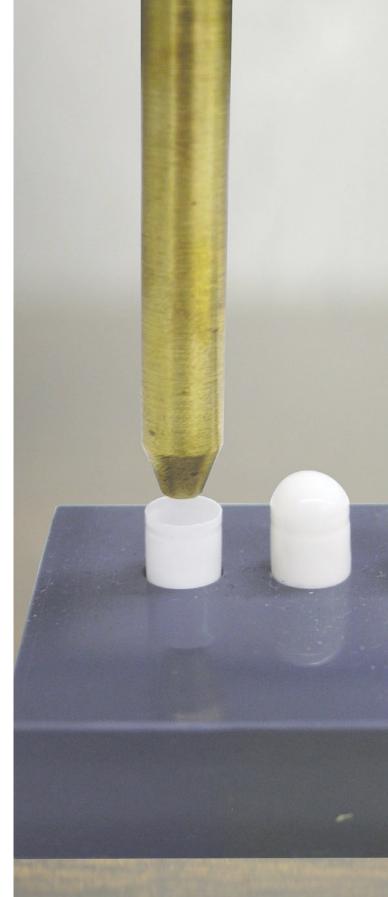
- Box, carton and case sealing
- Spot glue
- · Filling and potting
- · Component staking on circuit boards
- Gasket form-in-place
- Woven and fabric bonding
- Metal assembly, sealing and bonding

# Industries

- · Packaging and carton production
- Non-woven production
- Displays
- Electronic PCB assembly
- Upholstery & mattress fabrication
- Furniture assembly
- · Window assembly
- Filter manufacture
- Matting and carpet fabrication
- · Automotive woven product assembly
- Insulation protection
- Capsule production

# **Typical Hot Melt Materials**

- Pressure Sensitive Adhesive (PSA)
- Polyethylene (PE)
- Polyurethane (PUR)
- Contact adhesive
- Wax
- Rubber
- Polyamide
- Ethylene vinyl acetate (EVA)
- Non-adhesive compounds



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Form-in-Place Gaskets

Staking PCB Components







Filter Production

Furniture Assembly





Displays

Woven & Fabric Bonding



Box & Packaging Manufacture



Structural Assembly Bonding



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THERMADOSE<sup>®</sup> Positive-displacement, motor driven, all-electric hot melt systems are designed to provide the ultimate in temperature controlled pulse-free thermoplastic dispensing for industrial applications using pressure sensitive adhesives, contact adhesives, waxes and sealants. Capabilities include non-woven, spray, ribbon coating, direct contact, high-speed jetting adhesive and product assembly applications.

Products are RoHS compliant and CE approved.

## **Tank Controllers for Hot Melt Positive-Displacement**

Rugged heavy-duty, bulk storage dispensing systems with spur type gear-pump technology for use with hot melt solids supplied as pellet, brick or flake. Drive ratios are matched to each specific application. Tank controllers can be used in manual operated dispensing applications with hand valves or interfaced to conveyor lines and robots using automatic valves for automation.

A 220V tank controller "NA" option is available for non-adhesive processing applications that require sterile delivery.

## **Drum Melters for Hot Melt Positive-Displacement**

THERMADOSE<sup>®</sup> Drum Melters are designed to handle high volume production of hot melt EVA, PSA, and PUR, supplied from 5 gal (20 L) bulk pails or 55 gal (200 L) drums. Machines feature proven and reliable operational controls. Pail and Drum Melters include precision gear-pump technology providing pulse-free flow of adhesive for precise gluing applications.

THERMADOSE<sup>®</sup> hot melt systems include PID electronics and RTD sensors that ensure reliable and repeatable close tolerance dispensing.

THERMADOSE



THERMADOSE<sup>®</sup> hot melt tank controllers are selected by determining the tank capacity required, melt rate and the pump rate necessary to provide sufficient material for the process. Another factor that also influences the decision is whether the application is a manual process or an automated system.

When a hot melt tank controller is coupled to a hand valve, the tank controller becomes part of a manual system. When connected to an automated valve it can be an integral part of an automated production system.

Each hot melt tank controller includes a heated melt tank with easily replaceable cartridge heaters. Tanks are coated with Teflon<sup>®</sup>. The tank controller is all electric and does not require compressed air. The wide mouth design of the self-sealing tank lid will accommodate a large selection of solid adhesive forms.

Heated hoses are both electrically and mechanically attached to the unit via easy-access connectors on the rear panel of the controller.

# **5 Steps to Select a Hot Melt System**

1 Selecting a Tank Controller for an Automated System

Hot melt tank controllers are most popular for low to medium-volume production. The model HM110, 11kg unit, is suitable for automated assembly lines and robots. Note that the model HM044, 4.4 kg unit, is a convenient and economical system for low volume manual hand valve or bench assembly operations only.

2 Selecting a Tank Controller for a Manual System

Select the appropriate tank capacity controller, (ref pages 5-6). All systems are suitable for manual dispensing.

3 Selecting a Heavy-Duty Braided Heated Hose

Select a hose diameter suitable for the viscosity and flow rate. Hose diameters are coded. The recommended hose code is 6, which is 3/8" (9.52mm) The maximum hose length possible varies per system, but a 220/240V hose can be as long as 32 ft (9.67m). A hose over 16ft (4.87m) requires a 220/240V unit. Hoses are Teflon<sup>®</sup> - stainless steel braided. Note that hoses for automated systems using an automatic valve are supplied with bayonet electrical connections and hoses for use with manual hand valves include screw-on electrical fittings. (ref page 7 for Steps in Selecting a Heated Hose).

WARNING: Always allow extra length for routing around corners, a minimum of 16" (406mm) dia. per bend.

4 Selecting a Hand Valve for a Manual System or an Automatic Valve for Bench Mounting

Automatic valves can be mounted on a bench as a fixed work station and triggered by a foot switch. Hand valves with trigger action are an ergonomic method of free-hand dispensing. Nozzles are selected for beads, spray or swirl. (ref page 8)

**5** Selecting an Automatic Valve for an Automated System

The automatic valve set used with a robot is usually a single head type fitted with a nozzle for dispensing shots or beads. Swirl pattern nozzles and spray heads are employed to cover wider areas or coat surfaces (ref page 9).

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# Tank Controller 24 lb. (11kg.) Capacity

HM110

The model HM110 hot melt controller provides six outlets for multi-hose operation from one to six hoses for maximum flexibility. Designed for medium to high volume dispensing up to 30,000 cps\*. Machines are supplied with Teflon<sup>®</sup> coated tanks with cartridge heaters. Optimized system performance is ensured by the provision of solid-state controls and precise RTD temperature sensors.

\*Contact Fisnar engineers for higher viscosity applications.

Controllers feature relief valve options, ranging from the single-stage relief valve supplied with the standard controller to optional sophisticated pneumatic relief systems.

# Features

- Teflon<sup>®</sup> coated tanks reduce char buildup for easy maintenance and reliable operation
- HM110 hot melt tank controllers can be easily adapted to variable speed applications
- Independent over-temperature and over-pressure protection
   provides safe operation
- Independently controlled heat zones minimize adhesive degradation for precise, uniform patterns
- · Cartridge style heaters allow easy change-out in the field
- Compatible with industry standard hoses, valves, tank filters and drain valves
- Large capacity spur gear-pump that delivers 60 lb (27kg)/hour.
- · Compatible with major approval codes worldwide

# Options

- · Internal sensors (high, low or both)
- · Beacon for level sensors and faults
- · Larger capacity pumps
- Tool balancer
- Automatic feeder (pellets or small chips)
- Auxiliary I/O board (4 inputs 4 outputs)
- Optional pneumatic relief systems

## Model

HM110-240 24 lb (11kg) Tank controller 220/240 VAC

# **Specifications**

Tank capacity:	24 lb (11kg) Teflon <sup>®</sup> coated
Gear-pump rate:	Spur gear-pump 60 lb (27kg)/hr
Melt rate:	60 lb (27kg)/hr (depending on material)
Temperature control:	Max 425°F (218°C)
Temperature stability:	1°F (0.5°C)
Hose outlets:	1 - 6 hoses
Gear pump:	AC variable speed
Power source:	208-240 VAC 1Φ/3Φ, 380 VAC 3Φ, 30 amps.
Dimensions:	D 25.0" (635mm) X W 14.25" (362mm) X H 21.0" (533mm)
Weight:	110 lbs (50kg)



# **Touch-Pad Control Features**

- · Multi-language display
- · Programmable sequential zone start-up
- Automatic temperature setback
- High/low temperature protection
- · High-pressure protection
- · Fahrenheit or Centigrade option
- · System diagnostics
- Seven-day programmable clock
- Digital RPM readout
- Optional low-level detection in tank
- · Optional variable-speed motor control



HM110 controllers feature an easy-to-use touch-pad with a bright vacuum-fluorescent screen which allows operators to quickly setup system parameters and monitor system operation.

# HM044 Tank Controller 9.7 lb. (4.4kg.) Capacity

HM044 hot melt controllers provide outlet connections for one or two hoses. The HM044 is designed for manual dispensing up to 30,000 cps. Machines are supplied with Teflon<sup>®</sup> coated tanks and cartridge heaters. Optimized system performance is ensured by the provision of solid-state control and precise RTD temperature sensors.

Machines are available in 110/120VAC and 220/240VAC models. Note that 110/120VAC machines have a limitation in the allowable length of hose/s permitted - 2 hoses of 8ft (243.84cm) or 1 hose 16ft (487.68cm).



# **Touch-Pad Control Features**

- · Multi-language display
- · Programmable sequential zone start-up
- Automatic temperature setback
- · High/low temperature protection
- High-pressure protection
- · Fahrenheit or Centigrade option
- · System diagnostics
- Seven-day programmable clock
- Digital RPM readout
- · Optional low-level detection in tank



HM044 controllers feature an easy-to-use touch-pad with a bright vacuum-fluorescent screen which allows operators to quickly setup system parameters and monitor system operation.

#### Features

- Teflon<sup>®</sup> coated tanks reduce char buildup for easy maintenance and reliable operation
- Independent over-temperature and over-pressure protection
   provides safe operation
- Independently controlled heat zones minimize adhesive degradation for precise, uniform patterns
- · Cartridge style heaters allow easy change-out in the field
- Compatible with industry standard hoses, hand valves, tank filters and drain valves
- · Compatible with major approval codes worldwide
- Large capacity spur gear-pump that delivers 60 lb (27kg)/hour.
- · PID temperature controls to optimize system performance.

### Options

- Internal sensors (high, low or both)
- · Beacon for level sensors and faults
- Tool balancer
- · Automatic feeder (pellets or small chips)
- · Auxiliary I/O board (4 inputs 4 outputs)
- · Optional pneumatic relief systems

#### Model

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HM044-115	9.7 lb (4.4kg) Tank controller 115 VAC
HM044-240	9.7 lb (4.4kg) Tank controller 220/240 VAC

# **Specifications**

-	
Tank capacity:	9.7 lb (4.4kg) Teflon <sup>®</sup> coated
Pump rate:	Spur gear-pump 60 lb (27kg)/hr
Melt rate:	11 lb (5kg)/hr (depending on material)
Temperature control:	Max 425°F (218°C)
Temperature stability:	1°F (0.5°C)
Hose outlets:	1 - 2 hand valve attachments
Gear pump:	AC fixed speed
Power source:	110/120 VAC or 220/240 VAC 20 amps. single phase with ground
Dimensions:	D 23.90" (607mm) X W 12.30" (312mm) X H 16.70" (424mm)
Weight:	75 lbs (34kg)

# Hoses For Tank Controllers THERMADOSE<sup>®</sup> Heated Hoses 115V & 240V

Rugged construction hot melt heated hoses include a Teflon<sup>®</sup> core, a reinforced stainless steel braid and enhanced high temperature insulation with a durable polyester braid cover for abrasion resistance.

115 VAC hoses are suitable for HM044-115 Tank Controllers only.

# **5 Steps in Selecting a Heated Hose**

- The electrical connection for a manual hand valve hose is different than the electrical connection for an automatic valve used for an automated application. Hand valve hoses are supplied with metal jacketed screw-on electrical connectors; automatic valve hoses include bayonet snap-release connectors. When ordering, hoses will have an "H" prefix indicating a hose to connect to a hand valve or an "A" for a hose to connect to an automatic valve. Note that the fluid connection is supplied with a JIC type screw-on fitting for either type of hose.
- 2. Hoses are also designed for either extrusion (beads) (E) or swirl/spray (S) patterns and designated with an "E" or an "S" in the hose reference item # when ordering. Swirl/spray (S) hoses are similar to bead (E) hoses but integrate an internally wound air line that heats the air used in swirl/spray applications.
- **3.** They are then described by a diameter code for the hose I.D. diameter:

Diameter Code	Diameter
Code 4	1/4" 6.35mm
Code 6	3/8" 9.52mm (standard recommended)
Code 8	1/2" 12.70mm
Code 12	3/4" 19.05mm
Code 16	1.0" 25.45mm

4. Next is the length of the hose required:

115VAC = Hose Lengths 4ft (121.92cm) to 16ft (487.68cm) Max 240VAC = Hose Lengths 4ft (121.92cm) to 32ft (975.36cm) Max

5. Finally select the voltage 115VAC or 240VAC

# Examples of How to Order:

#### Example 1: H-S-6-8-115

Order code: **H-S-6-8-115** - describes a hose suitable for a hand valve (**H**) to dispense a swirl pattern (**S**) with a hose dia. Code 6 - 3/8" (9.52mm) I.D. hose length required is 8ft (243.84cm) and the tank controller voltage is 115V. This hose order example would be suitable for an HM044-115 Tank Controller only.

#### Example 2: A-E-8-16-240

Order code: **A-E-8-16-240** - describes a hose suitable for an automatic valve (**A**) used in automated systems to dispense an extruded bead (**E**) (or a single shot) with a hose dia. Code 8 which is a  $1/2^{\circ}$  (12.70mm) I.D. Hose Length required is 16ft (487.68cm) and the tank controller voltage is 240V. This hose order example would be suitable for either an HM110-240 or HM044-240 tank controller.

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**WARNING:** Always allow extra length for corners, a minimum of 16" (406mm) dia. per bend.





# Hand Valves - Manual

# Hot Melt Hand Valves

Ergonomic and lightweight balanced hand valves in top-feed or bottom-feed ball-swivel versions with an integrated hanger for suspension hook up. A built-in sensor provides an accurate temperature control of the hand valve. A trigger switch activates the tank controller gear-pump and air supply for swirl/spray options.

A hose swivel allows ease of use and helps avoid hose twist. A safety trigger lock secures the hand valve when not in use. A 90° extrusion adapter nozzle is recommended when necessary to prevent stressing the heated hose.

Model #

Hand Valves



Hand valves supplied with nozzle HVN4050 - I.D. 0.040" Length 2.00" (50.8mm)

# Nozzles

Hand Valve Nozzles

Model #	Length (inch)	Length (mm)	I.D. (inch)	I.D. (mm)
HVN1125	1.00	25.4	0.011	0.279
HVN1525	1.00	25.4	0.015	0.381
HVN2125	1.00	25.4	0.021	0.53
HVN1339	1.57	39.8	0.013	0.330
HVN1839	1.57	39.8	0.018	0.457
HVN2539	1.57	39.8	0.025	0.635
HVN1850	2.00	50.8	0.018	0.457
HVN2550	2.00	50.8	0.025	0.635
HVN4050	2.00	50.8	0.040	1.016

## **Automatic Valve Nozzles**

Model #	Length (inch)	Length (mm)	I.D. (inch)	I.D. (mm)
AVN0812	0.050	1.25	0.008	0.203
AVN2012	0.050	1.25	0.020	0.508
AVN3212	0.050	1.25	0.032	0.813
AVN1070	0.275	7.0	0.010	0.254
AVN2070	0.275	7.0	0.020	0.508
AVN4070	0.275	7.0	0.040	1.016
AVN1225	1.00	25.4	0.012	0.305
AVN2025	1.00	25.4	0.020	0.508
AVN2825	1.00	25.4	0.028	0.711
AVN1250	2.00	50.8	0.012	0.305
AVN2050	2.00	50.8	0.020	0.508
AVN2850	2.00	50.8	0.028	0.711



Automatic Valve Nozzles



Swirl/Spray Assembly Components

# Swirl/Spray Components

Model #	Description
SC000	Retainer cone
SC001	Air swirl

## Swirl/Spray Inserts

Model #	Inch	mm
SN021	0.021	0.533
SN030	0.030	0.762
SN040	0.040	1.016



GJBF115 GJBF240 GJTF115 GJTF240 GJEN90

#### Swirl/Spray Hand Valves Model # Description

Description

wouer #	Description
GSBF115	Swirl/spray hand valve bottom feed 115VAC
GSBF240	Swirl/spray hand valve bottom feed 240VAC
GSTF115	Swirl/spray hand valve top feed 115VAC
GSTF240	Swirl/spray hand valve top feed 240VAC

Hand valve bottom feed 115VAC

Hand valve bottom feed 240VAC

Hand valve top feed 115VAC

Hand valve top feed 240VAC

Hand Valve 90° adapter nozzle

Standard swirl/spray hand valves are supplied with an 0.040" orifice nozzle insert

# Automatic Valves Automated Dispensing

# VME4200 Automatic Valve

# Air Operated 4-Way Action

Automatic valves are used in automated installations. The VME4200 is an air-open/air-close fast action valve supplied with a 4-way solenoid required for high speed and quick cut-off dispensing. Valves can be installed as a single shot system or in multiple gangs mounted on a manifold. Manifolded valves can be fired simultaneously from a single solenoid or they can be independently fired from a separate solenoid. Contact office for details.

#### Model

VME4200 Automatic valve with 4-way solenoid Includes robot mounting bracket

\* VME4200 Automatic valves are supplied with a solenoid fitted



# THERM DOSE Hot Melt Systems

# **HVH3200 Automatic Valve**

#### Air Operated 3-Way Action

The HVH3200 is an air-operated valve, suitable for high flow and/or high viscosity materials greater than 30,000cps. This is an air-open/spring-close valve assembly, and requires a 3-way solenoid. The valve is used for applications not requiring high accuracy or speed. Valves can be used as a single installation or in multiple gangs on a manifold. Manifolded valves can be fired simultaneously from a single solenoid or independently fired from a separate solenoid. Contact office for details.

## Model

HVH3200

Automatic valve high-flow (3-way solenoid not included) Includes robot mounting bracket

# Solenoid for HVH3200 Air-Operated Automatic Valves

Model #	Description	Туре
SVH3200	3-way solenoid	24V

# **Automatic Valve Options**

HZC3200 Zero cavity automatic valve

**NOTE:** Contact office for details and quotation for HZC3200 system components. Electric automatic valves are available upon request - contact office.



HVH3200 Air-Operated Valve Solenoid supplied separately

# **Drum Melters**

# 5 & 55 Gallon Drum Melters

THERMADOSE<sup>®</sup> Pail and Drum Melters are designed to handle high volume production of hot melt EVA, PSA, and PUR, supplied from 5 gal (20 L) pails or 55 gal (200 L) drums. Machines feature proven and reliable operational controls. Melters include precision gear-pump technology providing pulse-free flow of adhesive for precise gluing applications.



#### **Features**

- · Continuous pulse-free spur gear-pump output
- · Melt-on-demand supply
- · Built-in pressure relief valve
- · Adjustable output pressure
- Teflon® coated platen with cast-in heaters
- · Quick and accurate container positioning
- One or two hose connections +2 optional
- Programmable alarms 4 input & 4 output
- · Dual Post ram cylinder pressure adjustment
- · Directly heated flat & fin platens for adhesive types
- Fully sealed system ideal for PUR. materials
- · Maintains material integrity

#### Model

PMFL20-240	Pail melter 5 gal (20L) flat platen
PMFP20-240	Pail melter 5 gal (20L) fin platen
DMFL200-480	Drum melter 55 gal (200L) flat platen
DMFP200-480	Drum melter 55 gal (200L ) fin platen

55 gal (200 L) Drum Melter Pail & Drum Melters are supplied in partnership with Valco Melton.

-	5 Gal. (20 L) Pail Melter		55 Gal. (200	L) Drum Melter	
System:	5 Gal. Flat Platen	5 Gal. Fin Platen	55 Gal. Flat Platen	55 Gal. Fin Platen	
Drum Capacity (L):	20	20	200	200	
Platen Configurations:*	Fin (hi-flow), Flat (reactive adhesives)		Fin (hi-flow), Flat (reactive adhesives)		
Max. Melting Rate (Kg/h):**	15	30	30	200	
Max. pumping rate:	106 lb/h (48 Kg/h)		475 lb/h (215 Kg/h)		
Input Power Requirements:***	0.275	7.0	400VAC, 3 phase, Y 480 VAC, 3 Phase, Delta (with transform		
Working Temperature	15-230°C (60-450°F) +/-1°C (+/-2°F)		15-230°C (60-450°F) +/-1°C (+/-2°F)		
Max. Working Viscosity (cps):		100,00	0 cps		
Max. Working Pressure (bar):	65 bar (1000 psi) standard with pressure relief valves up to 100 b			00 bar available.	
Maximum System Power:	9,500 W		39,300 W		
Number of 240 VAC Hose Outlets:	2 Standard & 2 Optional Outlets		1 - 4 Outlets		
Dimension (shipping LxWxH):	51.18x23.62x75.66 in (1300x600x1900mm)		) 61x33x89 in (1550x840x2180 mm)		
Weight:	992 lb (450 kg)		1343 lb (610 kg)		

\*Flat platens will have a significantly lower melt rate due to lower available power and melting efficiency.

\*\*Melt Rates will vary with input voltage, adhesive, and platen selection, numbers are based on PSA adhesive at 10,000 cps.

\*\*\*Some input power configurations require an optional transformer located in the electrical enclosure.

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# Specifications

# **Auto-Feed Tank Filling**

THERMADOSE<sup>®</sup> Auto-Feed tank feeders automatically administer adhesive from a bulk container into a connected hot melt tank. Auto-feeders save time and avoid labor costs incurred by manual refilling operations. The Auto-Feed system ensures safety, time-efficiency, and quality for an improved production process.

#### **Features**

- · Avoid charring of adhesive in the tank
- Maximum productivity and quality gluing
- · Automatic process ensures operator safety
- Elimination of adhesive waste, spillage and contamination
- · Reduces thermal impact in the tank
- · Offers a complete control of adhesive level
- · Eliminates any risk from production stoppage
- · Filtered dust-free environment
- Visual sensor provides confirmation of filling action
- Venturi feed transports chips up to 5/8" (15.87mm) diameter

# Model

AF110-240	Tank auto-feed system 240 VAC
AFR110	Field retro-fit for HM110 tank controller
AFR044	Field retro-fit for HM044 tank controller

Unit raises for easy maintenance

The Venturi Feeder's wand design is suitable for many types of totes and containers



# Hot Melt Timed Controller

# SL101-HMM

# Programmable Automatic Valve Controller

The SL101-HMM is an automatic digital controller with an LCD display for automatic timed pulse control of an automatic valve. An interface cable is ordered separately. Upon depressing a footpedal a programmed timed pulse is sent to the hot melt controller, which in turn activates the valve. Up to 9 timed intervals can be stored.



robot please contact Fisnar engineering.

#### Model

SL101-HMM	Digital timer 110/220 VAC
SL101-VMC	Interface cable for HM110 & HM044

# **Specifications**

Air input:	70 to 100 psi (5 to 7 bar)
Air output:	1-100 psi (0.1 - 7 bar)
Dispense time:	0.01 - 99.99 seconds
Operation modes:	Auto-Cycle, Timed, Manual
Internal memory:	9 memory locations
Standards:	CE approved, RoHS compliant
Voltage:	110 - 240 VAC 50/60Hz
Dimensions:	8.63" x 8.50" x 2.63" (21.92 x 21.59 x 6.68cm)



# Water Based Adhesives

Product Number	Class	Color	Product Description	Form	% Solids	Viscosity @ 77F (cPs)	Packaging
CA-5106-B	Rubber	White	One way contact adhesive	Liquid	52-55	200-500	pail, drum, tote
A-3610	Water Base	White	High solid polyvinyl acetate. More water resistant than dextrines	Liquid	70-74	1,500-3,000	pail, drum, tote
A-3538	Resin	White	EVA adhesive	Liquid	54-56	1,000-1,800	pail, drum, tote
A-3470-D	PSA	White	High solids, permanent PSA	Liquid	66-70	4,000-6,000	pail, drum, tote
A-3531	Resin	White	Low viscosity PVA woodworking adhesive	Liquid	54-56	2,900-3,700	pail, drum, tote
A-3562	Resin	White	Premium wood glue, water resistant	Liquid	48-51	4,000-6,000	pail, drum, tote
D-7007-D	Dextrin	Tan	Low viscosity dextrine	Liquid	30-40	700-900	pail, drum, tote
A-3586	Resin	White	High solids EVA	Liquid	65-68	800-1,300	pail, drum, tote
A-3496-G	Rubber	White	Cohesive/fugitive	Liquid	60-62	150-400	pail, drum, tote
A-4069	Resin	Off-white	High viscosity mastic product	Liquid	65-68	Paste	pail, drum
CA-5498	Rubber	Off-white	Two-way contact adhesive, heat resistant	Liquid	48-52	100-300	pail, drum, tote
A-3099-A	Water base	Milky/ Clear	Premium padding adhesive with excellent flexibility	Liquid	48-52	2,000	pail, drum, tote
A-3266-QT	Water base	White	Resin emulsion with excellent wet tack and fast speed	Liquid	55-60	1,500	pail, drum, tote
A-3381-E	Water base	White/ Clear	Versatile, fast-setting resin adhesive with high wet tack, easy clean up	Liquid	55-59	1,200	pail, drum, tote
A-3475	Water base	White/ Clear	Non-toxic, adhesive for case and carton sealing uncoated stocks, paper to paper laminations, heat sealing coating and a wood glue	Liquid	54-56	1,500	pail, drum, tote
A-3492	Water base	White	Waterborne urethane for laminating applications	Liquid	33-37	500	pail, drum, tote
A-3519	Water base	White/ Clear	Forms strong bonds between porous substrates and films	Liquid	54-56	1,500	pail, drum, tote
A-3587	Water base	Milky/ Clear	Resin emulsion with wet tack and fast speed of set on porous paper stocks	Liquid	57-63	2,000	pail, drum, tote
A-4005	Water base	Milky/ Clear	Versatile PSA with high shear resistance	Liquid	53-57	500	pail, drum, tote
D-7056	Starch	Tan	Multi-use such as labeling, case sealing, ream wrap and pasting	Liquid	15-20	500	pail, drum, tote

# **Custom Formulating**

F	lot Melts	Water Based			
Viscosities:	300 to 30,000 cps	<ul> <li>Cooked and uncooked batch capability</li> </ul>			
SAFT:	130° F to 220° F	Low and high speed mixing			
Polyken Tack:	0 to 2000g	Solids testing			
180° F Peel:	0 to 12lbs/in	pH testing			
Shear:	0 to 1000,000 min	Viscosity testing			
Color:	water white to dark amber	Pails, drums, totes			



# **Packaging Hot Melts**

Product Number	Class	Color	Product Description	Form	% Solids	Viscosity @ 77F (cPs)	Packaging
HM-101-K	EVA	Light yellow	Fast setting case/carton seal. Wide variety of substrates	Pellets	Fast	975	35 lb box
HM-130	EVA	Light yellow	Very fast setting case/carton seal. Wide variety of substrates	Pellets	Very fast	1,000	35 lb box
HM-302-D	EVA	Water white	Long open time adhesive. Good adhesion to plastics and glass.	Pellets	Slow	2,600	50 lb box, drum
HM-216-A1	EVA	Amber	Hot melt adhesive for bonding Polystyrene (styrofoam) to itself and "Lost Foam" Foundry processes	Pellets	Fast	100	50 lb box
HM-302-W2	EVA	Clear	Versatile thermoplastic hot melt for coating electrical parts and adhering some plastics	Pellets	Medium	2,600	50 lb box, drum
HM-324	EVA	Light yellow	Designed as a permanent adhesive for bonding flexible polyolefin films	Pellets	Fast	2,500	50 lb box
HM-349	EVA	Water white	Multi-purpose hot melt adhesive for wood, coated paper, and polyolefins	Pellets	N/A	4,000	50 lb box
HM-354	EVA	Yellow	Formulated for laminated color photographs back to back	Pellets	Fast	2,600	50 lb box
P-2000	Purge	Mint green	Safe, non-hazardous, highly effective hot melt cleaning compound. Pleasant odor and environmentally friendly	Chips	N/A	15,000	50 lb box

# **Pressure-Sensitive Hot Melts**

Product Number	Class	Color	Product Description	Form	% Solids	Viscosity @ 77F (cPs)	Packaging
HM-258-K3	PSA	Yellow	Very easy release	Solid	Permanent tack	500	tray, drum
HM-651	PSA	White	Credit card/tipping, removable	Solid	Permanent tack	4,500	tray, drum
HM-677	PSA	Clear	High strength, high shear, pressure- sensitive hot melt	Solid	Permanent tack	2,000	tray, drum
HM-643	PSA	White	High release removable, excellent cold temp performance excellent plastics adhesion	Solid	Permanent tack	11,000	tray, drum
HM-628	PSA	Yellow	Medium peel permanent/removable from some substrates	Solid	Permanent tack	2,400	tray, drum
HM-633	PSA	Yellow	Permanent high peel, excellent adhesion to wood, metals	Solid	Permanent tack	2,300	tray, drum
HM-650	PSA	White	Very high tack, freezer grade. Good down to -20° F. FDA direct food contact (see TDS)	Solid	Permanent tack	8,000	tray, drum
HM-221-A	PSA	Yellow	Low viscosity, economical, spray-able permanent	Solid	Permanent tack	1,000	tray, drum
HM-647-B	PSA	White	High strength, pressure-sensitive hot melt	Solid	Permanent tack	5,000	tray, drum
HM-610-A	Semi- PSA	White	Semi-pressure sensitive, stiff, best for plastics adhesion	Solid	Permanent tack	13,000	tray, drum



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