



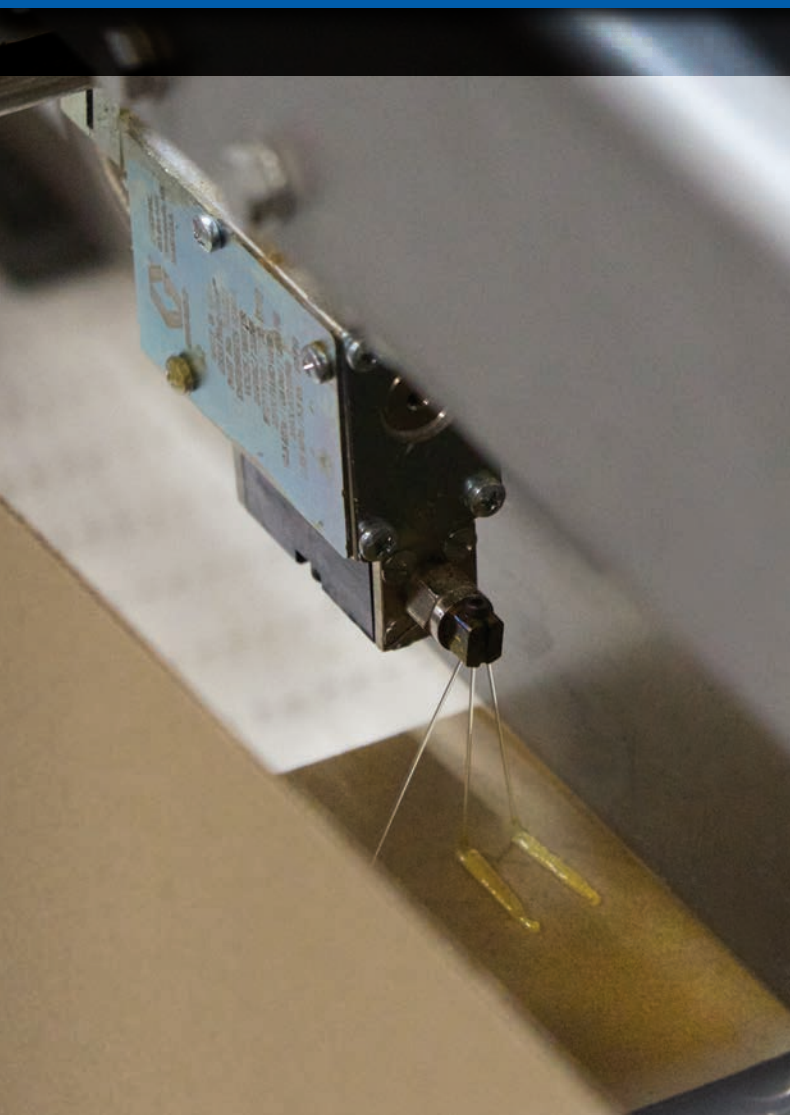
# InvisiPac™

Tank-Free™ Hot Melt Delivery System



PROVEN QUALITY. LEADING TECHNOLOGY.

# InvisiPac. So reliable, you'll forget it's even there.

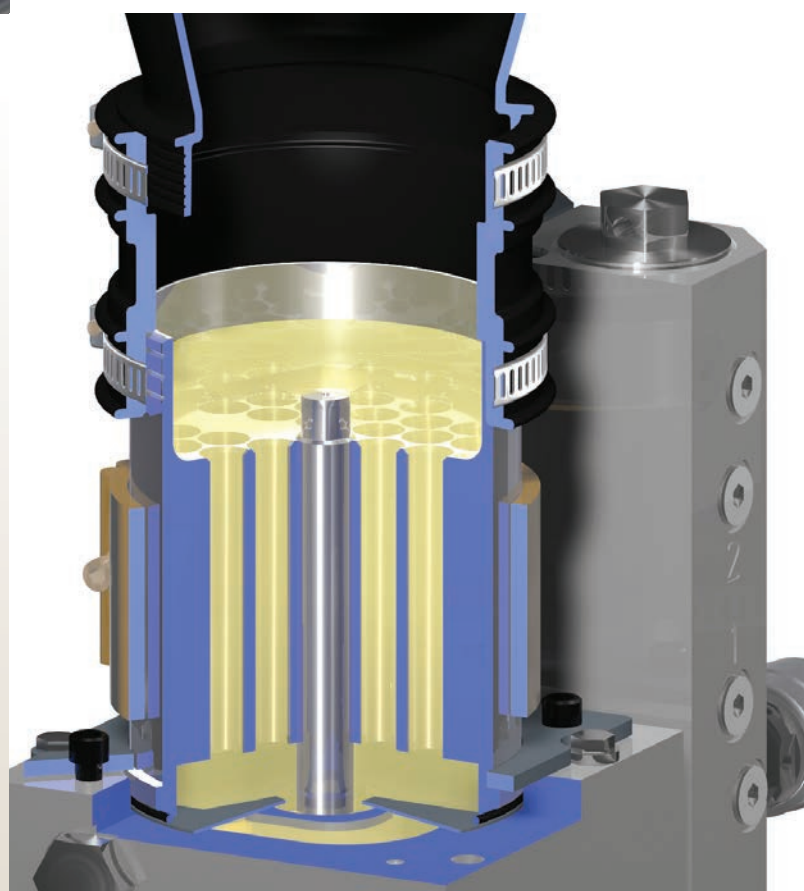


## Innovative Hot Melt Equipment for the Packaging Industry

- Quick start-up – ready in less than 10 minutes, eliminating costly downtime
- Tank-Free – adhesive supplied and melted to meet your application's demand means less adhesive time at high temperature
- Less adhesive time at high temperature means less char and less material degradation
- No nozzle plugging due to tank char means less system maintenance and more uptime
- Less degradation leads to better shot repeatability – less material waste, better quality assurance
- Great performance, even with low-cost adhesives

## How it Works

Graco's InvisiPac uses an integrated vacuum system to feed adhesive to an in-line melter. An ultrasonic sensor monitors adhesive in the chamber, and additional adhesive is automatically added as needed based on the demand of your application. With its efficient heat transfer design, the InvisiPac System has adhesive throughput capability equivalent to or better than many hot melt tank systems. The result? You get a continuous flow of adhesive during production that significantly reduces the time adhesive sits at temperature. Less time at high temperature means less char, less maintenance and more uptime.





### Optional Light Tower

- Indicates system status at a glance

### Pump

- Graco two-ball design leverages over 85 years of fluid handling expertise
- Proven NXT™ Air Motor technology provides reliable shot consistency

### Intuitive User Interface

- Graphics and text make operation simple
- Easy troubleshooting – points you to the root of the problem
- Single screen view of all heat zone temperatures
- Tracks adhesive consumption
- USB downloadable operating data, errors and event history

### Power Entry Module

- Simple jumper-less installation
- Automatically detects 480V system and protects from overload

### InvisiPac GS35

- Patent-pending module filter design provides plug-free operation

### Filter

- Large surface area for months of maintenance free operation

### In-line Melter

- Tank-Free design
- Melts adhesive to meet your application demand
- Reduces char and improves uptime
- Reaches operating temperature in less than 10 minutes
- Circular design allows first-in, first-out adhesive flow

### Integrated Automatic Vacuum Feed System

- Saves labour costs automatically by pulling adhesive from a drum or bulk container
- Automatically keeps adhesive at optimum levels
- Keeps paper dust & debris out
- Promotes improved hygiene and consistent bead weights by eliminating thermal shock

### Superior Heated Hoses

- Superior hose construction buffers heat, virtually eliminating char build-up

# Tank-free Design: setting a New Packaging Industry Standard

## Why Tank-Free is preferable to traditional Tank Systems

- Consistent adhesive levels help prevent char from forming
- Less molten volume means the adhesive spends less time at temperature – resulting in less char and less degradation
- More choices – you can use low-grade adhesives when it makes sense or high-grade adhesives to ensure premium performance



### Traditional Tank Systems

- Heat to operating temperature slowly
- Keep large quantities of adhesive at high temperatures
- Allow degradation of adhesive integrity
- Create char and cause plugged nozzles



### InvisiPac's Tank-Free System

- Heats to operating temperature quickly
- Maintains continuous flow of heated-on-demand adhesive
- Safeguards adhesive integrity
- Eliminates plugged nozzles due to tank char
- Achieves the same or better melt rate than most large-capacity tank systems

## A Network of Support for the Packaging Industry

### Worldwide Support

With infrastructure throughout the world, your company will benefit from Graco's knowledgeable, global network of professionals.

### Proven Track Record

Graco has close working relationships with many of the world's leading equipment manufacturers and adhesive suppliers. With Graco, you can expect responsive service and support, as well as the accuracy and reliability you demand from your manufacturing equipment.

### Global Distribution

With a global distribution network, you can count on quick turnaround times for replacement parts and service. With Graco's authorized distributors, you have access to experts who understand the unique needs of your business.

# Boost Production Uptime

## Reduce Downtime due to Plugged Nozzles

With the InvisiPac Plug-Free™ Hot Melt Adhesive Applicator, you'll experience a new era in hassle-free operation. With its innovative free-flow manifold design and integrated module filtering – together with the InvisiPac System – you can eliminate nozzle plugs. You'll finally have a hot melt system that runs reliably, unnoticed and invisible.

### Solenoid

- Graco-engineered for optimal control
- Designed to withstand high speed, high temperature operation

### Safety

- Third-party certification to UL/CSA standards

### Factory Set Spring

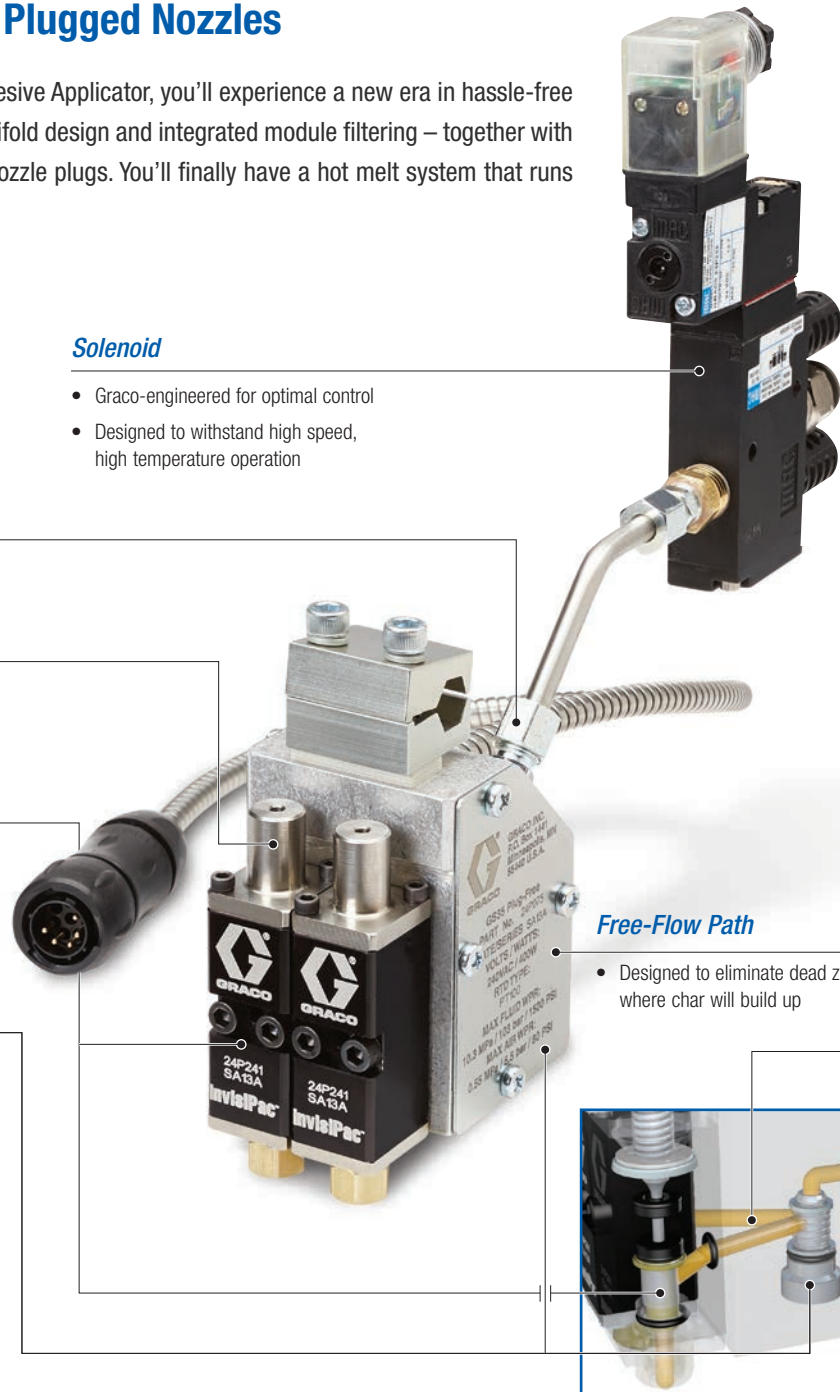
- Factory set spring works across all pneumatic and fluid pressure ranges – no need for field adjustment

### Module Filter

- Design protects ball and seat from debris and char
- Eliminates nozzle plugging when used with InvisiPac System

### Manifold

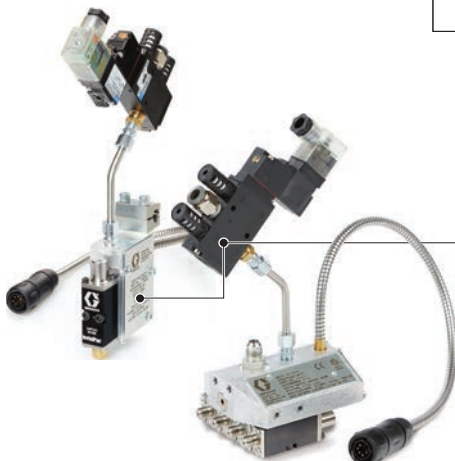
- Manifold filter traps debris and char so it's removed when you replace the filter
- Manifold filter is included in a heated zone, eliminating cold spots and ensuring consistent adhesive application
- Reaches operating temperature in less than 10 minutes



### Free-Flow Path

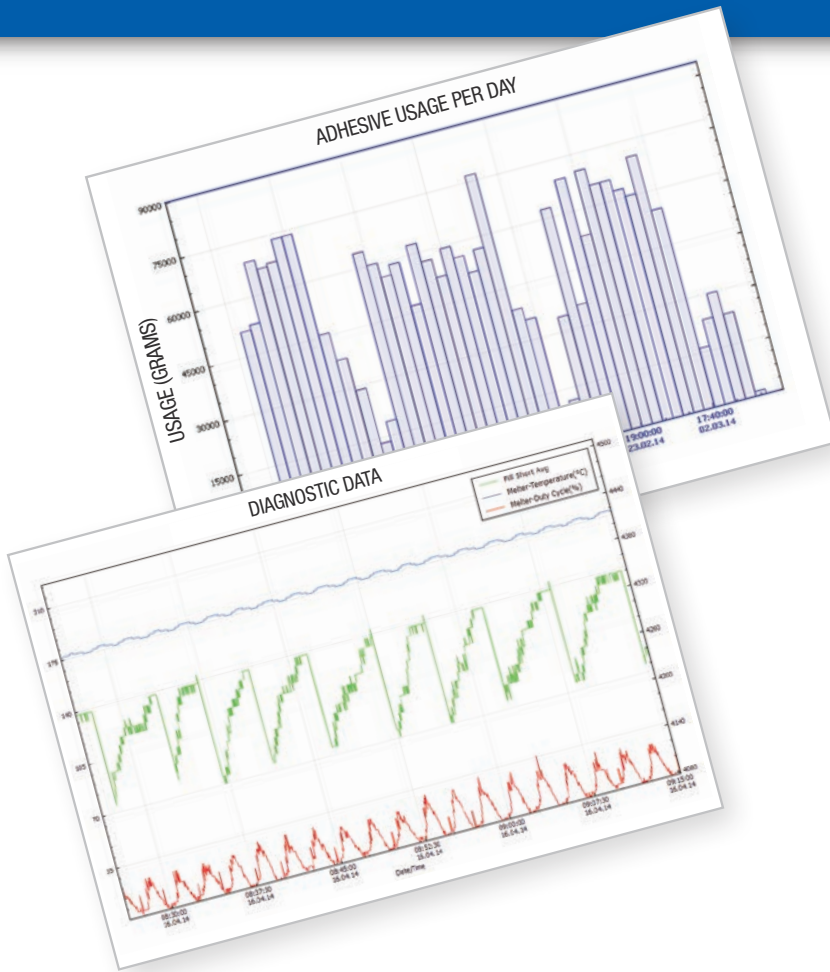
- Designed to eliminate dead zones where char will build up

### Other Models Available





# Superior Tracking and Monitoring Capabilities



## With InvisiPac, you can track Material Usage and other Production Events

- USB download of operating data, errors and event history
- Easily graph your adhesive consumption to track cost per unit, saving you money and ensuring quality
- Quantitatively analyse machine performance to improve preventative maintenance and reduce downtime

## Superior Heated Hose Design

Graco's char-resistant hose is designed to reduce adhesive char build-up, resulting in more uptime and lower maintenance costs. An additional silicone layer promotes even heating, eliminating hot and cold spots that cause char and skin formation

- Available in many lengths for easy installation
- Available in waterwash or standard platforms
- InvisiPac waterwash hoses for food-safe packaging operations are Rated to IPX6, an international standard for performance in waterwash applications



- 1 Built in over-temperature safety interlock
- 2 Silicone insulating layer
- 3 Up to temperature in less than 10 minutes

# Technical Specifications



**HM25**



**HM50**

## InvisiPac Tank-Free Hot Melt Delivery System

Electrical Service	200-240 Vac, 1-ph, 50/60 Hz 200-240 Vac, 3-ph, 50/60 Hz 400-480 Vac, 3-ph, w/Neutral, 50/60 Hz 200-240 Vac, 3-ph, w/Neutral, 50/60 Hz	200-240 Vac, 1-ph, 50/60 Hz 200-240 Vac, 3-ph, 50/60 Hz 400/480 Vac, 3-ph, w/Neutral, 50/60 Hz 400/230 Vac, 3-ph, w/Neutral, 50/60 Hz
Time to Temperature	Less than 10 minutes*	Less than 15 minutes*
Melt Rate / Constant Throughput*	11.3 kg/hr (25 lb/hr)	22.6 kg/hr (50 lb/hr)
Pump	Pneumatic Piston, 12:1	Pneumatic Piston, 12:1
Operating Pneumatic Pressure Range	1.4-7 bar / 0.14-0.69 MPa / 20-100 psi	1.4-7 bar / 0.14-0.69 MPa / 20-100 psi
Operating Fluid Pressure Range	16-83 bar / 1.6-8 MPa / 240-1200 psi	16-83 bar / 1.6-8 MPa / 240-1200 psi
Temperature Range	38-204°C (100-400°F)	38-204°C (100-400°F)
Ambient Temperature Range	0-50°C (32-122°F)	0-50°C (32-120°F)
Channels	Up to 6	Up to 6
Maximum Gun Wattage Per Channel	400 W	400 W
Input Capability	4 inputs (0-30Vdc)	4 inputs (0-30Vdc)
Output Capability	4 outputs (240Vac, 24Vdc, 2A)	4 outputs (240Vac, 24Vdc, 2A)
Machine Weight	34 kg (85 lb)	48 kg (105 lb)
Machine Dimensions (WxDxH)	526 mm x 975 mm x 429 mm (20.7 x 38.4 x 16.9 in)	483 mm x 1067 mm x 419 mm (19.0 x 42 x 16.5 in)
Glue shape	Pellets	Pellets
Max. Vacuum Transfer Hose Length (horizontal x vertical)	9.1 m (30 ft) 6.1 m x 3.0 m (20 ft x 10 ft)	9.1 m (30 ft) 6.1 m x 3.0 m (20 ft x 10 ft)
Vacuum Operating Pneumatic Pressure Range	2.8-5.5 bar / 0.28-0.55 MPa / 40-80 psi	2.8-5.5 bar / 0.28-0.55 MPa / 40-80 psi
Vacuum Air Consumption at 40 psi	0.26 m <sup>3</sup> (intermittent duty; 4% @ 11.3 kg/hr)	0.26 m <sup>3</sup> (intermittent duty; 4% @ 11.3 kg/hr)
Vacuum Air Consumption at 80 psi	0.48 m <sup>3</sup> (intermittent duty; 4% @ 11.3 kg/hr)	0.48 m <sup>3</sup> (intermittent duty; 4% @ 11.3 kg/hr)
Approvals and Standards	UL499, CSA88, CE, ISO 9001	UL499, CSA88, CE, ISO 9001

## InvisiPac GS35 Plug-Free Hot Melt Adhesive Applicator

Description	Air Open / Spring Close, Ball and Seat
Speed	Greater than 3,500 cycles/min
Time to Temperature	Less than 10 minutes**
Maximum Working Fluid Pressure	103 bar / 10.3 MPa / 1500 psi
Operating Pneumatic Pressure Range	2.8-5.5 bar / 0.28-0.55 MPa / 40-80 psi
Maximum Operating Temperature	204°C (400°F)
Ambient Temperature Range	0-50°C (32-122°F)
Solenoid Valve	24 Vac or 110 Vac
Graco engineered, factory installed	
Electrical Service	200-240 Vac, 50/60 Hz, 400 W
Approvals and Standards	UL499, CSA88, CE, ISO 9001



Gold Award Winner

\* Melt rates typical for packaging grade adhesives. Actual melt rates may vary due to chemistry and other factors.

\*\* From 21°C to 177°C (70°F to 350°F), dependent upon power supply, machine configuration and glue type.

For detailed dimensions and configurations, see instruction manuals 3A2347, 333347 and 3A2805 available on [www.graco.com](http://www.graco.com).



## ABOUT GRACO

Founded in 1926, Graco is a world leader in fluid handling systems and components. Graco products move, measure, control, dispense and apply a wide range of fluids and viscous materials used in vehicle lubrication, commercial and industrial settings.

The company's success is based on its unwavering commitment to technical excellence, world-class manufacturing and unparalleled customer service. Working closely with qualified distributors, Graco offers systems, products and technology that set the quality standard in a wide range of fluid handling solutions. Graco provides equipment for spray finishing, protective coating, paint circulation, lubrication, and dispensing sealants and adhesives, along with power application equipment for the contractor industry. Graco's ongoing investment in fluid management and control will continue to provide innovative solutions to a diverse global market.

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All written and visual data contained in this document are based on the latest product information available at the time of publication. Graco reserves the right to make changes at any time without notice.

Graco is certified ISO 9001.



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