Desktop Automatic Hot Melt Glue Dispenser with R Axis WPM-334

Model No. WPM-334



SPECIFICATIONS

Model Number	WPM-334
Product Name	Glue Dispenser with R Axis
Working Pressure	4-7kgf/cm
Operating Viscosity	1-1,000,000cps
Feed Pressure:	
Glue Amount	0.01ml
Product Material	Aluminum alloy

The WPM-334 is a desktop automatic dispensing machine with an R axis, built for electronic and small-part assembly. It dispenses shots down to 0.01 ml, handles material from 1 to 1,000,000 cps, and works at a supply pressure of 4-7 kgf/cm2 with a feed pressure below 10 kg. The frame and gantry are aluminium alloy, and the machine sits on a bench rather than a floor frame.

The viscosity band is the reason for the pressure range. A 1 cps solvent or a thin UV adhesive flows under almost no pressure and will drip if the valve is set for paste, while a 1,000,000 cps thermal compound or silver-filled epoxy needs the top of the 4-7 kgf/cm2 band before it moves at all. Keeping the same head across that span means one machine can run conformal coating, cyanoacrylate and thermal grease without a second dispenser. The 0.01 ml shot resolution is what makes small-dot work repeatable: a connector pin, an LED pad or a screw thread gets the same volume each cycle rather than a volume that depends on how long a hand-held syringe was squeezed. The R axis rotates the dispensing head, so the needle can be turned to follow a curved seam or to dispense around a circular part while the X and Y axes track the path.

The WPM-331, WPM-332 and WPM-333 are gantry machines with larger work envelopes and, in the case of the first two, a rotation axis aimed at connector work. The WPM-334 is the desktop member of the family, with an R axis on a compact aluminium frame and the finest published shot size at 0.01 ml. It is intended for bench assembly where a full gantry would not fit or would not be justified.

Key Features

1. Shot size down to 0.01 ml, so small pads, pins and threads receive a repeatable volume rather than a volume set by hand pressure.

2. Operating viscosity from 1 to 1,000,000 cps, covering solvents and UV adhesives at the thin end and thermal paste and filled epoxy at the thick end.

3. Working pressure 4-7 kgf/cm2 with feed pressure below 10 kg, set on the regulator and read on the gauge at the side of the frame.

4. R axis rotates the dispensing head, turning the needle to follow a curved seam or to work around a circular part while X and Y track the path.

5. Aluminium alloy frame and gantry, keeping the head rigid on a bench-mounted footprint instead of a floor-standing base.

6. Hand-held teaching pendant on a cable, panel-mounted emergency stop and power switch, with the workpiece held on a fixture block under the head.

Technical Specifications

Parameter	Specification
Model	WPM-334
Product name	Glue dispenser with R axis
Machine type	Desktop automatic dispensing machine
Glue amount	0.01 ml
Operating viscosity	1-1,000,000 cps
Working pressure	4-7 kgf/cm2
Feed pressure	Below 10 kg
Product material	Aluminium alloy

Applications

— PCB assembly: solder paste, UV cure adhesive and conformal coating applied in dots of 0.01 ml at component pads and keep-out zones.

— LED modules: thermal grease or silicone dispensed onto the heatsink pad in a controlled volume before the board is seated.

— Connector and terminal assembly: a small dot of threadlocker or retaining compound on screw threads and pin seats.

— Sensor and camera modules: adhesive applied around a lens barrel or housing seam with the R axis turning the needle to the joint.

— Small enclosure sealing: a bead of gasket compound run round a miniature housing flange on a bench fixture.

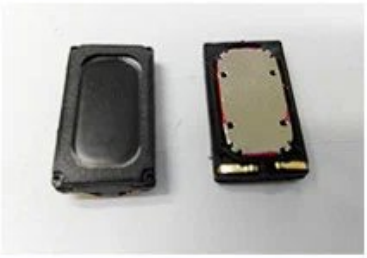

Robot Automatic Dispenser
Support Non-standard Customization

Application Products

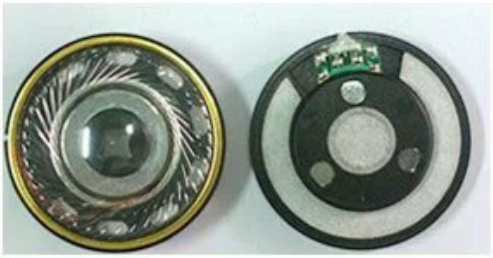
The operation is simple and convenient,
high-speed and accurate,
especially suitable for small earphones with 90° right-angle side glue.



In-ear headset speakers

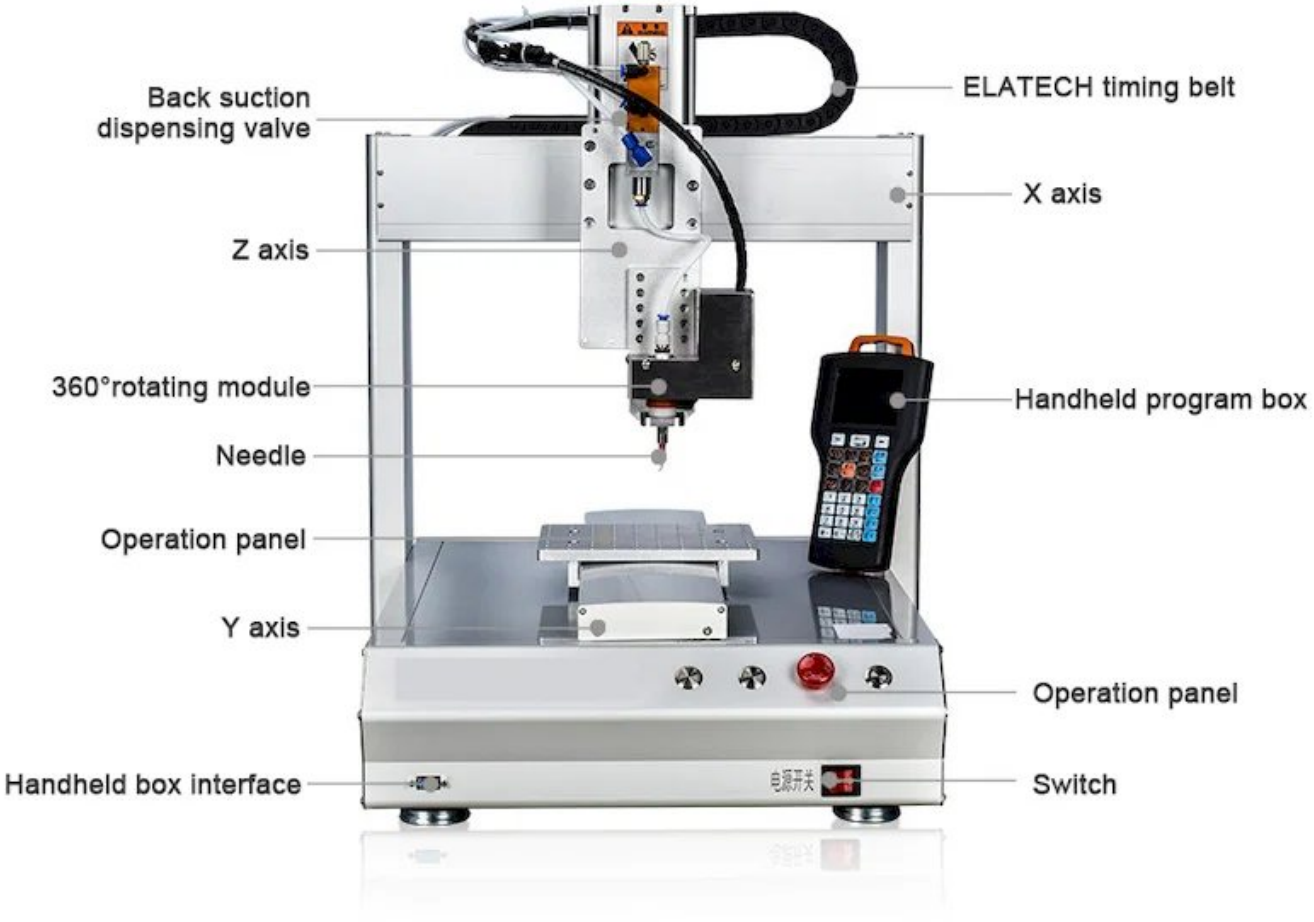


Mobile phone speakers



Over-ear headset speakers

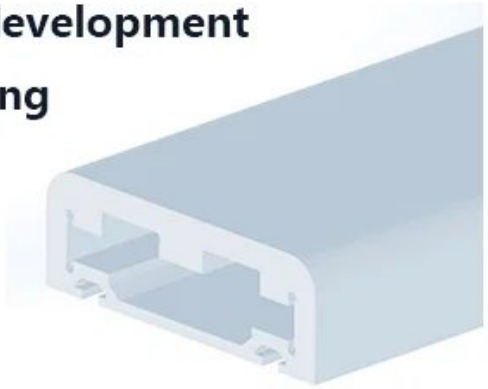
Product Structure and Parameters



01

Independent research and development

Independent forging



High-quality aviation aluminum forging



02

Hand-held teaching programmer

HD display, complete fuctions

Easy to learn and use



3-axis cintrol,Multilingual version



03

Japan stepper precision motor

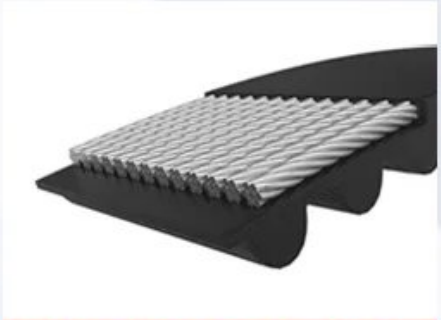
Low vibration, low noise, misco-step control



04

Italy Elatech synchronous belt

High wear resistance, good elasticity,embedded steel wire, durable



Glass fiber tension layer




Robot
Automatic
Dispenser
Digital Electronic
LED lighting
Wireless communications
Jewelry



Teach pendant keypad beside program screens for points, arcs and glue delay

Dispensing path diagram with points, lines, arcs, circles and helix

Dispensing samples on speakers, circuit boards, phone housings and earbuds

FAQ

What are the key precision features of the WPM-334 Desktop Automatic Hot Melt Glue Dispenser?

The WPM-334 is engineered for high-precision applications, offering a dispensing accuracy of 0.01ml and the capability to handle adhesives with a viscosity range from 1 to 1,000,000 centipoise (cps). Its integrated R (rotary) axis allows for precise angular control during dispensing, making it ideal for complex patterns and ensuring consistent, repeatable results in sensitive electronic assembly tasks.

What types of applications is this desktop glue dispenser best suited for?

This machine is specifically designed for precision dispensing in electronic assembly and similar small-parts manufacturing. It is perfect for applying hot melt adhesives, conformal coatings, sealants, or lubricants on PCBs, micro-components, sensors, and other delicate assemblies where accuracy and repeatability are critical.

What is the benefit of the R axis in the WPM-334 glue dispensing machine?

The R (rotary) axis provides rotational movement, allowing the dispensing needle to rotate around its own axis. This feature is crucial for applying glue in circular patterns, around components, or at specific angles without repositioning the workpiece. It enhances flexibility, reduces programming complexity for complex paths, and improves overall application precision and speed.

How durable and reliable is the construction of the WPM-334 dispenser?

Built for industrial desktop use, the WPM-334 features a robust frame constructed from durable aluminum alloy. This provides excellent stability to minimize vibration during high-speed operation, ensures long-term durability in a production environment, and maintains the precise mechanical alignment necessary for consistent 0.01ml accuracy over its service life.

Is the WPM-334 suitable for a small workshop or only large-scale production?

Its compact desktop design makes the WPM-334 an excellent choice for both small workshops and high-volume production lines. It offers the precision and automation of industrial adhesive applicators in a space-saving format. It is ideal for R&D, prototyping, low-to-medium volume production, and as a dedicated station for a specific high-precision task in a larger assembly cell.