

Chemmat Technology Inc.

Los Angeles, US

Shanghai, China

Brussels, Belgium

Chemmat KW-4AD Fluid Dispenser

Chemmat KW-4AD is designed for utilizing process productivity by consistently dispensing a wide variety of assembly fluids. From repeatable dots to neat beads, the KW-4AD provides immediate productivity gains without usage of messy squeeze bottles and other costly traditional fluid application methods. The dispenser KW-4AD is designed for use in semiconductor process, patterning, coating process, etc. It also can be used for R&D, as well as an educational tool.



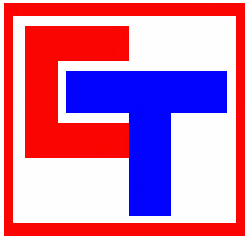
From left to right: dispenser, spin coater, hot plate(350°C), UV curer

Key features

- Small convenient bench top size
- Simple, user friendly design
- Adjustable output air pressure
- Manual vacuum control for thin fluids
- Ideal for any fluid dispense
- Multi-limited selection

Technical Specifications

- Dispense fluids range: 1 to 100,000 cP
- Selectable input voltage: 100/120/220 VAC 50/60Hz
- Internal voltage: 24VAC
- Air input port: 1/4 inch OD tube
- Air input: 80-100 psi (filtration required)
- Dimensions: 4.5 inch (W) X 10 inch (D) X 6.5 inch (H) without stand
- Weight: 7.5lbs without stand



Chemmat Technology Inc.

Los Angeles, US

Shanghai, China

Brussels, Belgium

Chemmat KW-4A Precision Spin Coater

CHEMAT Technology, Inc. has designed and manufactured a compact and easy-to-use spin-coater, Model KW-4A, for precise and uniform deposition of thin films and coatings. Its rugged, vibration-free and portable design makes it a versatile tool for your research facility. A two-stage spin process allows dispensing at low speeds and homogenizing the coating at high speed. The KW-4A spin coater can be used to deposit metal oxide thin films, polymer coating and organic thin films.



Key Features

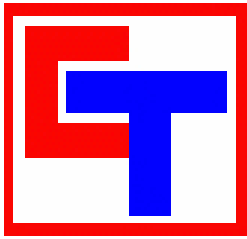
- Dual speed controls with continuous speed adjustment and individual timers. Initially, spinner rotates at a low speed (Speed I) for a pre-set cycle time (Timer I) and automatically switches to a high speed (Speed II) for pre-set cycle time (Timer II).

Feature	Minimum	Maximum
Speed I in RPM	500	2500
Speed II in RPM	1000	8000
Timer I in seconds	2	18
Timer II in seconds	3	60

- LED speed indicator with speed stability $\pm 1\%$ and coating uniformity $\pm 3\%$.
- Can be used to coat substrate with diameter ranging from 5/16 inch ~ 4.0 inch (standard aluminum vacuum chuck: 5/16 inch, 2/5inch, 1/2 inch, 1 inch, 2 inch, 3 inch, 4 inch).
- Power: 110 VAC, 60 Hz, 1 Amp, or 220 VAC, 50 Hz, 1 Amp
- Vacuum: More than 2.1 CFM or 60 litres per minute
- Compact size: 11.0 inch (D) X 8.5 inch (W) X 10.6 inch (H)
- Weight: 7.5Kg(net), 8.5Kg(packaged)

Remarks:

- The technical parameters beyond the above-mentioned are not assured.
- Spin coater and vacuum chuck must be made to order for substrates with diameter more than 6.0 inches. And the maximum speed may not reach 8000RPM.
- Vacuum pump can be purchased locally due to its weight to save the transportation cost. Chemmat design only requires the pumping speed more than 2.1 CFM or 60 litres per minute.



Chemmat Technology Inc.

Los Angeles, US

Shanghai, China

Brussels, Belgium

Chemmat KW-4A Hot Plate

CHEMAT TECHNOLOGY, INC. has designed and manufactured a compact and easy-to-use hotplate, Model KW-4AH, for baking and curing thin films and coatings. Its rugged, portable design, and temperature uniformity make it a versatile tool for research facilities. In conjunction with KW-4A spin coater, KW-4AH hot plate can be used to fabricate metal oxide thin films, polymer coatings and metal organic thin films.



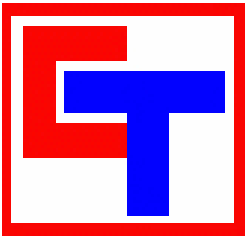
From left to right: dispenser, spin coater, hot plate(350°C), UV curer

Specifications

- Operation: Manual Load
- Process Control: Program (For details see OMRAN operation manual)
- Temperature fluctuation: $\leq \pm 2^{\circ}\text{C}$
- Temperature uniformity: $\leq \pm 3\%$
- Temperature Range:
 - 30°C - 350°C (KW-4AH-350)
 - 30°C - 600°C (KW-4AH-600)
- Substrate Size:
 - 7.5 inch X 7.5 inch(KW-4AH-350)
 - 5.8 inch X 5.8 inch(KW-4AH-600)
- Inert gas purge ((KW-4AH-600 only)



KW-4AH-600



Chemmat Technology Inc.

Los Angeles, US

Shanghai, China

Brussels, Belgium

KW-4AC UV curer

KW-4AC is made for utilizing the strong function of UV lamp to make the resin (UV paint, Ink, Glue) from liquid to solid status within few seconds. The machine is designed for semiconductor process, patterning, coating process. It can be used as R&D, and education of science.



From left to right: dispenser, spin coater, hot plate(350°C), UV curer

Specialty:

- Simple design and user friendly
- The UV lamp has strong penetration to ensure the good quality of inner layer solidification
- UV lamp is easy to replace

Technical Information:

Item	Motor Rotation speed (rad/min)	UV Lamp Wavelength (nm)	UV Lamp Aging Time (h)
Requirements	5	254/365	5000