

KW-4L-I

AUTOMATED SPIN COATER

The KW-4L-I is a heavy-duty, large-area spin coating system supporting substrates up to 600 mm (optional). Engineered for 24/7 continuous operation, it features a solid PTFE chamber for maximum chemical resistance. It integrates automated fluid dispensing, a foot pedal switch, and an 8-inch touch screen with RS485 (MODBUS-RTU) for seamless remote monitoring and industrial automation integration.



AT A GLANCE

Max Substrate	Ø 200 mm (Up to 600 mm Opt)
Speed Range	10 – 12,000 rpm (Opt: 20k)
Chamber Material	Solid PTFE
Automation	RS485 & Auto-Dispense
Interface	8" Touch Screen

Solid PTFE Processing Chamber

The entire processing chamber is constructed from Polytetrafluoroethylene (PTFE), ensuring superior corrosion resistance against aggressive chemicals and solvents.

Integrated Auto-Dispensing

Exclusive to the KW-4L-I model, it features an automated fluid dispense system and foot pedal operation, streamlining hands-free, quantitative workflows.

Industrial Automation (RS485)

Equipped with an RS485 interface utilizing standard MODBUS-RTU protocols. Includes free remote communication software for full system integration.

24/7 Continuous Operation

Engineered with a heavy-duty motor drive capable of extreme acceleration (up to 30,000 RPM/s) and sustained 24/7 uninterrupted industrial operations.

Technical Specifications

Process Capabilities	
Substrate Compatibility	5 - 200 mm (Standard) / Up to 600 mm (Optional)
Speed Range	10 – 12,000 rpm (Standard) / Up to 20,000 rpm (Optional)
Acceleration Profile	10 – 30,000 rpm/s (Adjustable)
Automated Fluid Dispensing	YES (Exclusive to KW-4L-I)
Speed Stability	± 1 rpm
Spin Coating Uniformity	± 1 %
Control System & Interface	
Human-Machine Interface (HMI)	8-inch Touch Screen
Communication Interface	RS485 (Standard MODBUS-RTU protocol) & USB
External Peripherals	Supports wireless mouse/keyboard and USB disk storage
Foot Pedal Function	YES (Exclusive to KW-4L-I)
Data Storage	Unlimited recipes (Standard: 15 speed steps per recipe)
Step Time	0 – 10,000 seconds per step
Power & Vacuum System	
Power Supply (Spin Coater)	AC 100–250 V, 1-Phase, 50/60 Hz
Power Consumption (Coater)	650 W
Power Supply (Vacuum Pump)	AC 220V Standard / AC 110V Optional
Vacuum Pump Model	SC-550V (350 W)
Pumping Speed / Max Vacuum	≥ 60 L/min / -85 kPa
Facilities & Mechanical Data	
Dimensions: Coater Unit (W×D×H)	340 mm × 500 mm × 250 mm
System Weight	18 kg (Coater) / 9 kg (Pump)
Acoustic Level	≤ 55 dB
Operating Environment	0 - 40 °C / < 85% RH (Supports 24/7 Uninterrupted Operation)
Warranty	1 Year