

# Spin-Coating System

TECHNICAL BULLETIN AL-214

These compatible, easy-to-use devices provide a convenient step-by-step method for precise and uniform deposition of thin films and coatings. The dispenser releases accurately measured amounts onto the precision spin-coater. The hot plate and UV curer are then used to bake or cure your thin film or coating. This simple system can be used to deposit metal oxide thin films, polymer coatings, and metal organic thin films.



## KW-4A Precision Spin-Coater

The rugged, vibration-free and portable design is ideal for research applications. A two-stage spin process allows dispensing at low speed and homogenizing the coating at high speed. Features a Teflon<sup>®</sup>-coated stainless steel coating bowl. Shown in photo with a 2 inch diameter, Type CG aluminum vacuum chuck (not included with unit). Order chucks separately below.

### Front Panel Controls:

Digital speed readout in 1,000rpm  
Timer controls, Stage I and Stage II  
Speed controls, Stage I and Stage II  
Control switch  
Vacuum switch  
Power switch  
Start switch

### Specifications:

Vacuum: >2.1CFM  
Speed stability: <1%  
Timer Stage 1: 500-2,500rpm  
2-18 seconds  
Timer Stage 2: 1,000-8,000rpm  
3-60 seconds  
Dimensions: 8½ W x 8½ H x 10 inches D  
Compliance: CE compliant and supplied with a U.S. plug



Volts	Cat. No.
115V	Z55,156-2
220V	Z55,158-9

## Type CG Vacuum Chucks

Precision machined aluminum vacuum chuck with circular grooves for thin, flat surfaces.

Diameter (in.)	Cat. No.
1	Z55,168-6
1½	Z55,169-4
2	Z55,170-8

### KW-4AH Compact Hot Plate

This easy-to-use hot plate is designed for use with the KW-4A Spin Coater to bake and cure thin films and coatings. Features digital PID control with internal thermocouple for exceptional temperature uniformity.

**Specifications:**

Temperature Resolution: 1°C  
 Temperature Range: 50-350°C  
 Substrate (plate) size: 6 inches  
 Compliance: CE compliant and supplied with a U.S. plug

Volts	Cat. No.
110V	Z55,159-7
220V	Z55,160-0



### UV Curer

**Specifications:**

UV Wavelength: 254nm  
 Power output: 2 tubes, 4 watts/tube  
 Turn plate: 6 rpm  
 Dimensions: 8¼ x 9½ inches  
 Compliance: CE compliant and supplied with a U.S. plug

Volts	Cat. No.
110V	Z55,161-9
220V	Z55,162-7



### Dispenser

Pneumatic dispenser releases accurately measured amounts onto precision spin coater. Includes syringe with a clear barrel.

**Specifications:**

Air: 80-100 psi  
 Air port: Quick-connect  
 Syringe capacity: 55mL  
 Dimensions: 8¼ x 9½ x 4 inches  
 Compliance: CE compliant and supplied with a U.S. plug

Volts	Cat. No.
110V	Z55,163-5
220V	Z55,164-3

