GRAFITEC INTERNATIONAL

# K Control Coater Models K101 and K202

## *For Use with Liquid Printing Inks, Varnishes, Adhesives and Paint*

Widely used for the application of liquid printing inks, varnishes, adhesives, paints and many other surface coatings to produce quick, accurate and repeatable samples. The proofs may then be used for quality control and presentation purposes, research and development, and computer color matching data, elements vital to a company's success in the modern world.

**Model K101**
coats area up to 6.7x9.8"/170x250mm

**Model K202**
coats area up to 12.8x9.8"/325x250mm

## Features

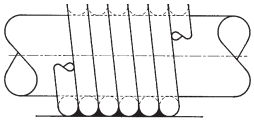
- Controlled speed and pressure to ensure repeatable results
- Coating by wire-wound bars or gap applicators
- Easy to use, easy to clean
- Vacuum, magnetic, heated and glass beds available
- Two models offering coated areas up to 6.7x9.8"/170x250mm or 12.8x9.8"/325x250mm
- Multiple coatings in one operation for comparison purposes
- Standard coating speeds infinitely variable between 2 and 15m/min

# Meter Bar Coating

Meter bars provide the simplest method of applying accurate, repeatable layers of surface coatings on most substrates. The bar is produced by winding precision-drawn stainless steel wire on a stainless steel rod, resulting in a pattern of identically shaped grooves. These grooves then precisely control the wet film thickness. Close wound bars will produce a coating thickness from 4 to 120$\mu$m. Higher coating weights up to 500$\mu$m can be obtained using spirally wound bars.

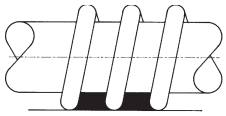
A three-part Melinex/foam/rubber coating bed is supplied as standard; vacuum, magnetic, heated and glass beds are available also.

# Standard Bars for K Control Coater Models K101 and K202



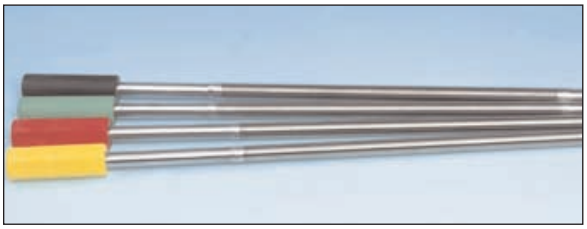
## Close Wound

| Bar Reference | Color Code | Wire Diameter | | Wet Film Deposit | |
|---|---|---|---|---|---|
| | | Inch | mm | Inch | $\mu$m |
| 0 | White | .002 | .05 | .00015 | 4 |
| 1 | Yellow | .003 | .08 | .00025 | 6 |
| 2 | Red | .006 | .15 | .0005 | 12 |
| 3 | Green | .012 | .31 | .001 | 24 |
| 4 | Black | .02 | .51 | .0015 | 40 |
| 5 | Bone | .025 | .64 | .002 | 50 |
| 6 | Orange | .03 | .76 | .0025 | 60 |
| 7 | Brown | .04 | 1 | .003 | 80 |
| 8 | Blue | .05 | 1.27 | .004 | 100 |
| 9 | Tan | .06 | 1.5 | .005 | 120 |



## Spirally Wound

| Bar Reference | Wire Diameter | | Wet Film Deposit | |
|---|---|---|---|---|
| | Inch | mm | Inch | $\mu$m |
| 150 | .01 | .25 | .006 | 150 |
| 200 | .014 | .36 | .008 | 200 |
| 300 | .02 | .51 | .012 | 300 |
| 400 | .03 | .76 | .016 | 400 |
| 500 | .04 | 1 | .02 | 500 |



Wire diameters with the choice of the following deposits (microns) when close wound are readily available from stock: 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 76, 80, 84, 88, 90, 92, 96, 100, 104, 108, 110, 112, 116, 120, 128, 130, 140, 150.

Special bars to apply intermediate wet film deposits are manufactured to customer requirements.

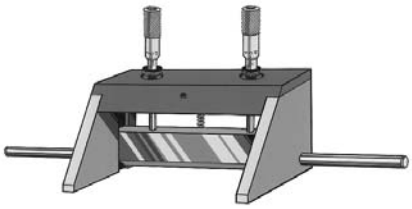
Both wire-wound metering bars and plain smooth bars are also manufactured to fit all laboratory and production coaters.

# Coating Areas

| Maximum Coating Area in mm When Using: | Model K101 | Model K202 |
|---|---|---|
| Meter bar coating with standard three-part bed | 170X250 | 325X250 |
| Meter bar coating with glass bed | 170X250 | 325X250 |
| Meter bar coating with vacuum bed type A | 140X250 | 290X250 |
| Meter bar coating with vacuum bed type B | 150X250 | 300X250 |
| Meter bar coating with magnetic bed | 150X250 | 300X250 |
| Meter bar coating with heated bed | 170X250 | 325X250 |
| Micrometer-adjustable applicator | 100X250 | 200X250 |
| Bird Applicator | 100X250 | 100X250 |
| Cube film applicator | 41X250 | 41X250 |
| 4-sided applicator | 60X250 | 60X250 |
| K Wedge bar | 100X250 | 200X250 |

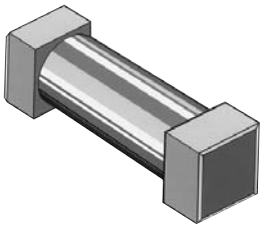
# Gap Applicators

A range of adjustable or fixed gap applicators is available for use with the K Control Coater. These are widely used for higher viscosity and thixotropic materials and for high coating weights.

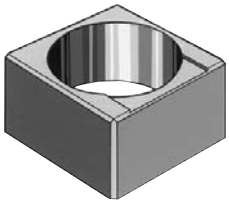


**Micrometer-Adjustable Applicator**
This applicator incorporates an adjustable spreading blade with micrometers to accurately set the substrate/blade gap from 0-10mm in 10$\mu$m increments, providing a most versatile tool. It gives a coating width of 100 or 200mm and produces a wet film thickness of 50-80% of the gap size.

**Bird Applicator**
Precision-ground all over, these stainless steel applicators provide a coating width of 100mm and are available with gap sizes of 25, 50, 75, 100, 150 or 200$\mu$m. These Bird applicators produce a wet film thickness equal to 50-80% of the gap size.



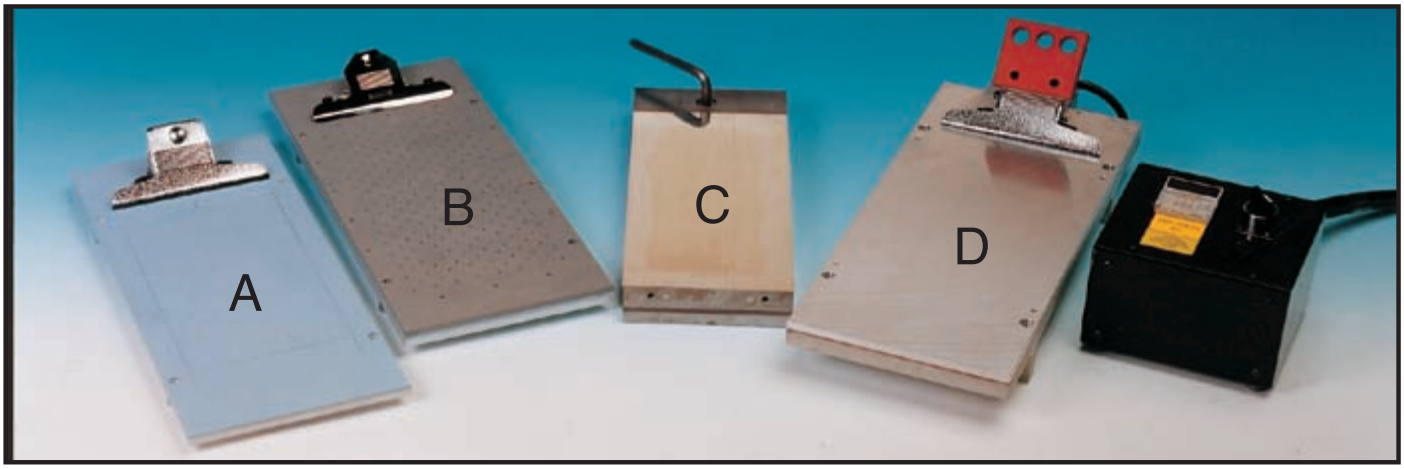
**4-Sided Applicator**
This device enables the user to coat four separate film thicknesses with a single applicator. Providing a coating width of 60mm, the 4-sided applicator is supplied approximately equal to 50% of the gap size and providing a wet film thickness of half the gap size.



**Cube Film Applicator**
Made of precision-ground stainless steel, the cube film applicator provides a coating width of 41mm. Each applicator is supplied with two gap sizes: 50 and 100$\mu$m or 150 and 200$\mu$m. These applicators produce a wet film thickness equal to approximately 50% of the gap size.

**K Wedge Bar**
The K Wedge Bar is an economical form of fixed gap applicator, produced by winding wire on a stainless steel rod, as shown above. Gaps between 50$\mu$m and 1500$\mu$m are available in 50$\mu$m steps. The wet film thickness is approximately equal to half the gap size and a coating width of 100 or 200mm is produced.

# Special Purpose Coating Beds




### Coating Beds for Various Applications

Shown above are four special purpose beds, each of which can be easily added to the basic machine, using four fixing screws to ensure the best possible results for a range of applications.

### Vacuum Bed Type A

Recommended when coating delicate and stretchy substrates (for example, aluminum foil and polythene). A rubber-faced bed connected to a vacuum pump (optional) holds the material perfectly flat. Vacuum is applied from the edges of the substrate only.

### Vacuum Bed Type B

A smooth aluminum-faced bed with vacuum applied via multiple holes over the entire surface. Suitable for more rigid substrates. Especially recommended when coating paint charts with gap applicators.

### Magnetic Bed C

For use when coating magnetic substrates (for example, tin plate) to ensure a flat surface. Permanent magnets are used and are operated by an on/off key.

### Heated Bed D

For use when applying coatings which require heating (for example, hot melts and electrographic inks). The bed has a smooth aluminum face which can be heated up to 200°C and is set by a digital temperature controller.

### Glass Bed (not shown)

This provides a perfectly flat surface which is very easily cleaned. It is especially recommended for use with gap applicators which require a hard surface.

# Required Order Specifications

- Machine size: model K101 or K202
- Type of drive: electric or pneumatic (safe for hazardous areas)
- Coating bed(s) and accessories
- Power supply: operation at 220V or 110V, or compressed air



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