

**BAKER FILM APPLICATOR** VF2145, VF2146, VF2147, VF1500, VF1501, VF1502, VF1510, VF1515, VF1560, VF1520, VF1521, VF1522, VF1523, VF1525, VF1526, VF1527, VF1528

DATASHEET

**PRODUCT DESCRIPTION**

Cylindrical film applicator with 4 application sides for application of paint-films of 4 different pre-defined thicknesses. The Baker applicator's are available in film width 60 mm and 80 mm and are suitable for applying a host of different products onto flat and relatively solid substrates. Since it's made out of high-grade stainless steel, the Baker Film Applicator will not be affected by acid or base elements.

**BUSINESS**

Coating Laboratories, Paint Production

**STANDARDS**

ASTM D 3022 ASTM D 823

Look up the appropriate standard for a correct execution of the test.

**SCOPE OF SUPPLY**

- TQC Baker Film Applicator
- Protective plastic case
- Calibration certificate

**ORDERING INFORMATION**

- VF2145** TQC Baker applicator 60mm, 15/30/60/90µm
- VF2146** TQC Baker applicator 60mm, 30/60/90/120µm
- VF2147** TQC Baker applicator 60mm, 50/100/150/200µm
- VF1500** TQC Baker film applicator 80mm, 15/30/60/90µm
- VF1501** TQC Baker film applicator 80mm, 30/60/90/120µm
- VF1502** TQC Baker film applicator 80mm, 50/100/150/200µm
- VF1510** TQC Baker film applicator width 60mm, 4 gaps as desired, Max. gap size 3000µm
- VF1515** TQC Baker film applicator width 80mm, 4 gaps as desired, Max. gap size: 3000µm
- VF1560** TQC Baker film applicator width 80mm, 2x90µm / 2x150µm  
(special diameter: 18mm instead of 27mm)
- VF1520** TQC Baker film applicator width 100mm, 4 gaps as desired
- VF1521** TQC Baker film applicator width 100mm, gaps 15/30/60/90µm
- VF1522** TQC Baker film applicator width 100mm, gaps 30/60/90/120µm
- VF1523** TQC Baker film applicator width 100mm, gaps 50/100/150/200µm
- VF1525** TQC Baker film applicator width 150mm, 4 gaps as desired, Max. gap size: 3000µm

- VF1526** TQC Baker film applicator width 150mm, gaps 15/30/60/90µm
- VF1527** TQC Baker film applicator width 150mm, gaps 30/60/90/120µm
- VF1528** TQC Baker film applicator width 150mm, gaps 50/100/150/200µm

## ACCESSORIES

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- AB3120** TQC motorized automatic film applicator with glass bed and combined attachment assembly for standard block applicators and spiral bar coaters, 230V
- AB3125** TQC motorized automatic film applicator with glass bed and combined attachment assembly for standard block applicators and spiral bar coaters, 100V
- AB3220** TQC motorized automatic film applicator with perforated vacuum bed, built-in vacuum pump and combined attachment assembly for standard block applicators and spiral bar coaters, 230V
  
- AB3225** TQC motorized automatic film applicator with perforated vacuum bed, built-in vacuum pump and combined attachment assembly for standard block applicators and spiral bar coaters, 100V
- AB3320** TQC motorized automatic film applicator with double channeled vacuum bed, built-in vacuum pump and combined attachment assembly for standard block applicators and spiral bar coaters, 230V
- AB3325** TQC motorized automatic film applicator with double channeled vacuum bed, built-in vacuum pump and combined attachment assembly for standard block applicators and spiral bar coaters, 100V
- AB3400** TQC motorized automatic film applicator with heated vacuum bed, built-in vacuum pump and combined attachment assembly for standard block applicators and spiral bar coaters 230V
- AB3405** TQC motorized automatic film applicator with heated vacuum bed, built-in vacuum pump and combined attachment assembly for standard block applicators and spiral bar coaters 100V
- AB3420** TQC motorized automatic film applicator 230 VAC (without application bed\*) Vacuum pump + automatic clamp unit included. Please order glass bed, perforated vacuum bed, and/or double channel vacuum bed separately.

*\*Though not included, both the glass bed, and the perforated and double channel vacuum bed will fit. AB3100 Glass bed\*\*; AB3200 Perforated vacuum bed\*\*, AB3300 Double channel vacuum bed \*\* (only to be used with AB3420)*

- VF1601** TQC Application Table 380 x 230
- VF1602** TQC Application Table 230 x 160
- VF2343** TQC Test charts A6, White/Black B+, with optical brightner, 250pcs
- VF2344** TQC Test charts A5, White/Black B+, with optical brightner, 250pcs
- VF2345** TQC Test charts A4, White/Black B+, with optical brightner, 250pcs
- VF2346** TQC Test charts A5, Black/White chequered B+, with optical brightner, 250pcs
- VF2347** TQC Test charts A4, Black/White chequered B+, with optical brightner, 250pcs
- VF2354** TQC Test charts A3, Black/White chequered B+, with optical brightner, 250pcs
- VF2317** TQC Test charts A6, White/Black B-, without optical brightner, 250pcs
- VF2319** TQC Test charts A5, White/Black B-, without optical brightner, 250pcs
- VF2321** TQC Test charts A4, White/Black B-, without optical brightner, 250pcs
- VF2323** TQC Test charts A5, Black/White chequered B-, without optical brightner, 250pcs
- VF2325** TQC Test charts A4, Black/White chequered B-, without optical brightner, 250pcs

## SPECIFICATIONS

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Material	: DAIDO 440C medical grade Martensitic stainless tool steel. Sub Zero Vacuum hardened (+1756°C to -70°C), hardness HRC 55 (through hardened*) & tempered.
Surface treatment	: polished
Overall accuracy	: $\pm 2 \mu\text{m}$ .
Accuracy	: better than 3 micron
Outer dimensions	: 100 x 22 x 22 mm / 120 x 22 x 22 mm

\*Through hardening versus Case-hardening or surface hardening.

Through-hardening means the metal uniformly is hardened throughout the piece. Case- or surface (face / frame) hardening only hardens the top layer of the metal. Once the top layer is degraded excessive wear and tear will occur on the product limiting its life time and affecting accuracy.

## USE

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Select the appropriate gap and place the applicator on a plane smooth surface such as a glass plate. Apply a sample of paint in the centre of the TQC Baker applicator near the correct opening.

Draw down the applicator over the surface.

Due to physical reasons the max. film attainable wet film thickness is not equal to the gap depth.

Deposited film thickness may vary from 40% to 80% of the clearance/gap depth.

Dry film thickness will be lower than wet thickness due solvent/water evaporation.



## SPECIAL CARE

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- Though robust in design, this instrument is precision-machined. Never drop it or knock it over
- Always clean the instrument after use.
- Only use non-corrosive solvents to clean the instrument. Use a soft, non-abrasive cloth to dry it.
- Never clean the instrument by any mechanical means such as a wire brush or abrasive paper. This may cause, just like the use of aggressive cleaning agents, permanent damage.
- When stored for a long period of time, wrap the instrument in oil paper
- We recommend annual calibration.

## DISCLAIMER

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The right of technical modifications is reserved.

The information given in this sheet is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. Whilst we endeavour to ensure that all advice we give about the product (whether in this sheet or otherwise) is correct we have no control over either the quality or condition of the product or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing to do so, we do not accept any liability whatsoever or howsoever arising for the performance of the product or for any loss or damage (other than death or personal injury resulting from our negligence) arising out of the use of the product. The

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