

**Bird type FILM APPLICATORS** VF1540, VF1541, VF1542, VF1543, VF1544, VF1545, VF1546, VF1570, VF1571, VF1572, VF1573, VF1574, VF1575, VF1576, VF1586, VF1587, VF1588, VF1591, VF1589, VF1592, VF1593, VF1595

DATASHEET

**PRODUCT DESCRIPTION**

TQC Bird-type film applicator with one flat edge. One application side for applying 1 pre-defined thickness. The TQC Bird-type applicator single gap is available in film width 50 and 75 mm and suitable for applying a host of different products onto flat and relatively solid substrates. The high-grade stainless steel will not be affected by acid or base elements.

We can not give guarantee of the wet thickness that will be obtained. The wet thickness is dependent upon the solids and vehicle content of the wet material as well as other factors. Film thickness deposited may vary from 40% to 80% of the actual gate clearance of the TQC Bird-type film applicator.

**BUSINESS**

Coating Laboratories, Paint Production

**STANDARDS**

ASTM D1084

**SCOPE OF SUPPLY**

- TQC Cylindrical film applicator single gap 50, 75 or 90mm
- Calibration certificate

**ORDERING INFORMATION**

- VF1540** TQC Bird-type film applicator 50mm, one single gap as desired
- VF1541** TQC Bird-type film applicator 50mm, 50µm
- VF1542** TQC Bird-type film applicator 50mm, 75µm
- VF1543** TQC Bird-type film applicator 50mm, 100µm
- VF1544** TQC Bird-type film applicator 50mm, 125µm
- VF1545** TQC Prism film applicator 50mm, 150µm
- VF1546** TQC Bird-type film applicator 50mm, 200µm
- VF1570** TQC Bird-type film applicator 75mm, one single gap as desired
- VF1571** TQC Bird-type film applicator 75mm, 50µm
- VF1572** TQC Bird-type film applicator 75mm, 75µm
- VF1573** TQC Bird-type film applicator 75mm, 100µm
- VF1574** TQC Bird-type film applicator 75mm, 125µm
- VF1575** TQC Bird-type film applicator 75mm, 150µm
- VF1576** TQC Bird-type film applicator 75mm, 200µm
- VF1586** TQC Bird-type film applicator, width 90mm with guidance plates, 25µm

- VF1587** TQC Bird-type film applicator, width 90mm with guidance plates, 50µm
- VF1588** TQC Bird-type film applicator, width 90mm with guidance plates, 75µm
- VF1591** TQC Bird-type film applicator, width 90mm with guidance plates, 150µm
- VF1589** TQC Bird-type film applicator, width 90mm with guidance plates, 100µm
- VF1592** TQC Bird-type film applicator, width 90mm with guidance plates, 200µm
- VF1593** TQC Bird-type film applicator, width 90mm with guidance plates, 250µm
- VF1595** TQC Bird-type film applicator, width 90mm with guidance plates, gap as desired

## 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	: 80 x 25 x 15 mm (50mm series) 105 x 25 x 15 mm (75mm series)

\*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 gap-side and place this side of the applicator on a plane smooth surface such as a glass plate. Apply a sample of paint in the centre of the TQC Prism applicator near the 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 information contained in this sheet is liable to modification from time to time in the light of experience and our policy of continuous product development.