



# HEATED PERFORATED VACUUM BED FOR THIN FILM APPLICATION AB3430 AB3435

DATASHEET

## **PRODUCT DESCRIPTION**

Heated perforated vacuum table to be used to create smooth and consistent thin films of paint, lacquers and other materials on sample specimen such as opacity test charts, sample panels, foils or other flat substrates.

The vacuum table is made of hard aluminium and anodized in hardcoat flat black to provide a durable and inert surface with an absolute flatness. The surface of the

vacuum table is perforated with a grid of small holes which hold the test specimen in position for proper drawdown when attached to a vacuum pump or line (not included)

The vacuum table has a built-in heating math which allows the temperature of the table to be elevated up to +100°C above ambient temperature. The powerful heating device guarantees an even distribution of the temperature over the entire vacuum plate. Temperature is set and controlled through a digital temperature controller.

Unlike with the TQC automatic film applicator the films are to be applied manually using a variety of applicators such as block-applicators, baker-applicators, bar-coaters and wire wound rods, Bird-applicator, Quadruple applicators, Biddle duplex applicators, System Wasag, Casting knife and Micrometric film applicators.

#### **APPLICATIONS**

- Apply even and consistent films op paint and coatings on test charts to evaluate opacity, hiding power, penetration resistance, spreading rate
- Produce consistent and reproducible test charts for colour comparison, gloss and reflectance testing and other appearance parameters.
- Apply adhesives, glue and hot melt on test specimen to evaluate bonding strength at different thicknesses and different temperatures.
- Apply slurries on metal foils for research after new thin film technologies in the battery production industry
- Produce reproducible test charts and specimen for scrub -, abrasion- and washability tests.
- ...

# **FEATURES**

- durable and inert surface with an absolute flatness
- to be used with charts, foils, panels and other flat surfaces
- even temperature distribution
- digital temperature control
- vacuum keeps the test specimen in position

## **SCOPE OF SUPPLY**

- Heated perforated vacuum bed
- Controller
- 110 VAC to 230VAC converter\*

\* Only model AB3435 Manual

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#### **ORDERING INFORMATION**

AB3430 TQC 230VAC heated perforated vacuum bed

AB3435 TQC 230VAC heated perforated vacuum bed with 110 VAC to 230VAC converter

## **ACCESSORIES**

AB3416 110 VAC to 230 VAC converter

#### **SPECIFICATIONS**

## **Heated vacuum bed**

Minimum temperature: Ambient + 5°C

Maximum temperature: Ambient + 100°C (Absolute max 140°C)

Resolution of set temperature: 1°C Resolution of readout temperature: 0.1°C

# **Separate Temperature controller**

Power consumption heating: 450 Watt Power Supply: 230V, 50Hz

Drawn Down Length: A3. If smaller test charts are used a A3 sized paper frame has to be created

to protect the holes from paint walk.

D x W X H bed: 520 x 310 x 72 mm / 20,5 x 12,2 x 2,8 inch

D x W x H controller: 190 x 120 x 46 mm

# USE

The TQC Heated film bed controller is operated by two buttons. The power switch on the top and the temperature set knob on the front. To set the temperature first turn the machine on and then set the temperature. The test bed will warm up to the set temperature.

# **SPECIAL CARE**

- Though robust in design, this instrument is precision-machined. Never drop it or knock it over
- Always clean the instrument after use.
- Clean the instrument using a soft dry cloth. 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.
- Do not use compressed air to clean the instrument.





#### **SAFETY PRECAUTIONS**

- Not suitable to be put in the sun or in the high light
- Avoid using it in over-high or over-low temperature environment
- Avoid humidity
- Always make sure the instrument is connected to an earthed electric socket.
- Always make sure the instrument's power is turned off while adjusting any electric component

#### **DISCLAIMER**

The right of technical modifications is reserved.

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