

TQC Drying Time Recorder

(AB3600)

Product Description

The new TQC Drying Time Recorder is a fully digitally controlled machine that operates conform the BK (Beck Koller) method and meets ASTM D5895, ISO 9117-4 and DIN EN 14022

Defining the final result or checking intermediate stages is very easy by means of the clear digital display and the intuitive controller.

The compact machine has six tracks, and comes with two robust and reusable glass beds of 100 X 350 X 3 mm. Optional are six narrow glass beds in special adapters.

The front panel of the TQC Drying Time Recorder is made out of hardened glass, which is easy to clean and protects the display underneath it.

The TQC Drying Time Recorder is powered by a safe 24 V DC power supply.

Temperature-friendly design

The possibility to perform tests at temperatures as low as -20 $^{\circ}$ C is unique. The drive system is lubricant free, so there is no risk of lubricants that thicken at lower temperatures. The display is heated which enhances menu visibility at lower temperatures. These design features result in a wide operating temperature range from -20 $^{\circ}$ C to +70 $^{\circ}$ C (non-condensing), which makes it possible to perform tests in climate chambers.

Broad and flexible time range

A broad and flexible time range can be set varying from 1 minute up to 200 hours. This makes the TQC Drying Time Recorder suitable for fast drying waterborne coatings as well as very slow drying paints that may need days to dry.

Features

- Flexible travel times, digitally adjustable from 1min to 200 hours
- Digitally controlled, fully flexible
- Check intermediate and final results on the machine's display
- Heated display enhances menu visibility at lower temperatures
- Lubricant free drive system
- Wide operating temperature range from -20°C to +70°C, also suitable for tests in climate chambers
- 6 tracks
- Triple I operating interface: Intelligent Illumination Indicator; just those keys that are active are illuminated
- Very accurate: < 1% of set time
- Glass front panel eases cleaning and protects the display
- Reusable glass beds
- Safe 24 V DC power supply

Standards

ASTM D5895, ISO 9117-4 and DIN EN 14022. Read the appropriate standard for a correct execution of the test.

Specifications

Technical Data

Drying time range:

Time accuracy:

Operating temperature: $-20^{\circ}\text{C to } +70^{\circ}\text{C} / -4^{\circ}\text{F to } 158^{\circ}\text{F}$

(non-condensing) 1 min to 200 hours < 1% of set time 300 mm

Maximum track length: 30
Maximum number of tracks: 6

Force per needle: 3.5 g / 0.03 N

Weight of additional weights:5 gDiameter of needle:2 mmRadius of needle:1 mm

Material: Stainless steel, powdercoated

steel, anodised aluminium,

nylon, glass

Test beds

 $2 \times triple track 350 \text{ mm X} 100 \text{ mm X} 3 \text{ mm glass bed (supplied), or } 6 \times solo track 305 \text{ mm X} 25 \text{ mm X} 3 \text{ mm glass bed, or } Custom bed; max dimensions W 200mm x L 400mm* x H 8mm$

- * Test surface is always 300 mm in length
- 400 mm length max. without extra support.
 Longer panels need an extra 125mm high support.

Dimensions and Weight

 Depth:
 335 mm / 13.18 in

 Width:
 400 mm / 15.74 in

 Height:
 190 mm / 7.48 in

Net weight: 9.5 kg

Basic Unit

Power Supply: 24 VDC
Power consumption: Max. 40 Watt

Display: 128 x 64 pixels graphical LCD,

70 mm x 40 mm, white

illuminated

Menu languages: English

User input method: Illuminated tactile navigation

button with Triple I function



Scope of Supply

- TQC Drying Time Recorder
- 24V Adapter
- Six Needles
- Six Weights (5g each)
- Two Glass Beds
- Power Cord and Adapter 24 VDC
- Manual

(i) Ordering Information

AB3600 Drying Time Recorder

Accessories

AB3602	Narrow glass beds 305x25x3mm, set of 12 pcs
AB3627*	Narrow glass bed adapter
	(for use with 6 narrow glass beds AB3602)
VF1590	TQC Triple Reservoir Film Applicator , 90μm/150μm
AB3700	TQC Cube Applicator, gaps 38 & 76μm
AB3701	TQC Cube Applicator, gaps 50 & 100μm
AB3702	TQC Cube Applicator, gaps 75 & 150µm
AB3703	TQC Cube Applicator, gaps on request (μm)
AB3705	TQC Cube Applicator, gaps 1,5 & 3 mil
AB3706	TQC Cube Applicator, gaps 2 & 4 mil
AB3707	TQC Cube Applicator, gaps 3 & 6 mil
AB3708	TQC Cube Applicator, gaps on request (mil)

^{*} Narrow glass beds have to be ordered separately

Spare Parts

AB3603	Spare weights 5g, set of 12 pcs
AB3604	Spare needles, set of 12 pcs
AB3605	Glass beds 350x100x3mm, set of 12 pcs

Use

The TQC Drying Time Recorder has a Tripple i controlled running operation. Check the manual for full details.

Care, Maintenance, Repairs

- Though robust in design, this instrument is sensitive. Never drop it or knock
- For the most accurate and reproducible results, do not operate the machine in direct sunlight or strong overhead lighting.
- · Avoid using the machine outside specified conditions.
- Please take note that relative humidity will influence the results obtained by the machine.
- Do not store the machine in high relative humidity environments to prevent corrosion
- Always make sure the instrument is connected to a grounded mains outlet.
- Maintenance and inspection should be carried out at the correct intervals.
- Operating personnel should be informed before starting with maintenance or repair work.
- · Always make sure the instruments power is turned off and the instrument is not connected to a socket while adjusting any electrical component whenever maintenance, inspection or repair work is done.
- Do not open the instrument. In case of malfunction always consult the manufacturer
- Never touch electronics or circuit boards when not ESD secured.
- The drying time recorder is subject to some natural wear and must be inspected from time to time to ensure that it is in fault-free condition.

Cleaning of the instrument and disposal of materials

- When in use it is not always possible to avoid some spill of paint on the work surface. Try to keep the instrument as clean as possible to prevent distortions of functions. Always clean the instrument thoroughly after use.
- To clean the instrument properly use a suitable solvent to dispose remains of paint or ink.
- Never use aggressive solvents such as MEK or Acetone as this might damage the coating of the machine.
- 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.
- Wear gloves during cleaning; Don't spill an overdose of solvent during
- Cleaning materials must always be used and disposed of correctly.

Disclaimer

The right of technical modifications is reserved.

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