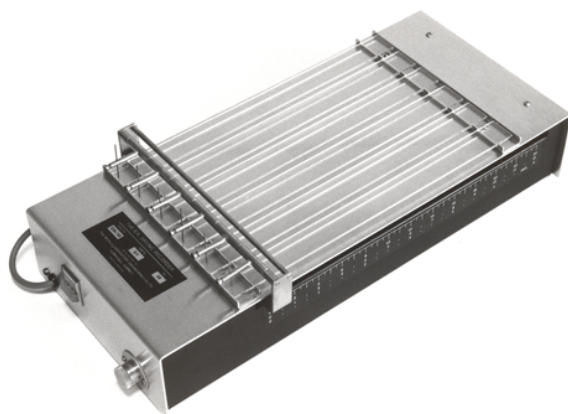


SHBK3 Drying Time Recorder

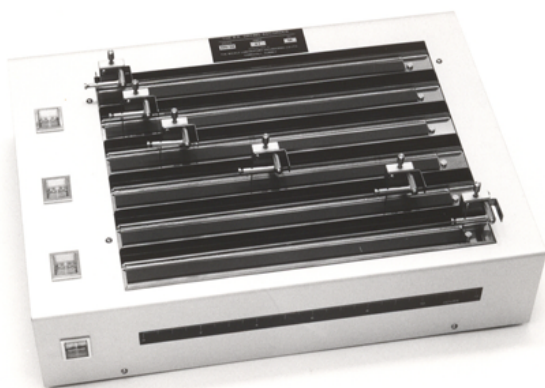
The SHBK3 Drying Time Recorder has been used widely in the coatings industry throughout the world for several decades. A needle carrier holding six hemispherical ended needles travels the length of the six 305 x 25mm test strips in 6, 12 or 24 hours. Other speeds are available to special order. A time scale on the side cover is graduated to suit the three different travel times.



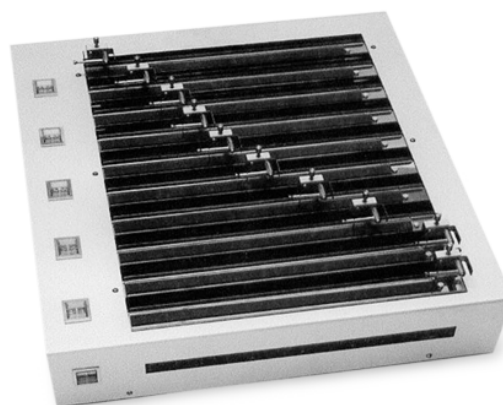
SHBK6 and SHBK10 Drying Time Recorders

The SHBK6 and SHBK10 Drying Time Recorders have independently operating tracks allowing tests to be made at different start times. Pairs of tracks operate at the same speed, and a wide range of travel times are available. The standard models are supplied with all tracks traversing at 12 hours, however, alternative combinations of speeds of 6, 12, 24 and 48 hours can be specified at the time of ordering.

A time scale on the front cover is graduated to suit the instrument's drying time ranges. Each pair of tracks has its own individual operating switch.



SHBK6



SHBK10

Drying stages

Initially the needle passes through the film followed by defined stages in the drying process that can be identified as:

1. The needle passes through the film, it recovers to leave no trace, progressing to a pear shape impression, corresponding with the **evaporation of the solvent**.
2. Cutting of a continuous track corresponding to a **sol-gel transition**.
3. The track depth is reducing and becomes interrupted corresponding to a tack-free **surface-dry time**.
4. The needle no longer penetrates the film, corresponding to the **final drying time**.

Brass weights (supplied as an accessory), each weighing 5 grams, may be used to apply greater pressure on the needles and thus record the through-drying properties of alkyds, varnishes and paints. The BK Drying Time Recorders will give useful information about the gelation times of many two component surface coating materials, and the properties of such films.

Physical Testing: Drying Time: BK Drying Time Recorders

Product specifications

Function	Description
Length of needle travel	300mm
Motor speeds	See the Features and options table below
Dimensions (cm)	
SHBK3	47 x 22 x 12
SHBK6	46 x 35 x 15
SHBK10	46 x 53 x 15
Weight (Kg)	
SHBK3	3.4
SHBK6	7.1
SHBK10	11.4
Electrical supply	220- 240V 50Hz 0.1 amp or 100-115V 60Hz 0.1 amp
Standards	ASTM D5895/A

Features and options

Model		Tracks	Motors	Standard Speeds (Hours)	Motor Speed Options (Hours)		
BK3 BK3/110V BK3/SV	220-240V – 50Hz	6	1	6, 12, 24	3, 6, 12	12, 24, 48	½, 1, 2
	110-120V – 60Hz				1, 2, 4	2, 4, 8	24, 48, 96
BK6 BK6/110V BK6/SV	220-240 – 50Hz	6	3	12 (Operates in 3 pairs)	In pairs of 6, 24, 48		Special version in pairs, 12 to 96.
	110-120V – 60Hz						
BK10 BK10/110V BK10/SV	220-240 – 50Hz	10	5	12 (Operates in 5 pairs)	In pairs of 6, 24, 48		Special version in pairs, ½ to 96
	110-120V – 60Hz						
	Motor speed option (state voltage)						

Optional accessories

SH1103 – Cube Film Applicator

This small Applicator is available with 16 film width. (Applicator width 25mm). The standard applicator has a gap depth of 37µ at one end and 75µ at the other. It has one chamber 16mm diameter to contain the liquid sample. The applicator is placed at one end of the glass strip with the ground gap facing the end. Paint is poured into the hole and the applicator steadily drawn down the glass strip and off the other end, the gap being the trailing end of the applicator. Paint will flow through the gap depositing a 16mm wide film on the glass strip.

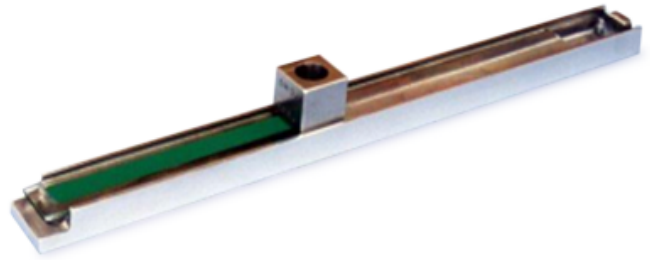
Other gap depths between 10µ and 650µ can be supplied to suit customer requirements (SH1103A).



Physical Testing: Drying Time: BK Drying Time Recorders

SHBK/CG – Casterguide

A device for simplifying and “tidying-up” the process of applying the paint film to the glass strip. It consists of a cast aluminium trough with a ledge on each side to carry the glass strip and a step one end to allow the user to hold the strip in place. The applicator is then positioned on the glass strip at the step end and filled with paint as described above. When using the applicator the Casterguide ensures that the film is applied centrally and, as the applicator is drawn off the end of the glass strip, the surplus paint is collected in the trough underneath.



This operation may be repeated several times before cleaning is necessary. For this purpose use only suitable solvents, do not use caustic alkali or caustic detergents since these will attack the aluminium metal.

Standard supply includes:

- Drying Time Recorder
- Glass Panels (6 or 10 dependent on model)
- Needles (6 or 10 dependent on model)
- Instructions

Ordering information

Product Ref	Description
SHBK3	Drying Time Recorder (state voltage)
SHBK6	Drying Time Recorder (state voltage)
SHBK10	Drying Time Recorder (state voltage)
SHBK3/SV	Drying Time Recorder, Motor speed option (state voltage)
SHBK6/SV	Drying Time Recorder, Motor speed option (state voltage)
SHBK10/SV	Drying Time Recorder, Motor speed option (state voltage)
	Accessories and consumables
SH1103	25mm Cube Film Applicator, 37/75 μ gap sizes
SH1103/A	25mm Cube Film Applicator, other gap sizes on request
SHBK/CG	Casterguide
SHBK/BW	5 Gram Brass Weights (pack of 6)
SHBK/GLASS	Glass Strips (pack of 12)
BKN/SS	Needles (Stainless Steel) (pack of 12)
BKN/T	Needles (Teflon Coated) (pack of 6)

Owing to continuous development, we reserve the right to introduce improvements and modify specifications without prior notice.

**Our sales team can be contacted on:
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