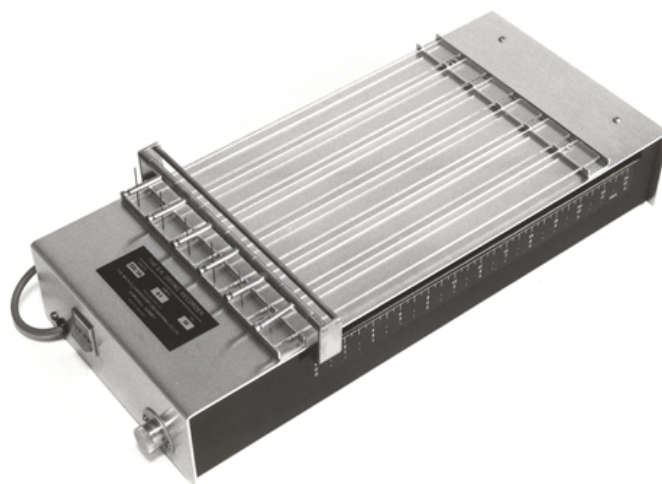


The SHBK3 Drying Time Recorder has been used widely in the coatings industry throughout the world for several decades.

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.



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.

Product specifications

Function	Description
Length of needle travel	300mm
Motor speeds	See the Features and options table below
Dimensions (cm)	47 x 22 x 12
Weight (Kg)	3.4
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	220-240V – 50Hz	6	1	6, 12, 24	3, 6, 12 12, 24, 48 ½, 1, 2

Physical Testing: Drying Time: SHBK3 Drying Time Recorder

Optional accessories

SH1103 – Cube Film Applicator

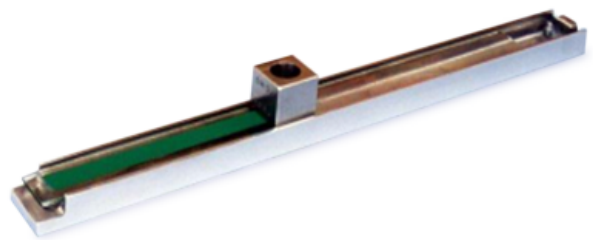
This small Applicator is available with 16 film width. (Applicator width 25mm). The standard applicator has a gap depth of 37 μ at one end and 75 μ at the other. It has one chamber 16mm diameter to contain the liquid sample. The applicator is placed at one end of the glass strip with the ground gap facing 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 10 μ and 650 μ can be supplied to suit customer requirements (SH1103A).

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.

Ordering information

Standard supply includes: Drying Time Recorder, 6 Glass Panels, 6 Needles, Instructions

Product Ref	Description
SHBK3	Drying Time Recorder (220-240V – 50Hz)
	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:
info@sheeninstruments.com or +44 (0)208 783 4321**