

How it works ?*

Optical measurement of the scatterers motion inside the sample as a function of time. As the film progressively forms, the scatterers motion decreases due to an increase in the film viscosity.

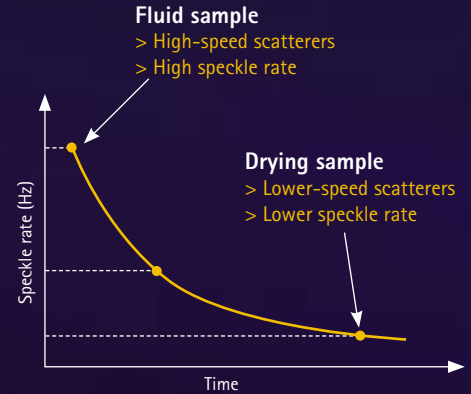
*see technical brochure



Film-forming sample with moving scatterers



Speckle image showing pattern deformation



Kinetics of film formation

Features and Specifications

Dimensions and Weight:

70x60x62 cm / 27.3x23.4x24.2 inches

45 kg/ 99 pounds.

Power Supply:

AC 100 to 240V - 50/60 Hz.

Minimum Computer Configuration:

PC: Pentium 500 MHz - RAM 128MB -

Hard Disk 4GB.

OS: Windows compatible USB (Win98 ME,

Win2000 & XP).

Communication port: USB.

Measuring Heads:

1 to 4 measuring heads.

Laser Class II (0.9mW - 650 nm).

CMOS video camera.

Data Acquisition:

From few seconds to several days.

Up to 30 acquisitions/sec.

Horus, the eye of the falcon

Horus is the name of the falcon-headed Egyptian god. Like the falcon, able to detect from high above the movements of small prey, the A.S.I.I. technology measures scatterers motion within the coating sample.



Automatic Coater Configuration

Autostart function for short drying times



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DISTRIBUTOR

Formulation

10 impasse Borde Basse
31240 L'Union (Toulouse)- France
Tel. +33 (0)5 62 89 29 29
Fax +33 (0)5 62 89 29 20

www.formulation.com
faction@formulation.com

HORUS®

ADVANCED DRYING ANALYSIS

A unique tool to
investigate film formation

[A.S.I.I.
Technology]



HORUS® ADVANCED DRYING ANALYSIS

Formulation

Simple and Easy

- ① Place your substrate under the laser beam
- ② Sample your product at desired thickness
- ③ Click to start measurement : the drying kinetics are displayed in real time by HoruSoft.

Application Fields

Drying and curing of :
Paints – Inks – Resins – Binders – Varnishes
Adhesives – Cosmetics...
Any system: water-based, solvent-based,
solvent free, two-components...

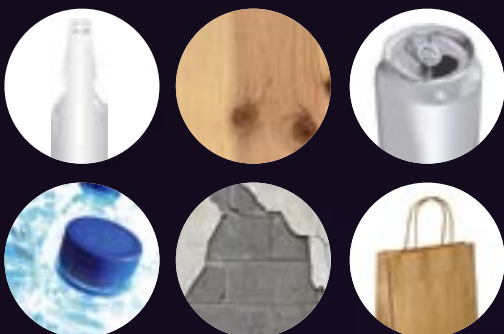


Realistic Test Conditions

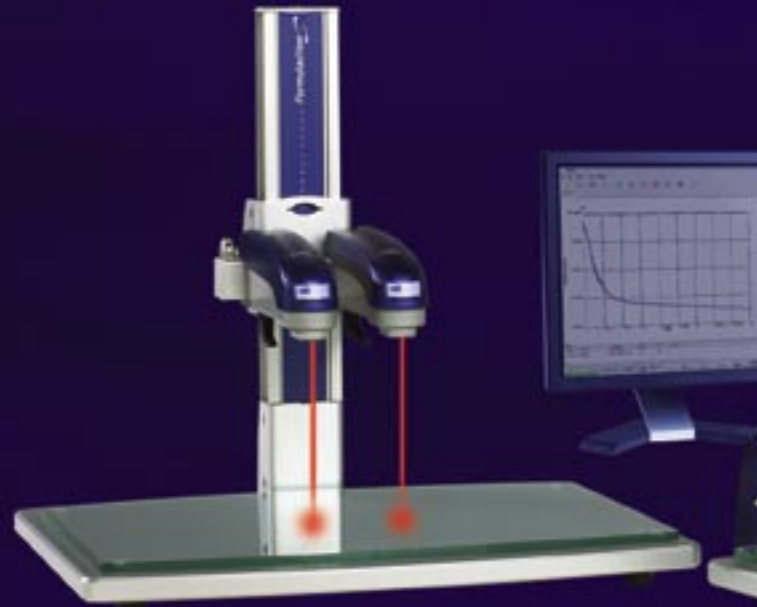
Optical non intrusive measurement
Open measurement
Up to 500 micron sample thickness
Reproducible and repeatable

Measurement on Various Substrates

Metal, plastic, glass, wood, concrete, paper, film...



Monitor drying properties of products



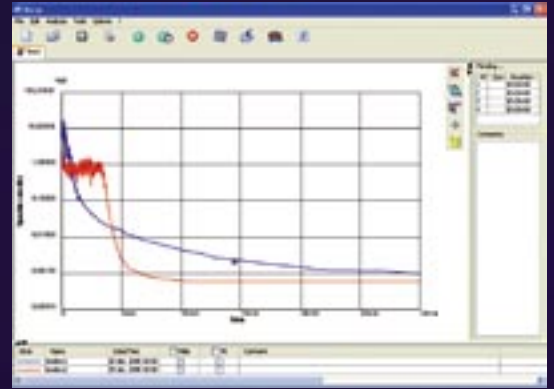
Simultaneous Measurements

The instrument is available in a "multiple heads" configuration to allow simultaneous measurements :

- for comparison with a reference sample in identical conditions (temperature, humidity...)
- for higher productivity.

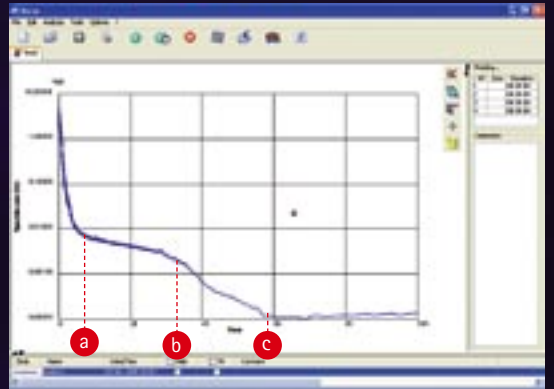
Drying and curing film-forming products

Mechanisms

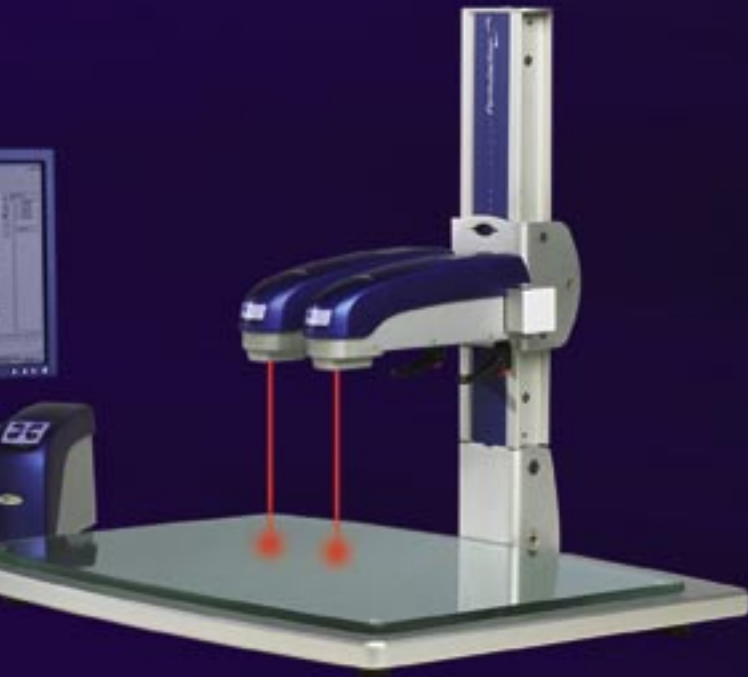


Different products (water-based and solvent-based)
=> Different drying mechanisms
=> Different kinetics profile

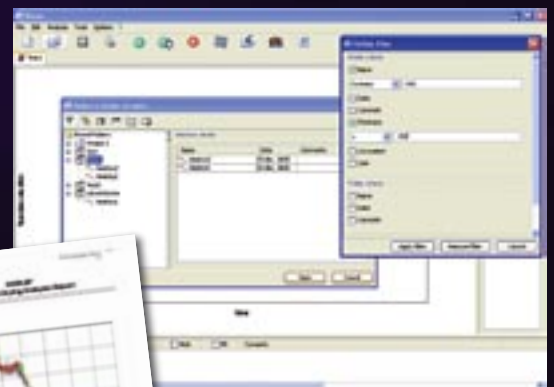
Characteristic Times



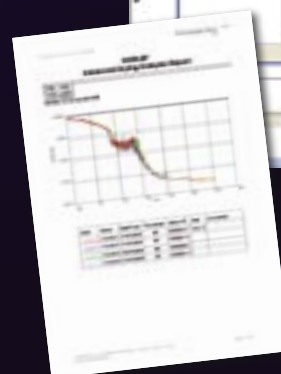
Determination of characteristic drying times:
a dust-free b touch-dry c dry-hard



HoruSoft on Windows



Data stored in database and exportable
to Microsoft Excel® or compatible software.



Analysis report