

IGT G1-5 Printability tester for gravure inks



For gravure inks IGT Testing Systems developed the G1-5, which has proved its value worldwide.

- Makes colour strips with gravure inks, which can be used for many purposes
- Specially designed for computerised colour measuring and colour matching systems
- Saves costs because colour tests on the printing presses are no longer necessary

APPLICATIONS

The G1-5 printability tester produces colour strips which are suitable for many purposes, such as:

- Measuring colour with colour measuring systems/ spectrophotometers
- Use in colour matching systems
- Visual appraisal
- Density measurements, including establishing colour and density tolerances and determination of coverage, wear resistance, scratch resistance, flexibility, adhesion and gloss, ink transfer, light fastness and resistance to chemicals
- Testing printing quality

The G1-5 tester prints all types of coated and uncoated materials:

- Paper, board, plastic film, cellophane, laminate, etc.

The G1-5 tester is used in the following industries:

- Printing ink, paper and board, printers
- Plastics and packaging
- Resins, lacquers and coatings
- Raw materials

IGT G1-5 Printability tester

Modern design, simple to operate



The G1-5, ready for use

PROPERTIES

The principal properties of the G1-5 are:

- Modern design, simple to operate and easily movable; very reliable and a sturdy construction for intensive use over a long period; easy and quick to clean
- Extensive processing possibilities for various substrates and gravure inks; substrate, ink and printing form simple and quick to change
- Excellent reproducibility; high degree of simulation to on-press performance
- Automatically makes two prints one after the other
- Printing force adjustable in 19 steps; speed adjustable in 5 steps
- Printing width is 50 mm
- Printing forms available in many types, also customised to individual customer requirements
- Low initial cost and low operating costs; complies with CE-standards; provided with detailed instructions for use

OPERATION

The G1-5 printability tester consists of a printing unit with an exchangeable engraved printing form, a doctor blade assembly and an impression cylinder. The substrate is attached to a substrate carrier. The substrate carrier is placed on the substrate guide, between the impression cylinder and the printing form. The printing force is applied between the printing form and the substrate, and at the same time contact is established between the doctor blade and the printing form. Using a disposable pipette, a few

IGT G1-5 Printability tester

Prints coated and uncoated materials:

Paper, board, plastic film, cellophane,

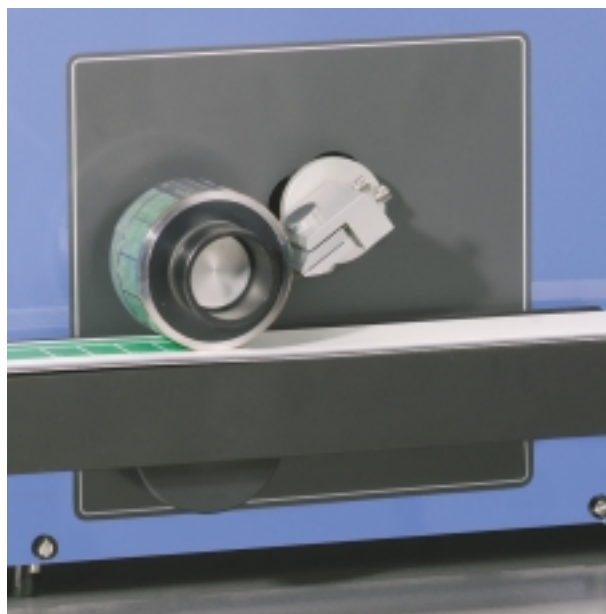
lamine, etc.



Applying ink

drops of ink are applied in the nip between the doctor blade and the printing form. The print system is now started: the surplus of ink is wiped off by the doctor blade and the printing ink is released from the

Making a print



cells of the printing disc and printed on the substrate. After two revolutions the doctor blade and the printing disc are lifted automatically. The substrate is removed for appraisal and the doctor blade and the printing disc are taken off for cleaning. In gravure printing the print quality is very much dependent upon the speed and the ink viscosity. Therefore the speed of the system is adjustable in five steps from 0.2 to 1.0 m/s.

Two prints are automatically made to ensure that the cells of the printing form are consistently filled with ink on the second revolution. The second print is the most reproducible and used for further evaluation. The printing form can be lifted about 4 mm, so there is sufficient space for easy changing of the substrate and the printing disc. The printing force is selectable between 100 - 1000 N.

Printing discs

The standard printing disc has a copper-engraved and then chromium-plated sheath. Many different printing forms are available. It is also possible to make customised discs.

IGT G1-5 Printability tester

Excellent reproducibility

TECHNICAL DATA

Printing units

- Printing speed: 0.2 - 1.0 m/s, adjustable
in five steps
- Printing force: 100 - 1000 N
- Printing form is automatically brought
under pressure, printed and lifted
- Doctor blade is automatically placed
against printing form and lifted
- Maximum substrate thickness: 4 mm

Engraved disc

- Printing width: 50 mm
- Printing length: approx. 140 mm
(2nd print)
- Range of discs available:
 - A wide selection of chromium-plated,
copper-engraved discs for specific ink
film weights are available
 - It is also possible to make special
customised discs on specification

Doctor blade

- Width: 52 mm
- Doctor blade angle: 60°, trailing
- Doctor blade pressure: 6 - 7 N
- Doctor blade type: MDC60

General

- Complies with CE-directives
- Modern design
- Reliable
- Low initial cost
- Possible to use many substrates and inks
- Easily movable
- Detailed instructions for use

| | |
|---------|--------|
| Weight: | 35 kg |
| Height: | 300 mm |
| Width: | 650 mm |
| Depth: | 400 mm |

Electrical connection:

115 - 230 V / 50 - 60 Hz



IGT Testing Systems

Research, development and production of testing equipment for the printing and allied industries

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