IGT C1 Printability tester
for offset inks

IGT Testing Systems supplies the C1 printability testers for offset inks. The C1 testers are simple and very successful all over the world:

- The C1 makes colour strips with offset inks with a known ink layer thickness, which can be used for many purposes.
- The C1 has specially been designed for computerized colour measuring and colour matching systems.
- The C1 saves on costs, because colour testing on the printing presses is no longer necessary.

APPLICATIONS

The C1 printability testers produce colour strips which are suitable for many purposes, such as:

- Measuring colour using colour measuring systems/spectro-photometers
- 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 (in g/m^2), light fastness and resistance to chemicals
- Testing printing quality, mottle and set off

The C1 tester prints all sorts of coated and uncoated materials:

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

The C1 tester is used in the following industries:

- **Printing ink, paper and board, printers**
- **Metal, plastics and packaging**
- **Resins, lacquers and coatings**
- **Raw materials**
- **Cosmetics, electronics**

IGT C1 Printability tester

Modern design, simple to operate

The C1, ready for use

PROPERTIES

The principal properties of the C1 tester 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 offset inks; substrate, ink, and printing form simple and quick to change
- Excellent reproducibility; high degree of correlation with press results
- Printing force adjustable in 19 steps
- Available in several print width versions:
  - C1 for printing widths of 15 and 35 mm
  - C1-5 for printing widths of 15, 35 and 50 mm
  - C1-7 for printing widths of 15, 35, 50 and 70 mm
  - Cx3 for printing width of 35 mm and 3 x 15 mm alongside each other
  - Other widths on request
- Low initial cost and low operating costs; complies with the latest EC-standards; provided with detailed instructions for use

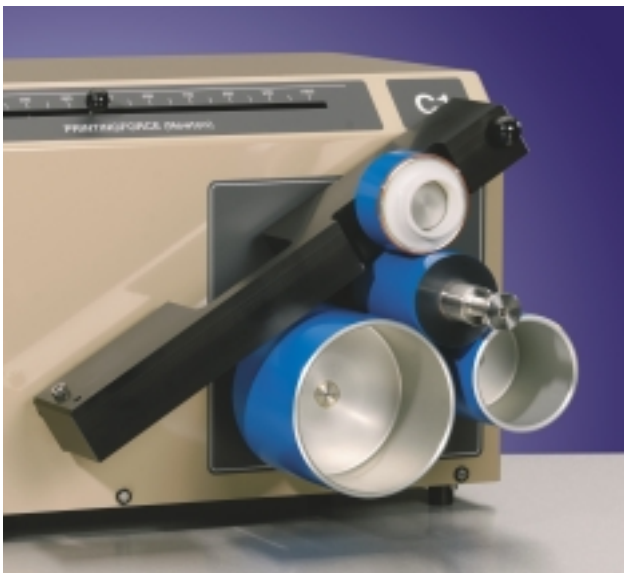
OPERATION

The C1 printability testers consist of an inking unit and a printing unit with removable printing disc (printing form).

The inking unit consists of two driven aluminium drums and a top roller. The distribution of the ink only takes about 30 seconds thanks to the diameter ratio and the oscillating drum movement. The inking time of the printing disc is about 15 seconds.

Applying ink with the IGT ink pipette

For different kinds of ink, there are different coverings for top rollers. For conventional inks, an elastomer is used. For UV-curing inks, a top roller is resistant to these inks and their sol-



Inking the printing disc

IGT C1 Printability tester

Prints coated and uncoated materials:

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

Making a print

Making a print on a metal can

vents. Cleaning the system is very simple and quick, because both aluminium drums are driven. To apply the ink as accurately as possible, the use of the IGT ink pipette is strongly recommended.

The printing unit consists of the printing form and an impression cylinder. The substrate is attached onto a substrate carrier. The substrate carrier with the substrate is then placed on the substrate guide, between the impression cylinder and the printing disc. After the printing force has been applied, the print is made automatically. The printing disc is then lifted automatically, after which the substrate is removed for appraisal and the printing disc is cleaned.

It is also possible to print directly onto metal cans: for this purpose they are slid on the impression cylinder, the substrate carrier is not being used in this case.

The printing speed is 0.3 m/s. Since the printing disc can be lifted about 4 mm, thick substrates can also be printed. The printing force can be set between 100 and 1000 N.

IGT Ink pipette

The use of an IGT ink pipette is strongly recommended because it increases the accuracy of application of ink and therefore the inking, thereby enhancing the performance of the tests.

The IGT ink pipette

Printing disc, printing disc holder and substrate guide, impression cylinder

The standard printing disc is covered with coated rubber or a rubber blanket for conventional inks. Discs are also available with rubber or a rubber blanket for UV curing inks. Furthermore, there is a printing disc with an aluminium surface. The weight of the printing discs is less than 200 g, so that they can be weighed on analytical balances.

The guide channel can be rotated about 135°. To the left it functions as a substrate guide and to the right as a printing disc mount. For printing on metal cans, the impression cylinder can be replaced with one of a different diameter.

IGT C1 Printability tester

Excellent reproducibility

TECHNICAL DATA

Inking unit

- Area 720 cm^2
- Two aluminium drums with top roller
- Both aluminium drums driven
- Short inking time: inking unit 30 sec and printing disc 15 sec
- Short cleaning time
- Independent drive

Top rollers

- Elastomer for conventional inks
- Rubber for UV-curing inks

Printing unit

- Printing speed : 0.3 m/s
- Printing force : 100 – 1000 N
- Printing form is automatically brought under pressure, printed and lifted
- Printing form is lifted 4 mm
- Independent drive
- Impression cylinder exchangeable for cylinders with different diameters

Printing disc

- Printing width
  - C1: 15, 35 mm
  - C1-5: 15, 35, 50 mm
  - C1-7: 15, 35, 50, 70 mm
  - Cx3: 35 mm, 3 x 15 mm alongside each other
  - Other widths on request
- Printing length: 210 mm
- Weight: < 200 g
- Types:
  - Rubber, 65 shore A, coated, for conventional inks
  - Rubber, 85 shore A, coated, for conventional inks, 50 mm width only
  - Rubber blanket, for conventional inks
  - Rubber, 65 shore A, for UV-curing inks
  - Rubber blanket, for UV-curing inks
  - Aluminium

General

- Complies with EC directives
- Modern styling
- Inking unit and printing unit in a single appliance
- Simple operation
- Reliable
- Low initial cost
- Possible to use many substrates and inks
- Possible to process metal cans
- 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

Agent

IGT Testing Systems

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

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