

IGT Orange Proofer

Printability tester for offset inks



IGT Testing Systems has been very successful in supplying printability testers to the paper, printing and ink industries for many years. Because of the large demand for a low cost, easy to operate printability tester for offset inks, IGT developed the IGT Orange Proofer for high reproducible results.

IGT Testing Systems supplies the Orange Proofer for offset inks. The Orange Proofer is versatile and yet very easy to operate:

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

APPLICATIONS

Today many printers have their own printing ink laboratories.

The Orange Proofer can be used to make colour strips, to check the quality of the ink on the substrate before using it on the press.

In this way, a quick check of colour matching can be obtained.

Also used in the laboratories of pigment and ink manufacturers the Orange Proofer forms an important tool to check colour, penetration, drying, density and set off.

The Orange Proofer is used in the following industries:

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

IGT Orange Proofer

Modern design, simple to operate



The Orange Proofer, ready for use

PROPERTIES

The principal properties of the Orange Proofer tester are:

- Simple to operate and easily movable
- Extensive processing possibilities for various substrates and offset inks; substrate, ink, and printing form are all simple and quick to change
- Excellent reproducibility; high degree of simulation to on-press performance
- Printing force adjustable
- Low initial cost and low operating costs; complies with the latest CE-standards; provided with detailed instructions for use

The Orange Proofer 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 (in g/m^2), light fastness and resistance to chemicals

- Testing printing quality, mottle and set off

The Orange Proofer can print on all types of coated and uncoated materials:

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

OPERATION

The IGT Orange Proofer consists of an inking unit and a printing unit with removable printing disc (printing form).

The inking unit consists of two aluminium drums and a top roller. For different types of ink, there are different coverings for top rollers. For conventional inks, a standard elastomer is used. For UV-curing inks, a top roller is available which is resistant to these inks and their solvents. To apply the ink as accurately as possible, the use of the IGT ink pipette is strongly recommended. The printing form is placed on a movable arm and then inked on the inking unit.

The printing unit consists of the printing form and an impression cylinder. The substrate is attached to a substrate carrier. The substrate carrier with the substrate is then placed

IGT Orange Proofer

Prints coated and uncoated materials:

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



Making a print



Applying ink with the IGT ink pipette



Inking the printing disc

underneath the shaft of the printing disc. After the printing force has been applied, the print is made, after which the substrate is removed for appraisal and the printing disc is cleaned. The printing speed is fixed at 0.3 m/s. The printing force can be selected between 100 and 800 N.

Printing discs

The standard printing disc is covered with a rubber blanket. Also available is one covered with a coated rubber for conventional inks. Discs covered with

rubber or a rubber blanket for UV curing inks are also available. Printing discs with a weight of less than 200 g are available, so that they can be weighed on analytical balances.

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 ink transfer, thereby enhancing the accuracy and repeatability of the tests.

The IGT ink pipette



IGT Orange Proofer

Excellent reproducibility

TECHNICAL DATA

Inking unit

- Two aluminium drums with top roller
- One aluminium drum driven
- Short inking time: inking unit 30 sec and printing disc 15 sec
- Easy to clean

Top rollers

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

Printing unit

- Printing speed: 0.3 m/s
- Printing force: 100 – 800 N
- Max. substrate thickness: 4 mm
- Independent drive

Printing discs

- Printing width: 50 mm
- Print length: 200 mm
- Range of discs available:

For UV inks:

- Disc with rubber or a rubber blanket

For conventional inks:

- Disc with coated rubber or a rubber blanket

Weight: 25 kg
Width: 620 mm
Height: 320 mm
Depth: 350 mm

Electrical connection:

115 - 230 V / 50 - 60 Hz

General

- Complies with CE directives
- Inking unit and printing unit in a single appliance
- Simple operation
- Low initial cost
- Possible to use many substrates and inks
- Easily movable
- Detailed instructions for use

Agent



IGT Testing Systems

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

IGT Testing Systems
P.O.Box 12688
1100 AR Amsterdam Z.O. The Netherlands
Phone : +31 20 409 9300
Fax : +31 20 697 4842
E-mail : info@igt.nl
Internet : www.igt.nl

IGT Testing Systems, Inc.
Arlington Center
543 West Golf Road
Arlington Heights IL 60005 USA
Phone : +1 847 952 2448
Fax : +1 847 952 2449
E-mail : usa@igt.nl

IGT Testing Systems Pte. Ltd.
Blk 1 Ang Mo Kio Industrial Park 2A
#06-12 AMK Tech 1
Singapore 568049
Phone : +65 6481 8993
Fax : +65 6481 9685
E-mail : singapore@igt.nl

IGT Testing Systems
2F Sagami Bldg., 1-6-14, Omote-cho, Sakura-shi,
Chiba-ken, 285-0811
Japan
Phone : +81 (0)43 483 1795
Fax : +81 (0)43 483 1803
E-mail : japan@igt.nl