## **IGT** Orange Proofers Printability testers for offset inks



**IGT Orange Proofers** are low cost, versatile and easy to operate printability testers to reduce costs in printing and quality control. The Orange Proofers are used in ink laboratories of printing houses and ink manufacturers. With these testers highly reproducible prints are made with offset inks on most substrates. Properties as e.g. colour, transparency, density, ink transfer, penetration can be tested on these prints. The ink tests on the Orange Proofer reduce down-time of the printing press and waste of materials.

- The Orange Proofer prints colour strips of offset inks with a known ink film thickness, which can be used for many purposes
- The Orange Proofer has especially 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

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Today many printers have their own ink kitchen. The Orange Proofer can be used to make colour prints, to check the quality of the ink on the substrate before going to press. This way, a quick check of colour matching can be obtained. Used in laboratories of pigment and ink manufacturers, the Orange Proofer forms an important tool to check colour, penetration, drying, density, set-off and others properties.

#### Orange Proofer use in industries:

- Offset printing ink
- Printing houses
- Paper and board
- Metal, plastics and packaging
- Resins, lacquers, varnishes and coatings
- Raw materials

# **IGT** Orange Proofers

## Modern design, simple to operate



#### IGT ORANGE PROOFER

The printing force is applied manually. Reasons to change the force are a very different substrate, a very different printing form or a different printing form width. If the force is not to be changed regularly the best choice is the Orange Proofer.

#### IGT ORANGE PROOFER M

Printing force is applied using push-buttons on the front of the instrument. In cases where the force used for the prints is changed regulary, e.g. when using different types of ink, different substrates or variation in thickness. If the force is to be changed regularly the best choice is the Orange Proofer M.

#### Purposes

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- Colour measuring
- Visual appraisal
- Density measurement, including establishing colour and density tolerances

• Determination of coverage, transparency, wear

- resistance, abrasion resistance, flexibility, adhesion, gloss, ink transfer (in g/m<sup>2</sup>), light fastness and resistance to chemicals
- Test printi quality, mottle, set-off
- Test paper properties as scumming, strike through, smoothness



#### Properties

- Simple to operate, short learning time
- Minimum amount of variables reducing error sources
- Adjustable printing force
- Fully compliant with ISO 2834, ISO 2846, ISO 12647 and ASTM 7680
- Extensive processing possibilities for various substrates and offset inks
- Substrate, ink and printing form are easy and fast to change
- Excellent reproducibility; high degree of correlation to press results
- Low investment and low operating costs
- Can print on all types of coated and uncoated materials: paper, board, plastic film, cellophane, laminates, metals, etc.
- Print width max 50 mm (standard) en 70 mm (OP 70)

## **IGT Orange Proofers** Print coated and uncoated materials



#### **IGT ORANGE PROOFER X3**

Printing force is applied using push-buttons on the front of the instrument. The device can print three prints adjacent to each other on the same substrate in three subsequent prints. This is needed in case density or colour tolerances are to be determined on the same substrate, e.g. strips of paper, board, plastic, metal plate, cans (diameter 63-68 mm). If there is a regular need for a number of prints on the same substrate the best choice is the Orange Proofer x3.

#### IGT ORANGE PROOFER 70

Printing force is applied using push-buttons on the front of the instrument. With the Orange Proofer 70 it is possible to use printing discs with different width. The device is especially designed to print directly on e.g. credit cards or on substrates used for abrasion tests with a maximum print width of 70 mm. If there is a regular need for a wider print the best choice is the Orange Proofer 70.



Inking the printing disc

#### Operation

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

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

The printing unit consists of a printing form and an impression cylinder. For conventional and UV-inks different printing forms are available. The substrate is attached to a substrate carrier. The substrate carrier with the substrate is placed on the impression cylinder. The printing disc is taken from the inking arm and placed on the shaft of the printing unit. After the printing force has been applied, the print is made. The printed 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 set between 100 and 900 N. See instruction video on **www.igt.nl**.



# IGT Orange Proofer

### Specifications

#### TECHNICAL DATA

#### Inking unit

- Area 720 cm<sup>2</sup>
- Two aluminium drums with top roller
- One aluminium drum driven
- Short inking time: inking unit 30 s and printing disc 30 s
- Independent drive

#### **Printing unit**

- Printing speed: 0,3 m/s
- Printing force: 100 900 N
- Max. substrate thickness: 4 mm
- Independent drive

#### **Printing discs**

- Standard print width :
  - Orange Proofer : 50 mm
  - Orange Proofer 70 : 70 mm
  - Orange Proofer x3 : 3x15 mm for
- Print length: 200 mm
- Standard covering: rubber blanket for conventional or UV-curing inks

• Specials: halftone photopolymers Other discs request

#### **Top rollers**

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

#### General

- Inking unit and printing unit in a single appliance
- Simple operation
- Low initial cost
- Possible to use many substrates and inks

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

#### Electrical connection:

90 - 245 V / 50 - 60 Hz



## IGT Testing Systems

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

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