Ultra-fast inking unit for offset inks



The IGT High Speed Inking Unit 4 has been developed to ink printing discs fast and with highest accuracy with a well defined ink layer thickness. These discs can be used on the IGT printability testers AIC2-5 and all versions of the IGT Global Standard Testers. Many modern inks dry very quickly and this means that it may be impossible to ink the printing discs with these type of inks on the AE inking units. The use of the IGT High Speed Inking Unit 4 also reduces the inking times dramatically.

APPLICATIONS

The High Speed Inking Unit 4 is used to ink printing discs for:

- Use with the IGT printability tester AIC2-5
- Use with all versions of IGT Global Standard Testers
- Inking with conventional offset inks
- Inking with UV-drying offset inks
- · Inking with pick test oils
- · Inking with temperature control
- · Very short inking times
- Inking up to 4 colours or inks at the same time

OPERATION

The IGT High Speed Inking Unit 4 consists of a rubber top roller and two steel distribution rollers, which can be heated or cooled by an external temperature control unit.

The top roller can be used to ink a maximum of 4 printing discs. The inking speed can be adjusted from 0.2 to 1.2 m/s.

The High Speed Inking Unit 4 is used in the following industries:

- Printing ink, paper and board, printers
- · Metals, plastics and packaging
- · Resins, lacquers and coatings
- · Raw materials
- Training centres and research institutes



Quick and easy to operate



IGT High Speed Inking Unit 4 with cover

PROPERTIES

The IGT High Speed Inking Unit 4 is an ultra-fast inking unit, which can be used to ink a maximum of 4 printing discs simultaneously.

The technical design of this inking unit enables the user to reduce the total inking time to 15 seconds. The unit is computer controlled and all settings as well as the operating instructions can be read on the large display.

The operating temperature of the IGT High Speed Inking Unit 4 is selectable between 15 and 45°C. This is particularly important at the high distribution speeds, which generates heat, affecting the tack and viscosity of the inks and consequently the test results. The temperature is controlled by means of a thermostatic bath, which can be used to either heat or cool the unit.

The thermostatic water bath is not supplied by IGT, but is readily available from most laboratory supply companies.

- Inking speed adjustable from 0.2 to 1.2 m/s
- System distribution time adjustable from 5 to 200 s
- Printing disc inking time adjustable from 5 to 200 s.
- Computer controlled process
- Top rollers available with 1, 2 or 4 sections
- Inking time separately adjustable for each printing disc
- Extremely precise inking times
- Printing discs lifted automatically after inking
- · Quick and easy to operate
- Sturdy construction
- Temperature control also precludes the influence of high speed or ambient temperature
- Supplied with an IGT ink pipette
- Suitable for printing discs used on IGT AIC2-5 and IGT Global Standard Testers



The ink is applied in three stages. The top roller can be adjusted to three positions to ensure the ink is applied as effectively as possible. After the unit has distributed the ink evenly, the printing discs are brought into contact with the top roller and inked for the selected preset time. A special feature of this unit is that the printing discs automatically lift of the top roller as soon as the set inking time elapses. The printing discs can also be lifted manually. The unit can be preset to perform three types of inking sequences. Through use of the display menu, one of the three inking

 Set the distribution time and speed. As soon as the preset time elapses, inking of the printing disc starts.

sequences can be selected:

- Set the distribution time and speed and set the ramp-up time to reach the selected speed. As soon as the preset time elapses, inking of the printing disc starts.
- 3. Set the distribution time and speed. Set a 2nd distribution time and speed and set the ramp-up time to reach that speed. As soon as the preset time elapses, inking of the printing disc starts.

Temperature control

The temperature can be controlled by means of a thermostatic bath, which can either heat or cool the unit. The two distribution rollers are kept at the required temperature and the top roller adopts the same temperature.

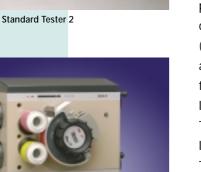
Computer controlled process

Inking with conventional offset inks, UV-drying offset

inks and pick test oils



IGT Global Standard Tester 2



IGT AIC2-5

Accurate temperature control is important for pick tests and when studying the properties of inks at different temperatures

(e.g. inks for dry offset printing). The accuracy of the temperature control facility is also required in standardized laboratory work.

The real time temperature of the rollers is shown on the display. The thermostatic bath is not part of the standard supply, but can be purchased from most general laboratory supply companies.



The High Speed Inking Unit is provided with a transparent cover over the rollers to prevent dusting of the applied ink and to prevent outside influences. The cover can be opened easily to apply the ink, to place or take off the printing discs or to clean the system.



The display of the inking unit

Cleaning

The software program contains a separate module for cleaning. The module ensures that cleaning is fast and safe, the top roller can be lifted automatically to facilitate the cleaning process.

IGT ink pipette

The IGT ink pipette is required to apply offset inks to the top roller. The ink pipette significantly increases the accuracy of the ink application and thus the results of the tests.



IGT Ink pipette



Extremely precise inking times

TECHNICAL DATA

• Top roller 1, 2 or 4 sections

· Inking surface area

4 x 328 cm² (4 segments)

2 x 729 cm² (2 segments)

1 x 1537 cm² (1 segment)

Inking speed 0.2

0.2 – 1.2 m/s

Distribution time

5 - 200 s

• Inking time

5 - 200 s

• Temperature range

15 – 45° C

Maximum printing disc width 50 mm

General

· Complies with EC directives

• Modern design

• Computer controlled process

· Simple operation

Reliable

· Low initial cost

· Easy to move

• Detailed instructions for use

Weight: Height:

55 kg

Width:

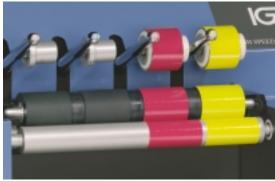
300 mm 860 mm

Depth:

380 mm

Electrical connection:

115/230V/50-60 Hz



Printing discs are lifted automatically

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

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