

# IGT AIC2-5

## Multi purpose printability tester



IGT Testing Systems has for many decades been supplying the well-known AIC2-5 printability tester for making numerous types of tests on different substrates and inks in quality control and research.

- Can test small quantities of ink and substrate in conditions simulating actual practice.
- Makes colour strips using various inks on different substrates, which can be used for numerous purposes.
- Saves costs because fewer tests need to be made on the printing presses.

### APPLICATIONS

The test strips made with the AIC2-5 printability tester are suitable for many purposes:

- Measuring colour using colour measuring systems/ spectrophotometers
- Use in colour matching systems

### The AIC2-5 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



# IGT AIC2-5

Modern software, simple to operate



The IGT AIC2-5 suitable for many test purposes

## PROPERTIES

The principal properties of the AIC2-5 tester are:

- Simple to operate due to the modern software, very reliable and sturdy construction for intensive use over a long period, easy and quickly to clean
- Many accessories available for a wide range of processing possibilities for various substrates and offset, gravure and flexo inks; substrate, ink and printing form are simple and quick to change
- Repeatability and reproducibility is extremely good
- Printing force continuously adjustable from 50 to 1000 N
- Two speed types which are both adjustable continuously:
  - Constant speed: 0.2 – 5 m/s
  - Increasing speed: 0.5 – 7 m/s
- Extra time interval between 1st and 2nd printing form, adjustable from 0.2 to 120 s to an accuracy of 0.1 s
- Suitable for two printing forms
- Maximum printing width 50 mm
- Low initial cost and low running costs; complies with the latest standards; provided with detailed instructions for use

- Visual appraisal
- Density measurements, including establishing colour and density tolerances
- Determination of coverage, wear resistance, abrasion resistance, flexibility, adhesion and gloss, ink transfer (in g/m<sup>2</sup>), light fastness, resistance to chemicals, etc.
- Testing printing quality, picking, wet pick and wet repellence, roughness, printing penetration, set-off, striking through, mottle, loose and weakly bound paper particles, etc.

The AIC2-5 prints all sorts of materials:

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

## OPERATION

The AIC2-5 printability tester consists of an impression cylinder and a choice of one or two printing forms (printing discs). The printing forces, speed and interval time between the first and second printing disc are adjustable. The printing discs, which are inked on the High Speed Inking Unit 4, are printed on the substrate, which is mounted on the impression cylinder. Many sorts of printing discs are available in various widths for the different tests and inks. When setting the highest speed, interval times of 0.014 s can be achieved. This makes it possible to set practically all the

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Prints all sorts of materials:

Paper, board, plastic film, cellophane, laminate,

metal, etc.



The IGT High Speed Inking Unit 4 for ultra-fast inking



The IGT AIC2-5 suitable for two printing forms

interval times of the printing presses. The printed strip is then used for the assessment.

For the various tests, the impression cylinder can be provided with a range of different coverings.

Many accessories are

available, which can be attached to the printability tester. This enables many different types of tests to be made.

## Inking unit

The recommended inking unit for the AIC2-5 is the IGT High Speed Inking Unit 4. This device consists of two steel rollers and an elastomer top roller. A selected amount of ink is applied to the system, the ink is distributed and the printing discs are inked. After this, the printing disc is placed on the AIC2-5 and the test is made. The High Speed Inking Unit 4 can be temperature controlled and due to the construction of the unit and the adjustable speed, very short inking times are possible. So all types of quick drying inks can be used.

## IGT ink pipette

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



IGT Ink pipette

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## Excellent reproducibility

### TECHNICAL DATA

#### Printing unit

- Printing speed:  
constant 0.2 – 5 m/s  
increasing 0.5 – 7 m/s
- Printing force: 50 – 1000 N
- Extra interval time: 0.2 – 120 s
- Number of printing discs: maximum 2

#### Printing discs

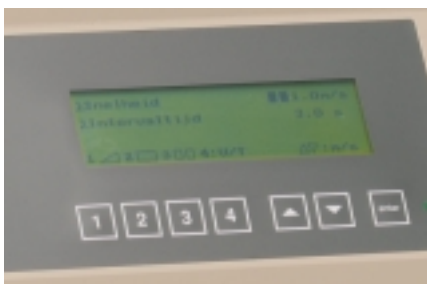
- Printing width: 10, 20, 35 and 50 mm
- Printing length: 200 mm
- Types:
  - Rubber, 85 shore A, coated, for conventional inks
  - Rubber, 65 shore A, coated, for conventional inks
  - Rubber blanket, for conventional inks
  - Rubber, 85 shore A, for UV-curing inks
  - Rubber blanket, for UV-curing inks
  - Aluminium
  - Also light weight versions < 200 g

#### Inking unit

- Top roller 1, 2 or 4 sections
- Inking surface area  
4 x 328 cm<sup>2</sup> (4 segments)  
2 x 729 cm<sup>2</sup> (2 segments)  
1 x 1537 cm<sup>2</sup> (1 segment)
- Inking speed 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

#### Top rollers

- For conventional inks, 1, 2 or 4 sections
- Rubber for UV-curing inks, 1, 2 or 4 sections



The display of the AIC2-5

#### General

- Complies with EC directives
- Inking and printing unit in separate devices
- Many accessories available
- Simple operation
- Reliable
- Low initial cost
- Processing of many substrates and inks possible
- Easy to move
- Detailed instructions for use

#### AIC2-5 /

#### High Speed Inking Unit 4

Weight:	97 kg	55 kg
Height:	500 mm	300 mm
Width:	440 mm	860 mm
Depth:	500 mm	380 mm

#### Electrical connection:

AIC2-5	115 – 230 V/ 50 – 60 Hz
High Speed Inking unit 4	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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