

Testing conditions:

Printability tester	AIC2-5	art.nr. 414
Printing disc	light weight, covered with coated rubber, 50 mm wide	art. nr. 402.333 ***)
Printing force	625 N	
Printing speed	0.2 m/s	
Packing	none	
Ink	ink to be tested	
Ink film thickness on printing disc	2.0 - 4.8 μ m	

Method of operation:

1. Apply the ink to the inking unit, distribute the ink and ink the printing disc as mentioned.
2. Take the printing disc from the inking unit and weigh the printing disc on a laboratory scale with an accuracy of 0.1 mg or better (weight = G_1 g).
3. Place the printing disc on the shaft of the printability tester and make a print on the substrate to be tested following the testing conditions as mentioned.
4. Take the printing disc from the printability tester and weigh the disc again (weight = G_2 g).
5. Calculate the amount of ink (G_a) transferred to the paper with the formula

$$G_a = G_1 - G_2.$$
6. Take the printed strip from the printability tester and measure the sizes. The printed surface area is $5 \times 20 \text{ cm} = 100 \text{ cm}^2$. The ink transfer per $100 \text{ cm}^2 = G_a$ grammes
7. Calculate the ink transfer in g/m^2 with the formula:

$$G_{\text{g/m}^2} = G_a \times 100.$$

Dependent to the results it can be necessary to change the testing conditions:

- * the type of printing disc:
 - 402.055 rubber blanket disc for rough papers
 - 402.059 UV rubber disc for UV inks
 - 402.072 UV rubber blanket disc for UV inks on rough papers
- * ink film thickness:

Dependent to the absorption and roughness of the paper an ink film thickness between 2.4 and 4.8 μ m can be used: for less absorbent and smooth papers the lower ink film thickness of 2.4 μ m is advised, for more absorbent and rougher papers a thicker ink film until 4.8 μ m or even more is advised.

***) To ink this disc on the inking unit belonging to the AIC2-5, 2 adaptors have to be used (1 for the inking unit and one for the AIC2-5). The reason for this is the printing disc has a larger opening to mount on the shaft of the instruments than the diameter of the shaft of the instrument is.