Adhesion – Tape

1. Field of application
   Method used to test the degree of adhesion of a printed ink/varnish to a printing substrate.

2. Principle
   A piece of tape is applied on top of the dried/cured ink/varnish. The tape is removed by hand from the printed surface. The adhesion of the ink is determined by the amount of ink that has been removed when the tape was peeled off.

3. Equipment

4. Chemicals/articles of consumption
   4.1 Standard tape from Tesa Film, 57341 Beiersdorf. Also Tesa 4104, 4202 och Scotch 610, 810 are commonly used testing tapes within the industry
   4.2 Printing substrate
   4.3 Printing ink/varnish

5. Application
   5.1 Sample preparation
   The ink/varnish is applied to the substrate and dried/cured on a printing press or by using STM2000S, STM2001S, STM2002S or STM2031S when printing in the laboratory.
   The printed sample can be tested direct or 24 h after the drying/curing.

   5.2 Testing
   Lay the specimen on a flat hard surface. Apply a 3-5 cm long strip of the tape on the dried/cured surface of the ink/varnish.
   Press down the tape by a finger so no air bubbles are trapped between the printed surface and the tape.
   Wait for 5 s. The tape is then pulled of either slowly or rapidly by hand.
   Estimate how much of the ink/varnish that has been removed by the tape.

6. Result
   5 = Excellent The ink/varnish has not been affected.
   4 = Good Minimum of the ink/varnish has been removed from the substrate.
   3 = Average Moderate removal of the ink/varnish.
   2 = Poor Servere removal of the ink/varnish.
   1 = Very poor Complete or almost complete removal of ink/varnish.