

**PAINTS AND SIMILAR PRODUCTS
RUN LIMIT**

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NO USE RESTRICTION*This is a translation, the French original shall be used in all cases of litigation**Date of translation : 22/07/2002***1. OBJECT AND FIELD OF APPLICATION**

The object of this méthode is to determine the minimum thickness of a film of product, at which a certain incipient run may be observed.

2. PRINCIPLE

On a metal substrate vertically positioned, a coat of the product of an increasing thickness is deposited. The minimum thickness of the product deposited is determined at the place where the start of the run is observed. Holes are made in the substrate in such a way as to encourage the run phenomenon.

3. EQUIPMENT

- Pierced sheet metal plate, 300mm x 200mm x 0,9mm for example (see figure 1)
- Application equipment
- Ventilated oven controlled from 20°C to 250°C, to within 2°C
- Thickness measuring equipment (méthodes d'essai D25 1350 and D25 1378)
- Abrasive paper
- Chronometer
- Spray booth with forced air
- Product prepared in accordance with méthodes d'essai D55 1016 and D55 1339.

4. METHOD OF OPERATION

- If necessary sand the undercoat in relation to the specification.
- Apply a single coat of diluted product on the test specimen which is held vertically.
- Pre-dry or not, according to the specification.
- Apply a second single coat of the product, offset towards the right approximately 35 mm from the left edge of the test specimen, then a third coat offset approximately 35mm from the second and so on, in successive coats offset in 35 mm steps. The thickness of the dry film on the right side of the plate shall be approximately 80 micrometres (see figure 1).
- After the last coat, pre-dry or not, according to the specification, with the plate maintained in a vertical position.
- Stove the plate in a vertical position in accordance with the stoving shown in the cahier des charges.
- Allow to cool at ambient temperature for a minimum of 2 hours.
- Mark on the plate the hole which exhibits a run of approximately 10mm, this length being taken from the lower edge of the hole being considered to the extremity of the run.
- Measure the thickness of the film between two holes, the hole on the left showing the start of the run to the extent of 10mm, E2 shall be this thickness (see sketch figure 1)
- Remove the film of product with a very fine abrasive paper until the undercoat appears (see sketch figure 2).
- Measure the remaining thickness: let this thickness be E1.

Note:

- *In the case of an application of a primer coat product proceed in the same way, but instead of measuring the thickness of the undercoat, a measurement is taken of the thickness of the surface treatment before application of the product to be tested.*
- *In the case of a wet on wet double coat (eg pigmented base and lacquer) the part to be tested is applied through a gradual range ; alone or with the other product deposited at a constant thickness which is defined by the cahier des charges or by the specification envisaged .In this case this thickness can be confirmed by applying abrasive paper for a second time, as soon as the measurement of the primer coat has been made.*

5. EXPRESSION OF RESULTS

The results shall be defined by the thickness in micrometres measured at the location shown in figure 1.
 $E = E2 - E1$.

6. TEST REPORT

As well as the results obtained, the test report must indicate the details of procedure not specified in this méthode method as well as any possible incidents likely to have affected the results.

FIGURE 1
Arrangement of coats and principle of run limit.

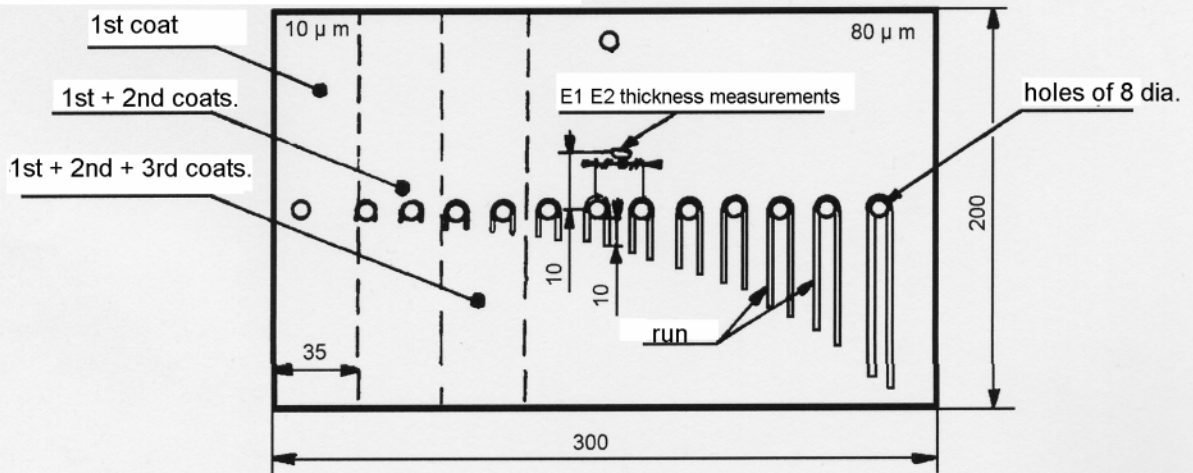
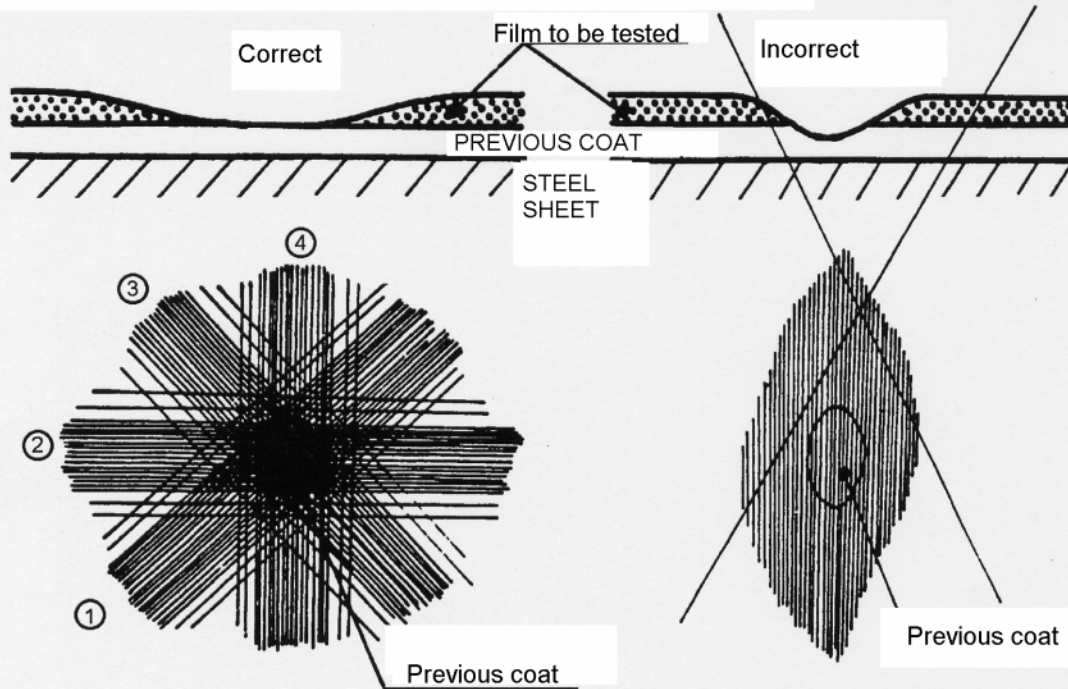


FIGURE 2
Principle of application of abrasive paper down to the previous coat.



Carry out the application by successive rotation in accordance with 1-2-3-4(etc) until the previous coat is visible.

7. RECORDS AND REFERENCE DOCUMENTS

7.1. RECORDS

7.1.1. CREATION

- OR : 01/01/1981 – CREATION OF THE NORME.

7.1.2. SUBJECT OF THE MODIFICATION

- A : 30/12/1996 – INTRODUCED INTO IDEM (*French edition only*).

7.2. REFERENCE DOCUMENTS

7.2.1. PSA DOCUMENTS

7.2.1.1 Normes

D25 1350, D25 1378, D55 1016, D55 1339.

7.2.1.2. Others

7.2.2. EXTERNAL DOCUMENTS

7.3. EQUIVALENT TO :

7.4. CONFORMS TO :

7.5. KEY-WORDS