

**DECORATIVE COATINGS AND PARTS
SUBJECT TO FRICTION
RESISTANCE TO ROTARY ABRASION**

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No use restriction**FOREWORD**

This document conforms technically to the test method RENAULT no. 1425.

It must not be modified without prior consultation with RENAULT.

It is in conformity with the agreement reached between the Standardization Departments of PEUGEOT Company and RENAULT in JUNE 1983.

1.OBJECT AND FIELD OF APPLICATION

The object of this method is to check the resistance to friction of the plastic parts that have a decorative coating such as metallization, paint, hot stamping, coating, as well as of any other inside part of the "wearing" category, i.e. having a surface that might be subject to friction upon use.

2.PRINCIPLE

The surface of a test specimen with appropriate dimensions is submitted for a specified duration to rubbing with six strips made of reference fabric, mounted on a device that turns at given speed.

3.EQUIPMENT**3.1.ELECTRIC ENGINE**

of approximately 200 W power, possibly equipped with devices that allow reaching the rotation speed of 1400 rpm \pm 50 rpm.

3.2.STRIP HOLDER DEVICE

composing of a drum assembled on the engine shaft (see sketch in the appendix).

3.3.STRIPS**3.3.1.REFERENCE MATERIAL FOR STRIPS (INDICATED IN THE DOCUMENTS)**

- type A: chamois
 - weight per square meter: 300 g \pm 50 g,
- type B: cotton woven fabric 100 % unbleached as-weaved, ref. 171 from COISNE et LAMBERT company 68 Lille Street 59280 ARMENTIERES Phone: (20) 77.07.07 (Support employed by RENAULT).
 - weight per square meter: 215 g,
 - 25/26 warp yarns/cm, single-twist thread of 41 tex,
 - 25/22 weft yarns/cm, single-twist thread of 41 tex,

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3.3.2.PREPARING THE STRIPS

The strips are cut out from reference material A or B. They are 40 mm wide.

Their length is designed so as, once they are mounted on the strip holder device, either as such (material A) or folded (material B), their end is at 110 mm of distance from the rotation axis of the device.

3.4.TIMER.

4.TEST SPECIMENS

The test can be performed on entire parts, or on sections of parts.

The rubbed area must be preferably flat or slightly skew. Eliminate to the possible extent the areas with sharp angles, less significant for the test.

5.CONDITIONING AND TEST ATMOSPHERE

The test specimens and the reference fabric strips are conditioned in an atmosphere at $23\text{ °C} \pm 2\text{ °C}$ and $50\% \pm 5\%$ of relative humidity for at least 24 hours.

The tests must be performed in the same atmosphere.

6.PROCEDURE

6.1 Examine the test specimen before the test and note its appearance, its shade, etc.

6.2 Fasten the test specimen so as the distance between the surface to be examined and the axis of rotation of the device is of $90\text{ mm} \pm 2\text{ mm}$.

6.3 Mount the strips prepared as indicated in 3.3.2 on the strip holder drum and tighten the end or both ends of the strips in the jaws designed for this purpose.

6.4 Turn on the device for the duration specified in the documents.

6.5 At the end of the test, stop the device and note the modifications of appearance and the degradations of the surface of the test specimen.

6.6 For each new test, use new strips.

7.EXPRESSION OF THE RESULTS

Indicate any degradation by modification of the appearance or of the characteristics, or by loss of weight.

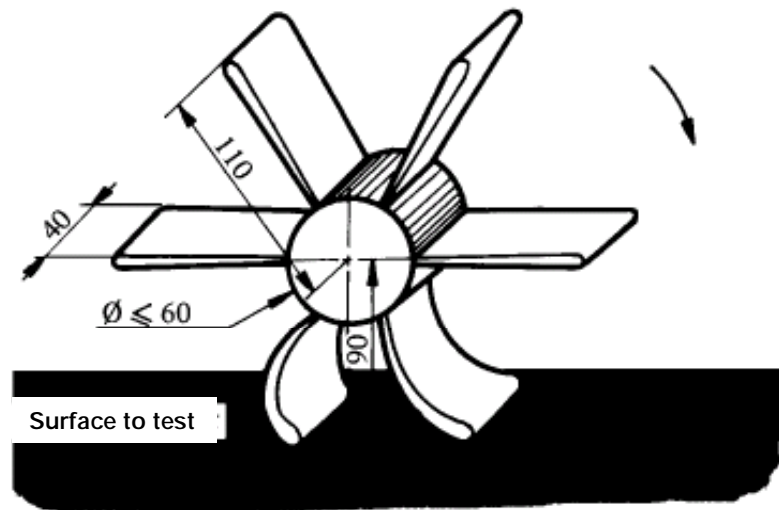
8.TEST REPORT

Besides the obtained results, the test report must indicate:

- the reference to this method,
- the reference of the part to be examined,
- the type of strip employed,
- the test length,
- the type of ageing applied before the abrasion test,
- the procedure details that are not specified in the method, as well as the possible incidents that might have influenced the results.

appendix

TEST EQUIPMENT WITH THE TYPE B MATERIAL STRIPS



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9.RECORDS AND REFERENCE DOCUMENTS

9.1.RECORDS

9.1.1.CREATION

- OR : 01/09/1983 CREATION OF THE NORM.

9.1.2.SUBJECT OF THE MODIFICATION

- A : 30/12/1996 RECOVER UNDER IDEM
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9.2.REFERENCE DOCUMENTS

9.2.1.PSA DOCUMENTS

9.2.1.1.Norms

9.2.1.2.Other

9.2.1.3.external documents

9.3.EQUIVALENT TO:

9.4.IN CONFORMITY WITH:

9.5.KEYWORDS