

**RESISTANCE OF PAINTED PLASTIC PARTS TO
HIGH PRESSURE CLEANING OPERATIONS**

Application

This procedure defines the test equipment and test method for the resistance of painted plastic parts (e.g., bumper bars, mirror housings, radiator grills) against high pressure cleaning processes.

Equipment Required

High Pressure Cleaning Equipment

Frank Type HW 810 DFS or equivalent

Source: Frank'sche Eisenwerke AG
D-6340 Dillenburg/Hessen

Moving Head

Source: Firma
Kunze Maschinenbau GmbH
D-6091 Drebur

Jet type 2506
Angle 25°
Diameter 0.6 mm

Settings

Water temperature	80 +/- 2 °C
Moving range	20 +/- 10 mm from center
Moving cycle	60 cycles/minute
Moving direction	Parallel to specimen
Jet position	Perpendicular to specimen
Test pressure	6000 kPa
Distance to part	100 mm
Testing time	120 s
Water flow	750 L/h

Note: All settings must be measured directly at the jet.

Date	Action	Revisions
2001 04 10	Revised	Editorial – no technical change A. Cockman
1996 08 22		

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Conditioning and Test Conditions

All test values indicated herein are based on material conditioned in a controlled atmosphere of 23 +/- 2 °C and 50 +/- 5 % relative humidity for not less than 24 h prior to testing and tested under the same conditions unless otherwise specified.

Procedure

Prepare test specimen in line with relevant Material or Performance Specifications. After the required ageing period all test parts must be cross hatched with an "Andreas Cross" (30° angle) down to substrate.

1. The equipment is filled with water without any additional cleaning agents and heated to 80 +/- 2 °C.
2. Before testing the equipment must be adjusted to the required test pressure for the specified distance.
3. The gun with the nozzle is fixed to the required distance from the nozzle to the painted surface which is to be tested. The jet of water has to be directed vertically onto the painted surface.
4. Spray water for the specified length of time.
5. The surface is dried and evaluated after cooling to 23 +/- 2 °C.
6. Report any failure (e.g., loss of gloss, loss of adhesion, surface deterioration).

Chemicals, materials, parts, and equipment referenced in this document must be used and handled properly. Each party is responsible for determining proper use and handling in its facilities.