

Sanitary Components

Technical document 076-01

Complementary specifications
applicable to all the families of
products

Technical document 076-01 rev. 10
01/09/2018

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Modification history

Revision No.	Date	Modifications
10	01/09/2018	Update to the document introduction and reference.

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1. NICKEL-CHROME PLATING – COMPLEMENTARY SPECIFICATIONS

1.1 Plating quality

1.1.1 Testing the corrosion resistance - Test under acetic acid salt spray

Procedure

Carry out the test according to the guidelines in Standard ISO 9227, in the following way:

- Submit the partially disassembled products and the accessories to spraying during 24 h, stopping for 4 h half-way through the treatment. During the spraying halt, keep the heating of the tank at $35 \pm 2^\circ\text{C}$.
- During the whole duration of the tests, the tank shall not be opened.
- The pieces tested shall undergo neither manipulation, nor washing, nor verification.
- The pH shall be from 3.1 to 3.3.
- After treatment and before visual inspection, rinse the pieces with water to remove all saline residues.
- After the test, examine the surfaces with the naked eye at a distance of about 300 mm, without magnifying instrument, in every direction, under a light positioned above the product tested, daylight type, diffuse, producing an illumination of $400 \text{ lux} \pm 40 \text{ lux}$.

Required outcome

At the end of the acetic acid salt spray (AASS) test, the visible surfaces shall contain no defect.

1.1.2 Checking the plating's adhesive strength – Test for resistance to thermal shocks

This test applies only to coated plastics.

The test is carried out according to the requirements of Standard **NF EN 248, Article 5.2.**

It is allowable that the test specimen undergoes the temperature variation profile shown by the black curve in figure 1.

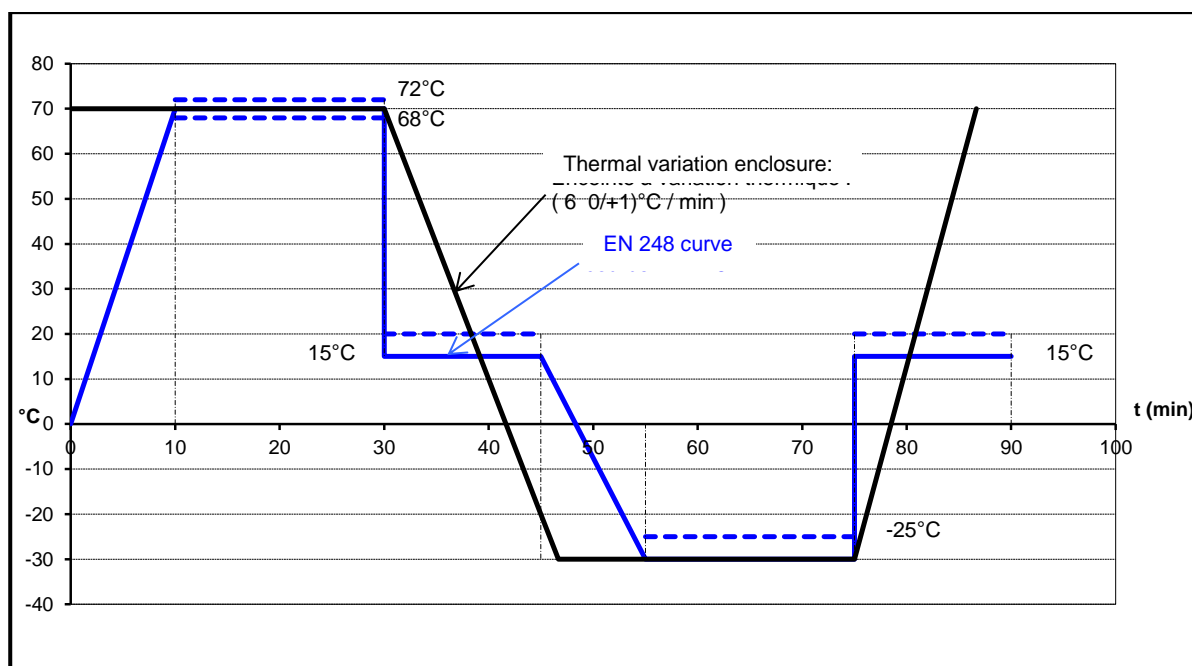


Figure 1: Tolerances on the test temperatures as a function of time

The tests at high and low temperatures shall be carried out under dry air circulation.

Required outcome

At the end of the thermal shock resistance test, the visible surfaces shall contain no defect.

2. QUALITY CONTROL OPERATIONS ON THE MOULDED PARTS

2.1 General description

Quality control operations on the moulded pieces after keeping the pieces in the oven for one hour, at a temperature determined as a function of the material.

2.2 Apparatus

Oven with air thermoregulated to within $T^{\circ}\text{C} \pm 4^{\circ}\text{C}$, with a heating power such that the temperature will be restored no more than 10 min after the test specimens have been introduced.

2.3 Test specimens

The test specimen consists of a complete piece (nut, tap body, etc.).

2.4 Procedure

- Introduce the test specimens into the oven, heated in advance to a temperature equal to the softening temperature communicated by the manufacturer;
- Place them on one end so that they will not be able to touch each other during the test;
- Make sure that the temperature is restored to within $T^{\circ}\text{C} \pm 4^{\circ}\text{C}$ in less than 10 min; as the exposure period start, note the instant when the oven reaches that temperature;
- After 1 hour, remove the test specimens from the oven, taking care not to deform them, nor to damage them;
- Leave the specimens to cool in the air until they can be handled;
- After cooling, visually inspect the specimens.

2.5 Specifications

- The test specimens shall contain no surface defects (splits, shrinkage, crazing), in particular on the weld seam and in the neighbourhood of the injection point.

3. COMPATIBILITY WITH THE SUPPLY NETWORK'S DISINFECTION PRODUCTS

3.1 Methodology

All the materials used, in particular the check valve of the mechanism or the check valves of the valve, shall be compatible with water of the networks that has undergone a treatment with potassium permanganate or sodium hypochlorite.

3.2 Test

That compatibility is verified by keeping the internal parts of the device in contact:

- during 96 h with a solution containing 0.30 g of potassium permanganate per litre of deionised water (Resistivity $\geq 400\ 000$ Ohms.cm), or
- during 24h with a solution containing 0.10 g of sodium hypochlorite per litre of deionised water (Resistivity $\geq 400\ 000$ Ohms.cm).

3.3 Specification

No alteration of the materials shall be observed. This requirement is verified by carrying out the fatigue limit (endurance) test following this test.