

SANITARY TAPWARE
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Complementary specifications applicable to surfaces with plating other than NICKEL-CHROME plating

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MODIFICATION HISTORY

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01	02/04/2019	Update to the document layout and reference. Technical Document No. 1 divided into 6 technical documents No. 01A to 01F
02	24/11/2022	Deletion of standards publication year.

TABLE OF CONTENTS

1.	Non nickel-chrome surface – complementary specifications	5
1.1	Purpose.....	5
1.2	Field of application.....	5
1.3	Reference.....	5
1.4	Definition of significant surfaces.....	5
1.5	Status of significant surfaces	5
1.6	Significant surface defect	5
1.7	Coating quality	5
1.7.1	Corrosion resistance control – acetic acid salt mist test.....	5
1.7.2	Coating Adhesion Control - Sectioning test.....	6

1. NON NICKEL-CHROME SURFACE – COMPLEMENTARY SPECIFICATIONS

1.1 Purpose

The purpose of this document is to:

- to define the status of significant tapware surfaces;
- to establish surface coating characteristics (corrosion resistance, adhesion);
- to describe the tests used to verify compliance with those requirements.

1.2 Field of application

This document applies to all sanitary tapware with a coating that is not subject to standard NF EN 248.

1.3 Reference

ISO 9227 – Corrosion test in artificial atmospheres - Salt spray tests

1.4 Definition of significant surfaces

“Significant surface” refers to any part of the item covered or to be covered by the coating, when the coating plays an essential role in the use and/or appearance of the installed item.

For example, the interior surfaces of hollow parts, such as braces, caps, covers, etc. are not considered significant surfaces.

1.5 Status of significant surfaces

Significant surfaces must be effectively protected against corrosion, either by the type of materials themselves or by a suitable coating.

1.6 Significant surface defect

Significant surfaces must not contain any defects before testing.

The surfaces are examined with the naked eye, at a distance of about 300 mm, without magnifying apparatus.

1.7 Coating quality

1.7.1 Corrosion resistance control – acetic acid salt mist test

Requirements

After the acetic acid mist test, the visible surfaces must not have any defects.

Operating procedure

Conduct the test under the conditions specified in Standard ISO 9227 as described below:

Subject the tapware devices, partially disassembled, and the components to spraying during (24 ± 0.5 h), arranging a pause of (4 ± 0.5) h half-way through the treatment, i.e. after the first ($12+0.5$) hours of spraying. During the spraying pause, maintain the heating of the tank.

The tank must not be opened throughout the duration of the tests.

The heating must never be shut off.

The parts tested must not be handled, washed or inspected.

The pH must be between 3.1 and 3.3.

Rinse the parts with water after treatment and before the visual examination, to eliminate any salt residue.

After the test, examine the surfaces with the naked eye from a distance of (300 ± 50) mm without magnifying apparatus.

1.7.2 Coating Adhesion Control - Sectioning test

Requirements

Following the test, repeated at three different locations, the coating shall neither scale nor separate.

Operating procedure

On one part of the coated surface, use a cutting tool with a tungsten carbide tip of the kind shown in Figure 1 to cut a grid over $((15 \times 15) \pm 3)$ mm; the grid should be cut by pulling the chisel handle parallel to the surface. The spacing of the cut lines shall be up to 3 mm and the depth shall be such that they completely cut through the coating, without forcing that coating into the base metal.

Repeat the test at three different locations.

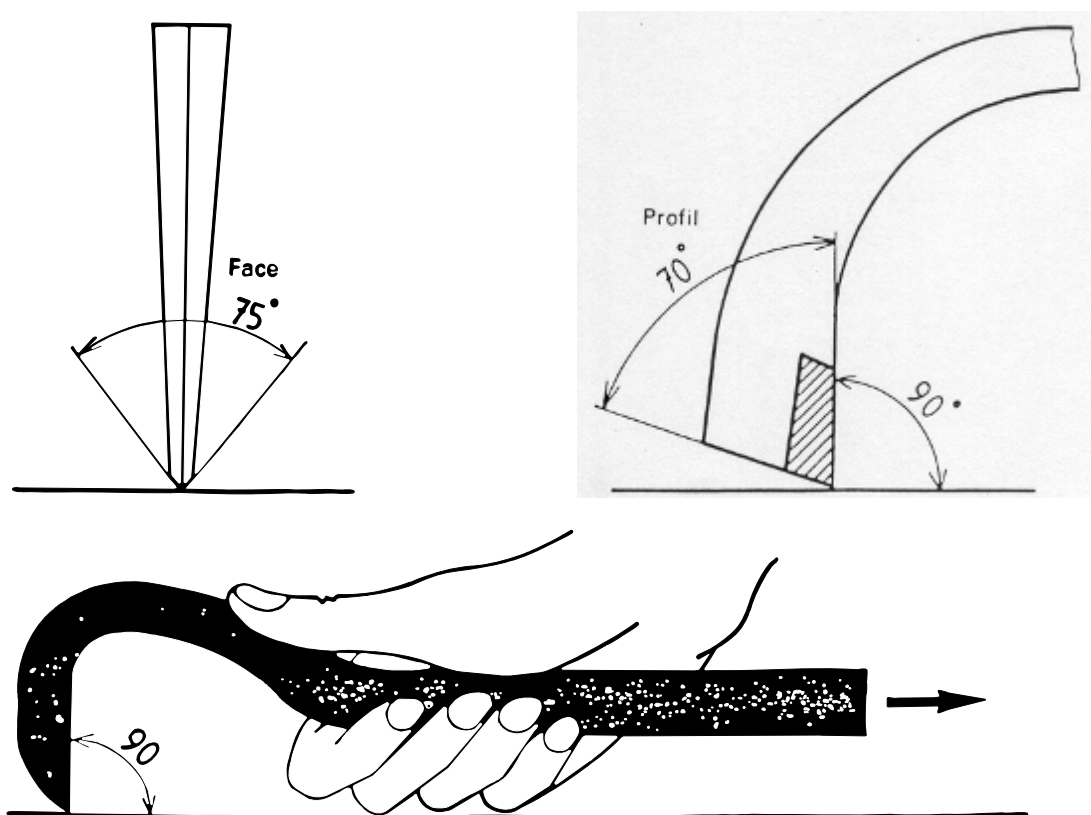


Figure 1

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