



316 Marine Grade Stainless Steel Hardware

KM930 / KM960 / KM965 / WH990 Lever Door Handle on Oval Rose

EN 1670:2007 CORROSION (SALT SPRAY) TEST REPORT

Conducted by:

White Technology and Engineering Ltd





EN 196070:2007 CORROSION (SALT SPRAY)



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TEST REPORT



Title: Coastal Hardware -

Evaluation to EN 1670:2007

Report Number: WTE-21-028-3

On behalf of: Coastal Specialist Ironmongery

Limited

Global House

Bojea Industrial Estate

Trethowel St Austell Cornwall PL25 5RJ

Date: 29 August 2021

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Coastal Hardware - Evaluation to EN 1670:2007	

Introduction

It was requested that White Technology and Engineering Ltd carry out a corrosion evaluation on a range Coastal Hardware to EN 1670:2007, Grade 5 - 480 hours.

The results are presented below.

Samples

The following samples were supplied.

Sample No.	
9	KM930 – Lever handle

Samples were supplied on 31 July 2021 and 4 August 2021. Photographs of the samples are shown in this report.



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Results

EN 1670:2007 states:

5.2 General test requirements

The product standard shall provide the method to specify the requirements for corrosion resistance including the acceptance criteria for appearance and functionality as required in 5.3 and 5.4.

5.3 Functional acceptance condition

After the corrosion test, the product shall be capable of functioning normally as required by the relevant product standard if available.

5.4 Appearance acceptance condition

5.4.1 General

Uncoated surfaces shall show no sign of tarnish, visible to unaided normal or corrected vision as blackening or adverse discolouration of the surface – this does not include an acceptable patina.

5.4.2 Degree of rust

Coated surfaces shall withstand exposure for the time specified without corrosion of the base metal substrate visible to unaided normal or corrected vision excepting an average of one spot per 650 mm2 of significant surface and without any spots larger than 1,5 mm in any direction.

EN 13126-1:2011 states

5.7 Corrosion resistance (6 – sixth digit)

Hardware shall conform to the grades listed in EN 1670, whereby grade 2 is the minimum requirement. Unless a test report can be provided by the manufacturer, the hardware shall be tested in accordance with EN 1670.

NOTE The evaluation of the corrosion resistance is limited to the essential areas (as a rule, the visible surfaces of the installed hardware).

Exempt from the corrosion resistance evaluation are:

- rivet locations;
- locations of later processing (for example: cleaved surfaces that result from cropping the hardware components, millings etc.);
- non surface-treated parts/surfaces, provided they are not in the visible vicinity of the hardware (for example: screw guide-holes made of zinc die-cast etc.);
- welding joints and their immediate surroundings.

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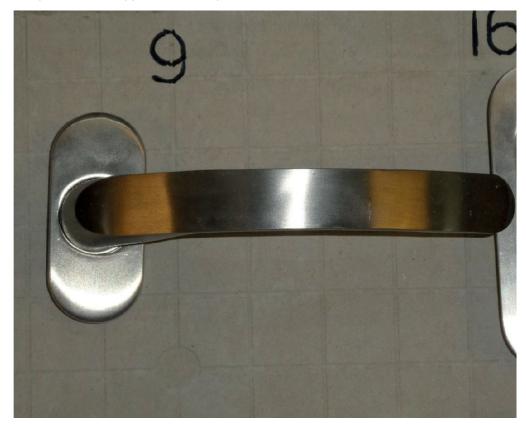
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Sample 9

	Comments	Operating Torque
Pre test		1.2 Nm
24 hours - Grade 1	No concerns	1.2 Nm
48 hours - Grade 2	No concerns	1.2 Nm
96 hours - Grade 3	No concerns	1.2 Nm
240 hours - Grade 4	No concerns	2.3 Nm
480 hours - Grade 5	No concerns	1.7 Nm

Sample 9 met the appearance acceptance conditions of EN 1670 to Grade 5.



Pre Test



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96 Hours



240 Hours

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480 Hours



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Summary

An evaluation of a range of hardware was carried out in accordance with EN 1670:2007, Grade 5 480 hours.

The results are presented above.

Report authorised by:

Dr Martin White Director

Date: 29 August 2021

REPORT ENDS













