

Testing Laboratory 1045.1 accredited by the Czech Accreditation Institute pursuant to ČSN EN ISO/IEC 17025:2018

Strojírenský zkušební ústav, s.p. Zkušební laboratoř (Engineering Test Institute, Public Enterprise, Testing Laboratory) Hudcova 424/56b, Medlánky, 621 00 Brno

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TEST REPORT 39-17692/JP

Product:

Harden carbon steel wood screw ø (5,0x90) mm,

surface coating: MFT2000

Customer:

Hikoki Power Tools Norway AS

Kjeller vest 7, N-2007, POSTBOKS 124

2007 Kjeller NORWAY

Manufacturer:

Hikoki Power Tools Norway AS

Kjeller vest 7, N-2007, POSTBOKS 124

2007 Kjeller NORWAY

Report issue date:

2024-06-25

Distribution list:

1 copy to the Customer

1 copy to the Engineering Test Institute

	1-2-2-11	-



Description of product tested

Harden carbon steel wood screw \emptyset (5,0x90) mm, surface coating: MFT2000, for cycling corrosion test EN 14592:2022 and Nordtest Method NT MAT 003

Photo documentation:



II. Sample tested

SZU reg. no.	Product name	Date of submission	
1216.24.39928.001-100	Harden carbon steel wood screw ø (5,0x90) mm	2024-04-19	

The visual inspection, tests and verification were carried out by Aneta Monika Kout at the test station of SZU. The tests were performed using measuring and testing equipment with valid calibration.

III. Measuring and test equipment:

No.	Description	Inventory number
1.	Cyclic corrosion chamber Q lab	000-000-000-854



IV. Methods, results of tests and verifications

No.	Test objective	Requirement	Method of test	Documentation	Test evaluation/ verification *
1	Corrosion resistance	EN 14592:2022 and Nordtest Method NT MAT 003, minimal degree according to EN ISO 10289 is R _p = 9 (only head is evaluated)	ČSN EN ISO 9227:2023 ČSN EN ISO 6270-2:2018	Page No. 3 to 13	+
*) Evaluation / statement of conformity:					
	Requirement fulfilled 0Not applicable				
<u>-</u>	Requirement not fulfilled xNot evaluated				

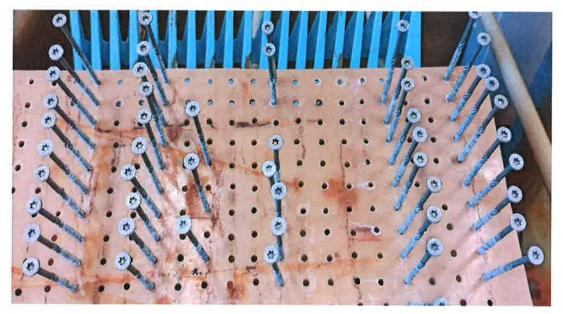
Note:

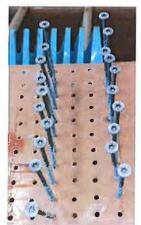
The stated extended measurement uncertainties are calculated as a factor of the measurement uncertainty and the extension coefficient k=2, corresponding to the coverage certainty of 95% as regards standard classification.

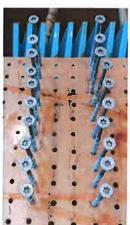
If a statement of conformity is provided, the decision rule pursuant to ILAC-G8:09/2019, Art. 4.2.1 - binary statement for the simple acceptance rule shall apply.

Test objective:	corrosion resistance		
Exact name of the test procedure:	4.108 - Corrosion test in neutral salt spray 4.107 - Corrosion test in condensation chamber		
Test method:	ČSN EN ISO 6270-2:2018, ČSN EN ISO 9227:2023		
Sample tested:	Harden carbon steel wood screw ø (5,0x90) mm, surface coating: MFT2000		
Measuring equipment used:	see Chapter III		
Date of test:	2024-04-23 to 2024-06-25		





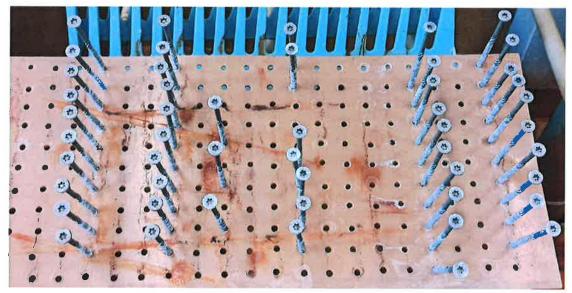






After 1st week





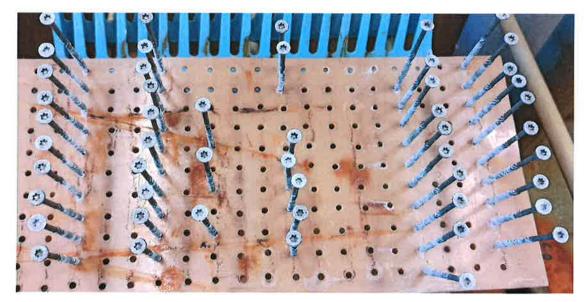


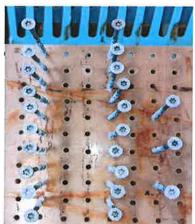


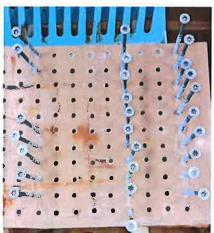


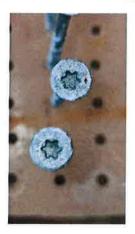
After 2nd week





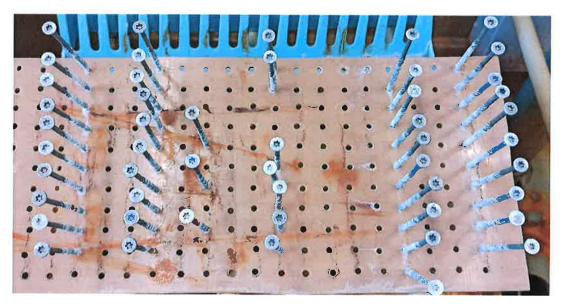


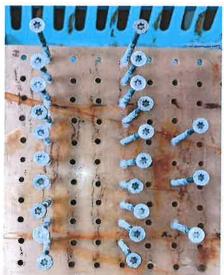


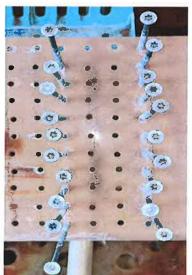


After 3rd week





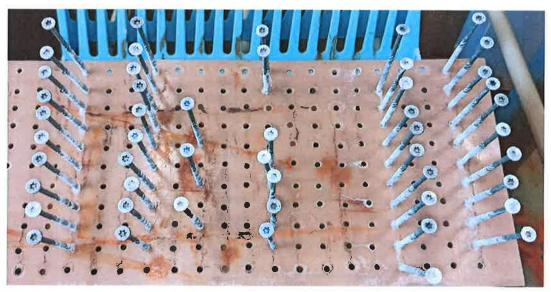


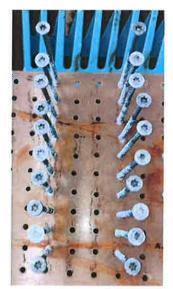


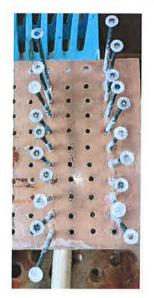


After 4th week

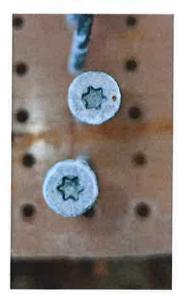






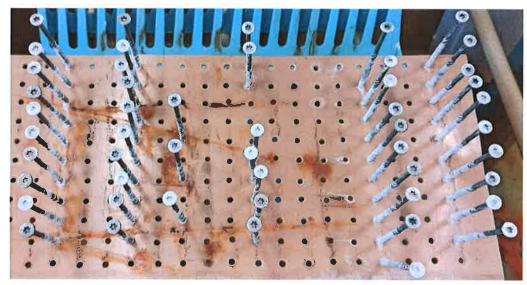


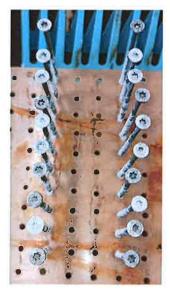




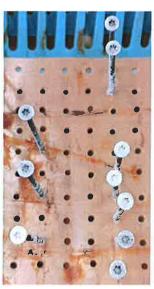
After 5th week







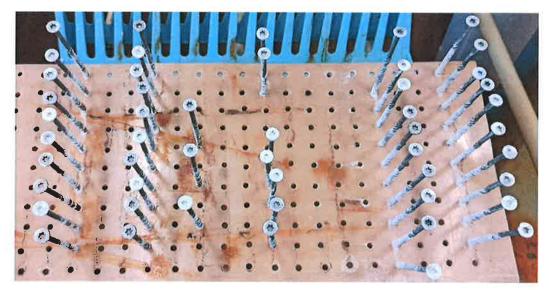


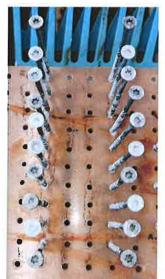


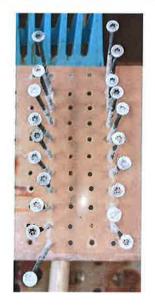


After 6th week

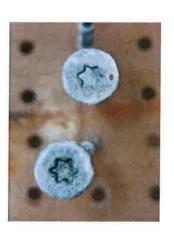






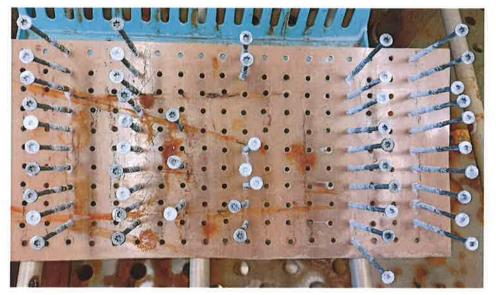


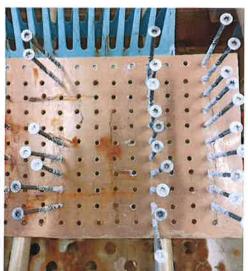


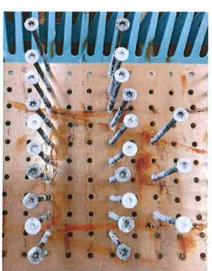


After 7th week





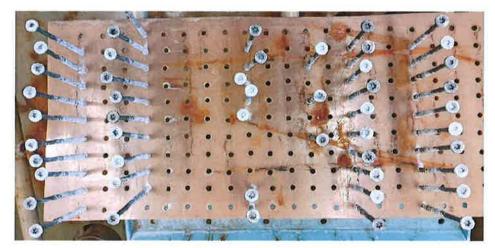


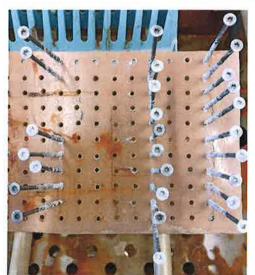


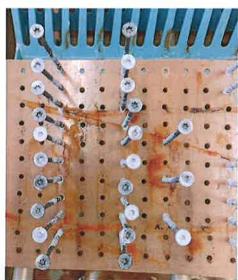


After 8th week











After 9th week



Exposition (weeks)	Sample	Appearance
1		incipient white corrosion on heads(35 pcs)white corrosion on heads (15 pcs)
2	50	- incipient white corrosion on heads (32 pcs) - white corrosion on heads (18 pcs)
3		 incipient white corrosion on heads (12 pcs) white corrosion on heads (33 pcs) red corrosion on 1 head (Rp 7)
4		 incipient white corrosion on heads (10 pcs) white corrosion on heads (40 pcs) red corrosion on 1 head (R_p 7)
5		- incipient white corrosion on heads (9 pcs) - white corrosion on heads (41 pcs) - red corrosion on 1 head (R _p 7)
6		 incipient white corrosion on heads (6 pcs) white corrosion on heads (44 pcs) red corrosion on 1 head (R_p 7)
7		 incipient white corrosion on heads (3 pcs) white corrosion on heads (47 pcs) red corrosion on 1 head (R_p 7)
8		 incipient white corrosion on heads (1 pc) white corrosion on heads (49 pcs) red corrosion on 1 head (R_p 7)
9		 incipient white corrosion on heads (1 pc) white corrosion on heads (49 pcs) red corrosion on 1 head (R_p 7)

Remark: 2% of all samples show base material corrosion.

Evaluation: The test fulfills the requirements of the class C4(15) defined in EN 14592:2022

Tested by: Aneta Monika Kout Date: 2024-06-25 Signed: Reviewed and approved by: Michal Štěpán Date: 2024-06-25 Signed:

V. A list of referenced documents

Order of 2024-04-15 (Order reg. no. J-82059, received on 2024-04-16)

ČSN EN ISO 6270-2:2018 Paints and varnishes - Determination of resistance to humidity - Part 2:
 Condensation (in-cabinet exposure with heated water reservoir)

ČSN EN ISO 9227:2023 Corrosion tests in artificial atmospheres - Salt spray tests

Test Report compiled by: Mi

Michal Štěpán

Test Report approved by:

Aneta Monika Kout

Fasteners and Construction Components Manager

- End of Test Report -

