


Version No. 1	Page 1 of 3	Technical Definition
		
Kit 7-1-2023 PTP Metallic		

Salt Spray - Mass loss determination – CR1 Steel

Please comply with the HSE policy of your laboratory for each test performed.

Instructions to participant laboratories

Please read these instructions carefully BEFORE starting the tests.

1. Five specimens (76 x 127 x 0,8 mm) are supplied to each participant – 5 results must be provided.
If one result is missing your test will be considered as an outlier. A RCA shall be completed.
2. No additional machining of specimens is required.
3. Each participant is required to determine the mass loss for each specimen.

All tests are to be performed in accordance with the requirements of **ASTM B117-19, ISO 9227:2017** and the instructions shown below:

Preparation of panels before testing - Before testing, each specimen has to be degreased, so that the surfaces are free of dirt, oil, or other foreign matter that could influence the test results. After cleaning, weigh each panel on an analytical balance to the nearest 1.0 mg and record the mass.

Nota : The whole specimen surface shall be tested without any protection. No face of the specimens shall be protected.


Positioning of the test specimens – After weighing, locate the specimens into the salt spray cabinet, with the 127-mm (5.0 in.) length supported between 15° and 30° from vertical. Place the specimens in the proximity of the condensate collectors. Face exposed to salt spray should be face opposite to marked face.

Duration of Test - Expose the specimens to the salt fog for **48 hours**.

Cleaning of test panels after exposure – after removal of the specimens from the cabinet, rinse each panel immediately with running tap water to remove salt, and then rinse in reagent grade water (ASTM D1193, Type IV). Chemically clean each panel for 10 min at 20 to 25°C in a fresh solution prepared as follows:

Mix 1000ml of hydrochloric acid (sp gravity 1.19) with 1000ml reagent grade water and add 10g of hexamethylene tetramine. After cleaning, rinse each panel with reagent grade water and dry.

Determining Mass Loss - Immediately after drying, determine the mass loss for each specimen by reweighing and subtracting the mass after exposure from its original mass.

Version No. 1	Page 2 of 3	Technical Definition Salt Spray - Mass loss determination – CR1 Steel
		
Kit 7-1-2023 PTP Metallic		

4. The following information need to be reported:


Characteristic	Unit	Significant digits	Mandatory / Not mandatory	Evaluated Yes/no
Test standard	N/A	N/A	Mandatory	No
Angle of the panels in the salt spray chamber	°	XX	Mandatory	No
Mass loss determination	g	X.XXX	Mandatory	Yes

All evaluated characteristics will be analysed according to the algorithm A and S (ISO 13528 – 2022) and evaluated using z-score.

5. Testing shall start **as soon as test specimens are received**. Please contact the following e-mail address for any technical or administrative query.

Submission date	June 1st, 2023
Technical and administrative support	info@ptpscheme.com

6. Instructions for submission of results are detailed on the website:
<https://ptpscheme.com>
7. To ensure the confidential treatment of your results in the final report, you will be allocated a unique identity number when you register for the program.
8. Collusion and falsification of your PTP results are totally forbidden. In case of identification or suspicion of collusion or falsification, the laboratory will be excluded from the program and the sponsors will be immediately informed. The sponsors could ask you for proof of your results, so be sure to conserve data, curves and specimens.
9. The tested specimens do not need to be sent back to the PTP office.

Version No. 1	Page 3 of 3	Technical Definition Salt Spray - Mass loss determination – CR1 Steel
		
Kit 7-1-2023 PTP Metallic		

APPENDIX : Instructions for IRR participation

The Internal Round Robin participation (IRR) is **optional** and **independent** from your PTP participation. **Confidentiality:** The IRR results and reports are confidential and only accessible by your laboratory. They are not shared with the scheme sponsors or any other accreditation or certification bodies.

The extra samples shall be tested according to the following table:

	Operator 1	Operator 2	Operator 3	Operator 4	Operator X
Test machine 1	PTP kit (5 samples)	3 samples	3 samples	3 samples	3 samples
Test machine 2	3 samples				
Test machine 3	3 samples				
Test machine Y	3 samples				

Operator 1 (OP1) is to be the most experienced operator currently conducting tests on a regular basis and shall perform tests on all machines (TM1, TM2, TM3...)

Test Machine 1 (TM 1) is to be the most utilised machine for this test in your laboratory and shall be tested by all operators (OP1, OP2, OP3...)

Example: A laboratory has 2 operators and 3 test machines. They receive a PTP kit and 9 extra specimens.

Operator 1 shall test the PTP kit on TM1, 3 specimens on TM2 and 3 specimens on TM3.

Operator 2 shall test 3 specimens on TM1.

The IRR results have to be submitted on a separate results form available on the PTP website.

The identification of operators and test machines you provide will appear on the IRR final report. These identifications will not be seen by other laboratories.

The IRR results will be classified against the acceptance classes of the kit 1-1-20XX.

Reminder: Laboratories are not permitted to switch specimens between the PTP kit and IRR samples. The traceability of the samples will be checked during the evaluation. Laboratories found to have switched samples will invalidate their PTP participation.

VERSION HISTORY

Version Date	Version N°	Changes
04/01/2023	1	Document creation