ptp.

Kit 9-2 PTP Metallic

Technical Definition

High Cycle Fatigue Test – Aluminium 2024 T3

190You shall respect the HSE policy of your laboratory for each performed test.

Please read these instructions carefully BEFORE starting the tests.

1. Five blanks (155 x 35 x 6 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. The **T-Type** specimens (Kt 2.3) shall be machined following the **EN 6072 (2010)** and **ASTM E466-15** with a thickness of 3 mm.

3. All tests have to be performed in accordance with the requirements of **EN 6072 (2010)**, **ASTM E466-15** and the following parameters :

Temperature	Room temperature (20 +/- 5 °C)
Humidity	< 55 %
Ratio	0,1
Wave form	Sinus
Test method	Load control
Frequency	To be selected by the laboratory
Imposed stress (maximum stress)	190 MPa
N stop	3 000 000 cycles

The tests shall be performed respecting the following conditions:

- One operator only
- One testing machine only
- Tests performed in sequence

4. Each participant is required to report the below parameters :

Characteristic	**Unit**	**Significant digits**	**Mandatory / Not mandatory**	**Evaluated** Yes/no
Specimen dimensions	mm	X,XX	Mandatory	No
Frequency	Hz	XX	Mandatory	No
Life duration	cycles	XXX XXX	Mandatory	**Yes**

Life duration will be analysed according to algorithm A (ISO 13528-2015) - based on the logarithm of the number of cycles – 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 :	**December 31st, 2022**
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 proofs of your records and analyses, so be sure to conserve data, curves and specimens.

9. The tested specimens do not need to be sent back to PTP.

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 samples on TM2 and 3 specimens on TM3.
Operator 2 shall test 3 samples 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 9-2.

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.

REVISION HISTORY

Issue Date	Issue N°	Changes
28/07/2022	1	Document creation