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Kit 4-4 PTP Metallic 2021		R Curve – Aluminium 2024 T351 Alclad sheet	

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

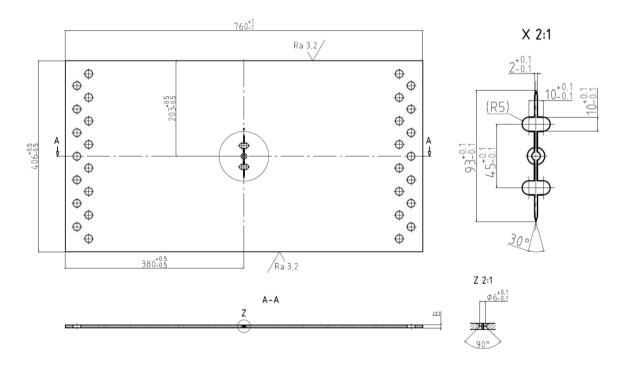
## Instructions to participant laboratories

Please read these instructions carefully BEFORE starting the tests.

1. Three blanks (800 x 466 x 3,5 mm) are supplied to each participant – 3 results must be provided.

If one result is missing your test will be considered as an outlier. A RCA shall be completed.

- 2. The sheet specimen shall be machined in accordance with the requirements of ASTM E561-**20**. The specimens have to be machined with CCTW406 (a/w=0,25).
- 3. Advised drawing :



## 4. All tests have to be performed in accordance with the requirements of **ASTM E561-20** and **AITM 1-0043**.

Parameters : Room temperature Humidity : Between 20 and 50 %

Precracking parameters :  $\Delta K$  first step : **12 MPa** $\sqrt{m}$  and 2<sup>nd</sup> step : **10 MPa** $\sqrt{m}$ 

Material data : Aluminium 2024 T351 Alclad sheet Yield strength : **304 MPa** Young's modulus : **73 GPa** 

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The tests shall be performed respecting the following conditions:

- One operator only
- One testing machine only
- Tests performed in sequence
- 5. The following information need to be reported:

Characteristic	Unit	Significant digits	Mandatory / Not mandatory	<b>Evaluated</b> Yes/no
Room temperature	°C	XX,X	Mandatory	No
Humidity	%	XX,X	Mandatory	No
Specimen length	mm	XXX,XX	Mandatory	No
Specimen width	mm	XXX,xx		
Starter notch length	mm	XX,XX	Mandatory	No
Test method (EPD or COD)	N/A	N/A	Mandatory	No
KR eff at 5 mm ∆aeff	MPa√m	XX,XX	Mandatory	Yes
KR eff at 15 mm ∆aeff	MPa√m	XX,XX	Mandatory	Yes
KR eff at 25 mm ∆aeff	MPa√m	XX,XX	Mandatory	Yes
KR eff at 35 mm ∆aeff	MPa√m	XX,XX	Mandatory	Yes
Full R Curve in excel file including validity check	N/A	N/A	Mandatory	No

All evaluated characteristics will be analysed according to the algorithm A and S (ISO 13528 – 2015) and evaluated using z-score.

6. 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 :	July 1 <sup>st</sup> , 2021	
Technical and administrative support :	info@ptpscheme.com	

- Instructions for submission of results are detailed on the website: <u>https://ptpscheme.com</u>
- 8. 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.
- 9. 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.
- 10. The tested specimens do not need to be sent back to the PTP office.

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**APPENDIX : Instructions for IRR participation** 

T351 Alclad sheet

The Internal Round Robin participation (IRR) is **optional** and **independent** from your PTP participation. <u>Confidentiality</u>: 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	<b>Operator 4</b>	Operator X
Test machine 1	PTP kit (3 samples)	1 sample	1 sample	1 sample	1 sample
Test machine 2	1 sample				
Test machine 3	1 sample				
Test machine Y	1 sample				

**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 3 extra specimens.

Operator 1 shall test the PTP kit on TM1, 1 specimen on TM2 and 1 specimen on TM3. Operator 2 shall test 1 specimen 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 4-4-2021.

<u>Reminder:</u> 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	
01/12/2020	1	Document creation	