Technical Definition

HCF on cylindrical specimen - 7175 Aluminium

Instructions to participant laboratories

Please read these instructions carefully **BEFORE** starting the tests.

- 1. Five specimen blanks (30 x 40 x 130 mm) are supplied to each participant 5 results must be provided.
- 2. The cylindrical specimens with a Kt 1.035 shall be machined according the EN 6072* or ASTM E466*.

Advised geometry:

- EN 6072 FCE 50 Type A
- or ASTM E466 Fig 3
- 3. The tests shall be performed respecting the following conditions:
 - One operator only
 - One testing machine only
 - Tests performed in sequence
- 4. The tests are to be performed in accordance with the requirements of EN 6072* or ASTM E466* and the below test conditions:

Temperature (°C)	22
Ratio	0.1
Wave form	Sinus
Imposed max stress (MPa)	360 MPa
Frequency (Hz)	10 - 60 Hz
N stop (cycles)	2 000 000

5. Each participant is required to determine and report the below information:

Life duration (Number of cycle)	To the nearest cycle
Diameter of the specimen (mm)	X, XX
Temperature (°C)	XX
Frequency (Hz)	XX

- 6. Testing may commence as soon as test specimens are received. All participant laboratories must supply results by 1st July 2013.
- 7. Instructions for submission of results are detailed on the website:

www.ptpscheme.com

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.

^{*} Note: The latest issue of the standard