## **Technical Definition**

Creep Test - Nimonic 75



## Instructions to participant laboratories

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

- 1. Five specimen blanks Ø16 x 90 mm are supplied to each participant 5 results must be provided
- 2. The specimens shall be machined in accordance with the requirements of ASTM E139-11.

It is permitted to use a rigid specimen for ease of identification of the gauge length.

- 3. Each participant is required to determine the following parameters:
  - Total Plastic Strain at 100 hours
  - Time to 0,2% Total Plastic Strain
- 4. All tests are to be performed at a temperature of 580°C / 1076°F and a stress of 160MPa, in accordance with the requirements of ASTM E139-11. Tests shall be stopped after 100 hours.

The tests shall be performed respecting the following conditions:

- One operator only
- One testing machine only
- Tests performed in sequence
- 5. The following information is to be reported:
  - Specimen diameter and gauge length (mm) before and after testing
  - Maximum and minimum temperatures (°C) during test
  - Details of any temperature deviations outside of limits, before and during test
  - The results for the parameters detailed in section 3
- 6. Results are to be reported as follows:
  - Total Plastic Strain at 100 hours: to nearest 0.001%
  - Time to 0,2% Total Plastic Strain: to nearest 0.01 hr
- 7. Testing may commence as soon as test specimens are received. All participant laboratories must supply results by 1<sup>st</sup> May 2017.
- 8. Instructions for submission of results are detailed on the website:

## https://ptpscheme.com

9. 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.