

**Technical Definition**

Creep Test – Titanium TA6V

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 – 4 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
4. All tests are to be performed at a temperature of 399°C / 750°F and a stress of 200MPa, 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
 - Average ambient temperature during the duration of the test (°C)
 - 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%
 7. Testing may commence as soon as test specimens are received. All participant laboratories must supply results by 15th October 2015.
 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.