

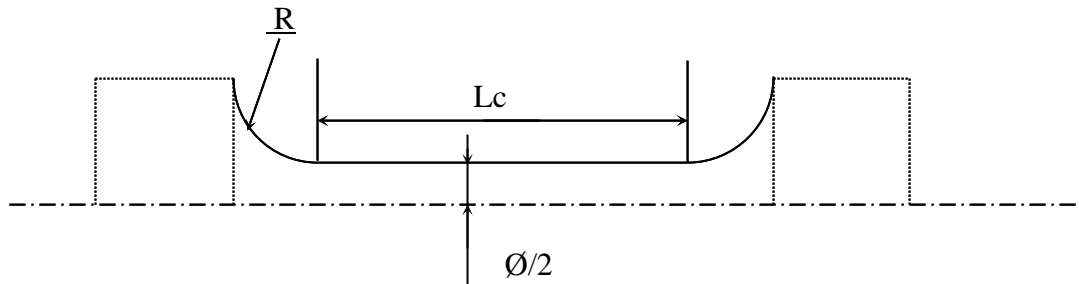
Technical Definition

Stress Rupture Test – INCO 718

Instructions to participant laboratories

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

1. Five specimen blanks are supplied to each participant – 5 results must be provided
2. The specimens shall be machined as shown below:



	SI unit (mm)			Imperial unit (inch)		
	Diam (Ø)	Lc	R	Diam (Ø)	Lc	R
<i>Tolerance</i>	± 0.10	min	min	± 0.005	min	min
<i>Dimension</i>	4.00	24.00	4.00	0.16	1.00	0.16

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:
 - Time to rupture
 - Elongation (on 4D or 5D)
 - Reduction of Area
4. All tests are to be performed at a temperature of 649°C (1200°F) and a stress of 700MPa, in accordance with the requirements of ASTM E139 (latest issue of standard). The test is to continue until the specimen ruptures.

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
 - Location and description of failure
 - The results for the parameters detailed in section 3
6. Results are to be reported as follows:
 - Time to rupture – nearest 0.1hr for test durations ≤ 100hrs and nearest 1.0hr for test durations > 100 h
 - Elongation (%) and Reduction of Area– to nearest 0.1%



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

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)	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 3-2-2013.

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.