

#### **Technical Definition**

Grain Size Determination - Inconel 718

You shall respect the HSE policy of your laboratory for each performed test.

#### Instructions to participant laboratories

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

- 1. One specimen (Ø 16 x 12 mm) is supplied to each participant − 1 result must be provided. In case of :
  - loss or deterioration of PTP sample please contact your sponsor for replacement kit.
  - exclusion of a test specimen results by yourself, you shall provide a short root cause analysis.
- 2. No additional machining of the specimen is required.
- 3. Each participant is required to prepare the specimen for evaluation using their usual polishing and etching techniques for this evaluation.
- 4. Determine the average grain size at the **center** of the specimen in accordance with **ASTM E112-13** and the approved method routinely used by the laboratory (i.e. grain intercept, comparison etc).
  - If the method indicated in this instruction is very different from the method you are used to use, you can contact directly your sponsor.
- 5. The following information is to be reported:

Characteristic	Unit	Significant digits	Mandatory / Not mandatory	Evaluated Yes/no
Description of the sample preparation	N/A	N/A	Mandatory	No
Evaluation method	N/A	N/A	Mandatory	No
Average grain size	ASTM	X,X	Mandatory	Yes

All evaluated characteristics will be analysed according to the algorithm A (ISO 13528 – 2015) and evaluated using z-score. The acceptance classes will be reviewed by technical experts to match the requirements of the test standard.

6. Testing shall start **as soon as test specimens are received**. Please contact the following email address for any technical or administrative query.

Submission date :	May 1 <sup>st</sup> , 2018	
Technical and administrative support :	info@ptpscheme.com	

7. Instructions for submission of results are detailed on the website:



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- 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 proofs of your records and analyses, so be sure to conserve data, curves and specimens.
- 10. The tested specimen does not need to be sent back to PTP.

## **REVISION HISTORY**

Issue Date	Issue N°	Changes
02/01/2018	1	Document creation