## **Technical Definition**

Interlaminar Shear Strength test (Elevated Temperature)
Carbon Fiber Composite

## Instructions to participant laboratories

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

- 1. Five specimens 20 x 10 x 2 mm are supplied to each participant 5 results must be provided.
  - In case of exclusion of a test specimen result by yourself, you shall provide a short root cause analysis.
- 2. The specimens have to be dried during 48h (0/+10) at  $70^{\circ}$ C (+/- 3) and tested within the next 8 hours after the drying.
- 3. All tests are to be performed at 120°C (± 3°C) in accordance with the requirements of EN 2563 (1997).

A fixed span of 10 mm shall be used for all tests.

Duration of specimen temperature stabilisation prior the test : 5 minutes once the test nominal temperature is reached.

Tests shall be performed by the same operator on the same test machine.

- 4. Each participant is required to determine the following parameters:
  - Apparent interlaminar shear strength (calculation must be done by using the measured thickness and the measured width).
- 5. The following information need to be reported:
  - Specimen dimensions (mm)
  - Test temperature (°C), method of measurement (including thermocouple location)
  - Test results, obtained on each tested sample, of the parameters as detailed in section 4.
  - All these information shall be provided even if failure mode is not valid.
- 6. Results are to be reported as follows:
  - Apparent interlaminar shear strength (XX,X MPa)
  - Failure Load (X,XX kN)
  - Failure mode

A standard complete test report shall be stored by the participant. In case of suspicious results, it will be asked for investigation by the sponsors.

- 7. All participant laboratories must supply results by September 15<sup>th</sup> 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.
- 10. The sponsors could ask you proofs of your records and analyses, so be sure to conserve data, curves and specimens.