



## Technical Definition

Charpy Impact (Ambient Temperature)  
35NCD16

### *Instructions to participant laboratories*

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

1. Five specimen blanks are supplied to each participant – 4 results must be provided.
2. The test specimen shall be machined in accordance with the following instructions:

Each test piece shall be 55 mm long and of square section with 10 mm sides. In the centre of the length, there shall be a V-notch of 45°, 2 mm deep with a 0.25 mm radius of curvature at base of notch. The dimensional tolerances stated in the chosen test standard apply:

3. Each participant is required to determine the following parameters:
  - The absorbed energy for each specimen
  - The Charpy value
4. All tests are to be performed in accordance with the requirements of ASTM E23-12c or EN ISO 148-01 (2010) at ambient conditions.

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 dimensions (Length, Height, Width, Height below notch)
  - Test method
  - Ambient temperature (°C)
  - Results
  - Type of pendulum (C type or U type according to ASTM E 23-12c description)
6. Results are to be reported as follows:
  - Absorbed Energy (J) – to nearest 0.5 J
  - Charpy Value (J/cm<sup>2</sup>) – to nearest 0.1 J/cm<sup>2</sup>
  - Lateral expansion (mm)
7. Testing may commence as soon as test specimens are received. All participant laboratories must supply results by 15th May 2016.
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.