

Technical Definition

Welding – Picture analysis

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

Instructions to participant laboratories

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

- 1. Two pictures are supplied to each participant The evaluations have to be performed on the provided_files.
 - First picture (kit 10-6-2020 Picture 1): Defect analysis
 - Second picture (kit 10-6-2020 Picture 2): Heat affected zone measurement
- 2. Each participant shall list the geometric imperfections of the first picture in accordance with the EN ISO 6520-1 (2007) and shall measure the heat affected zone on the second picture in accordance with AWS D17.1/D17.1M:2017.
- 3. Observations shall be performed respecting the following conditions:
 - One operator only
- 4. The following information is to be reported:

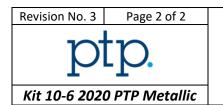
| Characteristic | Unit | Significant digits | Mandatory / Not mandatory | Evaluated Yes/no |
|--|------|-----------------------|------------------------------|---------------------|
| Classification of imperfection on first picture (see list below) | N/A | N/A | Mandatory | Yes |
| Maximum heated affected zone on second picture (left and right sides of the 3 markers) | μm | Х | Mandatory | Yes |

For picture 1, please indicate the imperfections you observed among the below list:

- 1 Crack
- 2 Cavity/Porosity
- 3 Inclusions
- 4 Lack of fusion and penetration
- 5 Incomplete root penetration
- 6 Undercut
- 7 Excess weld metal
- 8 Misalignment
- 9 Spatter
- 10 Incorrect root gap for fillet welds

Imperfections on first picture will be compared to expected results.

Results for the second picture will be analysed according to the algorithm A (ISO 13528 - 2015) and evaluated using z-score.



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5. Examination shall start **as soon as pictures are received**. Please contact the following e-mail address for any technical or administrative query:

| Submission date : | July 1 st , 2020 |
|---|-----------------------------|
| Technical and administrative support : | info@ptpscheme.com |

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

https://ptpscheme.com

7. 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.

REVISION HISTORY

| Issue Date | Issue N° | Changes |
|------------|----------|---|
| 09/01/2020 | 1 | Document creation |
| 20/03/2020 | 2 | Modification of the results submission deadline |
| 28/05/2020 | 3 | Modification of the results submission date |