ptp.

Element IRR Metallic H1 2018

Technical Definition

Decarburization – Carbon steel material of eutectoid composition (0.8% C)

Please comply with the HSE policy of your laboratory for each test performed.

Instructions to participant laboratories

Please read these instructions carefully BEFORE starting the tests.

Number of samples	OP1 TM1	Additional OP	Additional TM
	1	1	1
Blank dimension	Ø12x8 mm		
Material	Carbon steel material of eutectoid composition (0.8% C)		
Standards	**ASTM E1077*** or **SAE J121**		
Testing conditions	five or more measurements		
Parameters			

*Latest version of the standard

1. The tests shall be performed respecting the following conditions:

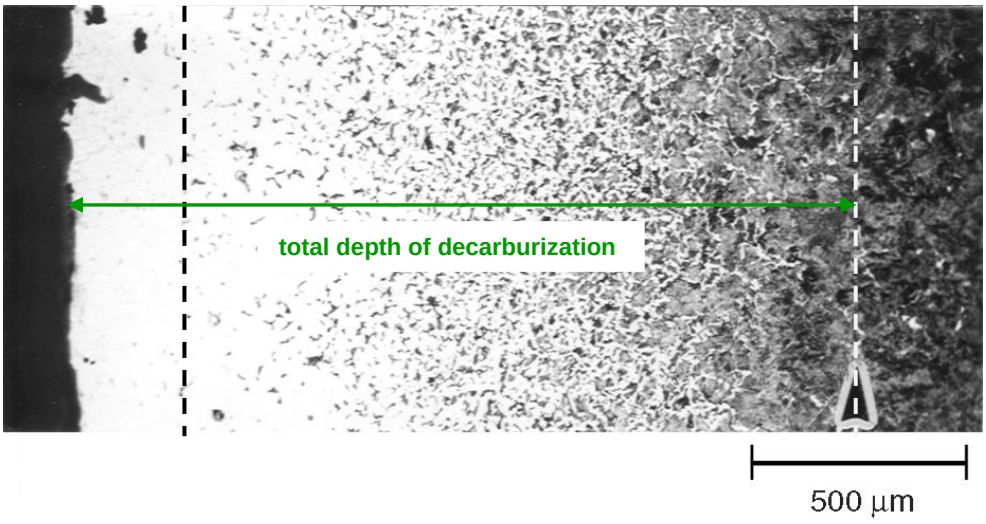
OP 1 is to be the **most experienced** operator currently conducting tests on a regular basis and shall perform tests on **all machines** (TM1, TM2, TM3…)
TM 1 is to be the **most utilised** machine for this test in your laboratory and shall be tested by **all operators** (OP1, OP2, OP3…)

Only the results of **OP 1 on TM 1** will be considered for the **PTP** (lab versus lab).
Results of **OP 2, OP 3**, (…) obtained **on TM 1** will be considered for **IRR** (intra lab check).
Results of **OP 1** obtained on **TM 2, TM 3,** (…) will be considered for **IRR** (intra lab check).

The results obtained **on all ordered specimens shall be supplied.**

2. For consistency and to eliminate differences in terminology, use the following definitions, taken from ASTM E1077-14:

- ***Total decarburization***—the perpendicular distance from the specimen surface to that location in the interior where the bulk carbon content is reached; that is, the sum of the depths of complete and partial decarburization.



3. The following characteristic is to be reported:

Characteristic	**Unit**	**Significant digits**	**Mandatory / Not mandatory**	**Evaluated** Yes/no
Total Decarburization	µm	X	Mandatory	**Y**

Note : Do not consider any scale, or oxidation layer in the measurements.

All evaluated characteristics will be analysed according to the algorithm A and S (ISO 13528 – 2015) and evaluated using z-score.

4. Testing may commence **as soon as test specimens are received**. Please contact the following person for any technical or administrative query.

Submission date	July 31st 2018
Technical support	David.vickers@exova.com
Admin support	marie-caroline.fages@ptpscheme.com

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

https://ptpscheme.com

6. 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.

7. 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.

REVISION HISTORY

Issue Date	Issue N°	Changes
19/03/2018	1	Document creation