

## Information sheet

### Proficiency tests metal 2017

Organiser:	Institut für Eignungsprüfung IfEP GmbH, Marl, Germany
Registration:	By means of the attached form
Intention:	Confirmation of technical competence of participating laboratories
Data evaluation:	Based on ISO/IEC 17043 and ISO 13528. <b>Usually the participation is approved for accreditations according to NADCAP.</b>
Confidentiality:	Each laboratory receives a specific code number
Documentation:	Certificate Final report with a list of participants in alphabetical order with declaration of consent; determination of measurement uncertainty according to the current standards and guidelines. Details for subcontracting of single parts: please see <a href="http://www.ifep.de">www.ifep.de</a> , section „proficiency tests“

No. 1701-1 Hardness testing Brinell	Test standard:	ISO 6506, part 1, HBW 2,5/187,5
	Material:	Certified reference hardness test block (MPA NRW Dortmund, Germany)
	Test program:	five hardness measurements on certified reference hardness test block
	Test sequence:	Each hardness test block will be tested by several participants. There will be an arrangement of the dates in advance.
	Results to be submitted:	five hardness values of the hardness test blocks
	Assigned value:	Certified reference values of MPA NRW Dortmund, Germany
	Additional information provided by organiser:	Statement to measurement uncertainty
	Participation fee:	Germany 330 €, other countries + transport costs* estimated start: II. quarter 2017

No. 1701-2 Hardness testing Rockwell C	Test standard:	ISO 6508, part 1, HRC
	Material:	Certified reference hardness test blocks (MPA NRW Dortmund, Germany)
	Test program:	3 x five hardness measurements on certified reference hardness test blocks
	Test sequence:	Each hardness test block set will be tested by several participants. There will be an arrangement of the dates in advance.
	Results to be submitted:	3 x five hardness values of the hardness test blocks
	Assigned Value:	Certified reference values of MPA NRW Dortmund, Germany
	Additional information provided by organiser:	Statement to measurement uncertainty
	Participation fee:	Germany 330 €, other countries + transport costs* estimated start: II. quarter 2017

No. 1701-3 Hardness testing Vickers	Test standard:	ISO 6507, part 1, HV 1, HV 10/HV 30
	Material:	Certified reference hardness test block (MPA NRW Dortmund, Germany)
	Test program:	five hardness measurements on certified reference hardness test block
	Test sequence:	Each hardness test block will be tested by several participants. There will be an arrangement of the dates in advance.
	Results to be submitted:	five hardness values of the hardness test blocks
	Assigned value:	Certified reference values of MPA NRW Dortmund, Germany
	Additional information provided by organiser:	Statement to measurement uncertainty
	Participation fee:	<b>HV 1 or HV 10/HV 30:</b> Germany 330 €, other countries + transport costs* <b>HV 1 and HV 10/HV 30:</b> Germany 490 €, other countries + transport costs* estimated start: II. quarter 2017

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## Information sheet Proficiency tests metal 2017

<b>No. 1703 Emission spectrometry steel</b>	Test standard:	In-house procedure
	Material:	Material similar to daily laboratory work (no „synthetic alloy“) <b>a) low alloyed steel</b> <b>b) unalloyed steel</b>
	Results to be submitted:	Characteristic values according to specifications
	Assigned value:	Consensus value calculated from the results of all participants
	Additional information:	Statement to measurement uncertainty
	Participation fee:	<b>One alloy:</b> Germany 310 €; other countries + transport costs* <b>Two alloys:</b> Germany 550 €; other countries + transport costs* estimated start: II. quarter 2017
<b>No. 1704 Emission spectrometry (non ferrous- metals)</b>	Test standard:	In-house procedure
	Material:	Material similar to daily laboratory work (no „synthetic alloy“) <b>Aluminium-alloy</b>
	Results to be submitted:	Characteristic values according to specifications
	Assigned value:	Consensus value calculated from the results of all the participants
	Additional information:	Statement to measurement uncertainty
	Participation fee:	Germany 310 €; other countries + transport costs* estimated start: II. quarter 2017
<b>No. 1705 Resistance to intergranular attack</b>	Test standard:	ASTM A262, practice B, Streicher test
	Material:	Stainless steel
	Production of specimens:	by the participants
	Results to be submitted:	according to standard
	Assigned value:	Consensus value calculated from the results of all participants
	Participation fee:	Germany 310 €; other countries + transport costs* estimated start: II. quarter 2017
<b>No. 1706 Indirect verification of salt spray test chamber</b>	Test standard:	ISO 9227
	Material:	Reference specimens
	Production of specimens:	by the organiser
	Results to be submitted:	Mass loss
	Assigned value:	Reference value
	Participation fee:	Germany 275 €; other countries + transport costs* estimated start: II. quarter 2017
<b>No. 1707-1 Tensile test aluminium (round specimens)</b>	Test standard:	ISO 6892-1
	Material:	6 round test specimens, aluminium, $d_0 = 6$ mm, specimen head: ISO thread M10, and/or 6 material sections, diameter 16 mm, length 110 mm each
	Production of specimens:	by the organiser / by the participants
	Results to be submitted:	Characteristic values according to the test standard, additionally “Young's Module” and the measurement uncertainty
	Assigned Value:	Consensus values calculated from the results of the participants
	Additional information:	Statement to the influence of specimen preparation, to measurement uncertainty of the test method
	Participation fee:	<b>1707-1M: Machined specimens:</b> Germany 370 €; other countries + transport costs* <b>1707-1U: Unmachined specimens:</b> Germany 290 €; other countries + transport costs* <b>Machined AND unmachined specimens:</b> Germany 600 €; other countries + transport costs* estimated start: III. quarter 2017

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## Information sheet

### Proficiency tests metal 2017

<b>No. 1707-2</b> <b>Tensile test aluminium</b> <b>(flat specimens)</b>	Test standard:	ISO 6892-1
	Material:	6 flat specimens, aluminium, geometry according to ISO 6892-1 (2009), annex B, table B2, $a_0 = 3$ mm, $b_0 = 20$ mm, and/or 6 material sections of about 32 x 280 mm <sup>2</sup> each
	Production of specimens:	by the organiser / by the participants
	Results to be submitted:	Characteristic values according to the test standard, additionally "Young's Module" and the measurement uncertainty
	Assigned Value:	Consensus values calculated from the results of the participants
	Additional information:	Statement to the influence of specimen preparation, to measurement uncertainty of the test method
	Participation fee:	<b>1707-2M: Machined specimens:</b> Germany 300 €, other countries + transport costs* <b>1707-2U: Unmachined specimens:</b> Germany 255 €, other countries + transport costs* <b>Machined AND unmachined specimens:</b> Germany 500 €, other countries + transport costs* estimated start: III. quarter 2017
<b>No. 1708</b> <b>Non-destructive</b> <b>testing</b>	Test standard:	RT, PT
	Material:	Steel specimens app. 200 x 200 x 10 mm <sup>3</sup> with weld seam in the middle, with flaws defined for the test method
	Results to be submitted:	Type / position / size of flaws
	Assigned value:	Sample solution of Fraunhofer IZFP Saarbrücken, Germany
	Test sequence:	Each sample will be tested by several participants. There will be an arrangement of the dates in advance.
	Participation fee:	<b>One method:</b> Germany 350 €, other countries + transport costs* <b>Two methods:</b> Germany 620 €, other countries + transport costs* estimated start: II. quarter 2017
<b>No. 1709</b> <b>Tensile test steel</b> <b>(round specimens)</b>	Test standard:	ISO 6892-1
	Material:	Standard samples: 6 round test specimens, steel, $d_0 = 10$ mm, specimen head: ISO thread M16 as per standard, Alternate samples: specimens with $d_0 = 6$ mm, specimen head: ISO thread M10, and/or 6 material sections, diameter 26 mm, length 150 mm each.
	Production of specimens:	by the organiser / by the participants
	Results to be submitted:	Characteristic values according to the test standard, additionally "Young's Module" and the measurement uncertainty
	Assigned Value:	Consensus values calculated from the results of the participants
	Additional information:	Statement to the influence of specimen preparation, to measurement uncertainty of the test method
	Participation fee:	<b>1709M: Machined specimens:</b> Germany 450 €, other countries + transport costs* <b>1709U: Unmachined specimens:</b> Germany 350 €, other countries + transport costs* <b>Machined AND unmachined specimens:</b> Germany 700 €, other countries + transport costs* estimated start: III. quarter 2017

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## Information sheet

### Proficiency tests metal 2017

<b>No. 1710-1</b> Tensile test steel flat specimens, 1 mm	Test standard:	ISO 6892-1 / ISO 10113
	Material:	6 flat specimens, steel, geometry according to ISO 6892-1 (2009), annex B, table B2, $a_0 = 1$ mm, $b_0 = 20$ mm, and/or 6 material sections of about 32 x 280 mm <sup>2</sup> each
	Production of specimens:	by the organiser / by the participants
	Results to be submitted:	Characteristic values according to the test standard, including the R-value, additionally "Young's Module" and the measurement uncertainty
	Assigned Value:	Consensus values calculated from the results of the participants
	Additional information:	Statement to the influence of specimen preparation, to measurement uncertainty of the test method
	Participation fee:	<b>1710-1M: Machined specimens:</b> Germany 330 €, other countries + transport costs* <b>1710-1U: Unmachined specimens:</b> Germany 285 €, other countries + transport costs* <b>Machined AND unmachined specimens:</b> Germany 550 €, other countries + transport costs* estimated start: III. quarter 2017
<b>No. 1710-2</b> Tensile test steel flat specimens, 15 mm	Test standard:	ISO 6892-1
	Material:	6 flat specimens, steel, geometry according to ISO 6892-1 (2009), annex B, table B2, $a_0 = 15$ mm, $b_0 = 25$ mm, and/or 6 material sections of about 37 x 400 mm <sup>2</sup> <b>Min. force to break needed: 270 kN!</b>
	Production of specimens:	by the organiser / by the participants
	Results to be submitted:	Characteristic values according to the test standard, additionally "Young's Module" and the measurement uncertainty
	Assigned Value:	Consensus values calculated from the results of the participants
	Additional information:	Statement to the influence of specimen preparation, to measurement uncertainty of the test method
	Participation fee:	<b>1710-2M: Machined specimens:</b> Germany 370 €, other countries + transport costs* <b>1710-2U: Unmachined specimens:</b> Germany 330 €, other countries + transport costs* <b>Machined AND unmachined specimens:</b> Germany 620 €, other countries + transport costs* estimated start: III. quarter 2017
<b>No. 1711</b> Charpy impact test ready to test specimens	Test standard:	ISO 148-1 / ISO 148-2 (2 mm striker)
	Material:	Charpy test specimens, impact energy low level (RT), average level (RT), high level (RT), super high level (RT)
	Production of specimens:	<b>by the organiser</b>
	Results to be submitted:	5 values according to ISO 148 each energy level
	Assigned value:	Reference value, limits according to ISO 148-2
	Additional information:	Measurement uncertainty according to ISO 148-2
	Participation fee:	<b>One energy level:</b> Germany 310 €, other countries + transport costs* <b>Two energy levels:</b> Germany 490 €, other countries + transport costs* <b>Three energy levels:</b> Germany 630 €, other countries + transport costs* <b>Four energy levels:</b> Germany 760 €, other countries + transport costs* estimated start: III. quarter 2017

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## Information sheet

### Proficiency tests metal 2017

No. 1711 Charpy impact test unmachined specimens	Test standard:	ISO 148-1 / ISO 148-2 (2 mm striker)
	Material:	Charpy test specimens, impact energy low level (RT), average level (RT), high level (RT), super high level (RT)
	Production of specimens:	<b>by the participants</b>
	Results to be submitted:	5 values according to ISO 148 each energy level
	Assigned value:	Reference value, limits according to ISO 148-2
	Additional information:	Measurement uncertainty according to ISO 148-2
	Participation fee:	<b>One energy level:</b> Germany 250 €; other countries + transport costs* <b>Two energy levels:</b> Germany 400 €; other countries + transport costs* <b>Three energy levels:</b> Germany 525 €; other countries + transport costs* <b>Four energy levels:</b> Germany 660 €; other countries + transport costs* estimated start: III. quarter 2017
No. 1713 Metallography, image analysis	Test standard:	e.g. ISO 643, ASTM E 112 appointment also possible via digital image processing
	Material:	Micrograph; in part simulated, in digital form
	Results to be submitted:	e.g. grain size steel / phase content steel / phase content aluminium
	Assigned Value:	Consensus value, sample solution
	Participation fee:	Germany 255 €; other countries + transport costs* estimated start: IV. quarter 2017
No. 1714-1 Metallography, sample preparation	Test standard:	e.g. ISO 643, ASTM E 112
	Material:	Metallic samples for grinding preparation and analysis
	Results to be submitted:	e.g. carbon content, grain size
	Assigned Value:	Consensus value, sample solution
	Participation fee:	Germany 275 €; other countries + transport costs* estimated start: IV. quarter 2017
No. 1714-2 Metallography, CHD	Test standard:	ISO 2639
	Material:	Steel specimens
	Results to be submitted:	Determination and verification of the depth of carburized and hardened cases, CHD
	Assigned Value:	Consensus value
	Participation fee:	Germany 275 €; other countries + transport costs* estimated start: III. quarter 2017
No. 1716 Tensile test nickel- based alloy	Test standard:	ISO 6892-2
	Material:	6 round test specimens, Inconel 718, to be tested at 650 °C
	Production of specimens:	by the organiser, specimen diameter $d_0 = 6$ mm, specimen head: ISO thread M10
	Results to be submitted:	Characteristic values according to the test standard, additionally "Young's Module" and the measurement uncertainty
	Assigned Value:	Consensus values calculated from the results of the participants
	Additional information:	Statement to the measurement uncertainty of the test method
	Participation fee:	Germany 450 €; other countries + transport costs* estimated start: II. quarter 2017
No. 1723 Tensile test steel for the reinforcement	Test standard:	ISO 15630-1, ISO 6892-1
	Material:	6 reinforcing bars, length app. 1.000 mm each
	Production of specimens:	by the participants, if required
	Results to be submitted:	according to the test standard, additionally Young's Module and the measurement uncertainty (not evaluated)
	Assigned Value:	Consensus values calculated from the results of the participants
	Additional information:	Statement to the measurement uncertainty of the test method
	Participation fee:	Germany 310 €; other countries + transport costs* estimated start: II. quarter 2017

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### Registration proficiency tests metal 2017: part 1

via fax to: +49 (0) 2365 / 209 00 35 or via e-mail to: [Sorge@ifep.de](mailto:Sorge@ifep.de)

We will participate in the following proficiency test(s):

No.	please mark	Proficiency test	Expected Start (quarter/2017)	Return of the results	Participation fee
1701-1	<input type="checkbox"/>	Hardness testing Brinell HBW 2,5/187,5	II/2017	1 week	330 €*
1701-2	<input type="checkbox"/>	Hardness testing Rockwell C	II/2017	1 week	330 €*
1701-3a	<input type="checkbox"/>	Hardness testing Vickers HV 1	II/2017	1 week	1701-3a or 1701-3b: total 330 €* 1701-3a and 1701-3b: total 490 €*
1701-3b	<input type="checkbox"/>	Hardness testing Vickers HV 10/HV 30	II/2017	1 week	
1703a	<input type="checkbox"/>	Emission spectrometry low alloyed steel	II/2017	4 weeks	1 alloy: total 310 €* 2 alloys: total 550 €*
1703b	<input type="checkbox"/>	Emission spectrometry unalloyed steel	II/2017	4 weeks	
1704	<input type="checkbox"/>	Emission spectrometry Aluminium-alloy	II/2017	4 weeks	310 €*
1705	<input type="checkbox"/>	Resistance to intergranular corrosion	II/2017	4 weeks	310 €*
1706	<input type="checkbox"/>	Indirect verification of salt spray test chamber	II/2017	4 weeks	275 €*
1707-1M	<input type="checkbox"/>	Tensile test aluminium, round specimens <b>machined specimens</b>	III/2017	4 weeks	1707-1M: 370 €* 1707-1U: 290 €* 1707-1M and 1707-1U: total 600 €*
1707-1U	<input type="checkbox"/>	Tensile test aluminium, round specimens <b>unmachined specimens</b>	III/2017	4 weeks	
1707-2M	<input type="checkbox"/>	Tensile test aluminium, flat specimens <b>machined specimens</b>	III/2017	4 weeks	1707-2M: 300 €* 1707-2U: 255 €* 1707-2M and 1707-2U: total 500 €*
1707-2U	<input type="checkbox"/>	Tensile test aluminium, flat specimens <b>unmachined specimens</b>	III/2017	4 weeks	
1708a	<input type="checkbox"/>	RT, radiographic testing	II/2017	1 week	1 method: total 350 €* 2 methods: total 620 €*
1708b	<input type="checkbox"/>	PT, penetrant testing	II/2017	1 week	
1709M	Standard samples: <input type="checkbox"/> Alternate samples: <input type="checkbox"/>	Tensile test steel round specimens <b>machined specimens</b>	III/2017	4 weeks	1709M: 450 €* 1709U: 350 €* 1709M and 1709U: total 700 €*
1709U	<input type="checkbox"/>	Tensile test steel round specimens <b>unmachined specimens</b>	III/2017	4 weeks	
1710-1M	<input type="checkbox"/>	Tensile test steel flat specimens, 1 mm <b>machined specimens</b>	III/2017	4 weeks	1710-1M: 330 €* 1710-1U: 285 €* 1710-1M and 1710-1U: total 550 €*
1710-1U	<input type="checkbox"/>	Tensile test steel flat specimens, 1 mm <b>unmachined specimens</b>	III/2017	4 weeks	
1710-2M	<input type="checkbox"/>	Tensile test steel flat specimens, 15 mm <b>machined specimens</b>	III/2017	4 weeks	1710-2M: 370 €* 1710-2U: 330 €* 1710-2M and 1710-2U: total 620 €*
1710-2U	<input type="checkbox"/>	Tensile test steel flat specimens, 15 mm <b>unmachined specimens</b>	III/2017	4 weeks	
1711aM	<input type="checkbox"/>	Charpy impact test low level <b>machined specimens</b>	III/2017	4 weeks	1 level: total 310 €* 2 levels: total 490 €* 3 levels: total 630 €* 4 levels: total 760 €*
1711bM	<input type="checkbox"/>	Charpy impact test average level <b>machined specimens</b>			
1711cM	<input type="checkbox"/>	Charpy impact test high level <b>machined specimens</b>			
1711dM	<input type="checkbox"/>	Charpy impact test super high level <b>machined specimens</b>			
1711aU	<input type="checkbox"/>	Charpy impact test low level <b>unmachined specimens</b>	III/2017	4 weeks	1 level: total 250 €* 2 levels: total 400 €* 3 levels: total 525 €* 4 levels: total 660 €*
1711bU	<input type="checkbox"/>	Charpy impact test average level <b>unmachined specimens</b>			
1711cU	<input type="checkbox"/>	Charpy impact test high level <b>unmachined specimens</b>			
1711dU	<input type="checkbox"/>	Charpy impact test super high level <b>unmachined specimens</b>			

\* Prices for Germany excl. VAT, other countries: Delivery and duty costs will be added to participation fee, see [www.ifep.eu](http://www.ifep.eu)

**Continuation on the next page.  
Please submit pages 6 and 7 for a binding order.**

## Registration proficiency tests metal 2017: part 2

No.	please mark	Proficiency test	Expected Start (quarter 2017)	Return of the results	Participation fee
1713	<input type="checkbox"/>	Metallography, image analysis	IV/2017	4 weeks	255 € *
1714-1	<input type="checkbox"/>	Metallography, sample preparation	IV/2017	4 weeks	275 € *
1714-2	<input type="checkbox"/>	Metallography, CHD	III/2017	4 weeks	275 € *
1716	<input type="checkbox"/>	Tensile test nickel-based alloy, 650 °C	II/2017	4 weeks	450 € *
1723	<input type="checkbox"/>	Tensile test steel for the reinforcement	II/2017	4 weeks	310 € *

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The costs will be invoiced by Institut für Eignungsprüfung IfEP GmbH **in advance**.

The organiser will charge 25 % of the fee if the registration is cancelled four weeks prior to the start of the proficiency test. For cancellations later than this, the full amount will be charged.

Company:			
Department:			
Contact person: <input type="checkbox"/> Ms. <input type="checkbox"/> Mr.			
Address:		Date / signature / <b>stamp</b>	
ZIP Code:	City:	Country:	<input type="checkbox"/> German <input type="checkbox"/> English
Telephone:	Fax:	E-Mail:	
<b><u>Necessary additional information:</u></b> Your VAT identification number:			
Billing address ( <b>only if differing</b> ):		Delivery address ( <b>only if differing</b> ):	
Further invoice-details, e.g. cost unit:			
<b>I confirm with my signature that the service is carried out for my/our company (and not for a private person).</b>			

**Please submit pages 6 and 7 for a binding order.**