

# Information sheet Proficiency tests metal 2016

Organiser:		Institut für Eignungsprüfung IfEP GmbH, Marl, Germany				
Registration:		By means of the attached form				
Intention:		Confirmation of technical competence of participating laboratories				
Data evaluati	on:	Based on ISO/IEC 17043 and ISO 13528. Normally the participation is approved for accreditations according to NADCAP.				
Confidentialit	V:	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 www.ifep.de, section "proficiency tests"				
	Test standard:	EN ISO 6506, part 1, HBW 2,5/187,5 and/or HBW 10/3000				
	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.				
ng	rest sequence.	There will be an arrangement of the dates in advance.				
7- <u>iš</u>	Results to be submitted:	five hardness values of the hardness test blocks				
o. 1601. ness te Brinell	Assigned value:	Certified reference values of MPA NRW Dortmund, Germany				
16 SS rin	Additional information	Statement to measurement uncertainty				
No. 1601-1 rdness test Brinell	provided by organiser:	Statement to medication and stanky				
No. 1601-1 Hardness testing Brinell	Participation fee:	HBW 2,5/187,5 or HBW 10/3000:				
Ŧ	T dittolpation roo.	Germany 330 € other countries + transport costs*				
		HBW 2,5/187,5 and HBW 10/3000:				
		Germany 490 €; other countries + transport costs*				
		estimated start: II. quarter 2016				
	Test standard:	ISO 6508, part 1, HRC				
	Material:	Certified reference hardness test blocks (MPA NRW Dortmund, Germany)				
bu	Test program:	3 x five hardness measurements on certified reference hardness test blocks				
-2 sti C	Test sequence:	Each hardness test block will be tested by several participants.				
te ell		There will be an arrangement of the dates in advance.				
No. 1601-2 dness testi Rockwell C	Results to be submitted:	3 x five hardness values of the hardness test blocks				
oc de	Assigned Value:	Certified reference values of MPA NRW Dortmund, Germany				
No. 1601-2 Hardness testing Rockwell C	Additional information	Statement to measurement uncertainty				
I	provided by organiser:					
	Participation fee:	Germany 330 €; other countries + transport costs*				
		estimated start: II. quarter 2016				
	Test standard:	ISO 898-1, EN ISO 3506-1				
	Material:	150 696-1, EN 150 3506-1				
No. 1602 Testing of fasteners	Production of specimens:	by the organiser				
16( ng	Results to be submitted:	according to standard, e.g. tensile test				
No. 1602 Festing of fasteners	Assigned Value:	Consensus value calculated from the results of all the participants				
ă <u>a</u> š	Participation fee:	Germany 320 €; other countries + transport costs*				
	i articipation iee.	estimated start: III. quarter 2016				
	L	Soundiod Start. III. quartor 2010				
	Test standard:	In-house procedure				
>	Material:	Material similar to daily laboratory work (no "synthetic alloy")				
etr		a) low alloyed steel				
шс		b) high alloyed steel				
33 :tr	Results to be submitted:	Characteristic values according to specifications				
No. 1603 on spectr steel	Assigned value:	Consensus value calculated from the results of all participants				
o. ' sfe	Additional information:	Statements with regard to measurement uncertainty				
ž	Participation fee:	One alloy:				
ssi	·	Germany 310 €; other countries + transport costs*				
No. 1603 Emission spectrometry steel		Two alloys:				
ш		Germany 550 €, other countries + transport costs*				
		estimated start: II. quarter 2016				

 $<sup>^{\</sup>star}$  Prices excl. valid VAT, transport costs, see www.ifep.eu



#### **Information sheet** Proficiency tests metal 2016

	1	
	Test standard:	In-house procedure
	Material:	Material similar to daily laboratory work (no "synthetic alloy")
>		a) Aluminium-alloy
etr IIs)		b) Nickel based-alloy c) Titan-alloy
om eta	Results to be submitted:	Characteristic values according to specifications
4 <del>2</del> 4	Assigned value:	Consensus value calculated from the results of all the participants
160 per	Additional information:	Statements with regard to measurement uncertainty
No. 1604 Emission spectrometry (non ferrous-metals)	Participation fee:	One alloy:
	articipation icc.	Germany 310 €; other countries + transport costs*
iss		Two alloys:
<u>ب</u> ۾ ا		Germany 550 €; other countries + transport costs*
		Three alloys:
		Germany 750 €; other countries + transport costs*
		estimated start: II. quarter 2016
	Test standard:	EN ISO 3651 part 1
0 2	Material:	Stainless steel
No. 1605 Resistance against ntergranula attack		by the participants
No. 1605 tesistance against tergranula	Results to be submitted:	according to standard
o. sis aga att	Assigned value:	Consensus value calculated from the results of all participants
No. 1605 Resistance against intergranular attack	Participation fee:	Germany 310 €; other countries + transport costs*
.=	·	estimated start: II. quarter 2016
	Test standard:	EN ISO 9227
of sst	Material:	Reference specimens
No. 1606 Indirect verification of salt spray test chamber	Production of specimens:	by the organiser
No. 1606 Indirect rification t spray te chamber	Results to be submitted:	Mass loss
lo. fic sp	Assigned value:	Reference value
alt alt		
> w	Participation fee:	Germany 275 €; other countries + transport costs* estimated start: II. quarter 2016
		estimated start. II. quarter 2010
	To at at an alamat	TN 100 0000 4
_	Test standard:	EN ISO 6892-1
(sua	Material:	6 round test specimens, aluminium, $d_0$ = 6 mm, specimen head: ISO thread M10
7 sst m mens)	Material: Production of specimens:	6 round test specimens, aluminium, $d_0$ = 6 mm, specimen head: ISO thread M10 by the organiser
607 e test nium ecimens)	Material:	6 round test specimens, aluminium, $d_0$ = 6 mm, specimen head: ISO thread M10 by the organiser  Characteristic values according to the test standard, additionally "Young's
o. 1607 sile test minium specimens)	Material: Production of specimens: Results to be submitted:	6 round test specimens, aluminium, $d_0 = 6$ mm, specimen head: ISO thread M10 by the organiser  Characteristic values according to the test standard, additionally "Young's Module" and the measurement uncertainty
No. 1607 ensile test aluminium nd specimens)	Material: Production of specimens: Results to be submitted: Assigned Value:	6 round test specimens, aluminium, $d_0 = 6$ mm, specimen head: ISO thread M10 by the organiser  Characteristic values according to the test standard, additionally "Young's Module" and the measurement uncertainty  Consensus values calculated from the results of the participants
No. 1607 Tensile test aluminium ound specimens)	Material: Production of specimens: Results to be submitted: Assigned Value: Additional information:	6 round test specimens, aluminium, $d_0 = 6$ mm, specimen head: ISO thread M10 by the organiser  Characteristic values according to the test standard, additionally "Young's Module" and the measurement uncertainty  Consensus values calculated from the results of the participants  Statement to the measurement uncertainty of the test method
No. 1607 Tensile test aluminium (round specimens)	Material: Production of specimens: Results to be submitted: Assigned Value:	6 round test specimens, aluminium, $d_0 = 6$ mm, specimen head: ISO thread M10 by the organiser  Characteristic values according to the test standard, additionally "Young's Module" and the measurement uncertainty  Consensus values calculated from the results of the participants  Statement to the measurement uncertainty of the test method  Germany 370 €; other countries + transport costs*
No. 1607 Tensile test aluminium (round specimens)	Material: Production of specimens: Results to be submitted: Assigned Value: Additional information:	6 round test specimens, aluminium, $d_0 = 6$ mm, specimen head: ISO thread M10 by the organiser  Characteristic values according to the test standard, additionally "Young's Module" and the measurement uncertainty  Consensus values calculated from the results of the participants  Statement to the measurement uncertainty of the test method
No. 1607 Tensile test aluminium (round specimens)	Material: Production of specimens: Results to be submitted: Assigned Value: Additional information:	6 round test specimens, aluminium, $d_0 = 6$ mm, specimen head: ISO thread M10 by the organiser  Characteristic values according to the test standard, additionally "Young's Module" and the measurement uncertainty  Consensus values calculated from the results of the participants  Statement to the measurement uncertainty of the test method  Germany 370 €; other countries + transport costs*
	Material: Production of specimens: Results to be submitted: Assigned Value: Additional information: Participation fee:	6 round test specimens, aluminium, d₀ = 6 mm, specimen head: ISO thread M10 by the organiser  Characteristic values according to the test standard, additionally "Young's Module" and the measurement uncertainty  Consensus values calculated from the results of the participants  Statement to the measurement uncertainty of the test method  Germany 370 €, other countries + transport costs* estimated start: III. quarter 2016  UT, VT  Steel specimens with flaws defined for the test method
	Material: Production of specimens: Results to be submitted: Assigned Value: Additional information: Participation fee:  Test standard:	6 round test specimens, aluminium, <i>d</i> <sub>0</sub> = 6 mm, specimen head: ISO thread M10 by the organiser  Characteristic values according to the test standard, additionally "Young's Module" and the measurement uncertainty  Consensus values calculated from the results of the participants  Statement to the measurement uncertainty of the test method  Germany 370 €, other countries + transport costs* estimated start: III. quarter 2016  UT, VT  Steel specimens with flaws defined for the test method  Type / position / size of flaws
	Material: Production of specimens: Results to be submitted:  Assigned Value: Additional information: Participation fee:  Test standard: Material: Results to be submitted: Assigned value:	6 round test specimens, aluminium, <i>d</i> <sub>0</sub> = 6 mm, specimen head: ISO thread M10 by the organiser  Characteristic values according to the test standard, additionally "Young's Module" and the measurement uncertainty  Consensus values calculated from the results of the participants  Statement to the measurement uncertainty of the test method  Germany 370 €, other countries + transport costs* estimated start: III. quarter 2016  UT, VT  Steel specimens with flaws defined for the test method  Type / position / size of flaws  Sample solution of Fraunhofer IZFP Saarbrücken, Germany; UT: true value
	Material: Production of specimens: Results to be submitted: Assigned Value: Additional information: Participation fee:  Test standard: Material: Results to be submitted:	6 round test specimens, aluminium, <i>d</i> <sub>0</sub> = 6 mm, specimen head: ISO thread M10 by the organiser  Characteristic values according to the test standard, additionally "Young's Module" and the measurement uncertainty  Consensus values calculated from the results of the participants  Statement to the measurement uncertainty of the test method  Germany 370 €, other countries + transport costs* estimated start: III. quarter 2016  UT, VT  Steel specimens with flaws defined for the test method  Type / position / size of flaws  Sample solution of Fraunhofer IZFP Saarbrücken, Germany; UT: true value  Each sample will be tested by several participants.
	Material: Production of specimens: Results to be submitted: Assigned Value: Additional information: Participation fee:  Test standard: Material: Results to be submitted: Assigned value: Test sequence:	6 round test specimens, aluminium, <i>d</i> <sub>0</sub> = 6 mm, specimen head: ISO thread M10 by the organiser  Characteristic values according to the test standard, additionally "Young's Module" and the measurement uncertainty  Consensus values calculated from the results of the participants  Statement to the measurement uncertainty of the test method  Germany 370 €, other countries + transport costs* estimated start: III. quarter 2016  UT, VT  Steel specimens with flaws defined for the test method  Type / position / size of flaws  Sample solution of Fraunhofer IZFP Saarbrücken, Germany; UT: true value  Each sample will be tested by several participants. There will be an arrangement of the dates in advance.
	Material: Production of specimens: Results to be submitted:  Assigned Value: Additional information: Participation fee:  Test standard: Material: Results to be submitted: Assigned value:	6 round test specimens, aluminium, <i>d</i> <sub>0</sub> = 6 mm, specimen head: ISO thread M10 by the organiser  Characteristic values according to the test standard, additionally "Young's Module" and the measurement uncertainty  Consensus values calculated from the results of the participants  Statement to the measurement uncertainty of the test method  Germany 370 €; other countries + transport costs* estimated start: III. quarter 2016  UT, VT  Steel specimens with flaws defined for the test method  Type / position / size of flaws  Sample solution of Fraunhofer IZFP Saarbrücken, Germany; UT: true value Each sample will be tested by several participants. There will be an arrangement of the dates in advance.  One method:
	Material: Production of specimens: Results to be submitted: Assigned Value: Additional information: Participation fee:  Test standard: Material: Results to be submitted: Assigned value: Test sequence:	6 round test specimens, aluminium, <i>d</i> <sub>0</sub> = 6 mm, specimen head: ISO thread M10 by the organiser  Characteristic values according to the test standard, additionally "Young's Module" and the measurement uncertainty  Consensus values calculated from the results of the participants  Statement to the measurement uncertainty of the test method  Germany 370 €; other countries + transport costs* estimated start: III. quarter 2016  UT, VT  Steel specimens with flaws defined for the test method  Type / position / size of flaws  Sample solution of Fraunhofer IZFP Saarbrücken, Germany; UT: true value  Each sample will be tested by several participants. There will be an arrangement of the dates in advance.  One method: Germany 350 €; other countries + transport costs*
tive	Material: Production of specimens: Results to be submitted: Assigned Value: Additional information: Participation fee:  Test standard: Material: Results to be submitted: Assigned value: Test sequence:	6 round test specimens, aluminium, <i>d</i> <sub>0</sub> = 6 mm, specimen head: ISO thread M10 by the organiser  Characteristic values according to the test standard, additionally "Young's Module" and the measurement uncertainty  Consensus values calculated from the results of the participants  Statement to the measurement uncertainty of the test method  Germany 370 €, other countries + transport costs* estimated start: III. quarter 2016  UT, VT  Steel specimens with flaws defined for the test method  Type / position / size of flaws  Sample solution of Fraunhofer IZFP Saarbrücken, Germany; UT: true value  Each sample will be tested by several participants. There will be an arrangement of the dates in advance.  One method: Germany 350 €, other countries + transport costs*  Two methods:
	Material: Production of specimens: Results to be submitted: Assigned Value: Additional information: Participation fee:  Test standard: Material: Results to be submitted: Assigned value: Test sequence:	6 round test specimens, aluminium, <i>d</i> <sub>0</sub> = 6 mm, specimen head: ISO thread M10 by the organiser  Characteristic values according to the test standard, additionally "Young's Module" and the measurement uncertainty  Consensus values calculated from the results of the participants  Statement to the measurement uncertainty of the test method  Germany 370 €; other countries + transport costs* estimated start: III. quarter 2016  UT, VT  Steel specimens with flaws defined for the test method  Type / position / size of flaws  Sample solution of Fraunhofer IZFP Saarbrücken, Germany; UT: true value  Each sample will be tested by several participants. There will be an arrangement of the dates in advance.  One method: Germany 350 €; other countries + transport costs*
	Material: Production of specimens: Results to be submitted: Assigned Value: Additional information: Participation fee:  Test standard: Material: Results to be submitted: Assigned value: Test sequence: Participation fee:	6 round test specimens, aluminium, <i>d</i> <sub>0</sub> = 6 mm, specimen head: ISO thread M10 by the organiser  Characteristic values according to the test standard, additionally "Young's Module" and the measurement uncertainty  Consensus values calculated from the results of the participants  Statement to the measurement uncertainty of the test method  Germany 370 €, other countries + transport costs* estimated start: III. quarter 2016  UT, VT  Steel specimens with flaws defined for the test method  Type / position / size of flaws  Sample solution of Fraunhofer IZFP Saarbrücken, Germany; UT: true value  Each sample will be tested by several participants. There will be an arrangement of the dates in advance.  One method: Germany 350 €, other countries + transport costs*  Two methods: Germany 620 €, other countries + transport costs* estimated start: III. quarter 2016
	Material: Production of specimens: Results to be submitted: Assigned Value: Additional information: Participation fee:  Test standard: Material: Results to be submitted: Assigned value: Test sequence:  Participation fee:	6 round test specimens, aluminium, <i>d</i> <sub>0</sub> = 6 mm, specimen head: ISO thread M10 by the organiser  Characteristic values according to the test standard, additionally "Young's Module" and the measurement uncertainty  Consensus values calculated from the results of the participants  Statement to the measurement uncertainty of the test method  Germany 370 €; other countries + transport costs* estimated start: III. quarter 2016  UT, VT  Steel specimens with flaws defined for the test method  Type / position / size of flaws  Sample solution of Fraunhofer IZFP Saarbrücken, Germany; UT: true value  Each sample will be tested by several participants. There will be an arrangement of the dates in advance.  One method: Germany 350 €; other countries + transport costs*  Two methods: Germany 620 €; other countries + transport costs* estimated start: III. quarter 2016
No. 1608 Non-destructive testing	Material: Production of specimens: Results to be submitted: Assigned Value: Additional information: Participation fee:  Test standard: Material: Results to be submitted: Assigned value: Test sequence: Participation fee:	6 round test specimens, aluminium, <i>d</i> <sub>0</sub> = 6 mm, specimen head: ISO thread M10 by the organiser  Characteristic values according to the test standard, additionally "Young's Module" and the measurement uncertainty  Consensus values calculated from the results of the participants  Statement to the measurement uncertainty of the test method  Germany 370 €; other countries + transport costs* estimated start: III. quarter 2016  UT, VT  Steel specimens with flaws defined for the test method  Type / position / size of flaws  Sample solution of Fraunhofer IZFP Saarbrücken, Germany; UT: true value  Each sample will be tested by several participants. There will be an arrangement of the dates in advance.  One method: Germany 350 €; other countries + transport costs*  Two methods: Germany 620 €; other countries + transport costs* estimated start: III. quarter 2016  EN ISO 6892-1  6 round test specimens, steel, specimen diameter <i>d</i> <sub>0</sub> = 10 mm, specimen head:
No. 1608 Non-destructive testing	Material: Production of specimens: Results to be submitted: Assigned Value: Additional information: Participation fee:  Test standard: Material: Results to be submitted: Assigned value: Test sequence:  Participation fee:	6 round test specimens, aluminium, <i>d</i> <sub>0</sub> = 6 mm, specimen head: ISO thread M10 by the organiser  Characteristic values according to the test standard, additionally "Young's Module" and the measurement uncertainty  Consensus values calculated from the results of the participants  Statement to the measurement uncertainty of the test method  Germany 370 €, other countries + transport costs* estimated start: III. quarter 2016  UT, VT  Steel specimens with flaws defined for the test method  Type / position / size of flaws  Sample solution of Fraunhofer IZFP Saarbrücken, Germany; UT: true value  Each sample will be tested by several participants. There will be an arrangement of the dates in advance.  One method: Germany 350 €, other countries + transport costs*  Two methods: Germany 620 €; other countries + transport costs* estimated start: III. quarter 2016  EN ISO 6892-1  6 round test specimens, steel, specimen diameter <i>d</i> <sub>0</sub> = 10 mm, specimen head: ISO thread M16, special shapes possible against payment
No. 1608 Non-destructive testing	Material: Production of specimens: Results to be submitted: Assigned Value: Additional information: Participation fee:  Test standard: Material: Results to be submitted: Assigned value: Test sequence: Participation fee:	6 round test specimens, aluminium, <i>d</i> <sub>0</sub> = 6 mm, specimen head: ISO thread M10 by the organiser  Characteristic values according to the test standard, additionally "Young's Module" and the measurement uncertainty  Consensus values calculated from the results of the participants  Statement to the measurement uncertainty of the test method  Germany 370 €, other countries + transport costs* estimated start: III. quarter 2016  UT, VT  Steel specimens with flaws defined for the test method  Type / position / size of flaws  Sample solution of Fraunhofer IZFP Saarbrücken, Germany; UT: true value  Each sample will be tested by several participants. There will be an arrangement of the dates in advance.  One method: Germany 350 €, other countries + transport costs*  Two methods: Germany 620 €, other countries + transport costs* estimated start: III. quarter 2016  EN ISO 6892-1  6 round test specimens, steel, specimen diameter <i>d</i> <sub>0</sub> = 10 mm, specimen head: ISO thread M16, special shapes possible against payment by the organiser
No. 1608 Non-destructive testing	Material: Production of specimens: Results to be submitted: Assigned Value: Additional information: Participation fee:  Test standard: Material: Results to be submitted: Assigned value: Test sequence:  Participation fee:	6 round test specimens, aluminium, <i>d</i> <sub>0</sub> = 6 mm, specimen head: ISO thread M10 by the organiser  Characteristic values according to the test standard, additionally "Young's Module" and the measurement uncertainty  Consensus values calculated from the results of the participants  Statement to the measurement uncertainty of the test method  Germany 370 € other countries + transport costs* estimated start: III. quarter 2016  UT, VT  Steel specimens with flaws defined for the test method  Type / position / size of flaws  Sample solution of Fraunhofer IZFP Saarbrücken, Germany; UT: true value  Each sample will be tested by several participants.  There will be an arrangement of the dates in advance.  One method:  Germany 350 € other countries + transport costs*  Two methods:  Germany 620 € other countries + transport costs* estimated start: III. quarter 2016  EN ISO 6892-1  6 round test specimens, steel, specimen diameter <i>d</i> <sub>0</sub> = 10 mm, specimen head: ISO thread M16, special shapes possible against payment by the organiser  Characteristic values according to the test standard, additionally "Young's
No. 1608 Non-destructive testing	Material: Production of specimens: Results to be submitted: Assigned Value: Additional information: Participation fee:  Test standard: Material: Results to be submitted: Assigned value: Test sequence: Participation fee:	6 round test specimens, aluminium, <i>d</i> <sub>0</sub> = 6 mm, specimen head: ISO thread M10 by the organiser  Characteristic values according to the test standard, additionally "Young's Module" and the measurement uncertainty  Consensus values calculated from the results of the participants  Statement to the measurement uncertainty of the test method  Germany 370 € other countries + transport costs* estimated start: III. quarter 2016  UT, VT  Steel specimens with flaws defined for the test method  Type / position / size of flaws  Sample solution of Fraunhofer IZFP Saarbrücken, Germany; UT: true value  Each sample will be tested by several participants. There will be an arrangement of the dates in advance.  One method:  Germany 350 € other countries + transport costs*  Two methods:  Germany 620 € other countries + transport costs* estimated start: III. quarter 2016  EN ISO 6892-1  6 round test specimens, steel, specimen diameter <i>d</i> <sub>0</sub> = 10 mm, specimen head: ISO thread M16, special shapes possible against payment by the organiser  Characteristic values according to the test standard, additionally "Young's Module" and the measurement uncertainty
No. 1608 Non-destructive testing	Material: Production of specimens: Results to be submitted: Assigned Value: Additional information: Participation fee:  Test standard: Material: Results to be submitted: Assigned value: Test sequence: Participation fee:  Test standard: Material: Production of specimens: Results to be submitted: Assigned value:	6 round test specimens, aluminium, <i>d</i> <sub>0</sub> = 6 mm, specimen head: ISO thread M10 by the organiser  Characteristic values according to the test standard, additionally "Young's Module" and the measurement uncertainty  Consensus values calculated from the results of the participants  Statement to the measurement uncertainty of the test method  Germany 370 € other countries + transport costs* estimated start: III. quarter 2016  UT, VT  Steel specimens with flaws defined for the test method  Type / position / size of flaws  Sample solution of Fraunhofer IZFP Saarbrücken, Germany; UT: true value  Each sample will be tested by several participants. There will be an arrangement of the dates in advance.  One method:  Germany 350 €, other countries + transport costs*  Two methods:  Germany 620 € other countries + transport costs* estimated start: III. quarter 2016  EN ISO 6892-1  6 round test specimens, steel, specimen diameter <i>d</i> <sub>0</sub> = 10 mm, specimen head: ISO thread M16, special shapes possible against payment by the organiser  Characteristic values according to the test standard, additionally "Young's Module" and the measurement uncertainty  Consensus value calculated from the results of all the participants
No. 1608 Non-destructive testing	Material: Production of specimens: Results to be submitted: Assigned Value: Additional information: Participation fee:  Test standard: Material: Results to be submitted: Assigned value: Test sequence: Participation fee:	6 round test specimens, aluminium, <i>d</i> <sub>0</sub> = 6 mm, specimen head: ISO thread M10 by the organiser  Characteristic values according to the test standard, additionally "Young's Module" and the measurement uncertainty  Consensus values calculated from the results of the participants  Statement to the measurement uncertainty of the test method  Germany 370 € other countries + transport costs* estimated start: III. quarter 2016  UT, VT  Steel specimens with flaws defined for the test method  Type / position / size of flaws  Sample solution of Fraunhofer IZFP Saarbrücken, Germany; UT: true value  Each sample will be tested by several participants. There will be an arrangement of the dates in advance.  One method:  Germany 350 € other countries + transport costs*  Two methods:  Germany 620 € other countries + transport costs* estimated start: III. quarter 2016  EN ISO 6892-1  6 round test specimens, steel, specimen diameter <i>d</i> <sub>0</sub> = 10 mm, specimen head: ISO thread M16, special shapes possible against payment by the organiser  Characteristic values according to the test standard, additionally "Young's Module" and the measurement uncertainty
No. 1608 Non-destructive testing	Material: Production of specimens: Results to be submitted: Assigned Value: Additional information: Participation fee:  Test standard: Material: Results to be submitted: Assigned value: Test sequence:  Participation fee:  Test standard: Material: Results to be submitted: Assigned value: Assigned value: Additional information:	6 round test specimens, aluminium, <i>d</i> <sub>0</sub> = 6 mm, specimen head: ISO thread M10 by the organiser  Characteristic values according to the test standard, additionally "Young's Module" and the measurement uncertainty  Consensus values calculated from the results of the participants  Statement to the measurement uncertainty of the test method  Germany 370 €, other countries + transport costs* estimated start: III. quarter 2016  UT, VT  Steel specimens with flaws defined for the test method  Type / position / size of flaws  Sample solution of Fraunhofer IZFP Saarbrücken, Germany; UT: true value  Each sample will be tested by several participants. There will be an arrangement of the dates in advance.  One method: Germany 350 €, other countries + transport costs*  Two methods: Germany 620 €, other countries + transport costs* estimated start: III. quarter 2016  EN ISO 6892-1  6 round test specimens, steel, specimen diameter <i>d</i> <sub>0</sub> = 10 mm, specimen head: ISO thread M16, special shapes possible against payment by the organiser  Characteristic values according to the test standard, additionally "Young's Module" and the measurement uncertainty  Consensus value calculated from the results of all the participants  Confirmation of the individual measurement uncertainty of each laboratory

<sup>\*</sup> Prices excl. valid VAT, transport costs, see www.ifep.eu



### **Information sheet** Proficiency tests metal 2016

	Test steedend	EN 100 0000 4				
el	Test standard: EN ISO 6892-1  Material: 6 flat specimens, thickness approx. 1 mm, geometry according to EN 68					
	Material.	annex B, table B2, 20 mm width				
i te	Production of specimens:	by the organiser				
3t s	Production of specimens:  Results to be submitted:	Characteristic values according to the test standard, additionally "Young's				
No. 1610 Tensile test steel flat tensile specimens	Results to be submitted.	Module" and the measurement uncertainty				
	Assigned value:	Consensus value calculated from the results of all the participants				
로 로	Additional information:	Confirmation of the individual measurement uncertainty of each laboratory				
_ <u> </u>	Participation fee:	Germany 330 €, other countries + transport costs*				
-		estimated start: II. quarter 2016				
	Test standard:	ISO 148-1 / ISO 148-2 (2 mm striker)				
	Material:	Charpy test specimens, impact energy low level (RT), average level (RT),				
	iviateriai.	high level (RT), super high level (RT)				
	Production of specimens:	by the organiser				
#	Results to be submitted:	5 values according to ISO 148 each energy level				
No. 1611 Charpy impact test	Assigned value:	Reference value, limits according to ISO 148-2				
<del>- 5</del>	Additional information:	Measurement uncertainty according to ISO 146-2				
No. 1611 py impac	Participation fee:	One energy level:				
<u>7</u> .⊑	Farticipation lee.	Germany 310 €, other countries + transport costs*				
ર્ચ ≿		Two energy levels:				
arg		Germany 490 €; other countries + transport costs*				
ర్		Three energy levels:				
_		Germany 630 € other countries + transport costs*				
		Four energy levels:				
		Germany 760 €; other countries + transport costs*				
		estimated start: III. quarter 2016				
	1					
_	Test standard:	In-house procedure (no stationary machines, see proficiency tests 1603 and 1604)				
No. 1612 Mobile Emission Spectrometry and XRF	Material:	Alloyed steel tube materials, similar to daily laboratory work (no "synthetic alloy")				
No. 1612 lile Emiss ectromet and XRF	iviateriai.	Alloyed steel tube materials, similar to daily laboratory work (no "synthetic alloy")				
는 E E X	Results to be submitted:	Allocation to steel grade, mix up test				
a ct	Assigned value:	Certificate of material				
a do	Participation fee:	Germany 300 €; other countries: + transport costs*				
ž "	. amorpanom room	estimated start: II. quarter 2016				
	Test standard:	e.g. EN ISO 643, ASTM E 112				
No. 1613 Metallography Image analysis	i est statiuatu.	appointment also possible via digital image processing				
13 ap s	Material:	Micrograph; in part simulated, in digital form and as photo				
No. 1613 tallograp Image analysis	Results to be submitted:	e.g. grain size steel / phase content steel / phase content aluminium				
na ji ji o	Assigned Value:	Consensus value, sample solution				
a _ ea &	Participation fee:	Germany 255 €, other countries + transport costs*				
Š	articipation icc.	estimated start: IV. quarter 2016				
>	Test standard:	e.g. EN ISO 643, ASTM E 112				
No. 1614 Metallography sample preparation	Material:	Metallic samples for grinding preparation and analysis				
No. 1614 stallograp sample reparatio	Results to be submitted:	e.g. carbon content, grain size				
lo. allc san spa	Assigned Value:	Consensus value, sample solution				
N let; pre	Participation fee:	Germany 275 € other countries + transport costs*				
Σ	,	estimated start: IV. quarter 2016				
	Tost standard:	EN ISO 6892-1				
<u>~</u>	Test standard: Material:	6 round test specimens, steel, 15-5PH, to be tested at room temperature				
te E	Production of specimens:	by the organiser, specimen diameter $d_0 = 6$ mm, specimen head: ISO thread M10				
15 t s talli	Results to be submitted:	Characteristic values according to the test standard, additionally "Young's				
16. q.	ixesuits to be submitted.	Module" and the measurement uncertainty				
No. 1615 sile test craft qual	Assigned Value:	Consensus values calculated from the results of the participants				
No. 1615 ensile test ster aircraft quality	Additional information:	Statement to the measurement uncertainty of the test method				
No. 1615 Tensile test steel aircraft quality	Participation fee:	Germany 450 €; other countries + transport costs*				
-	i articipation iee.	estimated start: III. quarter 2016				
		Communication in quarter 2010				

<sup>\*</sup> Prices excl. valid VAT, transport costs, see www.ifep.eu



#### **Information sheet Proficiency tests metal 2016**

>	Test standard:	EN ISO 6892-2			
± €	Material:	6 round test specimens, Inconel 718, to be tested at 650 °C			
6 est d a	Production of specimens:	by the organiser, specimen diameter $d_0 = 6$ mm, specimen head: ISO thread M10			
No. 1616 Tensile test nickel- based alloy	Results to be submitted:	Characteristic values according to the test standard, additionally "Young's Module" and the measurement uncertainty			
o. Isi	Assigned Value:	Consensus values calculated from the results of the participants			
호호	Additional information:	Statement to the measurement uncertainty of the test method			
ᆫ 당	Participation fee:	Germany 450 €; other countries + transport costs*			
<u>-</u>	T distolpation roo.	estimated start: II. quarter 2016			
	Test standard:	EN ISO 6892-1			
	Material:	6 round test specimens, Titan, 6Al-4V, to be tested at room temperature			
y y	Production of specimens:	by the organiser, specimen diameter $d_0 = 6$ mm, specimen head: ISO thread M10			
No. 1617 Tensile test titan alloy	Results to be submitted:	Characteristic values according to the test standard, additionally "Young's Module" and the measurement uncertainty			
lo. Insi	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 2016			
	Test standard:	BS 131-1			
	Material:	Steel, sections for production of five specimens			
∞ <del>+</del> :	Production of specimens:	by the participants			
No. 1618 Izod test steel	Results to be submitted:	Characteristic values according to the test standard			
o. 161 od tes steel	Assigned value:	Consensus value calculated from the results of all the participants			
ŽŽ	Additional information:	Measurement uncertainty of test procedure			
	Participation fee:	Germany 350 €, other countries + transport costs*			
	· · · · · · · · · · · · · · · · · · ·	estimated start: III. quarter 2016			
	Test standard:	ASTM E139, BS EN ISO 204, ASTM E292			
est loy	Material:	Inconel 718			
al et	Production of specimens:	by the organizer, according to ASTM E8, diameter 6 mm			
No. 1619 Stress rupture test nickel-based alloy	Results to be submitted:	Characteristic values according to the test standard			
rup bas	Assigned value:	Consensus value calculated from the results of all the participants			
SS -Fe	Additional information:	Measurement uncertainty of test procedure			
활성	Participation fee:	Germany 450 €, other countries + transport costs*			
S		estimated start: IV. quarter 2016			
	Test standard:	In house procedure related to VDI/VDE/DGQ 2618, Part 9.1 and 10.1			
	. sor standard.	calliper and micrometer gauge			
en	Material:	calibrated gauge blocks			
Ē	Test program:	Measurement of the final-dimensions			
20 L C	Test sequence:	The gauge blocks are measured by several participants.			
16 eas	Describe to be explored to de	There will be an arrangement of the dates in advance.			
No. 1620 Length measurement	Results to be submitted:	a) 5 measurements calliper gauge     b) 5 measurements micrometer gauge			
ig <del>t</del>	Assigned Value:	Certified reference value			
ē.	Additional information:	Information on the measurement uncertainty			
_	Participation fee:	Germany 350 €, other countries + transport costs*			
		estimated start: IV. quarter 2016			
+ D	Test standard:	EN ISO 642 (Jominy test)			
in	Material:	5 specimens, normalized, 25 mm x 100 mm			
본 호 호	Production of specimens:	by the participants			
No. 1621 Hardenability test by end quenching	Results to be submitted:	Characteristic values according to the test standard			
nal Iqi	Assigned value:	Consensus value calculated from the results of all the participants			
ğ g	Additional information:	Measurement uncertainty of test procedure			
ar ĕ	Participation fee:	Germany 310 €, other countries + transport costs*			
<b>-</b> 0		estimated start: III. quarter 2016			

<sup>\*</sup> Prices excl. valid VAT, transport costs, see www.ifep.eu



### **Information sheet** Proficiency tests metal 2016

Institut für Eignungsprüfung GmbH • Daimlerstraße 8 • D-45770 Marl

2 _ e	Test standard:	Technical guideline VGB-S-517-00		
	Material:	Replica; Micrograph images of heat resistant steel		
ca ca	Test procedure:	Every participant receives replicas of heat resistant steel for classification		
No. 1622 Replica technique	Results to be submitted:	Statement of evaluation class according to VGB-S-517		
Š & 5 2 €	Assigned Value:	Consensus values calculated from the results of the participants		
- \$	Participation fee:	Germany 330 €; other countries + transport costs*		
	Farticipation ree.	estimated start: III. quarter 2016		
	T=			
	Test standard:	EN ISO 15630-1, EN ISO 6892-1		
	Material:	6 reinforcing bars		
No. 1623 Tensile test steel for the einforcement	Production of specimens:	by the participants		
e te	Results to be submitted:	according to the test standard, additionally Young's Module and the measurement		
sil fo		uncertainty (not evaluated)		
Tee Dr	Assigned Value:	Consensus values calculated from the results of the participants		
⊢ ফ :ভ	Additional information:	Measurement uncertainty of test procedure		
	Participation fee:	Germany 310 €; other countries + transport costs*		
		estimated start: III. quarter 2016		
	Test standard:	e.g. EN 10247, DIN 50602		
등				
24 ity	Material:	Micrographs		
No. 1624 Determination of purity	Results to be submitted:	Determination of metallic inclusion		
of Eg	Assigned Value:	Consensus value		
2 \$ 0	Participation fee:	Germany 295 €; other countries + transport costs*		
۵	·	estimated start: IV. quarter 2016		
	Test standard:	All applicable standards allowed		
"	Material:	Reference specimens		
No. 1625 Surface roughness	Production of specimens:	by the organiser		
16; fac	Test procedure:	Each participant receives a reference specimen		
No. 1625 Surface oughnes	Results to be submitted:	$R_a, R_z, R_{max}$		
ع ۾ ق	Assigned Value:	Reference value		
	Participation fee:	Germany 280 €; other countries + transport costs*		
		estimated start: III. quarter 2016		
	Test standard:	VDA 233-102		
No. 1626 Alternating climate test	Material:	Reference specimens		
No. 1626 Alternatine Iimate tes	Production of specimens:	by the organiser		
# II 7	Results to be submitted:	Mass loss		
S 활 를	Assigned value:	Reference value		
๔ฃ	Participation fee:	Germany 275 €; other countries + transport costs*		
		estimated start: III. quarter 2016		

<sup>\*</sup> Prices. excl. valid VAT, transport costs, see www.ifep.eu





## Registration proficiency tests metal 2016: part 1 via fax to: +49 (0) 2365 / 209 00 35 or via e-mail to: Sorge@ifep.de

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

No.	please mark	Proficiency test	Expected Start (quarter/2016)	Return of the results	Participation fee
1601-1a		Hardness testing Brinell HBW 2,5/187,5	II/2016	1 week	1601-1a <b>or</b> 1601-1b: total 330 €*
1601-1b		Hardness testing Brinell HBW 10/3000	II/2016	1 week	1601-1a <b>and</b> 1601-1b: total 490 €*
1601-2		Hardness testing Rockwell C	II/2016	1 week	330 €*
1602		Testing of fasteners	III/2016	4 weeks	320 €*
1603a		Emission spectrometry low alloyed steel	II/2016	4 weeks	1 alloy: total 310 €*
1603b		Emission spectrometry high alloyed steel	II/2016	4 weeks	2 alloys: total 550 €*
1604a		Emission spectrometry Aluminium-alloy	II/2016	4 weeks	1 alloy: total 310 €*
1604b		Emission spectrometry Nickel-based alloy	II/2016	4 weeks	2 alloys: total 550 €*
1604c		Emission spectrometry Titan-alloy	II/2016	4 weeks	3 alloys: total 750 €*
1605		Resistance against intergranular attack	II/2016	4 weeks	310 €*
1606		Indirect verification of salt spray test chamber	II/2016	4 weeks	275 €*
1607		Tensile test aluminium, round bars	III/2016	4 weeks	370 €*
1608a		UT, ultrasonic testing	III/2016	1 week	1 method: total 350 €*
1608b		VT, visual testing	III/2016	1 week	2 methods: total 620 €*
1609		Tensile test steel round bars	III/2016	4 weeks	450 €*
1610		Tensile test steel flat specimens	II/2016	4 weeks	330 €*
1611a		Charpy impact test low level			1 level: total 310 €*
1611b		Charpy impact test average level	III/2016	4 weeks	2 levels: total 490 €* 3 levels: total 630 €*
1611c		Charpy impact test high level	111/2010		
1611d		Charpy impact test super high level			4 levels: total 760 €*
1612		Mobile Emission spectrometry and XRF	II/2016	4 weeks	300 €*
1613		Metallography, image analysis	IV/2016	4 weeks	255 €*
1614		Metallography, sample preparation	IV/2016	4 weeks	275 €*
1615		Tensile test steel, aircraft quality	III/2016	4 weeks	450 €*
1616		Tensile test nickel-based alloy, aircraft quality	II/2016	4 weeks	450 €*
1617		Tensile test titan alloy, aircraft quality	II/2016	4 weeks	450 €*
1618		Izod test, steel	III/2016	4 weeks	350 €*
1619		Stress rupture test, nickel-based alloy	IV/2016	4 weeks	450 €*
1620		Length measurement	IV/2016	1 week	350 €*

<sup>\*</sup> Prices for Germany excl. VAT, other countries: Delivery and duty costs will be added to participation fee, see www.ifep.eu

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





#### Registration proficiency tests metal 2016: part 2

No.	please mark	Proficiency test	Expected Start (quarter 2016)	Return of the results	Participation fee
1621		Hardenability test by end quenching	III/2016	4 weeks	310 €*
1622		Replica technique	III/2016	4 weeks	330 €*
1623		Tensile test steel for the reinforcement	III/2016	4 weeks	310 €*
1624		Determination of purity	IV/2016	4 weeks	295 €*
1625		Surface roughness	III/2016	4 weeks	280 €*
1626		Alternating climate test	III/2016	4 weeks	275 €*

For cancellations later than this, the full amount will be charged.						
Company:						
Department:						
Contact person: □ Ms. □ Mr.				Date / signature / <b>stamp</b>		
Address:						
ZIP Code:	City:			Country:		<ul><li>□ german</li><li>□ english</li></ul>
Telephone: Fax: E		E-Mail:				
Necessary additional information: Your companies' tax identification number:						
Billing address (only if differing):			Deliv	very address ( <b>or</b>	nly if differing):	
Further invoice-details, e.g. cost unit:						
I confirm with my signature that the service is carried out for my/our company (and not for a private person).						

Please submit pages 6 and 7 for a binding order.

<sup>\*</sup> Prices for Germany excl. VAT, other countries: Delivery and duty costs will be added to participation fee, see www.ifep.eu

The costs have to be paid to Institut für Eignungsprüfung IfEP in advance. **Specimens will be sent to the participants upon payment by the participant.** 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