



中国合格评定国家认可委员会

实验室认可证书附件

(No. CNAS L2181)

名称: 浙江省方正校准集团有限公司

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附件 1-1 认可的检测能力范围

序号	产品/ 产品类别	项目/参数		领域 代码	检测标准 (方法) 名称及编号 (含年号)	限制范围 及说明
		序号	名称			
1	多用户电能表	1	全部参数	0410.12	多用户静止式交流有功电能表 特殊要求 JB/T 10451-2004	无线电干扰抑制设备租用
2	泄漏电流测量仪 (表)	1	全部参数	0410.11	泄漏电流测量仪 (表) JJG 843-1993	只做 (0-2000)mA
3	电压、电流功率电阻表	1	全部参数	0410.01 ~ 0410.09	直接作用模拟指示电测量仪表及附件 GB/T 7676.1-767.9-1998	
4	数字多(万)用表	1	全部参数	0410.01 ~ 0410.09	数字多用表通用技术条件 GB/T 13978-1992	
5	电参数测量仪(或数字功率计、交流数字功率表)	1	全部参数	0410.01 ~ 0410.09	交流数字功率计 JJG 780-1992	
6	钳形电流表	1	全部参数	0410.04	钳形电流表校准规范 JJF 1075-2001	
7	LCR 测量仪 (包括 C、L 测量仪, C、L 表)	1	全部参数	0410.09	LCR 测量仪技术条件和测试方法 SJ/T 10297-1991 SJ/T 10298-1991	

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8	多功能标准源(包括交直流电压、电流、电阻)	1	全部参数	0410.01 ~ 0410.09	多功能标准源校准规范 ZTSM/JX DC 04-2002	
9	直流电子负载	1	全部参数	0402.05	直流电子负载校准规范 ZTSM/JX DC 22-2003	
10	电量变送器(传感器)	1	全部参数	0406.05	交流电量转换为模拟量或数字信号的电测量变送器 GB/T 13850-1998	
11	公路车辆智能监测记录系统	1	全部参数	0335.02	公路车辆智能监测记录系统通用技术条件 GA/T 497-2004	
12	闯红灯自动记录系统	1	全部参数	0405.06	闯红灯自动记录系统通用技术条件 GA/T 496-2004	
13	汽车行驶记录仪	1	全部参数	0335.02	汽车行驶记录仪 GB/T 19056-2003	
14	冷水水表	1	全部参数	1316.05	冷水水表 第1部分：规范 GB/T 778.1-1996 冷水水表 第2部分：安装要求 GB/T 778.2-1996 冷水水表 第3部分：试验方法和试验设备 GB/T 778.3-1996	
15	膜式煤气表	1	全部参数	1316.04	膜式煤气表 GB/T 6968-1997	
16	眼镜镜片	1	全部参数	1601.2	眼镜镜片 第一部分单光机多焦点镜片 GB 10810.1-2005	
17	眼镜架	1	全部参数	1601	眼镜架 GB/T 14214-2003	
18	配装眼镜	1	全部参数	1601.2	配装眼镜 GB 13511-1999	
19	电工电子产品	1	温度试验	0431	电工电子产品环境试验 第2部分： 试验方法 试验 A：低温 GB/T 2423.1-2001 电工电子产品环境试验 第2部分： 试验方法 试验 B：高温 GB/T 2423.2-2001 电工电子产品环境试验 第2部分： 试验方法 试验 N：温度变化 GB/T 2423.22-2002	只做温度范围： -70℃~+150℃
		2	湿热试验	0431	电工电子产品基本环境试验规程 试验 Db：交变湿热试验方法 GB/T 2423.4-1993 电工电子产品基本环境试验规程 试验 Ca：恒定湿热试验方法 GB/T 2423.3-1993	只做相对湿度范围：30%~98% (+15℃~+85℃)

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19	电工电子产 品	3	盐雾试验	0431	电工电子产品基本环境试验规程 试验 Ka: 盐雾试验方法 GB/T 2423.17-1993 电工电子产品环境试验 第 2 部分: 试验 试验 Kb: 盐雾, 交变 (氯化钠 溶液) GB/T 2423.18-2000	只做“中性盐 雾试验和中性 交变盐雾试 验”方法
		4	振动试验	0431	电工电子产品环境试验 第 2 部分: 试验方法 试验 Fc 和导则: 振动(正 弦) GB/T 2423.10-1995	只做“正弦振 动”方法
		5	冲击试验	0431	电工电子产品环境试验 第 2 部分: 试验方法 试验 Ea 和导则: 冲击 GB/T 2423.5-1995	只做“加速度脉 冲波形为半正 弦波”方法
		6	自由跌落	0431	电工电子产品环境试验 第 2 部分: 试验方法 试验 Ed: 自由跌落 GB/T 2423.8-1995	只做“自由跌落 试验”方法
		7	碰撞试验	0431	电工电子产品环境试验 第 2 部分: 试验方法 试验 Eb 和导则: 碰撞 GB/T 2423.6-1995	只做“加速度脉 冲波形为半正 弦波”方法
20	分析仪器	1	温度试验	0431	分析仪器环境试验方法 低温试验 GB/T 11606.3-1989 分析仪器环境试验方法 高温试验 GB/T 11606.4-1989 分析仪器环境试验方法 低温贮存试 验 GB/T 11606.14-1989 分析仪器环境试验方法 高温贮存试 验 GB/T 11606.15-1989 分析仪器环境试验方法 温度变化试 验 GB/T 11606.5-1989	只做温度范围: -70℃~+150℃
		2	湿热试验	0431	分析仪器环境试验方法 恒定湿度试 验 GB/T 11606.6-1989	只做相对湿度 范围: 30%~98% (+15℃~+85 ℃)
		3	盐雾试验	0431	分析仪器环境试验方法 盐雾试验 GB/T 11606.13-1989	只做“中性盐 雾试验和中性 交变盐雾试 验”方法
		4	振动试验	0431	分析仪器环境试验方法 振动试验 GB/T 11606.8-1989	只做“正弦振 动”方法
		5	碰撞试验	0431	分析仪器环境试验方法 碰撞试验 GB/T 11606.17-1989	只做“加速度脉 冲波形为半正 弦波”方法

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21	光学和光学 仪器	1	温度试验	0431	光学和光学仪器 环境试验方法 低温、高温、湿热 GB/T 12085.2-1989	只做温度范围： -70℃~+150℃
		2	湿热试验	0431	光学和光学仪器 环境试验方法 低温、高温、湿热 GB/T 12085.2-1989	只做相对湿度 范围：30%~98% (+15℃~+85 ℃)
		3	盐雾试验	0431	光学和光学仪器 环境试验方法盐雾 GB/T 12085.4-1989	只做“中性盐 雾试验和中性 交变盐雾试 验”方法
		4	振动试验	0431	光学和光学仪器 环境试验方法机械 作用力 GB/T 12085.3-1989	只做“正弦振 动”方法
		5	冲击试验	0431	光学和光学仪器 环境试验方法机械 作用力 GB/T 12085.3-1989	只做“加速度脉 冲波形为半正 弦波”方法
		6	碰撞试验	0431	光学和光学仪器 环境试验方法机械 作用力 GB/T 12085.3-1989	只做“加速度脉 冲波形为半正 弦波”方法
22	数字通信设 备	1	温度试验	0431	数字通信设备环境试验方法 GB/T 13543-1992	只做温度范围： -70℃~+150℃
		2	湿热试验	0431	数字通信设备环境试验方法 GB/T 13543-1992	只做相对湿度 范围：30%~98% (+15℃~+85 ℃)
		3	盐雾试验	0431	数字通信设备环境试验方法 GB/T 13543-1992	只做“中性盐 雾试验和中性 交变盐雾试 验”方法
		4	振动试验	0431	数字通信设备环境试验方法 GB/T 13543-1992	只做“正弦振 动”方法
		5	冲击试验	0431	数字通信设备环境试验方法 GB/T 13543-1992	只做“加速度脉 冲波形为半正 弦波”方法
23	电子测量仪 器	1	温度试验	0431	电子测量仪器 温度试验 GB/T 6587.2-1986	只做温度范围： -70℃~+150℃
		2	湿热试验	0431	电子测量仪器 湿度试验 GB/T 6587.3-1986	只做相对湿度 范围：30%~98% (+15℃~+85 ℃)
		3	振动试验	0431	电子测量仪器 振动试验 GB/T 6587.4-1986	只做“正弦振 动”方法

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23	电子测量仪器	4	冲击试验	0431	电子测量仪器 冲击试验 GB/T 6587.5-1986	只做“加速度脉冲波形为半正弦波”方法
24	人造气氛腐蚀	1	盐雾试验	0431	人造气氛腐蚀试验 盐雾试验 GB/T 10125-1997	只做“中性盐雾试验和中性交变盐雾试验”方法
25	工业自动化仪表	1	振动试验	0431	电子测量仪器 运输试验 GB/T 6587.6-1986	只做“正弦振动”方法
26	家用和类似用途电器	1	撞击试验	0431	家用和类似用途电器的安全 第一部分：通用要求 GB 4706.1-1998	只做 GB 4706.1.21-1998
27	音频、视频及类似电子设备	1	撞击试验	0431	音频、视频及类似电子设备安全要求 GB 8898-2001	只做 GB 8898.12.1.3-2001
28	包装 运输 包装件	1	振动试验	0431	包装 运输包装件基本试验 第7部分：正弦定频振动试验方法 GB/T 4857.7-2005 包装 运输包装件基本试验 第7部分：正弦变频振动试验方法 GB/T 4857.10-2005	只做“正弦振动”方法
		2	碰撞试验	0431	包装 运输包装件 碰撞试验方法 GB/T 4857.20-1992	只做“加速度脉冲波形为半正弦波”方法
29	外壳防护等级	1	IP 代码	0502	外壳防护等级（IP 代码） GB 4208-1993	
30	噪声源	1	声功率	1405	声学 噪声源声功率级的测定 消声室和半消声室精密法 GB/T6882-1986 声学 声压法测定噪声源声功率级 反射面上方近似自由场的工程法 GB/T3767-1996 声学 声压法测定噪声源声功率级 反射面上方采用包络测量表面的简易法 GB/T3768-1996 声学 家用电器及类似用途器具噪声测试方法 第1部分：通用要求 GB/T4214.1-2000 旋转电机噪声测定方法及限值 噪声工程测定方法 GB/T10069.1-1988 旋转电机噪声测定方法及限值 噪声简易测定方法 GB/T10069.2-1988	只做“半消声室法”方法

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31	金属切削机 床	1	位置精度	1304.02	机床检验通则 第2部分：数控轴线的定位精度和重复定位精度的确定 GB/T 17421.2-2000	只做：直线度、平面度、平行度、重合度、等距度、垂直度、旋转度
		2	几何精度	1304.01	机床检验通则 第1部分：在无负荷或精加工条件下机床的几何精度 GB/T 17421.1-1998	
32	静止式交流有功电能表	1	全部参数	0410.12	1级和2级静止式交流有功电能表 GB/T 17215-2002、 IEC 61036: 2000	无线电干扰抑制设备租用
					0.2S级和0.5S级静止式交流有功电 度表 GB/T 17883-1999、 IEC 60687: 1992	无线电干扰抑制设备租用
33	静止式交流无功电能表	1	全部参数	0410.12	2级和3级静止式交流无功电度表 GB/T 17882-1999、 IEC 61268: 1995	无线电干扰抑制设备租用
34	交流有功电 能表	1	全部参数	0410.12	0.5、1和2级交流有功电度表 GB/T 15283-1994、IEC 60521: 1988	
35	无功电能表	1	全部参数	0410.12	无功电度表 GB/T 15282-1994	
36	多费率电能 表	1	全部参数	0410.12	多费率电能表 特殊要求 GB/T 15284-2002	无线电干扰抑制设备租用
37	脉冲电能表	1	全部参数	0410.12	脉冲电度表 JB/T 7655-1995	无线电干扰抑制设备租用
38	多功能电能 表	1	全部参数	0410.12	多功能电能表 DL/T 614-1997	无线电干扰抑制设备租用
39	预付费电能 表	1	全部参数	0410.12	IC卡预付费售电系统 第3部分：预 付费电度表 GB/T 18460.3-2001	无线电干扰抑制设备租用
40	最大需量 电能表	1	全部参数	0410.12	最大需量电度表 JB/T 7657-1995	
41	永磁（硬磁） 材料	1	剩磁	0405	永磁（硬磁）材料磁性试验方法 GB/T 3217-1992 硬磁材料一般技术条件 GB/T 17951-2005	
		2	矫顽力	0405	永磁（硬磁）材料磁性试验方法 GB/T 3217-1992 硬磁材料一般技术条件 GB/T 17951-2005	
		3	内禀矫 顽力	0405	永磁（硬磁）材料磁性试验方法 GB/T 3217-1992 硬磁材料一般技术条件 GB/T 17951-2005	

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41	永磁（硬磁） 材料	4	最大磁 能积	0405	永磁（硬磁）材料磁性试验方法 GB/T 3217-1992 硬磁材料一般技术条件 GB/T 17951-2005	
		5	回复磁 导率	0405	永磁（硬磁）材料磁性试验方法 GB/T 3217-1992 硬磁材料一般技术条件 GB/T 17951-2005	
42	电工钢片 （带）	1	比总损耗	0405	用爱泼斯坦方圈测量电工钢片（带） 磁性能的方法 GB/T 3655-2000	
		2	磁感应 强度	0405	用爱泼斯坦方圈测量电工钢片（带） 磁性能的方法 GB/T 3655-2000	
		3	比视在 功率	0405	用爱泼斯坦方圈测量电工钢片（带） 磁性能的方法 GB/T 3655-2000	
43	磁性物品	1	磁场强度	0405	危险物品规则包装说明 902 IATA 42 nd 2001	
44	汽车、摩托 车用磁感应 式车速里程 表	1	全项	1324.02	汽车、摩托车用仪表 QC/T 727-2004	
45	汽车、摩托 车用电子车 速里程表	1	全项	1324.02	汽车、摩托车用仪表 QC/T 727-2004	
46	汽车、摩托 车用磁感应 式转速表	1	全项	1324.01	汽车、摩托车用仪表 QC/T 727-2004	
47	汽车、摩托 车用电子转 速表	1	全项	1324.01	汽车、摩托车用仪表 QC/T 727-2004	
48	汽车、摩托 车用燃油表	1	全项	1317	汽车、摩托车用仪表 QC/T 727-2004	
49	汽车用温度 表	1	全项	1502.08	汽车、摩托车用仪表 QC/T 727-2004	
50	汽车、摩托 车用电流表	1	全项	0410.03	汽车、摩托车用仪表 QC/T 727-2004	
51	汽车、摩托 车用电压表	1	全项	0410.01	汽车、摩托车用仪表 QC/T 727-2004	
52	汽车用压力 表	1	全项	1320.01	汽车、摩托车用仪表 QC/T 727-2004	

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53	超声波探伤	1	全项	1101	①汽轮机、汽轮发电机转子和主轴锻件超声波探伤方法 JB/T 1581-1996 ②钢锻件超声波检验方法 GB/T 6402-1991 ③钢焊缝手工超声波探伤方法和探伤结果分级 GB/T 11345-1989 ④厚钢板超声波检验方法 GB/T 2970-2004 ⑤铸钢件超声探伤及质量评级标准 GB/T 7233-1987 ⑥船舶钢焊缝手工超声波探伤工艺和质量分级 CB/T 3559-1993	
54	磁粉探伤	1	全项	1101	①无损检测 磁粉检测 第1部分 总则 GB/T 15822.1-2005 ②焊缝磁粉检验方法和缺陷磁痕的分级 JB/T 6061-1992 ③铸钢件磁粉探伤及质量评级方法 GB/T 9444-1988 ④锻钢件磁粉检验方法 JB/T 8468-1996	
55	渗透探伤	1	全项	1101	焊缝渗透检验方法和缺陷迹痕的分级 JB/T 6062-1992 铸钢件渗透探伤及缺陷显示迹痕的评级方法 GB/T 9443-1988	
56	电流互感器	1	全项	0406.01	电流互感器 GB 1208-1997	1)限 35kV 及以下电流互感器 2) 雷电冲击试验设备租用 3) 短时电流试验设备租用
57	电压互感器	1	全项	0406.01	电压互感器 GB 1207-1997	1)限 35kV 及以下电压互感器 2) 雷电冲击试验设备租用

序号	产品/ 产品类别	项目/参数		领域 代码	检测标准（方法）名称及编号 （含年号）	限制范围 及说明
		序号	名称			
58	射线检测	1	全项	1101	①船舶钢焊缝射线照相工艺和质量 分级 CB/T 3558-1994 ②钢熔化焊角焊缝射线照相方法和 质量分级 DL/T 541-1994 ③钢制承压管道对接接头射线检 验技术规程 DL/T 821-2002 ④铝合金铸件 X 射线照相检验针孔 （圆形）分级 GB/T 11346-1989 ⑤钢熔化焊对接接头射线照相和质 量分级 GB/T 3323-2005 ⑥钢管环缝熔化焊对接接头射线透 照工艺和质量分级 GB/T 12605-1990 ⑦球形储罐 γ 射线全景曝光照相方 法 GB/T 16544-1996 ⑧铸钢件射线照相及底片等级分类 方法 GB/T 5677-1985 ⑨阀门受压铸钢件射线照相检验 JB/T 6440-1992	
59	钢卷尺	1	全部参数	1303.27	钢卷尺 QB/T 2443-1999	
60	金属直尺	1	全部参数	1303.03	金属直尺 GB/T 9056 - 2004	
61	纤维卷尺	1	全部参数	1303.27	纤维卷尺 QB 1519 - 1992	
62	标准筛	1	全部参数	1303.29	金属丝编织网试验筛 GB/T 6003.1 - 1997	
63	金属切削机 床 安全防 护	1	部分参数	1304.03	金属切削机床 安全防护通用技术条 件 GB 15760-2004	只做：机床结 构、安全防护装 置及安全标志、 控制系统、动力 系统（电气、液 压、气动）、润 滑、冷却系统和 切屑、噪声、照 明

序号	产品/ 产品类别	项目/参数		领域 代码	检测标准（方法）名称及编号 （含年号）	限制范围 及说明
		序号	名称			
64	电子式标准 电能表	1	全部参数	0410.12	电子式标准电能表技术条件 DL/T 585-1995	
65	电能表检验 装置	1	全部参数	0425.01	电能表检验装置 GB/T 11150-2001	
66	低压电力用 户集中抄表 系统	1	全部参数	0419.14	低压电力用户集中抄表系统 技术条 件 DL/T 698-1999	
67	交流电能表 现场校验仪	1	全部参数	0410.12	交流电能表现场测试仪 DL/T 826-2002	
68	静电放电 抗扰度 (参数)	1	静电放电 抗扰度	1207	电磁兼容 试验和测量技术 静电放电抗扰度试验 GB/T 17626.2-1998 IEC 61000-4-2: 1995	
69	高频电磁场 抗扰度(参 数)	1	高频电磁 场抗扰度	1207	电磁兼容 试验和测量技术射频电磁 场辐射抗扰度试验 GB/T 17626.3-1998 IEC 61000-4-3: 1995	
70	快速瞬变脉 冲群抗扰度 (参数)	1	快速瞬变 脉冲群抗 扰度	1207	电磁兼容 试验和测量技术 电快速瞬变脉冲群抗扰度试验 GB/T 17626.4-1998 IEC 61000-4-4: 1995	
71	浪涌抗扰度 (参数)	1	浪涌 抗扰度	1207	电磁兼容 试验和测量技术 浪涌（冲击）抗扰度试验 GB/T 17626.5-1999 IEC 61000-4-5: 1995	
72	射频场感应 的传导骚扰 抗扰度 (参数)	1	射频场感 应的传导 骚扰抗扰 度	1207	电磁兼容 试验和测量技术 射频场感应的传导骚扰抗扰度 GB/T 17626.6-1998 IEC 61000-4-6: 1996	
73	预付费水表	1	全部参数	1316.05	IC卡冷水水表 CJ/T 133-2001	
74	热水表	1	全部参数	1316.05	热水表试行 JJG 686-2006 热水水表 规范 JB/T 8802-1998	
75	热量表	1	全部参数	1316.05	热量表 CJ 128-2000 热能表 JJG 225-2001	
76	预付费燃气 表	1	全部参数	1316.04	IC卡家用膜式燃气表 CJ/T 112-2000	
77	有线数字电 视广播 QAM 调制器	1	载波频率 偏差	0419.01	有线数字电视广播 QAM 调制器技术要 求和测量方法 GY/T 198-2003	
		2	最大输出 电平	0419.01	有线数字电视广播 QAM 调制器技术要 求和测量方法 GY/T 198-2003	
		3	输出端反 射损耗	0419.01	有线数字电视广播 QAM 调制器技术要 求和测量方法 GY/T 198-2003	

序号	产品/ 产品类别	项目/参数		领域 代码	检测标准（方法）名称及编号 （含年号）	限制范围 及说明
		序号	名称			
77	有线数字电 视广播 QAM 调制器	4	调制误差	0419.01	有线数字电视广播 QAM 调制器技术要 求和测量方法 GY/T 198-2003	
		5	载噪比	0419.01	有线数字电视广播 QAM 调制器技术要 求和测量方法 GY/T 198-2003	
		6	寄生输出 抑制比	0419.01	有线数字电视广播 QAM 调制器技术要 求和测量方法 GY/T 198-2003	
		7	相位噪声	0419.01	有线数字电视广播 QAM 调制器技术要 求和测量方法 GY/T 198-2003	
		8	工作频率	0419.01	有线数字电视广播 QAM 调制器技术要 求和测量方法 GY/T 198-2003	
		9	输出阻抗	0419.01	有线数字电视广播 QAM 调制器技术要 求和测量方法 GY/T 198-2003	
78	光学树脂 眼镜片	1	全部参数	1601.2	光学树脂眼镜片 QB 2506-2001	
79	太阳镜	1	全部参数	1601.2	太阳镜 QB 2457-1999	
80	滑板式汽车 侧滑检验台	1	全部参数	1309.19	滑板式汽车侧滑检验台 GB/T 11798.1-2001	
81	滚筒式车速 表检验台	1	全部参数	1324.02	滚筒式车速表检验台 GB/T 11798.4-2001	
82	滚筒反力式 制动检验台	1	全部参数	1323.03	滚筒反力式制动检验台 GB/T 11798.2-2001	
83	轴（轮）重 仪	1	全部参数	1310.03	轴（轮）重仪 GB/T 11798.7-2001	
84	机动车前照 灯检测仪	1	全部参数	1611.01	机动车前照灯检测仪 GB/T 11798.6-2001	
85	滤纸式烟度 计	1	全部参数	1511.03	滤纸式烟度计 GB/T 11798.5-2001	
86	摩托车轮偏 检测仪	1	全部参数	1309.19	摩托车轮偏检测仪 GB/T 11798.8-2001	
87	汽车底盘 测功机	1	全部参数	0410.06	汽车底盘测功机 JT/T445-2001	
88	平板式汽车 制动检验台	1	全部参数	1323.04	平板式汽车制动检验台 GB/T 11798.9-2001	
89	汽车悬架装 置检测台	1	全部参数	1323.01	汽车悬架检测台 JT/T448-2001	
90	透射式烟度 计	1	全部参数	1511.04	不透光烟度计 JT/T506-2004	

序号	产品/ 产品类别	项目/参数		领域 代码	检测标准（方法）名称及编号 （含年号）	限制范围 及说明
		序号	名称			
91	称重传感器	1	全部参数	1323.03	称重传感器 GB/T 7551-1997 JJG 669-2003	
92	钢结构用大六角头高强度螺栓连接副	1	扭矩系数	0301.18	钢结构用大六角头高强度螺栓、大六角螺母、垫片技术条件 GB/T 1231-1991	
		2	螺栓硬度	0301.05	钢结构用大六角头高强度螺栓、大六角螺母、垫片技术条件 GB/T 1231-1991	
		3	螺母硬度	0301.05	钢结构用大六角头高强度螺栓、大六角螺母、垫片技术条件 GB/T 1231-1991	
		4	垫圈硬度	0301.05	钢结构用大六角头高强度螺栓、大六角螺母、垫片技术条件 GB/T 1231-1991	
		5	实物机械性能	0301.18	钢结构用大六角头高强度螺栓、大六角螺母、垫片技术条件 GB/T 1231-1991	
		6	螺纹尺寸	0301.18	钢结构用大六角头高强度螺栓、大六角螺母、垫片技术条件 GB/T 1231-1991	
		7	其它尺寸	0301.18	钢结构用大六角头高强度螺栓、大六角螺母、垫片技术条件 GB/T 1231-1991	
		8	表面缺陷	0301.18	钢结构用大六角头高强度螺栓、大六角螺母、垫片技术条件 GB/T 1231-1991	
		9	螺母保证载荷	0301.18	钢结构用大六角头高强度螺栓、大六角螺母、垫片技术条件 GB/T 1231-1991	
93	钢结构用扭剪型高强度螺栓连接副	1	连接紧固预拉力	0301.03	钢结构用扭剪型高强度螺栓连接副技术条件 GB/T 3633-1995	
		2	螺栓硬度	0301.05	钢结构用扭剪型高强度螺栓连接副技术条件 GB/T 3633-1995	
		3	螺母硬度	0301.05	钢结构用扭剪型高强度螺栓连接副技术条件 GB/T 3633-1995	
		4	垫圈硬度	0301.05	钢结构用扭剪型高强度螺栓连接副技术条件 GB/T 3633-1995	
		5	实物机械性能	0301.18	钢结构用扭剪型高强度螺栓连接副技术条件 GB/T 3633-1995	
		6	螺纹尺寸	0301.18	钢结构用扭剪型高强度螺栓连接副技术条件 GB/T 3633-1995	

序号	产品/ 产品类别	项目/参数		领域 代码	检测标准（方法）名称及编号 （含年号）	限制范围 及说明
		序号	名称			
93	钢结构用扭剪型高强度螺栓连接副	7	其它尺寸	0301.18	钢结构用扭剪型高强度螺栓连接副 技术条件 GB/T 3633-1995	
		8	表面缺陷	0301.18	钢结构用扭剪型高强度螺栓连接副 技术条件 GB/T 3633-1995	
		9	螺母保证 载荷	0301.18	钢结构用扭剪型高强度螺栓连接副 技术条件 GB/T 3633-1995	
94	钢管脚手架扣件	1	抗滑移 性能	0301.18	钢管脚手架扣件 GB 15831-1995	
		2	抗破坏 性能	0301.18	钢管脚手架扣件 GB 15831-1995	
		3	扭转刚度 性能试验	0301.18	钢管脚手架扣件 GB 15831-1995	
		4	抗拉性能 试验	0301.03	钢管脚手架扣件 GB 15831-1995	
		5	抗压性能 试验	0301.13	钢管脚手架扣件 GB 15831-1995	
		6	65N·m 扭力 矩试压	0301.18	钢管脚手架扣件 GB 15831-1995	
		7	外观	0301.18	钢管脚手架扣件 GB 15831-1995	
95	碳素结构钢	1	屈服强度	0301.01	碳素结构钢 GB/T 700-1988	
		2	抗拉强度	0301.01	碳素结构钢 GB/T 700-1988	
		3	伸长率	0301.01	碳素结构钢 GB/T 700-1988	
		4	弯曲	0301.14	碳素结构钢 GB/T 700-1988	
		5	冲击	0301.10	碳素结构钢 GB/T700-1988	
96	低合金高强度结构钢	1	屈服强度	0301.01	低合金高强度结构钢 GB 1591-1994	
		2	抗拉强度	0301.01	低合金高强度结构钢 GB 1591-1994	
		3	伸长率	0301.01	低合金高强度结构钢 GB 1591-1994	
		4	弯曲	0301.14	低合金高强度结构钢 GB 1591-1994	

序号	产品/ 产品类别	项目/参数		领域 代码	检测标准（方法）名称及编号 （含年号）	限制范围 及说明
		序号	名称			
96	低合金高强度结构钢	5	冲击	0301.10	低合金高强度结构钢 GB 1591-1994	
97	非自行指示秤	1	全部参数	1311.03	非自行指示秤 GB/T335-2002 非自动秤通用检定规程 JJG 555-1996	
98	弹簧度盘秤	1	全部参数	1311.03	弹簧度盘秤 GB/11884-2000 非自动秤通用检定规程 JJG 555-1996	
99	固定式电子秤	1	全部参数	1311.03	固定式电子秤 GB/T7723-2002 非自动秤通用检定规程 JJG 555-1996	
100	电子吊秤	1	全部参数	1311.03	电子吊秤国家标准 GB/T 11883-2002 非自动秤通用检定规程 JJG 555-1996	
101	电子计价秤	1	全部参数	1311.03	电子台案秤国家标准 GB/T 7722-2005 非自动秤通用检定规程 JJG 555-1996	
102	动态汽车衡	1	全部参数	1311.03	动态汽车衡 JJG 907-2003	
103	电子台秤	1	全部参数	1311.03	非自动秤通用检定规程 JJG 555-1996	
104	质量标注类 定量包装商 品	1	净含量	1310	定量包装商品净含量计量检验规则 JJF 1070-2005	
105	体积标注类 定量包装商 品	1	净含量	1310	定量包装商品净含量计量检验规则 JJF 1070-2005	
106	长度标注类 定量包装商 品	1	净含量	1310	定量包装商品净含量计量检验规则 JJF 1070-2005	



**CHINA NATIONAL ACCREDITATION SERVICE FOR CONFORMITY ASSESSMENT
APPENDIX OF LABORATORY ACCREDITATION CERTIFICATE**

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APPENDIX1-1 LIST OF ACCREDITED TESTING SCOPE

№	Name of Products, Type of materials	Items, Parameter, Types of tests		Code of field	Name, Code of Specification, Standard or method used	Restriction or limitation and others
		№	Name			
1	Multi-users Static Watt-hour Meters	1	all	0410.12	Particular requirements for multi-users static watt-hour meters(a.c.)JB/T 10451-2004	apply simultaneously
2	Leakage Current Instrument and Meter	1	all	0410.11	Verification Regulation of Leakage Current Instrument JJG 843-1993	Accredited only for (0-2000) mA
3	Amperemeter , Volte-meter Wattmeter and Ohmmeter	1	all	0410.01 ~ 0410.09	Direct acting indicating analogue electrical measuring instruments and their accessories GB/T 7676.1~767.9-1998	
4	Digital multimeters	1	all	0410.01 ~ 0410.09	Generic specification for digital multimeters GB/T 13978-1992	
5	Electrical Parameter Detecting Meter (or Digital powermeter, AC digital powermeter)	1	all	0410.01 ~ 0410.09	Verification Regulation of AC Digital Powermeter JJG 780-1992	

№	Name of Products, Type of materials	Items, Parameter, Types of tests		Code of field	Name, Code of Specification, Standard or method used	Restriction or limitation and others
		№	Name			
6	Clamp Ammeters	1	all	0410.04	Calibration Specification of Clamp Ammeters JJF 1075-2001	
7	LCR Detecting Meter (Including capacitance,)	1	all	0410.09	Specification of LCR measuring instruments SJ/T 10297-1991 Test methods of LCR measuring instruments SJ/T 10298-1991	
8	Multifunctional Standard Source	1	all	0410.01 ~ 0410.09	Calibration Specification of Multifunctional Standard Source ZTSM/JX DC 04 2002	
9	Electricity Loader	1	all	0402.05	Calibration Specification of Electricity Loader ZTSM/JX DC 22-2003	
10	Electrical measuring transducers	1	all	0406.05	Electrical measuring Transducers for converting a.c. electrical quantities to analogue or digital singals GB/T 13850-1998	
11	Intelligent and monitoring system of vehicles on highways	1	All items	0335.02	General specifications of intelligent and monitoring system of vehicles on highways GA/T 497-2004	
12	Automatic detecting and recording system of vehicles for violation of traffic signal	1	All items	0405.02	General specifications of automatic detecting and recording system of vehicles for violation of traffic signal GA/T 496-2004	
13	Vehicle traveling date recorder	1	All items	0335.02	Vehicle traveling date recorder GB/T 19056-2003	
14	Meters for cold potable water	1	all	1316.05	Meters for cold potable water Part1:Specifications GB/T 778.1-1996 Part2:Installation requirements GB/T 778.2-1996 Part3:Test methods and equipment GB/T 778.3-1996	
15	Diaphragm gas meters	1	all	1316.04	Diaphragm gas meters GB/T 6968-1997	

№	Name of Products, Type of materials	Items, Parameter, Types of tests		Code of field	Name, Code of Specification, Standard or method used	Restriction or limitation and others
		№	Name			
16	Spectacles lenses	1	all	1601.2	Spectacles lenses GB 10810.1-2005	
17	Spectacle frames	1	all	1601	Spectacle frames GB/T 14214-2003	
18	Assembled spectacles	1	all	1601.2	Assembled spectacles GB 13511-1999	
19	Electric and electronic products	1	Temperature test	0431	Environmental testing for electric and electronic products-Part 2:Test methods-Tests A:Cold GB/T 2423.1-2001 Environmental testing for electric and electronic products-Part 2:Test methods-Tests B:Dry heat GB/T 2423.2-2001 Environmental testing for electric and electronic products-Part 2: :Test methods-Tests N: Change temperature GB/T 2423.22-2002	Accredited Only for temperature restriction: -70℃~+150℃
		2	Moist heat test	0431	Basic environmental testing procedures for electric and electronic products—Test Db: Damp heat, cyclic GB/T 2423.4-1993 Basic environmental testing procedures for electric and electronic products—Test Ca: Damp heat, steady state GB/T 2423.3-1993	Accredited Only for Relative humidity restriction: 30%~98% (15℃~+85℃)
		3	Salt mist test	0431	Basic environmental testing procedures for electric and electronic products—Test Ka: Salt mist GB/T 2423.17-1993 Environmental testing for electric and electronic products —Part 2:Tests--Test Kb: Salt mist, cyclic (sodium chloride solution) GB/T 2423.18-2000	Accredited Only for “NSS test and NSS test (cyclic)”
		4	Vibration test	0431	Environmental testing for electric and electronic products—Part 2: Test methods—Test Fc and guidance: Vibration (Sinusoidal) GB/T 2423.10-1995	Accredited Only for “vibration (sinusoidal) test”

№	Name of Products, Type of materials	Items, Parameter, Types of tests		Code of field	Name, Code of Specification, Standard or method used	Restriction or limitation and others
		№	Name			
19	Electric and electronic products	5	Shock test	0431	Environmental testing for electric and electronic products Part 2:Test methods Test Ea and guidance: Shock GB/T 2423.5-1995	Accredited Only for “Shock tests (Sinusoidal)”
		6	Free fall test	0431	Environmental testing for electric and electronic products Part 2:Test methods Test Ed: Free fall GB/T 2423.8-1995	Accredited Only for “Free fall test”
		7	Bump test	0431	Environmental testing for electric and electronic products—Part 2: Test methods—Test Eb and guidance: Bump GB/T 2423.6-1995	Accredited Only for “Bump tests (Sinusoidal)”
20	Analytical instruments	1	Temperature test	0431	The method of environmental test for analytical instruments Cold test GB/T 11606.3-1989 The method of environmental test for analytical instruments Cold storage test GB/T 11606.14-1989 The method of environmental test for analytical instruments Dry heat GB/T 11606.4-1989 The method of environmental test for analytical instruments Change temperature GB/T 11606.5-1989 The method of environmental test for analytical instruments Dry heat storage test GB/T 11606.15-1989	Accredited Only for temperature restriction: -70℃ ~ +150℃
		2	Moist heat test	0431	The method of environmental test for analytical instruments Damp heat, steady state GB/T 11606.6-1989	Accredited Only for Relative humidity restriction: 30% ~ 98% (15℃ ~ +85℃)
		3	Salt mist test	0431	The method of environmental test for analytical instruments Salt mist test GB/T 11606.13-1989	Accredited Only for “NSS test and NSS test(cyclic)”

№	Name of Products, Type of materials	Items, Parameter, Types of tests		Code of field	Name, Code of Specification, Standard or method used	Restriction or limitation and others
		№	Name			
20	Analytical instruments	4	Vibration test	0431	The method of environmental test for analytical instruments Vibration test GB/T 11606.8-1989	Accredited Only for “vibration(sin usoidal) test”
		5	Bump test	0431	The method of environmental test for analytical instruments Bump test GB/T 11606.17-1989	Accredited Only for “Bump tests (Sinusoidal)”
21	Optics and optical	1	Temperature test	0431	Optics and optical instruments-Environmental test methods-Cold, Heat, Humidity GB/T 12085.2-1989	Accredited Only for temperature restriction: -70℃~+150℃
		2	Moist heat test	0431	Optics and optical instruments-Environmental test methods-Cold, Heat, Humidity GB/T 12085.2-1989	Accredited Only for Relative humidity restriction: 30%~98% (15℃~+85℃)
		3	Salt mist test	0431	Optics and optical instruments -Environmental test methods -Salt mist GB/T 12085.4-1989	Accredited Only for “NSS test and NSS test(cyclic)”
		4	Vibration test	0431	Optics and optical instruments —Environmental test methods —Mechanical stresses GB/T 12085.3-1989	Accredited Only for “vibration(sin usoidal) test”
		5	Shock test	0431	Optics and optical instruments— Environmental test methods— Mechanical stresses GB/T 12085.3-1989	Accredited Only for “Shock tests (Sinusoidal)”
		6	Bump test	0431	Optics and optical instruments— Environmental test methods— Mechanical stresses GB/T 12085.3-1989	Accredited Only for “Bump tests (Sinusoidal)”
22	Digital communication equipments	1	Temperature test	0431	Environmental test methods for digital communication equipments GB/T 13543-1992	Accredited Only for temperature restriction: -70℃~+150℃

№	Name of Products, Type of materials	Items, Parameter, Types of tests		Code of field	Name, Code of Specification, Standard or method used	Restriction or limitation and others
		№	Name			
22	Digital communication equipments	2	Moist heat test	0431	Environmental test methods for digital communication equipments GB/T 13543-1992	Accredited Only for Relative humidity restriction: 30%~98% (15℃~+85℃)
		3	Salt mist test	0431	Environmental test methods for digital communication equipments GB/T 13543-1992	Accredited Only for “NSS test and NSS test(cyclic)”
		4	Vibration test	0431	Environmental test methods for digital communication equipments GB/T 13543-1992	Accredited Only for “vibration(sin usoidal) test”
		5	Shock test	0431	Environmental test methods for digital communication equipments GB/T 13543-1992	Accredited Only for “Shock tests (Sinusoidal)”
23	Electronic measuring instruments	1	Temperature test	0431	Humidity tests for electronic measuring instruments temperature test GB/T 6587.2-1986	Accredited Only for temperature restriction: -70℃~+150℃
		2	Moist heat test	0431	Humidity tests for electronic measuring instruments GB/T 6587.3-1986	Accredited Only for Relative humidity restriction: 30%~98% (15℃~+85℃)
		3	Vibration test	0431	Vibration tests for electronic measuring instruments GB/T 6587.4-1986	Accredited Only for “vibration(sin usoidal) test”
		4	Shock test	0431	Shock tests for electronic measuring instruments GB/T 6587.5-1986	Accredited Only for “Shock tests (Sinusoidal)”
24	Corrosion tests in artificial atmospheres-Salt	1	Salt mist test	0431	Corrosion tests in artificial atmospheres-Salt spray tests GB/T 10125-1997	Accredited Only for “NSS test and NSS test(cyclic)”

№	Name of Products, Type of materials	Items, Parameter, Types of tests		Code of field	Name, Code of Specification, Standard or method used	Restriction or limitation and others
		№	Name			
25	Industrial process measurement and control instrument	1	Vibration test	0431	Transportation tests for electronic measuring instruments GB/T 6587.6-1986	Accredited Only for “vibration(sin usoidal) test”
26	Household and similar electrical appliances	1	Ram test	0431	Safety of household and similar electrical appliances Part 1:General requirements GB 4706.1-1998	Accredited Only for GB4706.1.21-1998
27	Audio, video and similar electronic apparatus	1	Ram test	0431	Audio, video and similar electronic apparatus--Safety requirements GB 8898-2001	Accredited Only for GB8898.12.1.3-2001
28	Packaging-Transport packages	1	Vibration test	0431	Packaging-basic tests for Transport packages-part 7:sinusoidal vibration test method at constant frequency GB/T 4857.7-2005 Packaging-basic tests for Transport packages-part 7:sinusoidal vibration test method at constant frequency GB/T 4857.10-2005	Accredited Only for “vibration(sin usoidal) test”
		2	Bump test	0431	Packaging--Transport packages--Bump test method GB/T 4857.20-1992	Accredited Only for “Bump tests (Sinusoidal)”
29	Degrees of protection provided by enclosures	1	IP code	0502	Degrees of protection provided by enclosure (IP code) GB 4208-1993	
30	Noise sources	1	Sound power levels	1405	Acoustics—Determination of sound power levels of noise sources—Precision methods for anechoic and semi-anechoic rooms GB/T 6882-1986 Acoustics-Determination of sound power levels of noise sources using sound pressure-Engineering method in an essentially free field over a reflecting plane GB/T 3767-1996 Acoustics-Determination of sound power levels of noise sources using sound pressure-Survey	Accredited Only for “methods for semi-anechoic rooms”

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		№	Name			
30	Noise sources	1	Sound power levels	1405	method using an enveloping measurement surface over a reflecting plane GB/T 3768-1996 Acoustics--Household and similar electrical appliances--Test code for determination of airborne acoustical noise--Part 1:General requirements GB/T 4214.1-2000 Measurement of airborne noise emitted by rotating electrical machinery and the noise limits Engineering method for the measurement of airborne noise GB/T 10069.1-1988 Measurement of airborne noise emitted by rotating electrical machinery and the noise limits Survey method for the measurement of airborne noise GB/T 10069.2-1988	Accredited Only for “methods for semi-anechoic rooms”
31	Metal-cutting machine tools	1	Position accuracy	1304.02	Test code for machine tools--Part 2:Determination of accuracy and repeatability of positioning numerically controlled axes GB/T 17421.2-2000	Accredited Only for Measuring range: Straightness、flatness、parallelism、polymerriya-tion、equi-distance、squareness、rotation
		2	Geometric accuracy	1304.01	Test code for machine tools-Part 1:Geometric accuracy of machines operating under no-load or finishing conditions GB/T 17421.1-1998	
32	Alternating current static watt-hour meters for active energy	1	all	0410.12	Alternating current static watt-hour meters for active energy(classes 1 and 2) GB/T 17215-2002、 IEC 61036; 2000	Radio interference suppression subcontracted

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		№	Name			
32	Alternating current static watt-hour meters for active energy	1	all	0410.12	Alternating current static watt-hour meters for active energy (classes 0.2S and 0.5S) GB/T 17883-1999、 IEC 60687: 1992	Radio interference suppression subcontracted
33	Alternating current static var-hour meters for reactive energy	1	all	0410.12	Alternating current static var-hour meters for reactive energy (classes 2 and 3) GB/T 17882-1999、 IEC 61268: 1995	Radio interference suppression subcontracted
34	Alternating current watt- hour meters	1	all	0410.12	Class 0.5、 1 and 2 alternating current watt-hour meters GB/T 15283-1994、 IEC 60521: 1988	
35	Reactive energy meters	1	all	0410.12	Reactive energy meters GB/T 15282-1994	
36	multi-rate electricity meters	1	all	0410.12	Particular requirements for multi-rate electricity meters GB/T 15284-2002	Radio interference suppression subcontracted
37	Pulse ampere-hour meter	1	all	0410.12	Pulse ampere-hour meter JB/T 7655-1995	Radio interference suppression subcontracted
38	Multifunction watt-hour meter	1	all	0410.12	Multifunction wathour meter DL/T 614-1997	Radio interference suppression subcontracted
39	Pre-payment electricity meters	1	all	0410.12	Pre-payment vending system using integrated circuit(s) cards with contacts--Part 3:Pre-payment electricity meters GB/T 18460.3-2001	Radio interference suppression subcontracted
40	Maximum Wemand Watt-hour Weter	1	all	0410.12	Maximum Wemand Watthour Weter JB/T 7657-1995	
41	Permanent Magnetic Magnetically Hard Materials	1	Remanece Br	0405	Method of The Magnetic of Properties of Permanent Magnetic Cmagnetically Hard Materials GB/T 3217-1992 Standard specifications for magnetically hard materials GB/T 17951-2005	

№	Name of Products, Type of materials	Items, Parameter, Types of tests		Code of field	Name, Code of Specification, Standard or method used	Restriction or limitation and others
		№	Name			
41	Permanent Magnetic Magnetically Hard Materials	2	Coercivity HCB	0405	Method of The Magnetic of Properties of Permanent Magnetic Magnetically Hard Materials GB/T 3217-1992 Standard specifications for magnetically hard materials GB/T 17951-2005	
		3	Coercivity HCJ	0405	Method of The Magnetic of Properties of Permanent Magnetic Magnetically Hard Materials GB/T 3217-1992 Standard specifications for magnetically hard materials GB/T 17951-2005	
		4	Maximum BH Product	0405	Method of The Magnetic of Properties of Permanent Magnetic Magnetically Hard Materials GB/T 3217-1992 Standard specifications for magnetically hard materials GB/T 17951-2005	
		5	Recoil Permeability	0405	Method of The Magnetic of Properties of Permanent Magnetic Magnetically Hard Materials GB/T 3217-1992 Standard specifications for magnetically hard materials GB/T 17951-2005	
42	Electrical Steel and Serip	1	Specific Total Loss	0405	Method of Measurement of The Magnetic of Properties of Electrical Steel And Serip by Means of an Epstein Frame GB/T 3655-2000	
		2	The Intensity of Magnetic Induction	0405	Method of Measurement of The Magnetic of Properties of Electrical Steel And Serip by Means of an Epstein Frame GB/T 3655-2000	
		3	Apparent Power	0405	Method of Measurement of The Magnetic of Properties of Electrical Steel And Serip by Means of an Epstein Frame GB/T 3655-2000	

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		№	Name			
43	Magnetic articles	1	The Intensity of Magnetic Field	0405	Dangerous Article Rule The Package Explain 902 IATA 42 nd 2001	
44	Automobile-used Magnetic Induction of Automobile, Motor Speed MileMeter	1	all	1324.02	Automobile and Motorcycle-used Meter QC/T 727-2004	
45	Automobile-used Electrical Speed and Milemeter	1	all	1324.02	Automobile and Motorcycle-used Meter QC/T 727-2004	
46	Automobile-used Rotational Speed Meter of Magnetic Induction	1	all	1324.01	Automobile and Motorcycle-used Meter QC/T 727-2004	
47	Automobile-used Electronic Rotational Speed Meter	1	all	1324.01	Automobile and Motorcycle-used Meter QC/T 727-2004	
48	Automobile-used Fuel Meter	1	all	1317	Automobile and Motorcycle-used Meter QC/T 727-2004	
49	Automobile-used Thermometer	1	all	1502.08	Automobile and Motorcycle-used Meter QC/T 727-2004	
50	Automobile-used Ampere meter	1	all	0410.03	Automobile and Motorcycle-used Meter QC/T 727-2004	
51	Automobile-used Voltmeter	1	all	0410.01	Automobile and Motorcycle-used Meter QC/T 727-2004	
52	Automobile-used Manometer	1	all	1320.01	Automobile and Motorcycle-used Meter QC/T 727-2004	

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53	Ultrasonic Detector Flaw	1	all	1101	<p>①The Method That Steam Turbine, Turbogenerator Rotor and Main Shaft Forging Ultrasonic Wave Detect a Flaw JB/T 1581-1996</p> <p>②Steel Forgings-Method for Ultrasonic Examination GB/T 6402-1991</p> <p>③Method for Manual Ultrasonic Testing and Classification of Testing Results for Ferritic Steel Welds GB/T 11345-1989</p> <p>④Thicker steel plates- Method for ultrasonic inspection GB/T 2970-2004</p> <p>⑤Methods for Ultrasonic Testing and for Specifying Quality Levels of Steel Castings GB/T 7233-1987</p> <p>⑥The Grading of Shipping Detects a Flaw the Technology and Quality of The Steel Craft Ultrasonic Wave of Welding Seam CB/T 3559-1993</p>	
54	Magnetic particle flaw detector	1	all	1101	<p>①Method for Magnetic Particle Testing GB/T 15822.1-2005</p> <p>②The Grading of The Method and Defect Magnetism mark of The Magnetism Powder of Welding Seam Examination JB/T 6061-1992</p> <p>③The Method for Magnetic Particle Testing and for Specifying Quality Levels of Steel Castings GB/T 9444-1988</p> <p>④The Examine Method For Forge Piece of Magnetism Powder of Steel JB/T 8468-1996</p>	

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		№	Name			
55	Penetrant flaw detector	1	all	1101	①The Grading of The Method and Defect Mark of Welding Seam Permeation and Examination JB/T 6062-1992 ②Method for Liquid Penetrant Testing and Classification of Indication for Steel Castings GB/T 9443-1988	
56	Current Transformer	1	all	0406.01	Current Transformers GB 1208-1997	①Current transform that the highest rated voltage is 35kV ②Thunderbolt impingement experiment equipment is hired ③Short time current experiment equipment is hired
57	Voltage transformers	1	all	0406.01	Voltage transformers GB 1207-1997	① Voltage transform that the highest rated voltage is 35kV ②Thunderbolt impingement experiment equipment is hired
58	Radiographic testing	1	all	1101	①Methods of Radiographic inspection and quality Classification for fusion welded butt joints in Steel of The Steel Craft CB/T 3558-1994 ②Methods of Radiographic Testing and Classification of Measuring Results for Fillet Fusion Welded in Steel DL/T 541-1994	

№	Name of Products, Type of materials	Items, Parameter, Types of tests		Code of field	Name, Code of Specification, Standard or method used	Restriction or limitation and others
		№	Name			
58	Radiographic testing	1	all	1101	③The code of radiographic examination of butt welded-joints of pressure steels pipes and tubes DL/T 821-2002 ④Radiographic for inspection grading of gas porosity(round) in aluminum alloy casting GB/T 11346-1989 ⑤Methods for Radiographic inspection and Classification of radiographs for fusion welded butt joints in Steel GB/T 3323-2005 ⑥Methods of Radiographic inspection and quality Classification of circumferential fusion welded butt joints in Steel pipes and tubes GB/T 12605-1990 ⑦Methods of γ panoramic radiography for spherical reservoir GB/T 16544-1996 ⑧Methods of radiographic testing and classification of radiographs for steel castings GB/T 5677-1985 ⑨Methods of Radiographic Testing for steel valve castings JB/T 6440-1992	
59	Steel Tapeline	1	all	1303.27	Steel Tapeline QB/T 2443-1999	
60	Metal Ruler	1	all	1303.03	Metal Ruler GB/T 9056-2004	
61	Fiber Tapeline	1	all	1303.27	Fiber Tapeline QB 1519-1992	
62	Tryout wire web Griddler	1	all	1303.29	Tryout wire web Griddler GB/T 6003.1-1997	

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63	Cutting machine Tool Safe-Protction	1	Part parameters	1304.03	Cutting machine Tool Safe-Protection gengral parameters GB 15760-2004	Accredited Only for: structure of machine tool, safe-protection apparatus.contr olling system. power system. (electrical hydraulic pressure atmospheric pressure) lubrication, cooling system, cutling,noisy,ill umination
64	Alternating current static reference watt-hour meters	1	all	0410.12	Technical requirements for alternating current static reference watt-hour meters DL/T 585-1995	
65	Testing equipement for electrical energy meters	1	all	0425.01	Testing equipement for electrical energy meters GB/T 11150-2001	
66	Automatic meter reading for LV customers	1	all	0419.14	Automatic meter reading for LV customers DL/T 698-1999	
67	On-site Testing equipment for alternating current electricyl meters	1	all	0410.12	On-site Testing equipment for alternating current electricyl meters DL/T 826-2002	
68	Electrostatic discharge immunity test	1	Electrostatic discharge immunity test	1207	Electromagnetic compatibility-Testing and measurement techniques- Electrostatic discharge immunity test GB/T 17626.2-1998 IEC 61000-4-2: 1995	
69	Radiated, radio -frequency, electrostatic field immunity test	1	Radiated, radio -frequency, electrostatic field immunity test	1207	Electromagnetic compatibility-Testing and measurement techniques- Radiated, radio-frequency, electrostatic field immunity test GB/T 17626.3-1998 IEC 61000-4-3:1995	

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70	Electrical fast transient/burst immunity test	1	Electrical fast transient /burst immunity test	1207	Electromagnetic compatibility-Testing and measurement techniques- Electrical fast transient/burst immunity test GB/T 17626.4-1998 IEC 61000-4-4:1995	
71	Surge immunity test	1	Surge immunity test	1207	Electromagnetic compatibility-Testing and measurement techniques- Surge immunity test GB/T 17626.5-1999 IEC 61000-4-5:1995	
72	Immunity to conducted disturbances, induced by radio-frequency fields	1	Immunity to conducted disturbances, induced by radio -frequency fields	1207	Electromagnetic compatibility-Testing and measurement techniques- Immunity to conducted disturbances, induced by radio-frequency fields GB/T 17626.6-1998 IEC 61000-4-6:1996	
73	Prepayment water meters	1	all	1316.05	Integrated circuit card water meter CJ/T 133-2001	
74	Hot water meters	1	all	1316.05	Verification Regulation of Hot Water Meter JJG 686-2006 Meters for hot water Specifications JB/T 8802-1998	
75	Heat Meters	1	all	1316.05	Heat Meter CJ 128-2000 Heat Meter JJG 225-2001	
76	Prepayment Diaphragm gas meters	1	all	1316.04	Integrated circuit card family diaphragm gas meter CJ/T 112-2000	
77	The QAM modulator of wired digital TV broadcast The QAM modulator of wired digital TV broadcast	1	Carrier frequency deviation	0419.01	The standard for technology requirements and measurement methods of The QAM modulator of wired digital TV broadcast GY/T 198-2003	
		2	The top output level	0419.01	The standard for technology requirements and measurement methods of The QAM modulator of wired digital TV broadcast GY/T 198-2003	

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		№	Name			
77	The QAM modulator of wired digital TV broadcast The QAM modulator of wired digital TV broadcast	3	Output reflection loss	0419.01	The standard for technology requirements and measurement methods of The QAM modulator of wired digital TV broadcast GY/T 198-2003	
		4	Modulation error	0419.01	The standard for technology requirements and measurement methods of The QAM modulator of wired digital TV broadcast GY/T 198-2003	
		5	C/N	0419.01	The standard for technology requirements and measurement methods of The QAM modulator of wired digital TV broadcast GY/T 198-2003	
		6	Parasitic output inhibition ratio	0420.02	The standard for technology requirements and measurement methods of The QAM modulator of wired digital TV broadcast GY/T 198-2003	
		7	Phase noise	0420.02	The standard for technology requirements and measurement methods of The QAM modulator of wired digital TV broadcast GY/T 198-2003	
		8	Impedance	0419.01	The standard for technology requirements and measurement methods of The QAM modulator of wired digital TV broadcast GY/T 198-2003	
		9	Usability	0420.02	The standard for technology requirements and measurement methods of The QAM modulator of wired digital TV broadcast GY/T 198-2003	
78	Optical Resin Lenses	1	all	1601.2	Optical Resin Lenses QB 2506-2001	
79	Sun Glasses	1	all	1601.2	Sun Glasses QB 2457—1999	
80	Slip plate Type Automobile side slip Tester	1	all	1309.19	Slip plate Type Automobile side slip Tester GB/T 11798.1-2001	

№	Name of Products, Type of materials	Items, Parameter, Types of tests		Code of field	Name, Code of Specification, Standard or method used	Restriction or limitation and others
		№	Name			
81	Roller Type Speedometer Tester	1	all	1324.02	Roller Type Speedometer Tester GB/T 11798.4 -2001	
82	Roller Opposite Forces Type Brake Tester	1	all	1323.03	Roller Opposite Forces Type Brake Tester GB/T 11798.2 -2001	
83	Axle (Wheel) Load Scales	1	all	1310.03	Axle (Wheel) Load Scales GB/T 11798.7-2001	
84	Headlamp Tester for Motor Vehicle	1	all	1611.01	Headlamp Tester for Motor Vehicle GB/T 11798.6-2001	
85	Filter-Type Smoke meters	1	all	1511.03	Filter-Type Smoke meters GB/T 11798.5-2001	
86	Tester for Wheel Deviation Of Motorcycles	1	all	1309.19	tester for Wheel Deviation Of Motorcycles GB/T 11798.8-2001	
87	Automotive Chassis Dynamometer	1	all	0410.06	Automotive Chassis Dynamometer JT/T 445-2001	
88	Platform brake tester	1	all	1323.04	Platform brake tester GB/T 11798.9-2001	
89	Automotive suspension teter	1	all	1323.01	Automotive suspension teter JT/T 448-2001	
90	Opacimeters	1	all	1511.04	Opacimeters JT/T 506-2004	
91	Load Cells	1	all	1323.03	Load Cells GB/T 7551-1997 JJG 669-2003	
92	High strength bolts with large hexagon head , larg hexagon nuts, plain washers for Steel structures	1	Contortion space modulus	0301.18	Specifications of high strength bots with large hexagon head,large hexagon nuts,piain washers for steel structures GB/T 1231-1991	
		2	Rigidity of bolt	0301.05	Specifications of high strength bots with large hexagon head,large hexagon nuts,piain washers for steel structures GB/T 1231-1991	
		3	Rigidity of nut	0301.05	Specifications of high strength bots with large hexagon head,large hexagon nuts,piain washers for steel structures GB/T 1231-1991	

№	Name of Products, Type of materials	Items, Parameter, Types of tests		Code of field	Name, Code of Specification, Standard or method used	Restriction or limitation and others
		№	Name			
92	High strength bolts with large hexagon head ,large hexagon nuts, plain washers for Steel structures	4	Rigidity of gasket	0301.05	Specifications of high strength bots with large hexagon head,large hexagon nuts,plain washers for steel structures GB/T 1231-1991	
		5	Practical mechanic capability	0301.18	Specifications of high strength bots with large hexagon head,large hexagon nuts,plain washers for steel structures GB/T 1231-1991	
		6	Dimension of screwthread	0301.18	Specifications of high strength bots with large hexagon head,large hexagon nuts,plain washers for steel structures GB/T 1231-1991	
		7	Other dismensions	0301.18	Specifications of high strength bots with large hexagon head,large hexagon nuts,plain washers for steel structures GB/T 1231-1991	
		8	Facial disfigurement	0301.18	Specifications of high strength bots with large hexagon head,large hexagon nuts,plain washers for steel structures GB/T 1231-1991	
		9	Nut's ensured load	0301.18	Specifications of high strength bots with large hexagon head,large hexagon nute,plain washers for steel structures GB/T 1231-1991	
93	Sets of torshear type high strength bolt hexagonnut and piainwasher for steel structures	1	Joint fasten pull	0301.03	Technical requirement for sets of torshear high strenth bolt hexagon nut and piain washer for steel structures GB/T 3633-1995	
		2	Bolt rigidity	0301.05	Technical requirement for sets of torshear high strenth bolt hexagon nut and piain washer for steel structures GB/T 3633-1995	
		3	Nut rigidity	0301.05	Technical requirement for sets of torshear high strenth bolt hexagon nut and piain washer for steel structures GB/T 3633-1995	

№	Name of Products, Type of materials	Items, Parameter, Types of tests		Code of field	Name, Code of Specification, Standard or method used	Restriction or limitation and others
		№	Name			
93	Sets of torshear type high strength bolt hexagonnut and piainwasher for steel structures	4	Rigidity of gasket	0301.05	Technical requirement for sets of torshear high strenth bolt hexagon nut and piain washer for steel structures GB/T 3633-1995	
		5	Practical mechanic capability	0301.18	Technical requirement for sets of torshear high strenth bolt hexagon nut and piain washer for steel structures GB/T 3633-1995	
		6	Dimension of screwthread	0301.18	Technical requirement for sets of torshear high strenth bolt hexagon nut and piain washer for steel structures GB/T 3633-1995	
		7	Other dismensions	0301.18	Technical requirement for sets of torshear high strenth bolt hexagon nut and piain washer for steel structures GB/T 3633-1995	
		8	Facial disfigurement	0301.18	Technical requirement for sets of torshear high strenth bolt hexagon nut and piain washer for steel structures GB/T 3633-1995	
		9	Nut's ensured load	0301.18	Technical requirement for sets of torshear high strenth bolt hexagon nut and piain washer for steel structures GB/T 3633-1995	
94	Steel tube scaffold coupiers	1	Anti-slippage capability	0301.18	Steel tube scaffold coupiers GB 15831-1995	
		2	Anti-breakage	0301.18	Steel tube scaffold coupiers GB 15831-1995	
		3	Capability of wring rigidity try-out	301.18	Steel tube scaffold coupiers GB 15831-1995	
		4	Anti-pull capability try-out	0301.03	Steel tube scaffold coupiers GB 15831-1995	
		5	Try-out of anti-pressure	0301.13	Steel tube scaffold coupiers GB 15831-1995	

№	Name of Products, Type of materials	Items, Parameter, Types of tests		Code of field	Name, Code of Specification, Standard or method used	Restriction or limitation and others
		№	Name			
94	Steel tube scaffold couplers	6	65N• mtryout of wring-mom ent	0301.18	Steel tube scaffold couplers GB 15831-1995	
		7	appearanll	0301.18	Steel tube scaffold couplers GB 15831-1995	
95	Carbon structural Steels	1	Flex rigidity	0301.01	Carbon structural Steels GB/T 700-1988	
		2	Anti-pull rigidity	0301.01	Carbon structural Steels GB/T 700-1988	
		3	Elongation rate	0301.01	Carbon structural Steels GB/T 700-1988	
		4	flex	0301.14	Carbon structural Steels GB/T 700-1988	
		5	impact	0301.10	Carbon structural Steels GB/T 700-1988	
96	High strength low alloy structure steels	1	Flex rigidity	0301.01	High strength low alloy structure steels GB 1591-1994	
		2	Anti-pull rigidity	0301.01	High strength low alloy structure steels GB 1591-1994	
		3	Elongation rate	0301.01	High strength low alloy structure steels GB 1591-1994	
		4	flex	0301.14	High strength low alloy structure steels GB 1591-1994	
		5	impact	0301.10	High strength low alloy structure steels GB 1591-1994	
97	Non-auto indicator	1	all	1311.03	Non-auto indicator GB/T 335-2002 General Verification Regulation for Nonautomative Weighing Iustrument JJG 555-1996	
98	Balance of spring weighs measures	1	all	1311.03	Balance of spring weighs measures GB/11884-2000 General Verification Regulation for Nonautomative Weighing Iustrument JJG 555-1996	

№	Name of Products, Type of materials	Items, Parameter, Types of tests		Code of field	Name, Code of Specification, Standard or method used	Restriction or limitation and others
		№	Name			
99	Fixed electronic balance	1	all	1311.03	Fixed electronic balance GB/T7723-2002 General Verification Regulation for Nonautomative Weighing Instrument JJG 555-1996	
100	Electronic suspend balance	1	all	1311.03	Electronicsuspend balance GB/T 11883-2002 General Verification Regulation for Nonautomative Weighing Instrument JJG 555-1996	
101	Electronic Price computing scale	1	all	1311.03	Electromic portable platform and bench scale GB/T 7722-2005 General Verification Regulation for Nonautomative Weighing Instrument JJG 555-1996	
102	Mobil auto-balance	1	all	1311.03	Mobil auto-balance JJG 907-2003	
103	Electromic desktop balance	1	all	1311.03	General Verification Regulation for Nonautomative Weighing Instrument JJG 555-1996	
104	Quality-annetatio n and quantity set merchandise	1	Fixed Content	1300	The Rules of Metrological Inspection for Net content of Prepackaged Commodity With Fixed Content JJF 1070-2005	
105	Cubic annotation and quantity set	1	Fixed Content	1300	The Rules of Metrological Inspection for Net content of Prepackaged Commodity With Fixed JJF 1070-2005	
106	Length-annetation and quantity set merchandise	1	Fixed Content	1300	The Rules of Metrological Inspection for Net content of Prepackaged Commodity With Fixed JJF 1070-2005	



中国合格评定国家认可委员会 实验室认可证书附件

(No. CNAS L2181)

名称: 浙江省方正校准集团有限公司

地址: 浙江省杭州市天目山路 222 号

签发日期: 2006 年 11 月 16 日 有效日期: 2010 年 08 月 04 日

附件 1-2 认可的校准能力范围

序号	测量仪器名称	校准参数	领域代码	测量仪器类别/典型型号	规范名称及代号(含年号)	测量范围	扩展不确定度(最佳测量能力)	备注
1	发射光谱仪	检出限	1619.03	直读光谱仪/V 3000	发射光谱仪检定规程 JJG 768-2005	直读光谱仪	元素 U C 0.002% Si 0.0006% Mn 0.0002% Cr 0.0009% Ni 0.0001% V 0.0007%	
2	医用诊断数字减影血管造影(DSA)X射线辐射源	空气比释动能率	0517	电离辐射/V 3000	医用诊断数字减影血管造影(DSA)X射线辐射源检定规程 JJG(浙) 81-2005	0.2 μ Gy/s ~ 320mGy/s	$U_{rel} = 5\%$ $k=2$	MPE: $\pm 10\%$
3	医用磁共振成像系统	磁场强度	0517	磁学计量/Signa 1.5T	医用磁共振成像系统(MRI)检定规程 JJG(浙) 80-2005	(0.043 ~ 2.1)T	$U_{rel} = 0.2\%$ $k=2$	MPE: $\pm 2\%$
4	坐标测量机	长度	1309.12	坐标测量机/GLOBAL STATUS 555	坐标测量机 JJF 1064-2004	(0~6)m	$L=100\text{mm}$, $U=0.3 \mu\text{m}$ $L=1000\text{mm}$, $U=1.7 \mu\text{m}$	

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5	三等金属线纹尺	长度	1308.08	三等金属线纹尺	三等标准金属线纹 JJG 71-2005	(0~1)m	$U=12\ \mu\text{m}$	
6	数显测高仪	长度	1309.11	数显测高仪/CT6001	数显测高仪 JJG 929-1998	(0~1)m	$L=100\text{mm}$ $U=0.3\ \mu\text{m}$ $L=1000\text{mm}$, $U=2.0\ \mu\text{m}$	
7	感应同步器	长度	1309.11	感应同步器	感应同步器 JJG 836-1993	(0~1)m	$U=0.6\ \mu\text{m}$	
8	工具显微镜	长度	1309.06	万能、小型、大型、数显/JX77	工具显微镜 JJG 56-2000	(0~2000)mm	$U=0.8\ \mu\text{m}$	
9	测长机	长度	1309.06	测长机/JD9	测长机 JJF 1066-2000	(0~3000)mm	$L=200\text{mm}$, $U=0.45\ \mu\text{m}$ $L=1000\text{mm}$, $U=2.1\ \mu\text{m}$	
10	测长仪	长度	1309.06	测长仪/JD18	测长仪 JJG 55-1984	(0~500)mm	$U=0.5\ \mu\text{m}$	
11	接触式干涉仪	长度	1309.06	接触式干涉仪/JDS-1	接触式干涉仪 JJG 101-2004	± 50 分度	$U=0.027\ \mu\text{m}$	
12	光学计	长度	1309.06	光学计/JD3	光学计 JJG 45-1999	(0~200)mm	$U=0.04\ \mu\text{m}$	
13	测量显微镜	长度	1309.06	测量显微镜/15J	读数测量显微镜 JJG 571-2004	(0~50)mm	$U=1.5\ \mu\text{m}$	
14	读数显微镜	长度	1309.06	读数显微镜 J ₄ 10	读数测量显微镜 JJG 571-2004	(0~6)mm	$U=0.25\ \mu\text{m}$	
15	投影仪	长度	1309.16	投影仪/JJ12A	投影仪 JJF 1093-2002	(0~1000)mm	$L=25\text{mm}$, $U=0.6\ \mu\text{m}$ $L=100\text{mm}$, $U=1.0\ \mu\text{m}$	
16	表面粗糙度检查仪	表面粗糙度	1308.09	表面粗糙度检查仪/2201	触针式表面粗糙度测量仪 JJF 1105-2003	Ra(0.1~46) μm	$U_{\text{rel}}=1.5\%$	
17	光切显微镜	长度	1309.06	光切显微镜/9J	光切显微镜 JJF 1092-2002	H: (0.8~80) μm	$U_{\text{rel}}=2\%$	
18	干涉显微镜	长度	1309.06	干涉显微镜/6JA	干涉显微镜 JJG 77-1983	H: (0.1~1.0) μm	$U_{\text{rel}}=2\%$	
19	测角仪	角度	1308.06	测角仪/C20	测角仪 JJG 97-2001	0~360°	$U=2''$	

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20	光学、数显分度头	角度	1308.06	光学、数显分度头	光学数显分度头 JJG 57-1999	0~360°	$U = 1.6''$	
21	光学、数显分度台	角度	1308.06	光学、数显分度台	光学、数显分度台 JJF 1114-2004	0~360°	$U = 1.0''$	
22	电感测微仪	厚度	1309.09	电感测微仪/DGB-5A	电感测微仪 JJG 396-2002	(-1000~+1000) μ m	$U = 0.04 \mu$ m	
23	超声波测厚仪	长度	1309.11	超声波测厚仪/TT100	超声波测厚仪 JJF 1126-2004	(0~200)mm	$L=200$ mm $U = 0.04$ mm	
24	电涡流式测厚仪	长度	1309.11	电涡流式测厚仪/ED-200	磁性,电涡流式覆层厚度测试仪 JJG 818-2005	(0~1250) μ m	$U = 0.4 \mu$ m	
25	磁阻法测厚仪	长度	1309.11	磁阻法测厚仪/HCC-24	磁性,电涡流式覆层厚度测试仪 JJG 818-2005	(0~10)mm	$U = 0.6 \mu$ m	
26	标准环规	长度	1301.02	标准环规	标准环规 JJG 894-1995	(5~200)mm	$U = 1.2 \mu$ m	
27	光滑量规	长度	1301.01 1301.02	光滑量规/IT6-11	光滑极限量规 JJG 343-1996	(5~200)mm	$U = 1.2 \mu$ m	
28	渐开线检查仪	渐开线	1309.13	渐开线检查仪/3201型	齿轮渐开线测量仪器 JJF 1124-2004	基圆直径:(25~400)mm	$U = 1.0 \mu$ m	
29	齿形齿向检查仪	渐开线、螺旋线	1309.13	齿形齿向检查仪/3204型	齿轮渐开线测量仪器 JJF 1124-2004 齿轮螺旋线测量仪器 JJF 1122-2004	基圆直径:(25~400)mm	$U = 1.0 \mu$ m	
30	螺旋线检查仪	螺旋线	1309.13	螺旋线检查仪/3301型	齿轮螺旋线测量仪器 JJF 1122-2004	基圆直径:(25~400)mm	$U = 1.0 \mu$ m	
31	圆度、圆柱度测量仪	圆度、圆柱度	1305.02 1305.03	圆度、圆柱度测量仪/YD200	圆度、圆柱度测量仪 JJG 429-2000	20 μ m	$U = 0.012 \mu$ m	

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32	组合式形状测量仪	圆度、直线度	1305.01	组合式形状测量仪	组合式形状测量仪 JJG 786-1992		$U = 0.1 \mu\text{m}$	
33	通用卡尺	长度	1303.23	通用卡尺	通用卡尺 JJG 30-2002	(0~1000)mm	$L=300\text{mm}$ $U = 0.01\text{mm}$	
34	高度卡尺	长度	1303.23	高度卡尺	高度卡尺 JJG 31-1999	(0~1000)mm	$U = 0.01\text{mm}$	
35	千分尺	长度	1303.18	千分尺	千分尺 JJG 21-1995	(0~500)mm	$U = 1.1 \mu\text{m}$	
36	外径千分尺	长度	1300.18	外径千分尺	外径千分尺测量范围(500mm~3000mm) JJF 1088-2002	(500~1000)mm	$U = 2.2 \mu\text{m}$	
37	内测千分尺	长度	1300.18	内测千分尺	测量内尺寸千分尺 JJF 1091-2002	(5~100)mm	$U = 1.3 \mu\text{m}$	
38	内径千分尺	长度	1300.19	内径千分尺	内径千分尺 JJG 22-2003	(0~1000)mm	$U = 1.1 \mu\text{m}$	
39	孔径千分尺	长度	1300.18	孔径千分尺	测量内尺寸千分尺 JJF 1091-2002	(6~50)mm	$U = 1.2 \mu\text{m}$	
40	公法线千分尺	长度	1300.18	公法线千分尺	公法线类千分尺 JJG 82-1998	(0~150)mm	$U = 1.1 \mu\text{m}$	
41	杠杆千分尺	长度	1300.18	杠杆千分尺	杠杆千分尺、 杠杆卡规 JJG 26-2001	(0~100)mm	$U = 1.1 \mu\text{m}$	
42	深度千分尺	长度	1300.18	深度千分尺	深度千分尺 JJG 24-2003	(0~300)mm	$U = 1.1 \mu\text{m}$	
43	百分表	长度	1303.21	百分表	指示表(百分表和千分表) JJG 34-1996	(0~10)mm	$U = 5.1 \mu\text{m}$	
44	大量程百分表	长度	1303.21	大量程百分表/1级	大量程百分表 JJG 37-1995	(0~50)mm	$U = 5.1 \mu\text{m}$	
45	杠杆百分表	长度	1303.21	杠杆百分表/1级	杠杆表 JJG 35-1992	(0~0.8)mm	$U = 5.1 \mu\text{m}$	
46	内径百分表	长度	1303.21	内径百分表	内径表 JJF 1102-2003	(6~450)mm	$U = 3.7 \mu\text{m}$	
47	千分表	长度	1303.21	千分表/1级	指示表(百分表和千分表) JJG 34-1996	(0~1)mm	$U = 1.6 \mu\text{m}$	
48	杠杆千分表	长度	1303.21	杠杆千分表/1级	杠杆表 JJG 35-1992	(0~0.2)mm	$U = 1.6 \mu\text{m}$	

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49	内径千分表	长度	1303.21	内径千分表	内径表 JJF 1102-2003	(6~250)mm	$U = 1.3 \mu\text{m}$	
50	平面平晶	平面度	1303.11	平面平晶/1级	平晶 JJG 28-2000	$\phi 150\text{mm}$	$U = 0.01 \mu\text{m}$	
51	平行平晶	平面度 平行度	1303.13	平行平晶/I、II、III、IV系列	平晶 JJG 28-2000	(I~IV)组	$U = 0.01 \mu\text{m}$	
52	量仪测力仪	力值	1303.26	量仪测力仪/1、2级	专用工作测力仪 JJF 1134-2005	(0~15)N	$U_{\text{rel}}=0.31\%$	
53	刀口形直尺	直线度	1303.04	刀口形直尺/0级	刀口形直尺 JJG 63-1994	(75~300)mm	$U = 0.39 \mu\text{m}$	
54	百分表检定仪	长度	1303.17	百分表检定仪	指示类量具检定仪 JJG 201-1999	(0~25)mm	$U = 0.6 \mu\text{m}$	
55	千分表检定仪	长度	1303.17	千分表检定仪	指示类量具检定仪 JJG 201-1999	(0~2)mm	$U = 0.18 \mu\text{m}$	
56	测厚仪	长度	1303.21	测厚仪	测厚仪 JJG(浙)35-1992	(0~10)mm	$U = 1.2 \mu\text{m}$	
57	扭簧式比较仪	长度	1303.21	扭簧式比较仪	扭簧式比较仪 JJG 118-1996	$\pm 0.05\text{mm}$	$U = 0.17 \mu\text{m}$	
58	机械式比较仪	长度	1303.21	机械式比较仪	机械式比较仪 JJG 39-2004	$\pm 0.10\text{mm}$	$U = 0.17 \mu\text{m}$	
59	钢卷尺	长度	1303.27	钢卷尺/1、2级	钢卷尺 JJG 4-1999	(0~200)m	$U = (0.12 \sim 3.31) \text{mm}$	
60	测深钢卷尺	长度	1303.27	测深钢卷尺/1、2级	钢卷尺 JJG 4-1999	(0~200)m	$U = (0.12 \sim 3.31) \text{mm}$	
61	纤维卷尺	长度	1303.27	纤维卷尺/1、2级	纤维卷尺、测绳 JJG 5-2001	(0~200)m	$U = (0.12 \sim 3.31) \text{mm}$	
62	平尺	直线度	1303.01	平尺/00、0级	平尺校准规范 JJF 1097-2003	(300~5000)mm	$U = 0.7 \mu\text{m}$	
63	平板	平面度	1303.01	平板/00、0级	平板 JJG 117-2005	(300~5000)mm	$U = 0.7 \mu\text{m}$	
64	表面粗糙度比较样块	表面粗糙度	1308.09	表面粗糙度比较样块/七组27块	表面粗糙度比较样块校准规范 JJF 1099-2003	(6.3~0.025) μm	$U_{\text{rel}}=6.0\%$	
65	钢直尺	长度	1303.03	钢直尺	钢直尺 JJG 1-1999	(600~1000)mm	$U = 0.087\text{mm}$	

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66	角度块	角度	1303.06	角度块/1、2级	角度块 JJG 70-2004	0~360°	$U = 2.2''$	
67	木直(折)尺	长度	1303.03	木直(折)尺	木直(折)尺 JJG 2-1999	(0~5000)mm	$U = 0.3 \text{ mm}$	
68	直角尺	角度	1303.04	直角尺/0、1级	直角尺 JJG 7-2004	(0~630)mm	$U = 3.0 \mu\text{m}$	
69	水平仪检定器	角度	1309.05	水平仪检定器/101A	水平仪检定器 JJG 191-2002	(0~1.5)mm/m	$U = 0.4 \mu\text{m/m}$	
70	自准直仪	角度	1309.01	自准直仪/HYQ-03等	自准直仪 JJG 202-1990	0~10'	$U = 2.2 \mu\text{m/m}$	
71	电子水平仪	角度	1309.08	电子水平仪/0.01mm/m 0.005mm/m 0.001mm/m	电子水平仪和合像水平仪 JJG 103-2005	±500个数	$U = 0.6 \mu\text{m/m}$	
72	合象水平仪	角度	1309.05	合象水平仪/0.01mm/m	电子水平仪和合象水平仪 JJG 103-2005	(-5~+5)mm/m	$U = 0.6 \mu\text{m/m}$	
73	经纬仪	角度	1309.06	经纬仪DJ07	光学经纬仪 JJG 414-2003	测角: 水平角 0~360° 竖直角 ±30°	水平角: $U = 0.2''$ 竖直角: $U = 0.7''$	
74	水准仪	角度	1309.06	水准仪/DS05、DSZ05	水准仪 JJG 425-2003	2m~∞	i角: $U = 1.7''$	
75	三等量块	长度	1308.04	三等量块/(0.5~100)mm	量块 JJG 146-2003	(0.5~100)mm	$U = (0.05 \sim 0.10) \mu\text{m}$	
76	四等量块	长度	1308.04	四等量块/(0.5~1000)mm	量块 JJG 146-2003	(0.5~1000)mm	$U = (0.06 \sim 1.06) \mu\text{m}$	
77	二等标准水银温度计	温度	1501.06	二等标准水银温度计/棒式	二等标准水银温度计 JJG 128-2003	(-30~+300)°C	$U = (0.03 \sim 0.05) ^\circ\text{C}$	
78	工作用玻璃液体温度计	温度	1501.06	工作用玻璃液体温度计/棒式	工作用玻璃液体温度计 JJG 130-2004	(-60~+300)°C	$U = (0.03 \sim 0.05) ^\circ\text{C}$	
79	石油产品用玻璃液体温度计	温度	1501.06	石油产品用玻璃液体温度计/棒式	石油产品用玻璃液体温度计 JJG 50-1996	(-60~+300)°C	$U = (0.03 \sim 0.05) ^\circ\text{C}$	

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80	双金属温度计	温度	1501.11	双金属温度计/WSS	双金属温度计 JIG 226-2001	(-60~+300)℃	$U = 0.24^{\circ}\text{C}$	
81	压力式温度计	温度	1501.09	压力式温度计/WTZ、WTQ	压力式温度计 JIG 310-2002	(-60~+300)℃	$U = 0.24^{\circ}\text{C}$	
82	带传感器的温度巡回检测(记录)仪	温度	1501.13	带传感器的温度巡回检测(记录)仪/DWC、DR	温度巡回检测仪 JIG 718-1991	(-60~+300)℃	$U = 0.1^{\circ}\text{C}$	
83	数字温度计	温度	1501.13	数字温度计/WMY	数字温度计 JIG(浙)76-2004	(-60~+300)℃	$U = 0.1^{\circ}\text{C}$	
84	工业铂热电阻	温度电阻	1501.04	工业铂热电阻/WZP	工业铂、铜热电阻 JIG 229-1998	(-200~+850)℃	0℃: $U = 0.017^{\circ}\text{C}$ 100℃: $U = 0.026^{\circ}\text{C}$	
85	二等标准铂铑 ₁₀ -铂热电偶	热电势	1501.01	二等标准铂铑 ₁₀ -铂热电偶	标准铂铑 ₁₀ -铂热电偶 JIG 75-1995	(0~1300)℃	$U = (4.9 \sim 5.3) \mu\text{V}$	
86	工作用铂铑 ₁₀ -铂热电偶	热电势	1501.01	工作用铂铑 ₁₀ -铂热电偶	工作用贵金属热电偶 JIG 141-2000	(0~1300)℃	$U = 8.7 \mu\text{V}$	
87	工作用廉金属热电偶	热电势	1501.02	工作用廉金属热电偶	工作用廉金属热电偶 JIG 351-1996	K: (0~1300)℃ N: (0~1300)℃ E: (0~900)℃ J: (0~750)℃ 长度≥750mm	$U = (43 \sim 64) \mu\text{V}$	
88	数字温度指示调节仪	温度	1501.13	数字温度指示调节仪/XWT	数字温度指示调节仪 JIG 617-1996	(-200~+1800)℃之间各档	配热电阻: $U = (0.2 \sim 0.6)^{\circ}\text{C}$ 配热电偶: $U = (0.4 \sim 1.9)^{\circ}\text{C}$	
89	电子电位差计	温度	1502.04	电子电位差计/XWGJ	工业过程测量记录仪 JIG 74-2005	(-200~+1800)℃之间各档	$U = (0.5 \sim 0.6)^{\circ}\text{C}$	

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90	数字温度巡回检测(记录)仪	温度	1501.13	数字温度巡回检测(记录)仪/LR	数字温度指示调节仪 JJG 617-1996	(-200~+1800)°C 之间各档	配热电阻: $U = (0.2-0.6) ^\circ\text{C}$ 配热电偶: $U = (0.4-1.9) ^\circ\text{C}$	
91	模拟式温度指示调节仪	温度	1502.04	模拟式温度指示调节仪/TDA、TDW、TEAL	模拟式温度指示调节仪 JJG 951-2000	(-200~+1800)°C 之间各档	配热电阻: $U = (0.6-0.8) ^\circ\text{C}$ 配热电偶: $U = (0.6-2.0) ^\circ\text{C}$	
92	温度试验设备	温度	1519.04	温度试验设备/LR	环境试验设备温度、湿度校准规范 JJF 1101-2003	试验温度: (-40~+300)°C	$U = 0.15^\circ\text{C}$	
93	湿度试验设备	湿度	1517.02	湿度试验设备/LH	环境试验设备温度、湿度校准规范 JJF 1101-2003	试验时温度(0~100)°C 湿度 100)%RH	$U = 1.1\%RH$	
94	速度式流量计(液体)	流量	1316.05	速度式流量计(液体)/LWLD	速度式流量计 JJG 198-1994	DN (6~50) mm	$U_{rel} = 0.11\%$	
						DN (50~300) mm	$U_{rel} = 0.06\%$	
95	液体容积式流量计	流量	1316.05	液体容积式流量计/LC	液体容积式流量计 JJG 667-1997	DN (6~50) mm	$U_{rel} = 0.11\%$	
						DN (50~300) mm	$U_{rel} = 0.06\%$	
96	科里奥利力式质量流量计	流量	1316.05	科里奥利力式质量流量计/LZK	质量流量计 JJG 897-1995	DN (6~50) mm	$U_{rel} = 0.11\%$	
						DN (50~300) mm	$U_{rel} = 0.06\%$	
97	转子流量计(液体)	流量	1316.05	转子流量计(液体)/LZB	转子流量计 JJG 257-1994	DN100 mm 及以下	$U_{rel} = 0.12\%$	
98	水平螺翼式水表	流量	1316.05	水平螺翼式水表/LXL	水平螺翼式水表 JJG 258-1988	DN(50~300) mm	$U_{rel} = 0.06\%$	

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99	二等标准金属量器	容量	1312.02	二等标准金属量器/JB	标准金属量器 JIG 259-2005	(1~500)L	$U_{rel}=0.006\%$	
100	三等标准金属量器	容量	1312.02	三等标准金属量器/LJB	标准金属量器 JIG 259-2005	(0.5~10000)L	$U_{rel}=0.03\%$	
101	液体流量标准装置	流量	1316.09	液体流量标准装置/LJS	液体流量标准装置 JIG 164-2000	DN(6~400) mm	$U_{rel}=0.04\%$	
102	钟罩式气体流量标准装置	累积流量	1316.09	LJQ-10~LJQ-2000	钟罩式气体流量标准装置 JIG 165-2005	(10~2000) L	$U_{rel}=0.1\%$ $K_{95}=2$	
		瞬时流量	1316.09	LJQ-10~LJQ-2000	钟罩式气体流量标准装置 JIG 165-2005	(0.016~150) m ³ /h	$U_{rel}=0.2\%$ $K_{95}=2$	
103	加油机	流量	1316.05	加油机/J-60	燃油加油机 JIG 443-1998	$Q_{max} \leq 60L/min$	$U_{rel}=0.03\%$	
104	水表	流量	1316.05	水表/LXS	水表及其试验装置 JIG 162-1985	DN(8~50) mm	$U_{rel}=0.3\%$	
105	速度式流量计(气体)	流量	1316.04	速度式流量计(气体)/LW	速度式流量计 JIG 198-1994	$Q_{max}: 3 \sim 1600m^3/h$	$U_{rel}=0.6\%$	
106	转子流量计(气体)	流量	1316.04	转子流量计(气体)/LZB	转子流量计 JIG 257-1994	$Q_{max}: 100m^3/h$	$U_{rel}=0.6\%$	
107	膜式煤气表	流量	1316.04	膜式煤气表/G	膜式煤气表 JIG 577-2005	(0.016~6)m ³ /h	$U_{rel}=0.3\%$	
						(6~160)m ³ /h	$U_{rel}=0.6\%$	
108	气体腰轮流量计	流量	1316.04	DN≤150	气体容积式流量计 JIG 633-2005	(0.1~1600)m ³ /h	$U_{rel}=0.5\%$ $K=2$	
109	标准煤气表	流量	1316.04	标准煤气表/BSD	标准煤气表 JIG 643-2003	$Q_{max} \leq 6m^3/h$	$U_{rel}=0.3\%$	
						$Q_{max}: (6 \sim 100)m^3/h$	$U_{rel}=0.6\%$	
110	流量显示仪表	流量	1316.09	流量显示仪表/XSJ-39; LX-51B	流量积算仪 JIG 1003-2005	(0~20)mA (0~20)V (0~100)kHz (0~9999)Ω	$U=0.05\%$	

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111	差压式流量计(液体系数检定)	流量	1316.09	差压式流量计(液体系数检定)/JK	差压式流量计 JJG 640-1994	DN(6~50) mm	$U_{rel}=0.12\%$	
						DN(50~300) mm	$U_{rel}=0.06\%$	
112	标准测力仪	力值	1323.02	标准测力仪/ES-01	标准测力仪 JJG 144-1992	(20~1000)N	$U=0.0018\text{mm}$	
113	标准测力仪	力值	1323.02	/标准测力仪 ES-015	标准测力仪 JJG 144-1992	(100~6000)N	$U=0.0018\text{mm}$	
114	标准测力仪	力值	1323.02	标准测力仪/ES-3	标准测力仪 JJG 144-1992	(1~60)kN	$U=0.0018\text{mm}$	
115	标准测力仪	力值	1323.02	标准测力仪/ES-30	标准测力仪 JJG 144-1992	(10~600)kN	$U=0.0019\text{mm}$	
116	扭矩起子	扭矩	1325.01	扭矩起子/FTD400CN ₂ -S	扭矩扳子 JJG 707-2003	(1~15)Nm	$U_{rel}=0.18\%$	
117	扭矩扳子	扭矩	1325.01	扭矩扳子/AC10	扭矩扳子 JJG 707-2003	(1~15)Nm	$U_{rel}=0.18\%$	
118	扭矩扳子	扭矩	1325.01	扭矩扳子/AC300	扭矩扳子 JJG 707-2003	(10~300)Nm	$U_{rel}=0.23\%$	
119	扭矩扳子	扭矩	1325.01	扭矩扳子/AC1000	扭矩扳子 JJG 707-2003	(300~3000)Nm	$U_{rel}=0.25\%$	
120	扭矩仪	扭矩	1325.01	扭矩仪/HP-100	扭矩扳子检定仪 JJG 797-1992	(1~10)Nm	$U_{rel}=0.18\%$	
121	二等活塞式压力计	活塞有效面积	1320.01	二等活塞式压力计/YU	二、三等标准活塞压力计 JJG 59-1990	(0.1~60)MPa	$U_{rel}=0.03\%$	
122	二等活塞式压力真空计	活塞有效面积	1320.02	二等活塞式压力真空计/YS	二、三等标准活塞压力真空计 JJG 239-1994	(-0.1~0.25)MPa	$U_{rel}=0.03\%$	
123	二等补偿式微压计	压力	1320.06	二等补偿式微压计/YJB	标准补偿式微压计 JJG 158-1994	(-2500~2500)Pa	$U_{rel}=0.6\text{Pa}$	
124	精密压力表	压力	1320.01	精密压力表/Y	弹簧管式精密压力表和真空表 JJG 49-1999	(-0.1~60)MPa	$U_{rel}=0.17\%$	
125	数字压力计	压力	1320.07	数字压力计/CTC	数字压力计 JJG 875-2005	(-0.1~60)MPa	$U_{rel}=0.03\%$	
126	压力变送器	压力	1320.03	压力变送器/1151	压力变送器 JJG 882-2004	(-0.1~60)MPa	$U_{rel}=0.10\%$	

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127	热偶真空计	压力	1320.02	热偶真空计/GD8000	工作用热传导真空计校准规范 JJF 1050-1996	$(10^5 \sim 10^{-1})\text{Pa}$	$U_{\text{rel}} = 15\%$	
128	电阻真空计	压力	1320.02	电阻真空计/ZDZ-2	工作用热传导真空计校准规范 JJF 1050-1996	$(10^5 \sim 10^{-1})\text{Pa}$	$U_{\text{rel}} = 15\%$	
129	电离真空计	压力	1320.02	电离真空计/FZH-2	电离真空计 JJF 1062-1999	$(10^{-1} \sim 7 \times 10^{-3})\text{Pa}$	$U_{\text{rel}} = 8\%$	
130	标准玻璃量器	容量	1312.04	标准玻璃量器/QS-29	标准玻璃量器 JJG 20-2001	$(0.1 \sim 2000)\text{ml}$	$U = 0.12 \text{ ml}$	
131	工作玻璃量器	容量	1312.01	工作玻璃量器/(0.005~2000)ml	常用玻璃量器 JJG 196-1990	$(0.005 \sim 2000)\text{ml}$	$U = (0.00071 \sim 0.14) \text{ ml}$	
132	定量灌装机	质量	1311.04	定量灌装机/K324-757	液态物料定量灌装机 JJG 687-1990	$(0.5 \sim 5000) \text{ ml}$ $(0.5 \sim 5000)\text{g}$	$U_{\text{rel}} = (0.031 \sim 0.64)\%$	
133	二等玻璃浮计工作玻璃浮计(酒精)	密度	1314.01	二等玻璃浮计工作玻璃浮计(酒精)/1009	标准玻璃浮计 JJG 86-2001 工作玻璃浮计 JJG 42-2001	$(0 \sim 100)\%$	$U = 0.06\%$	
134	二等玻璃浮计工作玻璃浮计(密度)	密度	1314.01	二等玻璃浮计工作玻璃浮计(密度)/(0.65~2.00)g/cm ³	标准玻璃浮计 JJG 86-2001 工作玻璃浮计 JJG 42-2001	$(0.65 \sim 2.00) \text{ g/cm}^3$	$U = 0.13 \text{ kg/m}^3$	
135	拉力、压力和万能试验机	力值	1326.01 1326.02	拉力、压力和万能试验机/WE、LJ	拉力、压力和万能试验机 JJG 139-1999	1N—5 MN	$U_{\text{rel}} = 0.42\%$	
136	非金属拉力、压力和万能试验机	力值	1326.01 1326.02	非金属拉力、压力和万能试验机/YE、XL	非金属拉力、压力和万能试验机 JJG 157-2005	1N—5MN	$U_{\text{rel}} = 0.44\%$	

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137	弹簧拉压试验机	力值	1326.01 1326.02	弹簧拉压试验机/TL	专用工作测力机校准规范 JJF 1134-2005	1N~10kN	$U_{rel}=0.42\%$	
138	抗折试验机	力值	1326.01 1326.02	抗折试验机/DKZ	抗折试验机 JJG 476-2001	1N~6kN	$U_{rel}=0.46\%$	
139	电子式万能材料试验机	力值	1326.01 1326.02	电子式万能材料试验机/CMT	电子式万能试验机 JJG 475-1986	1N~1MN	$U_{rel}=0.25\%$	
140	转速表	转速	1324.01	转速表/SZG	转速表 JJG 105-2000	(30~40000) r/min	$U_{rel}=(0.02-0.58)\%$	
141	标准转速装置	转速	1324.02	标准转速装置/BZZ-1	标准转速装置 JJG 326-1983 转矩转速测量装置 JJG 924-1996	(5~40000) r/min	$U_{rel}=0.02\%$	
142	毫克组、克组砝码	质量	1310.01	毫克组、克组砝码/1mg~500g	砝码 JJG 99-1990	1mg~500g	$U=0.2mg$	
143	公斤组砝码	质量	1310.01	公斤组砝码/1kg~20kg	砝码 JJG 99-1990	(1~20)kg	$U=1mg$	
144	杠杆式天平	质量	1310.01	杠杆式天平/TG320	天平 JJG 98-1990	(0~50)kg	$U=2mg$	
145	电子天平	质量	1310.01	电子天平/AT250	天平 JJG 98-1990	(0~50)kg	$U=0.4mg$	
146	滑板式汽车侧滑检验台	侧滑量	1309.19	滑板式汽车侧滑检验台/CH	滑板式汽车侧滑检验台 JJG 908-1996	(-10~+10)m/km	$U=0.040 m/km$	
147	滚筒式车速表检验台	速度	1324.02	滚筒式车速表检验台/CS	滚筒式车速表检验台 JJG 909-1996	(30~60) km/h	$U_{rel}=0.54\%$	
148	滚筒反力式制动检验台	制动力	1323.03	滚筒反力式制动检验台/ZD	滚筒反力式制动检验台 JJG 906-1996	(0~30000)N	$U_{rel}=1.48\%$	
149	轴(轮)重仪	质量	1310.03	轴(轮)重仪/SDZ	轴(轮)重仪 JJG 907-1996	(0~100000)N	$U_{rel}=0.66\%$	

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150	机动车前照灯检测仪	光强度 光轴角	1611 .01	机动车前照灯检测仪/QDC-1C	机动车前照灯检测仪 JJG 745-2002	光强度: (0-40) kcd 光轴角: 上(0-20) cm/dam 下、左、 右(0-40) cm/dam	光强度: $U_{rel}=4.5\%$ 光轴角: $U=1.4$ cm/dam	
151	滤纸式烟度计	烟度	1511 .03	滤纸式烟度计/YD	滤纸式烟度计 JJG 847-1993	(0~10) FSN	$U_{rel}=2.1\%$ F.S	
152	摩托车轮偏检测仪	长度	1309 .19	摩托车轮偏检测仪/HYMLP-250	摩托车轮偏检测仪 JJG 910-1996	(-10~ +10)mm	$U=0.08$ mm	
153	汽车底盘测功机	功率 扭矩 速度	0410. 06	汽车底盘测功机/DCG	汽车底盘测功机 JJG 653-2003	功率: (0~ 150) kW 扭矩: (0~ 1500)N·m (或驱动力) 速度: (0~ 120)km/h (或相应 转速)	$U_{速rel}=0.64\%$ $U_{力rel}=0.88\%$	
154	车速里程表	速度	1324. 02	车速里程表/ZB-102	车速里程表 JJG 559-1988	车速: (20~ 160)km/h 或(100~ 4000)r/ min 里程: 车 速 60km/h 时走 3km	时速 $U=0.3$ km/h 里程 $U=0.008$ km 或 $U=0.46$ s	
155	电压、电流功率电阻表	直流电压	0410 .01	直流电压电流表/C41	电压、电流功率电阻表 JJG 124-2005	(0~ 1000)V	$U_{rel}=2.4 \times 10^{-4}$	
		直流电流	0410 .03	直流电压电流表/C41	电压、电流功率电阻表 JJG 124-2005	(0~ 100)A	$U_{el}=(2.0~2.4) \times 10^{-4}$	

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155	电压、电流功率电阻表	直流功率	0410 .06	交直流功率表/D26	电压、电流功率电阻表 JJG 124-2005	(0~1000) (0~100)	$U_{rel}=3.3 \times 10^{-4}$	
		交流电压	0410 .02	交流电压电流表/T24	电压、电流功率电阻表 JJG 124-2005	(0~1000)V	$U_{rel}=(1.2 \sim 2.0) \times 10^{-4}$	
		交流电流	0410 .04	交流电压电流表/T24	电压、电流功率电阻表 JJG 124-2005	(0~100)A	$U_{rel}=(1.2 \sim 2.0) \times 10^{-4}$	
		交流功率	0410 .06	交直流功率表/D26	电压、电流功率电阻表 JJG 124-2005	(0~1000) (0~100)	$U_{rel}=(1.7 \sim 3.0) \times 10^{-4}$	
		电阻	0410 .09	电阻表/MF47	电压、电流功率电阻表 JJG 124-2005	(0~1)M Ω	$U_{rel}=(5.8 \sim 7.0) \times 10^{-4}$	
156	数字多(万)用表(直流)	直流电压	0410 .01	数字多用表/HP34401A	直流数字电压表 JJG 315-1983	(0~1100)V	$U_{rel}=(3.7 \sim 12) \times 10^{-6}$	
		直流电流	0410 .03	数字多用表/HP34401A	直流数字电流表 JJG 598-1989	(0~20)A	$U_{rel}=(3.7 \sim 12) \times 10^{-5}$	
		电阻	0410 .09	数字多用表/HP34401A	直流数字式欧姆表 JJG 724--1991	(0~10)M Ω	$U_{rel}=(8.5 \sim 40) \times 10^{-6}$	
157	数字多(万)用表(交流)	交流电压	0410 .02	数字多用表 HP34401A	交流数字电压表 JJG(航天) 34-1999	(0~1100)V	$U_{rel}=(5.3 \sim 8.7) \times 10^{-5}$	
		交流电流	0410 .04	数字多用表/HP34401A	交流数字电流表 JJG(航天) 35-1999	(0~20)A	$U_{rel}=(1.6 \sim 3.0) \times 10^{-4}$	
158	标准电池	电动势	0407 .01	标准电池/BC9	标准电池 JJG 153-1996	(1.018~1.0198)V	$U=3 \mu V$	
159	直流电阻分压箱	电压分压比	0402 .02	直流电阻分压箱/FJ12	直流电阻分压箱 JJG 531-2003	1~1000	$U_{rel}=12 \times 10^{-6}$	只做1000V及以下
160	电参数测量仪(或数字功率计、交流数字功率表)	交流电压	0410 .02	电参数测量仪/PF9811	交流数字电压表 JJG(航天) 34-1999	(0~1000)V	$U_{rel}=(1.3 \sim 2.0) \times 10^{-4}$	
		交流电压	0410 .04	电参数测量仪/PF9811	交流数字电流表 JJG(航天) 35-1999	(0~100)A	$U_{rel}=(1.4 \sim 2.0) \times 10^{-4}$	
		交流功率	0410 .06	电参数测量仪/PF9811	交流数字功率表 JJG(航天) 780-1992	(0~1000) (0~100)	$U_{rel}=(1.9 \sim 3.5) \times 10^{-4}$	

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161	LCR 测量仪(包括 C、L 测量仪, C、L 表)	电容	0410 .09	LCR 测量仪 /YY2810	LCR 测量仪校准规范 ZTSM/JX DC 03 2002	(0~ 1.111110) μ F	$U_{rel}=1.2 \times 10^{-4}$	
		电感	0410 .09	LCR 测量仪 /YY2810	LCR 测量仪校准规范 ZTSM/JX DC 03 2002	100 μ H~ 1H	$U_{rel}=1.2 \times 10^{-3}$	
		交流电阻	0410 .09	LCR 测量仪 /YY2810	LCR 测量仪校准规范 ZTSM/JX DC 03 2002	(0~ 111110) Ω	$U_{rel}=1.2 \times 10^{-4}$	
		损耗	0410 .09	LCR 测量仪 /YY2810	LCR 测量仪校准规范 ZTSM/JX DC 03 2002	0-11.111 1	$U_{rel}=1.2 \times 10^{-3}$	
162	多功能标准源(包括交直流电压源、电流源、功率源)	直流电压	0410 .01	多功能标准源/XF30	多功能标准源校准规范 ZTSM/JX DC 04 2002	(0~ 1100) V	$U_{rel}=(6.1 \sim 11) \times 10^{-6}$	
		交流电压	0410 .02	多功能标准源/XF30	多功能标准源校准规范 ZTSM/JX DC 04 2002	(0~ 1100)V	$U_{rel}=(1.6 \sim 2.2) \times 10^{-4}$	
		直流电流	0409 .03	多功能标准源/XF30	多功能标准源校准规范 ZTSM/JX DC 04 2002	(0~60)A	$U_{rel}=(1.2 \sim 3.0) \times 10^{-4}$	
		交流电流	0409 .04	多功能标准源/XF30	多功能标准源校准规范 ZTSM/JX DC 04 2002	(0~60)A	$U_{rel}=(2.0 \sim 4.0) \times 10^{-4}$	
		直流电阻	0409 .05	多功能标准源/XF30	多功能标准源校准规范 ZTSM/JX DC 04 2002	(0~10)M Ω	$U_{rel}=(9.3 \sim 32) \times 10^{-6}$	
163	钳形电流表	交流电流	0410 .04	钳形电流表 /DM6015F	钳形电流表校准规范 JJF 1075-2001	(0~ 1000)A	$U_{rel}=2.3 \times 10^{-3}$	
164	电流互感器	交流电流变比值、相位	0406 .04	电流互感器/HL2	测量用电流互感器 JJG 313-1994	(0.1~ 5000)A/1 A、5A	比值: $U=3 \times 10^{-5}$ 相位: $U=0.08$	

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165	电压互感器	交流电压变比比值、相位	0406.05	电压互感器/HJ-10	测量用电压互感器 JJG 314-1994	1000V/0.01mV~1000V(2kV~10kV)/100V	比值: $U = 3 \times 10^{-5}$ 相位: $U = 0.08'$	
166	互感器校验仪	电流比值、相位	0409.04	互感器校验仪/HEW5	互感器校验仪 JJG 169-1993	f: (0.01~100)% δ : 0.05'~500'	比值: $U_{rel} = 0.3\%$ 相位: $U = 0.12'$	
		电压比值、相位	0409.02	互感器校验仪/HEW5	互感器校验仪 JJG 169-1993	f: (0.01~100)% δ : 0.05'~500'	比值: $U_{rel} = 0.4\%$ 相位: $U = 0.08'$	
167	电流负载箱	伏安值	0402.01	电流负载箱/HL92	电流负载箱校准规范 ZTSM/JX DC 01 2002	(2.5~60) VA	同相: $U_{rel} = 10 \times 10^{-3}$ 正交: $U_{rel} = 10 \times 10^{-3}$	
168	电压负载箱	伏安值	0402.01	电压负载箱/HY99	电压负载箱校准规范 ZTSM/JX DC 02 2002	(1.25~200) VA	同相: $U_{rel} = 10 \times 10^{-3}$ 正交: $U_{rel} = 10 \times 10^{-3}$	
169	绝缘电阻表	电阻	0410.09	绝缘电阻表/ZC25-3	绝缘电阻表 JJG 622-1997	(0.001~151111.221) M Ω	$U = (0.2 \sim 2.5) M\Omega$	
170	接地电阻表	电阻	0410.09	接地电阻表/ZC-8	接地电阻表 JJG 366-2004	(0~1111.11) Ω	$U = (0.4 \sim 2.5) \Omega$	
171	直流电阻箱	电阻	0402.01	直流电阻箱/ZX54	直流电阻箱 JJG 982-2003	(10 ⁻³ ~106) Ω	$U = (2 \times 10^{-1} \sim 2.5) \Omega$	
172	直流标准电阻	电阻	0402.01	标准电阻/BZ3	直流电阻器 JJG 166-1993	(10 ⁻³ ~10 ⁵) Ω	$U = (2 \times 10^{-6} \sim 5 \times 10^{-1}) \Omega$	
173	直流电桥	电阻	0411.01	直流电桥/QJ36	直流电桥 JJG 125-2004	(10 ⁻³ ~10 ⁶) Ω	$U = (8 \times 10^{-3} \sim 5 \times 10^{-1}) \Omega$	
174	直流电位差计	电动势	0411.02	直流电位差计/UJ25	直流电位差计 JJG 123-2004	0.01 μ V~2.1111110V	$U_{rel} = 6 \times 10^{-6}$	
175	耐电压测试仪	电压	0411.09	耐电压测试仪/CS2671B	耐电压测试仪 JJG 795-2004	(0~10) kV	$U_{rel} = 1.3 \times 10^{-2}$	
		电流	0411.09	耐电压测试仪/CS2671B	耐电压测试仪 JJG 795-2004	(0~2000) mA	$U_{rel} = 1.2 \times 10^{-2}$	

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175	耐电压测试仪	时间	0411.09	耐电压测试仪/CS2671B	耐电压测试仪 JIG 795-2004	(0~1999)s	$U_{rel}=1.0 \times 10^{-2}$	
176	泄漏电流测量仪	电流	0410.11	泄漏电流测量仪/PA30	泄漏电流测量仪 JIG 843-1993	(0~200)mA	$U_{rel}=1.2 \times 10^{-2}$	
177	接地电阻测试仪	电阻	0410.09	接地电阻测试仪/WB2678	接地导通电阻测试仪 JIG 984-2004	(0.01~0.2) Ω	$U_{rel}=4 \times 10^{-3}$	
178	单、三相标准电能表	电能	0410.12	单、三相标准电能表/HC3100型、BY2462型	电子式电能表 JIG 596-1999	3×(57.7~380)V 3×(0.1~100)A	$U_{rel}=0.011\%$	
179	单、三相电能表检验装置	电能	0425.01	单、三相电能表检验装置/PTC-8320型	交流电能表检定装置 JIG 597-2005	3×(57.7~380)V 3×(0.1~100)A	$U_{rel}=0.012\%$	
180	电话计费器	时间	0412.10	电话计费器/TJJ-2A	单机型和集中管理分散计费型电话计时计费器 JIG 107-2002	(0.1~3600×24)s	$U=(0.1-8.6)s$	
181	毫秒计	时间	0412.10	毫秒计/401	数字式时间间隔测量仪 JIG 238-1995	1 μ s~9999.999999s	$U=1\mu s - 0.00013s$	
182	机械秒表	时间	0412.10	机械秒表/钻石	指针式时间间隔测量仪 JIG 237-1995	1 μ s~9999.999999s	$U=0.004s$	
183	电子秒表	时间	0412.10	电子秒表/SJ-7	数字式时间间隔测量仪 JIG 238-1995	1 μ s~9999.999999s	$U=0.004s$	
184	通用电子计数器	频率	0412.01	通用电子计数器/E337	通用电子计数器 JIG 349-2001	10Hz~1000MHz	$U=(0.061-0.1)Hz$	
185	失真度仪检定装置	失真度	0413.04	失真度仪检定装置/B0-13B	失真度检定装置 JIG 802-1993	(0.03~100)%	$U=(0.06-1.2)\%$	只做频率范围: 50Hz-200kHz

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186	失真度测量仪	失真度	0413 .04	失真度测量仪 /ZQ4121A	失真度测量仪 JJG 251-1997	(0.03 ~100)%	$U=(1.2-5.8)\%$	只做 频率 范围: 5Hz -200k Hz
		低频电压	0409 .02	失真度测量仪 /ZQ4121A	失真度测量仪 JJG 251-1997	0.1mV ~300V	$U_{rel}=(0.02-1)\%$	
187	低频电子电压表	电压	0409 .02	低频电子电压表 /GB-9	低频电子电压表 JJG 782-1992	0.1mV ~300V	$U_{rel}=(0.02-1)\%$	
188	低频信号发生器	电压	0416 .02	低频信号发生器 /X010	低频信号发生器 JJG 602-1996	30 μ V ~300V	$U_{rel}=(0.05-3)\%$	
		频率	0416 .01	低频信号发生器 /X010	低频信号发生器 JJG 602-1996	1Hz~ 1MHz	$U_{rel}=0.1\%$	
189	晶体管特性图示仪	电压	0418	晶体管特性图示仪 /JT-1	JT-1 晶体管图示仪 JJG(浙) 3-1986	(0.01 ~1000)V	$U_{rel}=(0.3-0.35)\%$	
		电流	0418	晶体管特性图示仪 /JT-1	JT-1 晶体管图示仪 JJG(浙) 3-1986	10 μ A~ 10A	$U_{rel}=(0.3-0.35)\%$	
190	心电图机	电压	0413 .02	心电图机 /EGC-1B 等	心脑电图机 JJG 543-1996	8 μ V~ 30Vp-p	$U_{rel}=0.5\%$	
		时间	0413 .03	/EGC-1B 等	心脑电图机 JJG 543-1996	2ms~50s	$U_{rel}=0.1\%$	
191	示波器	电压	0413 .02	示波器 /2465A	模拟示波器 JJG 262-1996	100uV ~270V	$U_{rel}=0.5\%$	
		时间	0413 .03	示波器 /2465A	模拟示波器 JJG 262-1996	1ns~5s	$U_{rel}=0.01\%$	
192	频谱分析仪	频率	0419 .06	频谱分析仪/R4131A	频谱分析仪 JJG 501-2000	10kHz~ 6GHz	$U_{rel}=(1\times 10^{-4}-1.8\times 10^{-8})$	
		电平	0419 .06	频谱分析仪/R4131A	频谱分析仪 JJG 501-2000	(30~ -110)dBm	$U=(0.2-0.5)$ dB	
193	声级计	声压级	1401 .02	声级计 /AWA56XX 系列 HS56XX 系列 MD10 等	声级计 JJG 188-2002	(40~ 120)dB	$U=(0.17-0.4)$ dB	只做 频率 范围: 10Hz ~ 1kHz

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194	信号发生器	电平	0416 .01	信号发生器/HP86XX系列 E44XX系列 MSG25XX系列 YM8177等	信号发生器 JJG 173-2003	(30~ -127)dBm	$U = 0.18\text{dB}$	
		频率	0416 .01	信号发生器/HP86XX系列 E44XX系列 MSG25XX系列 YM8177等	信号发生器 JJG 173-2003	5 kHz~ 26.5GHz	$U_{\text{rel}} = 1\%$	
		频率调制制度	0416 .01	信号发生器/HP86XX系列 E44XX系列 MSG25XX系列 YM8177等	信号发生器 JJG 173-2003	(0-400) kHz	$U_{\text{rel}} = 1\%$	
		幅度调制制度	0416 .01	信号发生器/HP86XX系列 E44XX系列 MSG25XX系列 YM8177等	信号发生器 JJG 173-2003	(0-100) %	$U_{\text{rel}} = 1\%$	
195	验光仪	顶焦度	1601	电脑验光机	验光机 JJG 892-2005	-20.00D ~ +20.00D	$U = 0.11\text{D}$	不作主观式
196	焦度计	顶焦度	1601	自动焦度计 调焦式焦度计	焦度计 JJG 580-2005	-25.00D ~ +25.00D	$U = 0.03\text{D}$	
197	验光镜片箱	顶焦度	1601	验光镜片箱 /119/232/ 266-II	验光镜片箱 JJG 579-1998	-20.00D ~ +20.00D	$U = 0.03\text{D}$	
198	白度计	白度	1613	白度计	白度计 JJG 512-2002	可见光谱区 (380-780) nm	$U = 0.9$ $k=1$	

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199	测色色差计	色度	1613	色差计	测色色差计 JJG 595-2002	可见光谱区 (380-780) nm	$U = 0.8$ $k=1$	
200	标准色板	三刺激值	1613	白板	标准色板 JJG 453-2002	(380 ~780)nm	$U = 0.8$ $k=1$	
201	亮度计	亮度	1611	亮度计	亮度计 JJG 211-2005	(3~ 1500) cd/m ²	$U = 2.0\%$	
202	光照度计	照度	1612	照度计	光照度计 JJG 245-2005	(10~ 3000) lx	$U = 1.1\%$	
203	光泽度计	镜向光泽度	1613 .14	光泽度计	镜向光泽度计 和光泽度板 JJG 696-2002	20°、 60°、 85° (1~ 100)光泽 单位	$U = 1.2$ 光泽单 位	不做 光泽 度板
204	漫透射视觉密度计	密度	1613 .08	透射式黑白密度计	漫透射视觉密 度计 JJG 920-1996	0~4.0D	$U = 0.03$ ($D \leq 2.0$)	
205	医用激光源	功率	1621	医用激光源	医用激光源 JJG 581-1999	(0~ 100) MW (0~ 100) W	$U = 3.34\%$	
206	光通量值	光通量	1610	光通量标准灯	总光通量标准 白炽灯 JJG 247-1991	(0~ 10000)lm	$U = 1.7\%$	
207	色温度值	色温	1613 .05	色温标准灯	分布(颜色) 温度标准灯 JJG 213-2003	(0~ 10000) K	$U = 15.1k$	
208	医用诊断X射线辐射源	空气比释动能率	1620	医用诊断X射线辐射源 /GE1600E	医用诊断X射 线辐射源 JJG 744-2004	100nGy/s ~ 1800mGy/s	$U_{rel} = 5\%$	
209	医用诊断CT机X射线辐射源	剂量指数	1620	医用诊断CT机X射线辐射源 /H8000	医用诊断计算 机断层摄影装 置(CT)X射线 辐射源 JJG 961-2001	0.1 mGycm/s ~ 260 Gycm/s	$U_{rel} = 8\%$	
210	气相色谱仪	检测限	0236	气相色谱仪/HP6890	气相色谱仪 JJG 700-1999	FID、TCD、 ECD、NPD、 FPD 检测器	$U_{rel} = 5\%$	

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211	液相色谱仪	检出限	0236	液相色谱仪/1100等	液相色谱仪 JJG 705-2002	紫外、荧光、示差检测器	$U_{rel} = 5\%$	
212	原子吸收分光光度计	检出限	1618	原子吸收分光光度计/AA-6501	原子吸收分光光度计 JJG 694-2005	火焰法	Cu: $U = 0.005 \mu\text{g/ml}$ 、	
						石墨炉法	Cd: $U = 0.5\text{pg}$	
213	旋光仪	旋光度	1603	旋光仪/WZZ-1	旋光仪和旋光糖量计 JJG 536-1998	$-45^\circ \sim +45^\circ$	$U = 0.005^\circ \sim 0.011^\circ$	
214	工作毛细管粘度计	常数	0236	毛细管	工作毛细管粘度计 JJG 155-2005	(0~1000000) mm^2/s	$U = (0.3 \sim 1)\%$	
215	流出杯式粘度计	常数	0236	流出杯式	流出杯式粘度计 JJG 743-2005	(10~400) mm^2/s	$U = 3 \times 10^{-3}$	
216	恩氏粘度计	流出时间	0236	恩氏	恩氏粘度计 JJG 742-2005	(51±1)s	$U = 0.07\text{s}$	
217	旋转式粘度计	常数	0236	旋转式	旋转式粘度计 JJG 215-2005	(1~100000) $\text{mPa} \cdot \text{s}$	$U = 5 \times 10^{-2} \text{mPa} \cdot \text{s}$	
218	医用超声诊断仪超声源	输出声强	1405	医用超声诊断仪超声源/B型	医用超声诊断仪超声源 JJG 639-2005	(0~10) mW/cm^2	$U = 0.1\text{mW}/\text{cm}^2$	
219	大气采样仪	流量	1316	大气采样仪/GS-3	大气采样仪 JJG 956-2000	(50~2000) ml/min (0~100) L/min	$U = 1.5\%$	
220	粉尘采样仪	流量	1316	粉尘采样仪/BFC-35	粉尘采样仪 JJG 520-2005	(0~100) L/min	$U = 1\%$	
221	可见分光光度计	波长	1618	可见分光光度计/721	可见分光光度计 JJG 178-1996	(360~800) nm	干涉滤光片: $U = 2\text{nm}$ 氧化钬溶液: $U = 0.3\text{nm}$	
		透射比				(0~100) $\% \tau$	透射比: $U = 0.2\% \tau$	
222	紫外可见分光光度计	波长	1618	紫外可见分光光度计/754等	单光束紫外可见分光光度计 JJG 375-1996 双光束紫外可见分光光度计 JJG 682-1990	(190~850) nm	波长: $U = 0.3\text{nm}$	
		透射比				(0~100) $\% \tau$	透射比: $U = 0.17\% \tau$	

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223	浊度计	浊度	0236	浊度计/YZD-1A	浊度计 JJG 880-1994	(0~400)NTU	$U_{rel}=5\%$	
224	测汞仪	线性误差	0236	测汞仪/ZYG-II	测汞仪 JJG 548-2004	(0~1) $\mu\text{g/ml}$	$U_{rel}=4.8\%$	
225	阿贝折射仪	折射率	1604	阿贝折射仪/WZS-1	阿贝折射仪 JJG 625-2001	1.3~1.7	$U=1.0 \times 10^{-4}$	
226	酸度计,离子计	pH值	0236	酸度计,离子计/pHS-3C等	实验室PH(酸度)计 JJG 119-2005 离子计 JJG 757-1991	(0~14)pH	$U=0.02\text{pH}$	
227	电导仪	电导电导率	0401	电导仪/DDS-11A	电导仪 JJG 376-1985	(0~10 ⁵) $\mu\text{S/cm}$	$U_{rel}=0.3\%$	
228	pH计检定仪	电压	0236	pH计检定仪pHJ-02	PH计检定仪 JJG 919-1996	(0~10 ⁵)mV	$U=0.012\text{mV}$	
229	覆膜电极溶解氧测定仪	溶解氧	0236	覆膜电极溶解氧测定仪/YSI	覆膜电极溶解氧测定仪 JJG 291-1999	(0~20) mg/L	$U=0.06\text{mg/L}$	
230	CO、CO2红外线分析仪	CO、CO2气体密度	0236	CO、CO2红外线分析仪/GXH	一氧化碳,二氧化碳红外线气体分析器 JJG 635-1999	(0~5000) $\mu\text{mol/mol}$	$U_{rel}=2.3\%$	
231	汽车排放气体测试仪	CO, HC浓度	0236	汽车排放气体测试仪/MEXA	汽车排放气体测试仪 JJG 688-1990	CO: (0~8)%	CO: $U_{rel}=3.4\%$	
						HC: (0~8000) $\mu\text{mol/mol}$	HC: $U_{rel}=2.1\%$	
232	可燃气体测爆仪	仪器示值误差	0236	可燃气体测爆仪/GP-103	可燃气体检测报警器 JJG 693-2004	(0~100) %LEL	$U_{rel}=2.3\%$	
233	滤波器	相对衰减	1401.04	滤波器/AWA	倍频程和1/3倍频程滤波器 JJG 449-2001	相对衰减: (0~75)dB	$U=0.24\text{dB}$	只做频率: (10~20) kHz
234	标准钢卷尺	长度	1303.27	标准钢卷尺	标准钢卷尺 JJG 741-2005	(0~50) m	L=3m: $U=7.0\mu\text{m}$	
235	全站仪	角度长度	1309.11	全站仪/CTS-332W	全站型电子速测仪 JJG 100-2003 光电测距仪 JJG 703-2003	测角: 水平角(0~360) ° 竖直角 ±30° 测距: (1~1.1)km	测角: $U=0.38$ " 测距: $U=0.94\text{mm}$	

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236	GPS 接收机	长度	1309.11	GPS 接收机/Promark2	全球定位系统(GPS)接收机(测地型和导航型) JJF 1118-2004	(0~63)km	$U = 2.1\text{mm}$	
237	手持式激光测距仪	长度	1309.12	手持式激光测距仪/Distodassi c3	手持式激光测距仪 JJG 966-2001	(0~30)m	固定误差 a: $U = 0.4\text{mm}$ 比例误差系数 b: $U = 1.7 \times 10^{-2}\text{mm/m}$	
238	红外辐射温度计	温度	1501.08	红外辐射温度计/MT、ST	500℃以下工作用辐射温度计 JJG 856-1994 工作用辐射温度计 JJG 415-2001	(室温~1100)℃	$U = (1.7 \sim 2.1)^\circ\text{C}$	
239	毛发湿度表、毛发湿度计	湿度	1517.01	毛发湿度表、毛发湿度计/HM10	机械式温湿度计 JJG 205-2005	(30~95)%RH	$U = 2.0\%RH$	
240	X 射线探伤机	空气比释动能率	1623	X 射线探伤机/XXQ-2505	X 射线探伤机 JJG 40-2001	(0-876)Gy 灵敏度: (2×10^{-8})C/Gy	$U_{\text{rel}} = 4.4\%$	
241	平板式汽车制动检验台	制动力	1323.04	平板式汽车制动检验台/JCY-G-4-3t	平板式汽车制动检验台 JJG(浙)70-2003	(0~10000)N	$U_{\text{rel}} = 0.82\%$	
242	车轮动平衡机	剩余不平衡量	1411.02	车轮动平衡机/CB-15	车轮动平衡机 JJG(浙)74-2004	(30~120)kg	$U_{\text{rel}} = 1.4\%$	
243	透射式烟度计	光吸收比 N 和光吸收系数 K	1511.04	透射式烟度计/NHT-1	透射式烟度计 检定规程 JJG 976-2002	光吸收比: (0~98.6)% 光吸收系数: (0~9.99) m^{-1}	$U_{\text{rel}} = 0.53\%$	
244	汽车转向盘转向力-转向角检测仪	转向力	1323.04	车转向盘转向力-转向角检测仪/DCG-10C	汽车转向盘转向力-转向角检测仪 JJG(浙)73-2004	转向力: (0~500N)	$U_{\text{rel}} = 0.38\%$	
		转向角	1323.04			转向角: (0~360°)		

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245	汽车制动踏板力计	力值	1323.04	汽车制动踏板力计/TL-1000	汽车制动踏板力计 JJG(浙)72-2004	(0~1000)N	$U_{rel}=1.1\%$	
246	汽车悬架装置检测台	质量	1323.01	汽车悬架装置检测台/DLXX-200B	汽车悬架检测台 JJG(浙)69-2003	(0~1000) kg	$U_{rel}=0.72\%$	
247	一般压力表	压力	1230.01	一般压力表/Y	弹簧管式一般压力表、压力真空表和真空表 JJG 52-1999	(-0.1~60)MPa	$U=0.72\%$	
248	车速里程表校验仪	转速	1324.02	车速里程表校验仪/ZJY-1	车速里程表校验仪 JJG 779-2004	(4~40000) r/min	$U_{rel}=0.04\%$	
249	直流电子负载	电压	0402.05	直流电子负载	直流电子负载校准规范 ZTSM/JX DC 22-2003	(0~60)V	$U_{rel}=1 \times 10^{-4}$	
		直流电压	0402.05	直流电子负载	直流电子负载校准规范 ZTSM/JX DC 22-2003	(0~60)V	$U_{rel}=1.7 \times 10^{-4}$	
		直流电流	0402.05	直流电子负载	直流电子负载校准规范 ZTSM/JX DC 22-2003	(0~100)A	$U_{rel}=2 \times 10^{-4}$	
		直流电阻	0402.05	直流电子负载	直流电子负载校准规范 ZTSM/JX DC 22-2003	(0.1~4000) Ω	$U_{rel}=4 \times 10^{-4}$	
250	螺纹(环)塞规	长度	1301.1 1302.2	螺纹(环)塞规	圆柱螺纹量规 JJG 888-1995	环规: (2~200)mm 塞规: (2~120)mm	$U=3 \mu m$	
251	塞尺	长度	1303.25	塞尺	塞尺 JJG 62-1995	厚度: (0.02~1.00)mm 长度:(75~300)mm	$U=2.4 \mu m$	

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252	电子式数字湿度计	湿度	1517 .01	电子式数字湿度计/HM34	数字湿度计 JJG(浙) 77-2004	(20~95)%RH	$U=(0.4\sim 1.7)\%RH$	
253	交流电能表现场校验仪	电能	0410 .12	交流电能表现场校验仪/HPU3001型	电子式电能表 JJG 596-1999	3×(57.7~380)V 3× (0.1~100)A	$U_{rel}=0.011\%$	
254	磁通表	磁通量	0405 .05	磁通表/伏秒发生器MTC-1	磁通表 JJG 317-1983	0.1 mWb ~ 10Wb	$U_{rel}=(0.07\sim 0.1)\%$	
255	特斯拉计	磁感应强度	0405 .08	特斯拉计/NMR 磁强计:FW101 特斯拉计:7010	特斯拉计 JJG 242-1995	(0~3.0)T	$U_{rel}=(0.04\sim 0.1)\%$	
256	液压张拉机	力值	1323 .04	液压张拉机/YDC-5000	液压千斤顶 JJG 621-2005	1N~8MN	$U_{rel}=1.6\%$	
257	数字通信综合测试仪	RF 信号源频率准确度	0419 .02	数字通信综合测试仪/CMU200 8960S	TDMA-GSM 数字移动通信综合测试仪校准规范 JJF 1131-2005	10Hz~26.5GHz	$U_{rel}=2.2\times 10^{-8}$	
		RF 信号源电平准确度	0419 .02	数字通信综合测试仪/CMU200 8960S	TDMA-GSM 数字移动通信综合测试仪校准规范 JJF 1131-2005	-145dBm ~ +30dBm	$U=0.22dB$	
		RF 信号源谐波	0419 .02	数字通信综合测试仪/CMU200 8960S	TDMA-GSM 数字移动通信综合测试仪校准规范 JJF 1131-2005	-145dBm ~ +30dBm	$U=0.94dB$	
		RF 信号源 SSB 相位噪声	0419 .02	数字通信综合测试仪/CMU200 8960S	TDMA-GSM 数字移动通信综合测试仪校准规范 JJF 1131-2005	-145dBm ~ +30dBm	$U=0.32dB$	
		RF 分析仪频率准确度	0419 .02	数字通信综合测试仪/CMU200 8960S	TDMA-GSM 数字移动通信综合测试仪校准规范 JJF 1131-2005	250kHz ~ 6GHz	$U_{rel}=1.7\times 10^{-8}$	

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257	数字通信综合测试仪	RF 分析仪电平准确度	0419.02	数字通信综合测试仪/CMU200 8960S	TDMA-GSM 数字移动通信综合测试仪校准规范 JJF 1131-2005	-136dBm ~20dBm	$U = 0.25\text{dB}$	
		AF 信号源频率准确度	0419.02	数字通信综合测试仪/CMU200 8960S	TDMA-GSM 数字移动通信综合测试仪校准规范 JJF 1131-2005	0.1Hz ~ 1GHz	$U_{\text{rel}} = 2.0 \times 10^{-6}$	
		AF 信号源电平准确度	0419.02	数字通信综合测试仪/CMU200 8960S	TDMA-GSM 数字移动通信综合测试仪校准规范 JJF 1131-2005	0 ~ 750Vac	$U_{\text{rel}} = 0.076\%$	
		AF 信号源失真	0419.02	数字通信综合测试仪/CMU200 8960S	TDMA-GSM 数字移动通信综合测试仪校准规范 JJF 1131-2005	(0.003 ~ 100) %	$U = 0.018\%$	
		AF 分析仪频率准确度	0419.02	数字通信综合测试仪/CMU200 8960S	TDMA-GSM 数字移动通信综合测试仪校准规范 JJF 1131-2005	0.1Hz ~ 100kHz	$U = 0.0058\text{Hz}$	
		AF 分析仪电平准确度	0419.02	数字通信综合测试仪/CMU200 8960S	TDMA-GSM 数字移动通信综合测试仪校准规范 JJF 1131-2005	0 ~ 5Vpp	$U_{\text{rel}} = 0.13\%$	
		RF 信号源数字调制准确度	峰值相位误差 均方根值相位误差	0419.02	数字通信综合测试仪/CMU200 8960S	TDMA-GSM 数字移动通信综合测试仪校准规范 JJF 1131-2005	-4° ~ 4°	$U = 1.2^\circ$
		-1° ~ 1°	$U = 0.35^\circ$					

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257	数字通信综合测试仪	RF 信号源数字调制准确度	0419 .02	数字通信综合测试仪/CMU200 8960S	TDMA-GSM 数字移动通信综合测试仪校准规范 JJF 1131-2005	(-45~+20)dBm	$U = 0.12\text{dB}$	
						3Hz~26.5GHz	$U = 5.8 \times 10^{-8}$	
		RF 数字调制分析仪准确度	0419 .02	数字通信综合测试仪/CMU200 8960S	TDMA-GSM 数字移动通信综合测试仪校准规范 JJF 1131-2005	-4° ~4°	$U = 1.2^\circ$	
						-1° ~1°	$U = 0.35^\circ$	
						DC~40MHz	$U = 1.2\text{Hz}$	
		RF 输入和输出端口电压驻波比	0419 .02	数字通信综合测试仪/CMU200 8960S	TDMA-GSM 数字移动通信综合测试仪校准规范 JJF 1131-2005	1.02~∞	$U = 1.2$	
258	电平监测仪	电平	0415 .01	电平监测仪/ZBL8810	ZBL8810 系列 TV/FM 电平监测仪 JJG(浙) 55-1996	(30~120) dB μ	$U = 1.2\text{dB}$	只做 100kHz~1000MHz
259	通信直流稳压电源	电压	0415 .01	通信直流稳压电源/6654	直流稳压电源 检定规程 JJG(航天) 6-1999	(0~1000) V	$U_{\text{rel}} = 0.0092\%$	

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260	函数信号发生器	电平	0416.02	函数信号发生器/FG503	函数信号发生器 JYG 840-1993	电压: 30 μ V~ 300V	$U_{rel}=0.10\%$	
		频率	0416.01	函数信号发生器/FG503	函数信号发生器 JYG 840-1993	频率: 0.03Hz~ 30MHz	$U_{rel}=0.029\%$	
261	心脑电图机检定仪	频率	0416.01	心脑电图机检定仪/EGC-1B	心脑电图机检定仪 JJG 749-1997	0.03Hz~ 100Hz	$U_{rel}=0.029\%$	
		电压	0416.02	心脑电图机检定仪/EGC-1B	心脑电图机检定仪 JJG 749-1997	0~100V	$U_{rel}=0.2\%$	
262	猝发音信号源	频率	0416.01	猝发音信号源/AWA5551	猝发音信号源 JJG 199-2005	0.03Hz~ 100MHz	$U_{rel}=1.5 \times 10^{-6}$	
		衰减	0416.01	猝发音信号源/AWA5551	猝发音信号源 JJG 199-2005	(0~ 60)dB	$U=0.05\text{dB}$	
263	音频分析仪	电压	0409.02	音频分析仪/8903B	电子电压表 JJG 250-19 90	1mV~ 300V	$U_{rel}=0.042\%$	
		失真度	0413.04	音频分析仪/8903B	失真度测量仪 JJG 251-1997	0~100%	$U=0.12\%$	
264	调制度测量仪	调频频偏	0416.03	调制度测量仪/8901B	调制度测量仪 JJF 1111-2003	(0.1~ 400)kHz	$U_{rel}=1.4\%$	
		调幅度	0416.03	调制度测量仪/8901B	调制度测量仪 JJF 1111-2003	(0~ 100)%	$U_{rel}=1.6\%$	
265	雷达测速仪	速度	0335.02	雷达测速仪/LDR	手握式雷达测速仪 JJG 528-2004	(20~ 150) km/h	$U=0.67\text{km/h}$	
266	工作测振仪	加速度	1407.02	工作测振仪/HS5944	工作测振仪 JJG 676-2000	(1~700) m/s^2	$U_{rel}=2\%-3\%$	
267	压电加速度计	加速度	1407.01	压电加速度计/YD-3A	压电加速度计 JJG 233-1996	(1~700) m/s^2	$U_{rel}=2\%-3\%$	
268	基桩动态测量仪	加速度	1407.02	基桩动态测量仪/RS-1616K(P)	基桩动态测量仪 JJG 930-1998	(1~700) m/s^2	$U_{rel}=2\%-3\%$	
269	数字式电动振动试验系统	加速度	1409.01	数字式电动振动试验系统/ES-6	数字式电动振动试验系统 JJG 948-1999	(1~ 1000) m/s^2	$U_{rel}=2\%-3\%$	

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269	数字式电动振动试验系统	速度	1409.01	数字式电动振动试验系统/ES-6	数字式电动振动试验系统 JIG 948-1999	(0.1~100) _{rms} cm/s	$U_{rel}=2\%-5\%$	
		位移	1409.01	数字式电动振动试验系统/ES-6	数字式电动振动试验系统 JIG 948-1999	(0.01~100) _{p-p} mm	$U_{rel}=3\%-6\%$	
270	电动式振动试验台	加速度	1409.01	电动式振动试验台/D-350	电动式振动试验台 JIG 190-1997	(1~1000) m/s ²	$U_{rel}=2\%-3\%$	
		速度	1409.01	电动式振动试验台/D-350	电动式振动试验台 JIG 190-1997	(0.1~100) _{rms} cm/s	$U_{rel}=2\%-5\%$	
		位移	1409.01	电动式振动试验台/D-350	电动式振动试验台 JIG 190-1997	(0.01~100) _{p-p} mm	$U_{rel}=3\%-6\%$	
271	机械式振动试验台	加速度	1409.01	机械式振动试验台/Y5050/ZF	机械式振动试验台 JIG 189-1997	(1~1000) m/s ²	$U_{rel}=2\%-3\%$	
		位移	1409.01	机械式振动试验台/Y5050/ZF	机械式振动试验台 JIG 189-1997	(0.01~100) _{p-p} mm	$U_{rel}=3\%-6\%$	
272	超声波探伤仪	衰减器衰减误差	1101	超声波探伤仪/CTS-22A	超声探伤仪 JIG 746-2004	衰减范围 ≤61dB	12dB 下, $U=0.28dB$	
273	高绝缘电阻测试仪	电阻	0410.09	高绝缘电阻测试仪/ZC36	高绝缘电阻测试仪 JIG 690-2003	(0.001~151111.221) MΩ	$U_{rel}=2 \times 10^{-2}$	
274	电量变送器(传感器)	电压、电流	0406.05	直流电压传感器/TC6/GP6	交流电量变换为直流电量电工测量变送器 JIG 126-1995	(0~5)V、(0~20)mA	$U_{rel}=2 \times 10^{-4}$	
			0406.04	交流电压变送器/TC/GP	交流电量变换为直流电量电工测量变送器 JIG 126-1995	(0~5)V、(0~20)mA	$U_{rel}=2 \times 10^{-4}$	
		电压、电流	0410.03	直流电流传感器/TC6/GP6	交流电量变换为直流电量电工测量变送器 JIG 126-1995	(0~5)V、(0~20)mA	$U_{rel}=2 \times 10^{-4}$	

序号	测量仪器名称	校准参数	领域代码	测量仪器类别/典型型号	规范名称及代号(含年号)	测量范围	扩展不确定度(最佳测量能力)	备注
274	电量变送器(传感器)	电压、 电流	0410 .04	交流电流 变送器 /TC/GP	交流电量变换 为直流电量电 工测量变送器 JJG 126-1995	(0~5)V、 (0~ 20)mA	$U_{rel}=2 \times 10^{-4}$	
		电压、 电流	0406 .03	有功无功 功率变送器 / TC/GP	交流电量变换 为直流电量电 工测量变送器 JJG 126-1995	(0~5)V、 (0~20)m	$U_{rel}=3 \times 10^{-4}$	
		电压、 电流	0406 .06	频率变送器 /FPF	交流电量变换 为直流电量电 工测量变送器 JJG 126-1995	(0~5)V、 (0~ 20)mA	$U_{rel}=2 \times 10^{-4}$	
		电压、 电流	0406 .10	功率因数、 相位变送器 /FPPF	交流电量变换 为直流电量电 工测量变送器 JJG 126-1995	(0~5)V、 (0~ 20)mA	$U_{rel}=2 \times 10^{-4}$	
275	标准测力 仪	力值	0333 .02	标准测力 仪/C2000	标准测力仪 JJG 144-1992	200kN~ 2MN	$U_{rel}=0.13\%$	
		力值	0333 .02	标准测力 仪/C500	标准测力仪 JJG 144-1992	(20~ 500)kN	$U_{rel}=0.037\%$	
		力值	0333 .02	标准测力 仪/C60	标准测力仪 JJG 144-1992	(1~ 60)kN	$U_{rel}=0.04\%$	
		力值	0333 .02	标准测力 仪/C6	标准测力仪 JJG 144-1992	(50~ 6000)N	$U_{rel}=0.072\%$	
276	工作测力 仪	力值	0333 .02	工作测力 仪/GZ6	工作测力仪 JJG 455-2000	(50~ 6000)N	$U_{rel}=0.47\%$	
		力值	0333 .02	工作测力 仪/GZ2000	工作测力仪 JJG 455-2000	200kN~ 2MN	$U_{rel}=0.25\%$	
		力值	0333 .02	工作测力 仪/GZ500	工作测力仪 JJG 455-2000	(20~ 500)kN	$U_{rel}=0.47\%$	
		力值	0333 .02	工作测力 仪/GZ60	工作测力仪 JJG 455-2000	(1~ 60)kN	$U_{rel}=0.25\%$	
277	液压张拉 机(含静 载仪器)	力值	1323 .04	液压张拉 机(含静载 仪器)/YCW-1 50C	液压千斤顶 JJG 621-2005	10kN~ 10MN	$U_{rel}=1.8\%$	
278	拉力、压 力和万能 试验机	力值	1326 .01 1326 .02	拉力、压力 和万能试 验机 /WE-100B	拉力、压力和 万能试验机 JJG 139-1999	10kN~ 2MN	$U_{rel}=0.42\%$	

序号	测量仪器名称	校准参数	领域代码	测量仪器类别/典型型号	规范名称及代号(含年号)	测量范围	扩展不确定度(最佳测量能力)	备注
279	非自行指示秤	质量	1311.03	非自行指示秤/TGT	非自行指示秤 JJG 14-1997	≤50t	$U_{rel}=0.013\%$	只做Ⅲ、Ⅳ级
280	模拟指示秤	质量	1311.03	模拟指示秤/ATZ	模拟指示秤 JJG 13-1997	≤30t	$U_{rel}=0.045\%$	只做Ⅲ、Ⅳ级
281	数字指示秤	质量	1311.03	数字指示秤/SCS、ACS	数字指示秤 JJG 539-1997	≤150t	$U_{rel}=0.012\%$	只做Ⅲ、Ⅳ级
282	动态汽车衡	质量	1311.03	动态汽车衡/DCS	动态汽车衡 JJG 907-2003	≤100t	$U_{rel}=0.048\%$	只做0.2级及以下
283	重力式自动装料衡器	质量	1311.04	重力式自动装料衡器/CJD	重力式自动装料衡器 JJG 564-2002	≤1000kg	$U_{rel}=0.20\%$	只做X(0.1)级及以下
284	连续累计自动衡器(皮带秤)	质量	1311.03	连续累计自动衡器(皮带秤)/ICS	连续累计自动衡器 JJG 195-2002	≤4000t/h	$U_{rel}=0.10\%$	只做0.5级及以下



**CHINA NATIONAL ACCREDITATION SERVICE FOR CONFORMITY ASSESSMENT
APPENDIX OF LABORATORY ACCREDITATION CERTIFICATE**

(No. CNAS L2181)

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APPENDIX 1-2 LIST OF ACCREDITED CALIBRATION SCOPE

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
1	Emission Spectrometer	Descrim Ination threshold	1619.03	Atomic emission spectrometer /ARL-4460	The Verification Regulation of Emission Spectrometer JJG 768-2005	AES	元素 U C 0.002% Si 0.0006% Mn 0.0002% Cr 0.0009% Ni 0.0001% V 0.0007%	
2	Medical Image Quality Assurance Test for Digital Subtraction Angiography (DSA)	Kerma-rate	0517	Ionize Radiation / V 3000	Medical Image Quality Assurance Test for Digital Subtraction Angiography Verification Regulation JJG(Zhe) 81-2005	0.2 μ Gy/s ~320mGy/s	Urel=5% k=2	MPE: ±10%

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
3	Technical Specification of Measurement Nuclear Magnetic Resonance Image (MRI)	Tesla	0517	Magnetism Measurement /Signa 1.5T	Technical Specification of Measurement Nuclear Magnetic Resonance Image (MRI) Verification Regulation JJG(Zhe) 80-2005	(0.043 ~2.1)T	$U_{rel}=0.2\%$ $k=2$	MPE: $\pm 2\%$
4	Coordinate Measuring Machines	length	1309.12	Coordinate Measuring Machines/ GLOBAL STATUS 555	Calibration Specification for Coordinate Measuring Machine JJF 1064-2004	(0-6)m	$L=100\text{mm}$, $U=0.3\ \mu\text{m}$ $L=1000\text{mm}$, $U=1.7\ \mu\text{m}$	
5	Standard Metallic Scale (Grade III)	length	1308.08	Standard Metallic Scale (Grade III)	Standard Metallic Scale (Grade III) JJG 71-2005	(0-1)m	$U=12\ \mu\text{m}$	
6	Digital Display Height Measuring Instrument	length	1309.11	Digital Display Height Measuring Instrument/ CT6001	Digital Display Height Measuring Instrument JJG 929-1998	(0-1)m	$L=100\text{mm}$ $U=0.3\ \mu\text{m}$ $L=1000\text{mm}$, $U=2.0\ \mu\text{m}$	
7	Linear Displacement Inductor	length	1309.11	Linear Displacement Inductor	Linear Displacement Inductor JJG 836-1993	(0-1)m	$U=0.6\ \mu\text{m}$	
8	Universal Measuring Microscopes and Makers Microscopes	length	1309.06	Nonautomatic、Big、Minitype、number/JX7	Universal Measuring Microscopes and Makers Microscopes JJG 56-2000	(0-2000)mm	$U=0.8\ \mu\text{m}$	
9	Length Measuring Test Set	length	1309.06	Length Measuring Test Set /JDP	Length Measuring Test Set JJF 1066-2000	(0-3000)mm	$L=200\text{mm}$, $U=0.45\ \mu\text{m}$ $L=1000\text{mm}$, $U=2.1\ \mu\text{m}$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
10	Horizontal Metro scope	length	1309.06	Horizontal Metro scope JD18	Horizontal Metroscope JIG 55-1984	(0-500)mm	$U = 0.5 \mu m$	
11	Contact Type Interferometer	length	1309.06	Contact Type Interferometer /JDS-1	Contact Type Interferometer JIG 101-2004	± 50 Index	$U = 0.027 \mu m$	
12	Optimeter	length	1309.06	Optimeter/ JD3	Optimeter JIG 45-1999	(0-200)mm	$U = 0.04 \mu m$	
13	Measuring Microscope	length	1309.06	Measuring Microscope /15J	Measuring Microscope JIG 571-2004	(0-50)mm	$U = 1.5 \mu m$	
14	Microscope for Reading	length	1309.06	Microscope for Reading /J ₄ 10	Microscope for Reading JIG 571-2004	(0-6)mm	$U = 0.25 \mu m$	
15	Projector	length	1309.16	Projector /JJ12A	Projector JJF 1093-2002	(0~1000)mm	$L=25$ mm, $U = 0.6 \mu m$ $L=100$ mm, $U = 1.0 \mu m$	
16	Contact (Stylus) Instruments for the Measurement of Surface Roughness by the Profile Method	Surface Roughness	1308.09	Contact (Stylus) Instruments for the Measurement of Surface Roughness by the Profile Method /2201	Contact (Stylus) Instruments for the Measurement of Surface Roughness by the Profile Method JJF 1105-2003	Ra: (0.1-46) μm	$U_{rel} = 1.5\%$	
17	Light-Section Microscope	length	1309.06	Light-Section Microscope /9J	Light-Section Microscope JJF 1092-2002	H: (0.8-80) μm	$U_{rel} = 2\%$	
18	Interference Microscope	length	1309.06	Interference Microscope /6JA	Interference Microscope JIG 77-1983	H: (0.1-1.0) μm	$U_{rel} = 2\%$	
19	Goniometers	angle	1308.06	Goniometers /C20	Goniometers JIG 97-2001	(0~360) $^{\circ}$	$U = 2''$	
20	Optical Digital Dividing Head	angle	1308.06	Optical Digital Dividing Head	Optical Digital Dividing Head JIG 57-1999	0-360 $^{\circ}$	$U = 1.6''$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
21	Optical Rotary Table	angle	1308.06	Optical Rotary Table	Calibration Specification for Optical & Digital Dividing Tables JJJ 1114-2004	0-360°	$U=1.0''$	
22	Inductive Micrometers	length	1309.09	Inductive Micrometers /DGB-5A	Inductive Micrometers JJG 396-2002	(-1000+1000) μm	$U=0.04\mu\text{m}$	
23	Ultrasonic Thickness Gauge	length	1309.11	Ultrasonic Thickness Gauge /TT100	Ultrasonic Thickness Gauge JJF 1126-2004	(0-200)mm	$L=200\text{mm}$ $U=0.04\text{mm}$	
24	Eddy Current Interferometer for Measuring Thickness	length	1309.11	Eddy Current Interferometer for Measuring Thickness /ED-200	Magnetic and Eddy Current Measuring instrument for coating Thickness JJG 818-2005	(0-1250) μm	$U=0.4\mu\text{m}$	
25	Magnetic Resistance Thickness Gauge	length	1309.11	Magnetic Resistance Thickness Gauge /HCC-24	Magnetic and Eddy Current Measuring instrument for coating Thickness JJG 818-2005	(0-10)mm	$U=0.6\mu\text{m}$	
26	Standard Ring Gauge	length	1301.02	Standard Ring Gauge	Standard Ring Gauge JJG 894-1995	(5~200)mm	$U=1.2\mu\text{m}$	
27	Smooth Limit Gauge	length	1301.01 1301.02	Smooth Limit Gauge /IT6-11	Smooth Limit Gauge JJG 343-1996	(5~200)mm	$U=1.2\mu\text{m}$	
28	Universal Involute Gear Tester	Involute indication error	1309.13	Universal Involute Gear Tester /3201	Calibration Specification for Gear Involute Measuring Instruments JJF 1124-2004	base circle dia.: (25~400) mm	$U=1.0\mu\text{m}$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
29	Base Circle Involute and Helix Gear Tester	Involute 、 Helix	1309.13	Base Circle Involute and Helix Gear Tester /3204	Calibration Specification for Gear Helix Measuring Instruments JJF 1122-2004 Calibration Specification for Gear Involute Measuring Instruments JJF 1124-2004	base circle dia. : (25~400) mm	$U=1.0 \mu m$	
30	Lead Tester of Gear	Helix indication	1309.13	Lead Tester of Gear /3301	Calibration Specification for Gear Helix Measuring Instruments JJF 1122-2004	base circle dia. : (25-400) mm	$U=1.0 \mu m$	
31	Measurement Standard Instrument of Roundness and Cylindricity	Roundness and Cylindricity	1305.02 1305.03	Measurement Standard Instrument of Roundness and Cylindricity /YD200	Measurement Standard Instrument of Roundness and Cylindricity JIG 429-2000	20 μm	$U=0.012 \mu m$	
32	Combined Appearance Measuring Instrument	Radial error Axis error	1305.01	Combined Appearance Measuring Instrument	Combined Appearance Measuring Instrument JIG 786-1992		$U=0.1 \mu m$	
33	Current Caliper	length	1303.23	Current Caliper	Current Calipers JIG 30-2002	(0~1000)mm	$L=300mm$ $U=0.01mm$	
34	Height Gauge	length	1303.23	Height Gauge	Height Gauge JIG 31-1999	(0~1000)mm	$U=0.01mm$	
35	Micrometer	length	1303.18	Micrometer	Micrometer JIG 21-1995	(0~500)mm	$U=1.1 \mu m$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
36	Micrometer	length	1303.18	Micrometer	Micrometers with Measuring Range form 500mm~3000mm JJF 1088-2002	(500~1000)mm	$U = 2.2 \mu m$	
37	Micrometer for Measuring Inside Dimension	length	1303.18	division value: 0.001mm	Micrometers for Measuring Inside Dimension JJF 1091-2002	(5~100)mm	$U = 1.3 \mu m$	
38	Internal Micrometer	length	1303.19	Internal Micrometer	Internal Micrometer JJG 22-2003	(0~1000)mm	$U = 1.1 \mu m$	
39	Bore Diameter (Three-Point Internal) Measuring Micrometer	length	1303.18	Bore Diameter (Three-Point Internal) Measuring Micrometer	Micrometers for Measuring Inside Dimension JJF 1091-2002	(6~50)mm	$U = 1.2 \mu m$	
40	the class of Common Normal Micrometer	length	1303.18	the class of Common Normal Micrometer	the class of Common Normal Micrometer JJG 82-1998	(0~150)mm	$U = 1.1 \mu m$	
41	Micrometers with Dial Comparator and Indicating Snap Gauge	length	1303.18	Micrometers with Dial Comparator and Indicating Snap Gauge	Micrometers with Dial Comparator and Indicating Snap Gauge JJG 26-2001	(0~100)mm	$U = 1.1 \mu m$	
42	Depth Micrometers	length	1303.18	Depth Micrometers	Depth Micrometers JJG 24-2003	(0~300)mm	$U = 1.1 \mu m$	
43	Dial Gauges (reading in 0.01mm)	length	1303.21	Dial Gauges (reading in 0.01mm)	Dial Gauges JJG 34-1996	(0~10)mm	$U = 5.1 \mu m$	
44	Wide Range Dial Gauges Reading in 0.01mm	length	1303.21	Wide Range Dial Gauges Reading in 0.01mm	Wide Range Dial Gauges Reading in 0.01mm JJG 37-1995	(0~50)mm	$U = 5.1 \mu m$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
45	Dial Test Indicator	length	1303.21	Dial Test Indicator	Dial Test Indicator JJG 35-1992	(0~0.8)mm	$U=5.1 \mu\text{m}$	
46	Bore Dial Indicator	length	1303.21	Bore Dial Indicator	Bore Dial Indicator JJF 1102-2003	(6~450)mm	$U=3.7 \mu\text{m}$	
47	Dial Gauges (reading 0.001mm)	length	1303.21	Dial Gauges (reading 0.001mm)	Dial Gauges JJG 34-1996	(0~1)mm	$U=1.6 \mu\text{m}$	
48	Dial Test Indicator	length	1303.21	Dial Test Indicator	Dial Test Indicator JJG 35-1992	(0~0.2)mm	$U=1.6 \mu\text{m}$	
49	Bore Dial Indicator	length	1303.21	Bore Dial Indicator	Bore Dial Indicator JJF 1102-2003	(6~250)mm	$U=1.3 \mu\text{m}$	
50	Optical Flat	Flatness	1303.11	Optical Flat	Optical Flat JJG 28-2000	$\phi 150\text{mm}$	$U=0.01 \mu\text{m}$	
51	Optical Flat	Flatness 、 parallelness	1303.13	Optical Flat	Optical Flat JJG 28-2000	(I ~IV) group	$U=0.01 \mu\text{m}$	
52	Dynamometer for Measuring Instrument	force	1303.26	Dynamometer for Measuring Instrument/ D-3	Working Force Measuring Machines for Special Purposes JJF 1134-2005	(0~15)N	$U_{\text{rel}}=0.31\%$	
53	Straight Edge	Liner	1303.04	Straight Edge	Straight Edge JJG 63-1994	(75~300)mm	$U=0.39 \mu\text{m}$	
54	Tester for Dial Indicator Gauges	length	1303.17	Tester for Dial Indicator Gauges	Tester for Dial Indicator Gauges JJG 201-1999	(0~25)mm	$U=0.6 \mu\text{m}$	
55	Tester for Dial Indicator Gauges	length	1303.17	Tester for Dial Indicator Gauges	Tester for Dial Indicator Gauges JJG 201-1999	(0~2)mm	$U=0.18 \mu\text{m}$	
56	Thickness Instrument	length	1303.21	Thickness Instrument	Thickness Instrument JJG(Zhe) 35-1992	(0~10)mm	$U=1.2 \mu\text{m}$	
57	Micro-Kator	length	1303.21	Micro-Kator	Micro-Kator JJG 118-1996	$\pm 0.05\text{mm}$	$U=0.17 \mu\text{m}$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
58	Comparator of Machinery Type	length	1303.21	Comparator of Machinery Type	Comparator of Machinery Type JJG 39-2004	$\pm 0.10\text{mm}$	$U=0.17\ \mu\text{m}$	
59	Steel Tape	length	1303.27	Steel Tape	Steel Tape JJG 4-1999	(0~200)m	$U=(0.12\sim 3.31)\ \text{mm}$	
60	Steel Tape of depth test	length	1303.27	Steel Tape of depth test	Steel Tape JJG 4-1999	(0~200)m	$U=(0.12\sim 3.31)\ \text{mm}$	
61	Fiber Tapes and Measuring Ropes	length	1303.27	Fiber Tapes and Measuring Ropes	Fiber Tapes and Measuring Ropes JJG 5-2001	(0~200)m	$U=(0.12\sim 3.31)\ \text{mm}$	
62	Straight Edge	Liner	1303.01	Straight Edge	Straight Edge JJF 1097-2003	(300~5000)mm	$U=0.7\ \mu\text{m}$	
63	Plates	Plateness	1303.01	00、0 Level	Plates JJG 117-2005	(300~5000)mm	$U=0.7\ \mu\text{m}$	
64	Roughness Comparison Specimens	roughness	1308.09	Roughness Comparison Specimens /Group 27 Cake	Roughness Comparison Specimens JJF 1099-2003	(6.3~0.025) μm	$U_{\text{rel}}=6.0\%$	
65	Steel Rule	length	1303.03	Steel Rule	Steel Rule JJG 1-1999	(600~1000)mm	$U=0.087\text{mm}$	
66	Angle Gauge	angle	1303.06	Angle Gauge	Angle Gauge JJG 70-2004	(0~360) $^{\circ}$	$U=2.2''$	
67	Wooden Rule (Wooden Folded Rule)	length	1303.03	Wooden Rule (Wooden Folded Rule)	Wooden Rule (Wooden Folded Rule) JJG 2-1999	(0~5000)mm	$U=0.3\ \text{mm}$	
68	Square	angle	1303.04	Square	Square JJG 7-2004	(0~630)mm	$U=3.0\ \mu\text{m}$	
69	Calibrator for Levels	angle	1309.05	Calibrator for Levels /101A	Calibrator for Levels JJG 191-2002	(0~1.5)mm/m	$U=0.4\ \mu\text{m/m}$	
70	Autocollimator	angle	1309.01	Autocollimator /HYQ-03	Autocollimator JJG 202-1990	0~10'	$U=2.2\ \mu\text{m/m}$	
71	Electronic Level	angle	1309.08	Electronic Level	Electronic Level and Coincidence Levels JJG 103-2005	± 500 numeric	$U=0.6\ \mu\text{m/m}$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
72	Coincidence Level	angle	1309.05	Coincidence Level	Electronic Level and Coincidence Levels JJG 103-2005	(-5~+5)mm/m	$U=0.6 \mu\text{m/m}$	
73	Optical Theodolite	angle	1309.06	Optical Theodolite /DJ07	Optical Theodolite JJG 414-2003	Measure angle: horizontal (0~360) ^o upright ness $\pm 30^{\circ}$	Horizontal: $U=0.2''$ Upright: $U=0.7''$	
74	Level	angle	1309.06	Level /DS05	Level JJG 425-2003	2m~ ∞	i angle: $U=1.7''$	
75	Gauge Blocks (Grade 3)	length	1308.04	Gauge Blocks (Grade 3)	Gauge Blocks JJG 146-2003	(0.5~100)mm	$U=(0.05\sim 0.10) \mu\text{m}$	
76	Gauge Blocks (Grade 4)	length	1308.04	Gauge Blocks (Grade 4)	Gauge Blocks JJG 146-2003	(0.5~1000)mm	$U=(0.06\sim 1.06) \mu\text{m}$	
77	Standard Mercury-in-Glass Thermometer (grade II)	Temperature	1501.06	Standard Mercury-in-Glass Thermometer (grade II) /Rod type	Standard Mercury-in-Glass Thermometer (grade II) JJG 128-2003	(-30~+300) ^o C	$U=(0.03\sim 0.05)^{\circ}\text{C}$	
78	Industrial Glass Thermometer	Temperature	1501.06	Industrial Glass Thermometer /Rod type	Liquid-in-Class Thermometers for Industrial JJG 130-2004	(-60~+300) ^o C	$U=(0.03\sim 0.05)^{\circ}\text{C}$	
79	Liquid-in-Class Thermometers for Petroleum Products	Temperature	1501.06	Liquid-in-Class Thermometers for Petroleum Products /Rod type	Liquid-in-Class Thermometers for Petroleum Products JJG 50-1996	(-60~+300) ^o C	$U=(0.03\sim 0.05)^{\circ}\text{C}$	
80	Bimetallic Thermometer	Temperature	1501.11	Bimetallic Thermometer /WSS	Bimetallic Thermometers JJG 226-2001	(-60~+300) ^o C	$U=0.24^{\circ}\text{C}$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
81	Pressure Thermometer	Temperature	1501.09	Pressure Thermometer /WTZ、WTQ	Filled System Thermometers JJJ 310-2002	(-60~+300) °C	$U=0.24^{\circ}\text{C}$	
82	Mobile Detecting Meter of Temperature with sensor	Temperature	1501.13	Mobile Detecting Meter of Temperature with sensor /DWC、DR	Mobile Detecting Meter of Temperature JJJ 718-1991	(-60~+300) °C	$U=1^{\circ}\text{C}$	
83	Digital Detecting Meter of Temperature	Temperature	1501.13	Digital Detecting Meter of Temperature /WMY	Digital Detecting Meter of Temperature JJJ (Zhe) 76 -2004	(-60~+300) °C	$U=1^{\circ}\text{C}$	
84	Industrial Platinum Resistance Thermometer	Resistance	1501.04	Industrial Platinum Resistance Thermometer /WZP	Industry Platinum Copper Resistance Thermometers JJJ 229-1998	(-200~+850) °C	0°C: $U=0.017^{\circ}\text{C}$ 100°C: $U=0.026^{\circ}\text{C}$	
85	The Standard Platinum -Rhodium 10/Platinum Thermocouple (grade 2)	heat electric potential	1501.01	Reference The Standard Platinum -Rhodium 10/Platinum Thermocouple (grade 2)/ No.:S	The Standard Platinum-10% Rhodium /Platinum Thermocouple (grade 2) JJJ 75-1995	(0~1300) °C	$U=(4.9\sim 5.3)\mu\text{V}$	
86	Working Platinum -Rhodium 10/Platinum Thermocouple	heat electric potential	1501.01	Working Platinum -Rhodium 10/Platinum Thermocouple/ No.:S	Working Noble Metal Thermocouple JJJ 141-2000	(0~1300) °C	$U=8.7\mu\text{V}$	
87	Working Base Metal Thermocouple	heat electric potential	1501.02	Working Base Metal Thermocouple/ No.: K、E、J、N	Working Base Metal Thermocouple JJJ 351-1996	K: (0~1300) °C N: (0~1300) °C E: (0~900) °C J: (0~750) °C L≥750mm	$U=(43\sim 64)\mu\text{V}$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
88	Digital Temperature Indicators and controllers	Temperature	1501.13	Digital Temperature Indicators and controllers /XWT	Digital Temperature Indicators and controllers JIG 617-1996	(-200~+1800) °C	Resistance Thermometer: $U = (0.2-0.6) ^\circ\text{C}$ Thermocouple: $U = (0.4-1.9) ^\circ\text{C}$	
89	Electrical Automatic Potentiometers	Temperature	1502.04	Electrical Automatic Potentiometers /XWGJ	The Recorders for Industrial-Processes Measurement JIG 74-2005	(-200~+1800) °C	$U = (0.5\sim 0.6)^\circ\text{C}$	
90	Mobile Digital Detecting Meter of Temperature	Temperature	1501.13	Mobile Digital Detecting Meter of Temperature /LR	Digital Temperature Indicators and controllers JIG 617-1996	(-200~+1800) °C	Resistance Thermometer: $U = (0.2-0.6) ^\circ\text{C}$ Thermocouple: $U = (0.4-1.9) ^\circ\text{C}$	
91	Analogue Temperature Indicators and Controllers	Temperature	1502.04	Analogue Temperature Indicators and Controllers /TDA、TDW、TEAL	Analogue Temperature Indicators and controllers JIG 951-2000	(-200~+1800) °C	Resistance Thermometer: $U = (0.6-0.8) ^\circ\text{C}$ Thermocouple: $U = (0.6-2.0) ^\circ\text{C}$	
92	Temperature testing equipments	Temperature	1519.04	Temperature testing equipments /LR	Calibration Specification for the Equipment of Environmental Testing for Temperature and Humidity JJF 1101-2003	Testing temperature: (-40~+300)°C	$U = 0.15^\circ\text{C}$	
93	Damp Heat Testing Equipments	Humidity	1517.02	Damp Heat Testing Equipments /LH	Calibration Specification for the Equipment of the Environmental Testing for Temperature and Humidity JJF 1101-2003	Temperature : (0~100) °C Humidity: (30~100)%RH	$U = 1.1\%RH$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
94	Velocity Flow meter (Liquid)	flowrate	1316.05	Velocity Flow meter (Liquid)// LW LD	Verification Regulation of Velocity Flow Meter JJJ 198-1994	DN (6~50) mm	$U_{rel}=0.11\%$	
						DN (50~300) mm	$U_{rel}=0.06\%$	
95	Liquid Positive displacement flow meter	Flowrate	1316.05	Liquid Positive displacement flow meter /LC	Verification Regulation of Liquid Positive Displacement Flow Meter JJJ 667-1997	DN (6~50) mm	$U_{rel}=0.11\%$	
						DN (50~300) mm	$U_{rel}=0.06\%$	
96	Coriolis Force Mass Flow Meters	flowrate	1316.05	Coriolis Force Mass Flow Meters /LZK	Verification Regulation of Mass Flow Meters JJJ 897-1995	DN (6~50) mm	$U_{rel}=0.11\%$	
						DN (50~300) mm	$U_{rel}=0.06\%$	
97	Rotameter (Liquid)	flowrate	1316.05	Rotameter (Liquid)/ LZB	Verification Regulation of Rotameter JJJ 257-1994	DN100 mm 及以下	$U_{rel}=0.12\%$	
98	Horizontal Spiral Blade Water Meter	flowrate	1316.05	Horizontal Spiral Blade Water Meter /LXL	Verification Regulation of Horizontal Spiral Blade Water Meter JJJ 258-1988	DN(50~300) mm	$U_{rel}=0.06\%$	
99	Standard Metal Tank (grade 2)	capacity	1312.02	Standard Metal Tank (grade 2)/JB	Verification Regulation of Standard Metal Tank JJJ 259-2005	(1~500)L	$U_{rel}=0.006\%$	
100	Standard Metal Tank (grade 3)	capacity	1312.02	Standard Metal Tank (grade 3)/LJB	Verification Regulation of Standard Metal Tank JJJ 259-2005	(0.5~10000)L	$U_{rel}=0.03\%$	
101	Standard Facilities for Liquid Flowrate	flowrate	1316.09	Standard Facilities for Liquid Flowrate /LJS	Verification Regulation of Standard Facilities for Liquid Flowrate JJJ 164-2000	DN(6~400) mm	$U_{rel}=0.04\%$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
102	Standard Bell Prover	Accumulate discharge	1316.09	LJQ-10~LJQ-2000	Verification Regulation of Standard Bell Prover JJG 165-2005	(10~2000) L	$U_{rel}=0.1\%$ $K_{95}=2$	
		moment discharge	1316.09	LJQ-10~LJQ-2000	Verification Regulation of Standard Bell Prover JJG 165-2005	(0.016~150) m ³ /h	$U_{rel}=0.2\%$ $K_{95}=2$	
103	Dispensers	flowrate	1316.05	Dispensers /J-60	Verification Regulation of Fuel Dispensers JJG 443-1998	$Q_{max} \leq 60$ L/min	$U_{rel}=0.03\%$	
104	Water Meters	flowrate	1316.05	Water Meters /LXS	Verification Regulation of Water Meters and Facilities JJG 162-1985	DN(8~50) mm	$U_{rel}=0.3\%$	
105	Velocity Flow meter(gas)	flowrate	1316.04	Velocity Flow meter(gas)/LW	Verification Regulation of Velocity Flow Meter JJG 198-1994	$Q_{max}: 3 \sim 1600$ m ³ /h	$U_{rel}=0.6\%$,	
106	Rotameter (gas)	flowrate	1316.04	Rotameter (gas)/LZB	Verification Regulation of Rotameter JJG 257-1994	$Q_{max}: 100$ m ³ /h	$U_{rel}=0.6\%$,	
107	Diaphragm Gas Meter	flowrate	1316.04	Diaphragm Gas Meter /G	Verification Regulation of Diaphragm Gas Meter JJG 577-2005	(0.016~6) m ³ /h	$U_{rel}=0.3\%$	
						(6~160) m ³ /h	$U_{rel}=0.6\%$	
108	Diaphragm Gas Meter	flowrate	1316.04	DN \leq 150	Verification Regulation of Gas Roots Flowmeter JJG 633-2005	(0.1~1600) m ³ /h	$U_{rel}=0.5\%$ $K=2$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
109	Standard Gas Meter	flowrate	1316.04	Standard Gas Meter /BSD	Verification Regulation of Standard Gas Meter JIG 643-2003	$Q_{max} \leq 6 \text{ m}^3/\text{h}$	$U_{rel}=0.3\%$	
						$Q_{max}: (6 \sim 100) \text{ m}^3/\text{h}$	$U_{rel}=0.6\%$	
110	Flow Display Meter	flowrate	1316.09	Flow Display Meter /XSJ-39	Flow Intergration Meters JIG 1003-2005	(0~20)mA (0~20)V (0~100)kHz (0~9999) Ω	$U_{rel}=0.05\%$	
111	Differential Pressure Type Flowmeter (liquid coefficient)	flowrate	1316.09	Differential Pressure Type Flowmeter (liquid coefficient)/J K	Verification Regulation of Differential Pressure Type Flowmeter JIG 640-1994	DN(6~50) mm	$U_{rel}=0.12\%$	
						DN(50~300) mm	$U_{rel}=0.06\%$	
112	Standard Dynamometer	force	1323.02	Standard Dynamometer /ES-01	Standard Dynamometer JIG 144--1992	20N-1000N	$U=0.0018\text{mm}$	
113	Standard Dynamometer	force	1323.02	Standard Dynamometer /ES-015	Standard Dynamometer JIG 144--1992	100N-6000N	$U=0.0018\text{mm}$	
114	Standard Dynamometer	force	1323.02	Standard Dynamometer /ES-3	Standard Dynamometer JIG 144--1992	(1-60)kN	$U=0.0018\text{mm}$	
115	Standard Dynamometer	force	1323.02	Standard Dynamometer /ES-30	Verification Regulation for Standard Dynamometer JIG 144--1992	(10-600)kN	$U=0.0019\text{mm}$	
116	Torque Wrench	Torque	1325.01	Torque Wrench /FTD400 CN ₂ -S	Torque Wrench JIG 707-2003	(1-15)Nm	$U_{rel}=0.18\%$	
117	Torque Wrench	Torque	1325.01	Torque Wrench /AC10	Torque Wrench JIG 707-2003	(1-15)Nm	$U_{rel}=0.18\%$	
118	Torque Wrench	Torque	1325.01	Torque Wrench /AC300	Torque Wrench JIG 707-2003	(10-300)Nm	$U_{rel}=0.23\%$	
119	Torque Wrench	Torque	1325.01	Torque Wrench /AC1000	Torque Wrench JIG 707-2003	(300-3000)Nm	$U_{rel}=0.25\%$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
120	Torque Instrument	Torque	1325.01	Torque Instrument /HP-100	Verification Regulation of Calibration Instrument for Torque Wrenches JIG 797-1992	(1-10)Nm	$U_{rel}=0.18\%$	
121	Piston Type Pressure Gauge (Grade2)	Piston effective area	1320.01	Piston Type Pressure Gauge (Grade2)/Y U	Standard Piston Gauge (Grade II & III) JIG 59-1990	(0.1~60)MPa	$U_{rel}=0.03\%$	
122	Piston Pressure Vacuum Gauge (Grade2)	Piston effective area	1320.02	Piston Pressure Vacuum Gauge (Grade2)/YS	Standard Piston Pressure vacuum Gauge (Grade II & III) JIG 239-1994	(-0.1~0.25)MPa	$U_{rel}=0.03\%$	
123	Compensated Micro-manometer	pressure	1320.06	Compensated Micro-manometer /YJB	Standard Compensated Micro-manometer JIG 158-1994	(-2500~+2500)Pa	$U=0.6\text{Pa}$	
124	Precision Pressure Gauge	pressure	1320.01	Precision Pressure Gauge /Y	Bourdon Tube precise Pressure Gauge and Vacuum Gauge JIG 49-1999	(-0.1~60)MPa	$U_{rel}=0.17\%$	
125	Digital Pressure Gauges	pressure	1320.07	Digital Pressure Gauges /CTC	Digital Pressure Gauges JIG 875-2005	(-0.1~60)MPa	$U_{rel}=0.03\%$	
126	Pressure Transmitters	pressure	1320.03	Pressure Transmitters /1151	Pressure Transmitters JIG 882-2004	(-0.1~60)MPa	$U_{rel}=0.10\%$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
127	Ionization Vacuum Gauge	pressure	1320.02	Ionization Vacuum Gauge /GD 8000	Calibration Specification of Working Thermal Conducting Vacuum Gauge JJF 1050-1996	$(10^5 \sim 10^{-1})\text{Pa}$	$U_{\text{rel}}=15\%$	
128	Resistance Vacuum Gauge	pressure	1320.02	Resistance Vacuum Gauge /ZDZ-2	Calibration Specification of Working Thermal Conducting Vacuum Gauge JJF 1050-1996	$(10^5 \sim 10^{-1})\text{Pa}$	$U_{\text{rel}}=15\%$	
129	Ionization Vacuum Gauge	pressure	1320.02	Ionization Vacuum Gauge /FZH-2	Ionization Vacuum Gauge JJF 1062-1999	$(10^{-1} \sim 7 \times 10^{-3})\text{Pa}$	$U_{\text{rel}}=8\%$	
130	Standard Capacity Measures (glass)	capability	1312.04	Standard Capacity Measures (glass)/ QS-29	V.R.of Standard Capacity Measures JJG 20-2001	$(0.1 \sim 2000)\text{ml}$	$U = 0.12\text{ml}$	
131	Standard Capacity Measures (glass)	capability	1312.01	Standard Capacity Measures (glass)	V.R.of General Volumetric Class JJG 196-1990	$(0.005 \sim 2000)\text{ml}$	$U = (0.00071 - 0.14)\text{ml}$	
132	Quantitative Filling Machine	MASS	1311.04	Quantitative Filling Machine /K324-757	V.R.of Quantitative Adjustable Bipet JJG 687-1990	$(0.5 \sim 5000)\text{ml}$ $(0.5 \sim 5000)\text{g}$	$U = (0.031 - 0.64)\%$	
133	Glass Hydrometers with Grade II Working Glass Hydrometers (density)	consistency	1314.01	Glass Hydrometers with Grade II Working Glass Hydrometers (density)/ 1009	Standard Class Hydrometers JJG 86-2001 Working Class Hydrometers JJG 42-2001	$(0-100)\%$	$U = 0.06\%$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
134	Glass Hydrometers with Grade II Working Glass Hydrometers (density)	consistency	1314.01	Glass Hydrometers with Grade Working Glass Hydrometers (density) / (0.65~2.00)g/cm ³	Standard Class Hydrmeters JIG 86-2001 Working Class Hydrmeters JIG 42-2001	(0.65-2.00)g/cm ³	$U=0.13 \text{ kg/m}^3$	
135	Universal Tension and Compression Testing Machine	Force	1326.01 1326.02	Universal Tension and Compression Testing Machine /WE、LJ	V.R.of Universal Tension and Compression Testing Machine JIG 139-1999	1N-5MN	$U_{\text{rel}}=0.42\%$	
136	Tension Compression and Universal Testing Machine for Nonmetall	Force	1326.01 1326.02	Tension Compression and Universal Testing Machine for Nonmetallic /YE、XL	V.R.of Tension Compression and Universal Testing Machine for Nonmetallic JIG 157-2005	1N-5MN	$U_{\text{rel}}=0.44\%$	
137	Spring Tension and Compression Testing Machine	Force	1326.01 1326.02	Spring Tension and Compression Testing Machine /TL	V.R.of Spring Tension and Compression Testing Machine JIF 1134-2005	1N-10kN	$U_{\text{rel}}=0.42\%$	
138	Flexure Testing Machine	Force	1326.01 1326.02	Flexure Testing Machine /DKZ	V.R.of Flexure Testing Machine JIG 476-2001	1N-6kN	$U_{\text{rel}}=0.46\%$	
139	Electronic Universal Testing Machine	Indication Relative error	1326.01 1326.02	Electronic Universal Testing Machine /CMT	V.R.of Electronic Universal Testing Machine JIG 475-1986	1N-1MN	$U_{\text{rel}}=0.25\%$	
140	Tachometers	Speed	1324.01	Tachometers /SZG	Tachometer JIG 105-2000	(30~40000)r/min	$U_{\text{rel}}=(0.02-0.58)\%$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
141	Revolution Speed Equipment	Speed	1324.02	Revolution Speed Equipment /BZZ-1	Revolution Speed Equipment JIG 326-1983 Verification Regulation of Tacho-Torque Measuring Device JIG 924-1996	(5~40000)r/min	$U_{rel}=0.02\%$	
142	Milligram and Gram Weights of Grade 2	MASS	1310.01	Milligram and Gram Weights of Grade 2	Verification Regulation of weights JIG 99-1990	1mg~500g	$U=0.2\text{mg}$	
143	Milligram and Gram Weights of Grade 2	MASS	1311.01	Milligram and Gram Weights of Grade 2	Verification Regulation of weights JIG 99-1990	(1~20)kg	$U=1\text{mg}$	
144	Lever Balance	MASS	1311.01	Lever Balance /TG320	Verification Regulation for Non automatic Balances JIG 98-1990	(0~50)kg	$U=2\text{mg}$	
145	Electronic Balance	MASS	1310.01	Electronic Balance /AT250	Regulation for Non automatic Balances JIG 98-1990	(0~50)kg	$U_{rel}=0.4\text{mg}$	
146	Slip plate Type Automobile side slip Tester	Indicative Error	1309.19	Slip plate Type Automobile side slip Tester /CH	Verification Regulation of Slip plate Type Automobile side slip Tester JIG 908-1996	(-10~+10) m/km	$U_p=0.040\text{m/km}$	
147	Roller Type Speedometer Tester	Speed	1324.02	Roller Type Speedometer Tester /CS	Verification Regulation of Roller Type Speedometer Tester JIG 909-1996	(30~60) km/h	$U_{rel}=0.54\%$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
148	Roller Opposite Forces Type Brake Tester	Force	1323.03	Roller Opposite Forces Type Brake Tester /SDZ	Verification Regulation of Roller Opposite Forces Type Brake Tester JIG 906-1996	(0~30000) N	$U_{rel}=1.48\%$	
149	Axle (Wheel) Load Scales	MASS	1310.03	Axle (Wheel) Load Scales /CS	Verification Regulation of Axle (Wheel) Load Scales JIG 907-1996	(0~100000)N	$U_{rel}=0.66\%$	
150	Headlamp Tester for Motor Vehicle	light intensity optical axis	1611.01	Headlamp Tester for Motor Vehicle /QDC-1C	Verification Regulation of Headlamp Tester for Motor Vehicle JIG 745-2002	Luminous Intensity:(0-40)kcd Luminous Axle Angle:Up (0-20)cm/dam Down、Left、Right(0-40)cm/dam	Luminous Intensity: $U_{rel}=4.5\%$ Luminous Axle Angle: $U=1.4$ cm/dam	
151	Filter-Type Smoke meters	limit of smoke	1511.03	Filter-Type Smoke meters /YD	Verification Regulation of Filter-Type Smoke meters JIG 847-1993	(0~10) FSN	$U_{rel}=2.1\%$ (F.S)	
152	Tester for Wheel Deviation Of Motorcycles	length	1309.19	Tester for Wheel Deviation Of Motorcycle/ HYMLP-250	Verification Regulation of tester for Wheel Deviation Of Motorcycles JIG 910-1996	(-10~+10)mm	$U=0.08$ mm	
153	Automotive Chassis Dynamometer	Power Twisting moment Speed	0410.06	Automotive Chassis Dynamometer /DCG	Verification Regulation of Automotive Chassis Dynamometer JIG 653-2003	Power: (0~150) kW Torque: (0~1500) N·m (or driving force) Speed: (0~120)km/h (or relative rotate speed)	Speed: $U_{Speed\ rel}=0.64\%$ force: $U_{force\ rel}=0.88\%$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
154	Speed and Mileage Metre for Cars	Speed	1324.02	Speed and Mileage Metre for Cars /ZB-102	Verification Regulation of Speed and Mileage Metre for Cars JIG 559-1988	Speed: (20~160) km/h or (100~4000) r/min Mileage: Speed; 60km/h with 3km	mph: $U=0.3$ km/h course of development: $U=0.008$ km Or $U=0.46$ s	
155	Ammeter, Voltmeter Wattmeter and Ohmmeter	DC voltage	0410.01	DC Ammeter and Voltmeter /C41	Verification Regulation of Ammeter, Voltmeter Wattmeter and Ohmmeter JIG 124-2005	(0~1000)V	$U_{rel}=2.4 \times 10^{-4}$	
		DC current	0410.03	DC Amperemeter and Voltmeter /C41	Verification Regulation of Ammeter, Voltmeter Wattmeter and Ohmmeter JIG 124-2005	(0~100)A	$U_{rel}=(2.0-2.4) \times 10^{-4}$	
		DC power	0410.06	AC and DC Wattmeter/D26	Verification Regulation of Ammeter, Voltmeter Wattmeter and Ohmmeter JIG 124-2005	(0~1000)V (0~100)A	$U_{rel}=3.3 \times 10^{-4}$	
		AC volts	0410.02	AC Ammeter and Voltmeter /T24	Verification Regulation of Ammeter, Voltmeter Wattmeter and Ohmmeter JIG 124-2005	(0~1000)V	$U_{rel}=(1.2-2.0) \times 10^{-4}$	
		AC current	0410.03	AC Ammeter and Voltmeter /T24	Verification Regulation of Ammeter, Voltmeter Wattmeter and Ohmmeter JIG 124-2005	(0~100)A	$U_{rel}=(1.2-2.0) \times 10^{-4}$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
155	Ammeter, Voltmeter Wattmeter and Ohmmeter	AC power	0410.06	AC and DC Wattmeter/ D26	Verification Regulation of Ammeter, Voltmeter Wattmeter and Ohmmeter JIG 124-2005	(0~1000)V (0~100)A	$U_{rel}=(1.7-3.0) \times 10^{-4}$	
		resistance	0410.09	Resistancer/ MF47	Verification Regulation of Ammeter, Voltmeter Wattmeter and Ohmmeter JIG 124-2005	(0~1)M Ω	$U_{rel}=(5.8-7.0) \times 10^{-4}$	
156	Digital Multimeter (D.C.)	DC volts	0410.01	Digital Voltmeter /HP34401A	Verification Regulation of DC Digital Voltmeter JIG 315-1983	(0~1100)V	$U_{rel}=(3.7\sim 12) \times 10^{-6}$	
		DC current	0410.03	Digital Voltmeter /HP34401A	Verification Regulation of DC Digital Amperemeter JIG 598-1989	(0~20)A	$U_{rel}=(3.7\sim 12) \times 10^{-5}$	
		resistance	0410.09	Digital Voltmeter /HP34401A	Verification Regulation of DC Digital Ohmmeter JIG 724-1991	0~10M Ω	$U_{rel}=(8.5\sim 40) \times 10^{-6}$	
157	Digital Multimeterd (A.C.)	AC volts	0410.02	Digital Voltmeter /HP34401A	Verification Regulation of AC Digital Voltmeter JIG(spaceflight)34-1999	(0~1100)V	$U_{rel}=(5.3\sim 8.7) \times 10^{-5}$	
		AC current	0410.04	Digital Voltmete /HP34401A	Verification Regulation of AC Digital Amperemeter JIG(spaceflight)35-1999	(0~20)A	$U_{rel}=(1.6\sim 3.0) \times 10^{-4}$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
158	Standard Cell	electromotive force	0407.01	Standard Cell /BC9	Verification Regulation of Standard Cell JIG 153-1996	(1.018~1.0198)V	$U = 3 \mu V$	
159	The DC Resistive Volt Radio Box	Ratio of voltage division	0402.02	DC Resistive Volt Ratio Box /FJ12	Verification Regulation of the DC Resistive Volt Ratio Box JIG 531-2003	1~1000	$U_{rel}=12 \times 10^{-6}$	Accredited Only for Most voltage: 1000V
160	Electrical Parameter Detecting Meter (or Digital powermeter, AC digital powermeter)	AC volts	0410.02	Electrical Parameter Detecting Meter /PF9811	Verification Regulation of AC Digital Voltmeter JIG(spaceflight) 34-1999	(0~1000)V	$U_{rel}=(1.3\sim 2.0) \times 10^{-4}$	
		AC current	0410.04	Electrical Parameter Detecting Meter /PF9811	Verification Regulation of AC Digital Amperemeter JIG(spaceflight)35-1999	(0~100)A	$U_{rel}=(1.4\sim 2.0) \times 10^{-4}$	
		AC power	0410.06	Electrical Parameter Detecting Meter /PF9811	Verification for Ac Digital Powermeter JIG 780-1992	(0~1000)V (0~100)A	$U_{rel}=(1.9\sim 3.5) \times 10^{-4}$	
161	LCR Detecting Meter (Including capacitance)	capacitance	0410.09	LCR Detecting Meter /YY2810	Calibration Specification of LCR Detecting Meter ZTSM/JX DC 03 2002	(0~1.111110) μ F	$U_{rel}=1.2 \times 10^{-4}$	
		inductance	0410.09	LCR Detecting Meter /YY2810	Calibration Specification of LCR Detecting Meter ZTSM/JX DC 03 2002	100 μ H~1H	$U_{rel}=1.2 \times 10^{-3}$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
161	LCR Detecting Meter (Including capacitance)	ac resistance	0410.09	LCR Detecting Meter /YY2810	Calibration Specification of LCR Detecting Meter ZTSM/JX DC 03 2002	(0~111110) Ω	$U_{rel}=1.2 \times 10^{-4}$	
		wastage	0410.09	LCR Detecting Meter /YY2810	Calibration Specification of LCR Detecting Meter ZTSM/JX DC 03 2002	0-11.1111	$U_{rel}=1.2 \times 10^{-3}$	
162	Multifunctional Standard Source	DC volts	0410.01	Multifunctional Standard Source /XF30	Calibration Specification of Multifunctional Standard Source ZTSM/JX DC 04 2002	(0~1100)V	$U_{rel}=(6.1 \sim 11) \times 10^{-6}$	
		AC voltage	0410.02	Multifunctional Standard Source /XF30	Calibration Specification of Multifunctional Standard Source ZTSM/JX DC 04 2002	(0~1100)V	$U_{rel}=(1.6 \sim 2.2) \times 10^{-4}$	
		DC current	0409.03	Multifunctional Standard Source /XF30	Calibration Specification of Multifunctional Standard Source ZTSM/JX DC 04 2002	(0~60)A	$U_{rel}=(1.2 \sim 3.0) \times 10^{-4}$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
162	Multifunctional Standard Source	AC current	0409.03	Multifunctional Standard Source /XF30	Calibration Specification of Multifunctional Standard Source ZTSM/JX DC 04 2002	(0~60)A	$U_{rel}=(2.0\sim 4.0) \times 10^{-4}$	
		DC resistance	0409.05	Multifunctional Standard Source /XF30	Calibration Specification of Multifunctional Standard Source ZTSM/JX DC 04 2002	(0~10)M Ω	$U_{rel}=(9.3\sim 32) \times 10^{-6}$	
163	Clamp Ammeters	AC current	0410.04	Clamp Ammeters /DM6015F	Calibration Specification of Clamp Ammeters JJF 1075-2001	(0~1000) A	$U_{rel}=2.3 \times 10^{-3}$	
164	Current Transformers	Ratio,phase of AC current	0406.04	Current Transformers /HL2	Verification Regulation of Current Transformers of Measuring Service JJG 313-1994	(0.1-5000) A/1A、5A	ratio: $U=3 \times 10^{-5}$ phase: $U=0.08'$	
165	Voltage Transformers	Ratio,phase of AC voltage	0406.05	Voltage Transformers /HJ-10	Verification Regulation of Voltage Transformers of Measuring Service JJG 314-1994	1000V/0.01Mv ~1000V (2kV~10kV) /100V A	ratio: $U=3 \times 10^{-5}$ phase: $U=0.08'$	
166	Instrument Transformer Test Set	Ratio,phase of AC voltage	0409.04	Instrument Transformer Test Set /HEW5	Verification Regulation of Instrument Transformer Test Set JJG 169-1993	f: (0.01-100)% δ : 0.05' -50'	ratio: $U_{rel}=0.3\%$ phase: $U=0.12'$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
166	Instrument Transformer Test Set	Ratio, phase of AC voltage	0409.02	Instrument Transformer Test Set /HEW5	Verification Regulation of Instrument Transformer Test Set JIG 169-1993	f: (0.01-100) % δ : 0.05' -50'	ratio: $U_{rel}=0.4\%$ phase: $U=0.08'$	
167	Electricity Loader	Value of volt-ampere	0402.01	Electricity Loader /HL92	Calibration Specification of Electricity Loader ZTSM/JX DC 01 2002	(2.5-60)VA	in phase: $U_{rel}=10\times 10^{-3}$ in quadratur: $U_{rel}=10\times 10^{-3}$	
168	Voltage Loader	Value of volt-ampere	0402.01	Voltage Loader /HY99	Calibration Specification of Voltage Loader ZTSM/JX DC 02 2002	(1.25-200)VA	in phase: $U_{rel}=10\times 10^{-3}$ in quadrature: $U_{rel}=10\times 10^{-3}$	
169	Megohmmeter	resistance	0410.09	Megohmmeter /ZC25-3	Verification Regulation of Megohmmeter JIG 622-1997	(0.001~151111.221) M Ω	$U=(0.2\sim 2.5) M\Omega$	
170	Earth Resistance Meter	resistance	0410.09	Earth Resistance Meter /ZC-8	Verification Regulation of Earth Resistance JIG 366-2004	(0~1111.11) Ω	$U=(0.4\sim 2.5) \Omega$	
171	DC Resistors (Multi-value)	resistance	0402.01	DC Resistors Rox/ZX54	Verification Regulation of D.C. Resisitors JIG 982-2003	($10^{-3}\sim 10^6$) Ω	$U=(0.2\sim 2.5) \Omega$	
172	Standard Resistances	resistance	0402.01	Standard Resistances /BZ3	Verification Regulation of D.C. Resisitors JIG 166-1993	($10^{-3}\sim 10^5$) Ω	$U=(2\times 10^{-6}\sim 5\times 10^{-1})\times 10^{-6} \Omega$	
173	D.C Bridge	resistance	0411.01	D.C Bridge /QJ36	Verification Regulation of The D.C Bridges JIG 125-2004	($10^{-3}\sim 10^6$) Ω	$U=(8\times 10^{-3}\sim 5\times 10^{-1}) \Omega$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
174	D.C. Potentiometer	electromotive force	0411.02	D.C. Potentiometer /UJ25	Verification Regulation of The D.C. Potentiometers JIG 123-2004	0.01 μ V ~ 2.111110V	$U_{rel}=(1 \times 10^{-6} \sim 2.5 \times 10^{-2})V$	
175	Withstanding Voltage Tester	output voltage	0411.09	Withstanding Voltage Tester /CS2671B	Verification Regulation of Withstanding Voltage Tester JIG 795-2004	(0~10) kV	$U_{rel}=1.3 \times 10^{-2}$	
		resistance	0411.09	Withstanding Voltage Tester /CS2671B	Verification Regulation of Withstanding Voltage Tester JIG 795-2004	(0~200)mA	$U_{rel}=1.2 \times 10^{-2}$	
		time	0411.09	Withstanding Voltage Tester /CS2671B	Verification Regulation of Withstanding Voltage Tester JIG 795-2004	(0~1999) s	$U_{rel}=1.0 \times 10^{-2}$	
176	Leakage Current Instrument and Meter	resistance	0410.11	Leakage Current Instrument and Meter /PA30	Verification Regulation of Leakage Current Instrument JIG 843-1993	(0~200)mA	$U_{rel}=1.2 \times 10^{-2}$	
177	Earth Resistance Detector	resistance	0410.09	Earth Resistance Detector /WB2678	Earth-Continuity Testers JIG 984-2004	(0.01~0.2) Ω	$U_{rel}=4 \times 10^{-3}$	
178	Standard single-phase or three-phase electrical energy meter	electric energy	0410.12	Standard single-phase or three-phase electrical energy meter /HC3100、	Electrical Energy Meters with Electronics JIG 596-1999	3×(57.7~380)V 3×(0.1~100) A	$U_{rel}=0.011\%$	
179	Testing equipment for single-phase or three-phase electrical energy meters	electric energy	0425.01	Testing equipment for single-phase or three-phase electrical energy meters /PTC-8320	Verification Regulation of Verification Equipment for AC Electrical Energy Meter JIG 597-2005	3×(57.7~380)V 3×(0.1~100) A	$U_{rel}=0.012\%$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
180	Single and Dispersion Controled Centrely Telephone Accounter	time	0412.10	Single and Dispersion Controled Centrely Telephone Accounter /TJJ-2A	Verification Regulation of Single and Dispersion Controled Centrely Telephone Accounter JIG 107-2002	(0.1~3600×24)s	$U=(0.1-8.6)s$	
181	Digital Time Interval Measuring Instrument	time	0412.10	Digital Time Interval Measuring Instrument /401	Verification Regulation of Digital time Interval Measuring Instrument JIG 238-1995	1 μ s~9999.999999 s	$U=1 \mu s -0.00013s$	
182	Time Interval Measuring Instrument with pointer Indication	time	0412.10	Time Interval Measuring Instrument with pointer Indication /Diamond	Verification Regulation of time Interval Measuring Instrument With Needle Indication JIG 237-1995	1 μ s~9999.999999 s	$U=0.004s$	
183	Stop watch	time	0412.10	Stop watch /SJ-7	Verification Regulation of Digital time Interval Measuring Instrument JIG 238-1995	1 μ s~9999.999999 s	$U=0.004s$	
184	Universal Counters	Frequency	0412.01	Universal Counters /E337	Verification Regulation of Currency Electronic counter JIG 349-2001	10Hz~1000MHz	$U=(0.061-0.1) Hz$	
185	Distortion Meter Calibrator	Output Distortion	0413.04	Distortion Meter Calibrator /BO-13B	Verification Regulation of Distortion Meter JIG 802-1993	$\pm(0.4\sim 1) \%$	$U=(0.06-1.2)\%$	Accredited Only for 50Hz-200kHz

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
186	Distortion Meter Calibrator	Distortion	0413.04	Distortion Meter Calibrator /ZQ4121A	Verification Regulation of Distortion meter calibrator JIG 251-1997	(0.03 ~100)%	$U=(1.2-5.8)\%$	Accredited Only for 5Hz-200kHz
		Voltage	0409.02	Distortion Meter Calibrator /ZQ4121A	Verification Regulation of Distortion meter calibrator JIG 251-1997	0.1mV ~300V	$U_{rel}=(0.02-1)\%$	
187	LF Electronic Voltmeter	Voltage	0409.02	LF Electronic Voltmeter /GB-9.	Verification Regulation of LF Electronic Voltmeter JIG 782-1992	0.1mV ~300V	$U_{rel}=(0.02-1)\%$,	
188	Low Frequency Signal Generator	Voltage	0416.02	Low Frequency Signal Generator X010	Verification Regulation of Low-frequency signal generator JIG 602-1996	Voltage: 30 μ V ~300V	$U_{rel}=(0.05-3)\%$	
		Frequency	0416.01	Low Frequency Signal Generator /X010	Verification Regulation of Low-frequency signal generator JIG 602-1996	Frequency: 1Hz ~1MHz	$U_{rel}=0.1\%$	
189	Transistor device curve tracers	Voltage	0418	Transistor device curve tracers /JT-1	Verification Regulation of Transistor device curve tracers JIG (Zhe) 3-1986	V: (0.01 ~1000)V	$U_{rel}=(0.3-0.35)\%$	
		Current	0418	Transistor device curve tracers /JT-1.	Verification Regulation of Transistor device curve tracers JIG (Zhe) 3-1986	I: 1 μ A ~10A	$U_{rel}=(0.3-0.35)\%$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
190	Electrocardiograph and Electroencephalograph	Voltage	0413.02	Electrocardiograph and Electroencephalograph /EGC-1B	Verification Regulation of Electrocardiograph and Electroencephalograph JJJG 543-1996	V: 8 μ V \sim 30Vp-p	$U_{rel}=0.5\%$	
		time	0413.03	Electrocardiograph and Electroencephalograph /EGC-1B	Verification Regulation of Electrocardiograph and Electroencephalograph JJJG 543-1996	time: 2ms \sim 50s	$U_{rel}=0.1\%$	
191	Oscilloscope	Voltage	0413.02	Electrocardiograph and Electroencephalograph /2465A	Verification Regulation of Analogue Oscilloscope JJJG 262-1996	Voltage 100 μ V \sim 270V	$U_{rel}=0.5\%$	
		time	0413.03	Electrocardiograph and Electroencephalograph /2465A	Verification Regulation of Analogue Oscilloscope JJJG 262-1996	time 1ns \sim 5s	$U_{rel}=0.01\%$	
192	Spectrum Analyzers	Frequency	0419.06	Spectrum Analyzers /R4131A.	Verification Regulation of Spectrum Analyzers JJJG 501-2000	Frequency: 10kHz \sim 1000MHz	$U_{rel}=1\times 10^{-4}$ -1.8×10^{-8}	
	Spectrum Analyzers	Power Level	0419.06	Spectrum Analyzers /R4131A.	Verification Regulation of Spectrum Analyzers JJJG 501-2000	Power Level: (30 \sim -110)dB	$U=(0.2-0.5)$ dB	
193	Sound Level Meter	Voice pressure	1401.02	Sound Level Meter /AWA56XX serial HS56XX serial MD10etc	Verification Regulation of Sound Level Meter JJJG 188-2002	Sound Level: (40 \sim 120)dB	$U=(0.17-0.4)$ dB	Accredited Only for Frequency: 10Hz \sim 1kHz

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
194	Signal Generator	Power Level	0416.02	Sound Level Meter /AWA56XX serail HS56XX serail MD10etc c	Verification Regulation of Signal Generator JJG 173-2003	Power Level: (30 ~-127)dBm	$U = 0.18\text{dB}$	
		Frequency	0416.02	Sound Level Meter /AWA56XX serail HS56XX serail MD10etc	Verification Regulation of Signal Generator JJG 173-2003	Frequency: 5 kHz ~26.5GHz	$U_{\text{rel}} = 1\%$	
		Frequency Modulation	0416.02	Sound Level Meter /AWA56XX serail HS56XX serail MD10etc	Verification Regulation of Signal Generator JJG 173-2003	FM: (0-400) kHz	$U_{\text{rel}} = 1\%$	
		Amplitudr Modulation	0416.01	Sound Level Meter /AWA56XX serail HS56XX serail MD10etc	Verification Regulation of Signal Generator JJG 173-2003	AM: (0-100) %	$U_{\text{rel}} = 1\%$	
195	Eye-Refractometers	vertex power	1601	Objective Eye -Refractometers	Eye-Refractometers JJG 892-2005	-20.00D ~ +20.00D	$U = 0.11\text{D}$	Except for Eye-Ref ractometers
196	Focimeters	vertex power	1601	Auto-Lensm eters Manual focusing Lensmeters	Focimeters JJG 580-2005	-25.00D ~ +25.00D	$U = 0.03\text{D}$	
197	Trial Case Lenses	vertex power	1601	Trial Case Lenses /119/232/26 6-II	Trial Case Lenses JJG 579-1998	-20.00D ~ +20.00D	$U = 0.03\text{D}$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
198	The Whiteness meter	Whiteness	1613	Whiteness meter	the Whiteness meter JJG 512-2002	Visible spectrum 380nm~ 780nm	$U=0.9$ $k=1$	
199	Colorimeter and Colour Differences Meters	Colour	1613	Colour Differences Meters	Colorimeter and Colour Differences Meters JJG 595-2002	Visible spectrum 380nm~ 780nm	$U=0.8$ $k=1$	
200	Colour Standard plates	Three fillip	1613	Whiteness plates	Colour Standard plates JJG 453-2002	380nm~ 780nm	$U=0.8$ $k=1$	
201	Luminance meter	Luminance	1611	Luminance meter	Luminance meter JJG 211-2005	(3~1500) cd/m ²	$U=2.0\%$	
202	Illuminometer	Illuminance	1612	Illuminometer	Illuminometer JJG 245-2005	(10~3000) lx	$U=1.1\%$	
203	Specular Gloss Plates	Gloss	1613.14	Specular Gloss Plates	Specular Gloss Plates and Gloss Plates JJG 696-2002	20°、60°、 85° (1~100) luster unit	$U=1.2$ luster unit	Except for Gloss Plates
204	Diffuse Transmission Visual Densitometer	Density	1613.08	Transmission black-White Densitometer	Diffuse Transmission Visual Densitometer JJG 920-1996	0~4.0D	$U=0.03$	
205	Laser for Medicine	Power	1621	Laser for Medicine	Laser for Medicine JJG 581-1999	(0~100)mW (0~100)W	$U=3.34\%$	
206	Total Luminous Flux	Total Luminous Flux	1610	Luminous Flux Lamp	Standard Incandescent Lamp for Total Luminous Flux JJG 247-1991	(0~ 10000)lm	$U=1.7\%$	
207	Colour Temperature Value	Colour Temperature	1613.05	Colour Temperature Lamp	Distribution (Colour) Temperature of Standard Lamps JJG 213-2003	(0~10000)K	$U=15.1k$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
208	Medical Diagnostic X Ray Radiation Source	Air Kerma Rate	1620	Medical Diagnostic X Ray Radiation Source /GE1600E	V.R.of Medical Diagnostic X Ray Radiation Source JJJ 744-2004	100nGy/s~1800mGy/s	$U_{rel}=5\%$	
209	Medical Diagnostic X-ray Radiation Source for Computer Tomography (CT)	Computer Tomography Dose Index (CTDI)	1620	Medical Diagnostic X-ray Radiation Source for Computer Tomography (CT)/H8000	V.R.of Medical Diagnostic X-ray Radiation Source for Computer Tomography(CT) JJJ 961-2001	0.1mGycm/s ~ 260Gycm/s	$U_{rel}=8\%$	
210	Gas chromatograph	Substance Quantity Contented	0236	Gas chromatograph /HP6890	Gas Chromatograph JJJ 700-1999	Gas chromatograph with FID,TCD, ECD, NPD or FPD	$U_{rel}=5\%$	
211	Liquid chromatographs	Substance Quantity Contented	0236	Liquid chromatographs /1100	Liquid Chromatographs JJJ 705-2002	UV, fluorescent or differential-width detector	$U_{rel}=5\%$	
212	Atomic Absorption Spectrophotometer	Substance Quantity Contented	1618	Atomic Absorption Spectrophotometer /AA-6501	Atomic Absorption Spectrophotometer JJJ 694-2005	Flame, gra-phite furnace detector	Cu: $U=0.005 \mu\text{g/ml}$ Cd: $U=0.5\text{pg}$	
213	Polarimeter and Saccharimeter	Optical Rotation	1603	Polarimeter and Saccharimeter /WZZ-1	Polarimeter and Saccharimeter JJJ 536-1998	$-45^\circ \sim +45^\circ$	$U=0.005^\circ \sim 0.011^\circ$	
214	Routine Capillary Viscometer	Constant	0236	Routine Capillary	Routine Capillary Viscometer JJJ 155-2005	(0~1000000) mm^2/s	$U=(0.3\sim 1)\%$	
215	Flow Cups Viscometer	Constant	0236	Flow Cups Type	Flow Cups Viscometer JJJ 743-2005	(10~400) mm^2/s	$U=3 \times 10^{-3}$	

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216	Engler Viscometer	Time	0236	Engler	Engler Viscometer JIG 742-2005	(51±1)s	$U=0.07s$	
217	Rotational Viscometer	Constant	0236	Rotational Viscometer	Rotational Viscometer JIG 1002-2005	(1~100000) mPa·s	$U=5 \times 10^{-2}$ mPa·s	
218	Ultrasonic Source for Medical Ultrasonic Diagnostic Equipment	Output Sound Intensity	1405	Ultrasonic Source for Medical Ultrasonic Diagnostic Equipment /Type B	V.R.of Ultrasonic Source for Medical Ultrasonic Diagnostic Equipment JIG 639-2005	(0~10) mW/cm ²	$U=0.1mW/cm^2$	
219	Air Sampler	Flow rate	1316	Air Sampler /GS-3	Air Sampler JIG 956-2000	(50~2000) m L /min (0~100)L/min	$U=1.5\%$	
220	Dust Samplers	Flow rate	1316	Dust Samplers /BFC-35	Dust Samplers JIG 520-2005	(0~100)L/min	$U=1\%$	
221	Visible Range Spectrophotometer	Wavelength	1618	Visible Range Spectrophotometer /721	Visible Range Spectrophotometer JIG 178-1996	(360~800) nm (0~100)%τ	Wavelength $U=2nm$ $U=0.3nm$ Transmissivity $U=0.2\% \tau$	
222	Ultraviolet Visible Range Spectrophotometer	Wavelength	1618	Ultraviolet Visible Range Spectrophotometer /754	Ultraviolet Visible Range Spectrophotometer in Single Beam JIG 375-1996 Double Beam UV-VIS Spectrophotometer JIG 682-1990	(190~850)nm (0~100)%τ	Wavelength $U=0.3nm$ transmissivity $U=0.17\% \tau$	
223	Turbidimeter	Turbidity	0236	Turbidimeter /YZD-1A	Turbidimeter JIG880-1994	(0~400)NTU	$U_{rel}=5\%$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
224	Cold Atomic Fluorometer for Determination of Mercury; Cold Atomic Absorption Analyzer of Mercury	Mercury Quantity Contented	0236	Cold Atomic Fluorometer for Determination of Mercury; Cold Atomic Absorption Analyzer of Mercury /ZYG-II	Cold Atomic Fluorometer for Determination of Mercury; JIG 548-2004	(0~1) μ g/ml	$U_{rel}=4.8\%$	
225	Abbe Refractometer	Refrangibility	1604	Abbe Refractometer /WZS-1	Add Refractometer JIG 625-2001	1.3~1.7	$U=1.0 \times 10^{-4}$	
226	pH Meter, Ionometer	pH	0236	pH Meter, Ionometer /PHS-3C	Laboratory pH Meters JIG 119-2005 Ionometer JIG 757-1991	(0~14)PH	$U=0.02\text{pH}$	
227	Electrolytic Conductance Meter	Conductance	0401	Electrolytic Conductance Meter /DDS-11A	Electrolytic Conductance Meter JIG 376-1985	(0~10 ⁵) μ S/cm	$U_{rel}=0.3\%$,	
228	Verifying Meter for pH Meter	Pressure	0236	Verifying Meter for pH Meter /PHJ-02	Verifying Meter For pH Meters JIG 919-1996	(0~10 ⁵)mV	$U=0.012\text{mV}$	
229	Film Electrode Dissolved Oxygen Meter	Dissolved Oxygen Quantity	0236	YSI	Film Electrode Dissolved Oxygen Meter JIG 291-1999	(0~20)mg/L	$U=0.06\text{mg/L}$	
230	Monoxide and Carbon Dioxide Infrared Gas Analyzer	CO、CO ₂ Gas concentration	0236	Monoxide and Carbon Dioxide Infrared Gas Analyzer /GXH	Carbon Monoxide and Carbon Dioxide Infrared Gas Analyzer JIG 635-1999	(0~5000) μ mol/mol	$U_{rel}=2.3\%$	
231	Vehicle Exhaust Emission Measuring Instruments	HC、CO Gas concentration	0236	Vehicle Exhaust Emission Measuring Instruments /MEXA	Vehicle Exhaust Emission Measuring Instruments JIG 688-1990	CO: (0~8)%	CO: $U_{rel}=3.4\%$	
						HC: (0~8000) μ mol/mol	HC: $U_{rel}=2.1\%$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
232	the Detector of Combustible Gases	Combustible Gas concentration	0236	the Detector of Combustible Gases /GP-103	Detector of Combustible Gases JIG 693-2004	(0~100)%LEL	$U_{rel}=2.3\%$	
233	Filter	Relative Damping	1401.04	Filter /AWA	Octave-Band and One-Third-Octave Band Filters JIG 449-2001	relative damping: (0~75)dB	$U=0.24\text{dB}$	Accredited Only for frequency: (10~20)kHz
234	Standard Steel Tape	Indication Error	1303.27	Standard Steel Tape	Standard Steel Tape JIG 741-2005	(0~50) m	$L=3\text{m}$: $U=7.0\mu\text{m}$	
235	Electronic Total Station	Length angle	1309.11	Electronic Total Station	Electronic Total Station JIG 100-2003 Electromagnetic Distance measuring Instrument JIG 703-2003	Measure angle: horizontal angle (0~360) $^{\circ}$ uprightness angle $\pm 30^{\circ}$ measure space: (1~1.1)km	Measure angle: $U=0.38''$ measure space: $U=0.94\text{mm}$	
236	GPS receiver of Surveying Model	length	1309.11	GPS receiver of Surveying Model	Calibration Specification for Global Positioning System Receiver JJF 1118-2004	(0~63)km	$U=2.1\text{mm}$	
237	Hand-held Laster Distance Meter	length	1309	Hand-held Laster Distance Meter	V.R.of Hand-held Laster Distance Meter JIG 966-2001	(0~30)m	fixed error a: $U=0.4\text{mm}$ proportionment error coefficient b: $U=1.7\times 10^{-2}\text{mm/m}$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
238	Infrared ray Radiation thermometers	Temperature	1501.08	Infrared ray Radiation thermometers /MT、ST	V.R.of The working Radiation thermometers 500℃ JJG 856-1994 V.R.of The working Radiation Thermometers JJG 415-2001	(common temperature ~1100) °C	$U = (1.7 \sim 2.1) \text{ } ^\circ\text{C}$	
239	Meteorological Hair Hygrometer and Hair Hygrograph	Humidity	1517.01	Meteorological Hair Hygrometer and Hair Hygrograph /HM10	V.R.of Mechanical Thermohygrometers JJG 205-2005	(30~95) %RH	$U = 2.0\% \text{RH}$	
240	X-Ray Flaw Detectors	Air kerma rate	1623	X-Ray Flaw Detectors /XXQ-2505	V.R.of X-Ray Flaw Detectors JJG 40-2001	(0~876)Gy sensitivity: (2×10^{-8})C/Gy	$U_{rel} = 4.4\%$	
241	Platform brake tester	Determination of the indication error and the absolute difference value of the indication error at the left and the right brakeboard	1323.04	Platform brake tester /JCY-G-4-3t	Platform brake tester JJG (Zhe) 70-2003	(0~10000) N	$U_{rel} = 0.82\%$	
242	Wheel Dynamic Balancer	Determination of the minimum imbalance of surplus that can touch	1411.02	Wheel Dynamic Balancer /CB-15	Wheel Dynamic Balancer JJG (zhe) 74-2004	(30~120)kg	$U_{rel} = 1.4\%$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
243	Opacimeter	Verification of Light absorbance N and Light absorption coefficient K	1511.04	Opacimeter /NHT-1	Opacimenes JIG 976-2002	Light absorbance: (0~98.6)% Light absorption coefficient: (0~9.99)m ⁻¹	$U_{rel}=0.53\%$	
244	Verification Regulation of Steering Force-Steering Angle Tester of Motor Car	Steering Force	1323.04	Verification Regulation of Steering Force-Steering Angle Tester of Motor Car /DCG-10C	Verification Regulation of Steering Force-Steering Angle Tester of Motor Car JIG (zhe) 73-2004	Steering Force: (0~500) N	$U_{rel}=0.38\%$	
		Steering angle	1323.04			Steering Angle: (0~360) °	$U=0.60^{\circ}$	
245	Verification Regulation of Automobilt Brake Pedal Force Tester	Force	1323.04	Verification Regulation of Automobilt Brake Pedal Force Tester /TL-1000	Verification Regulation of Automobilt Brake Pedal Force Tester JIG (zhe) 72-2004	(0~1000) N	$U_{rel}=1.1\%$	
246	Automotive suspension teter	Mass	1323.01	Automotive suspension teter /DLXX-200 B	Bourdon Tube pressure Gauge, Prussure -Vacuum Gauge and Vacuum Gauge for General Use JIG (Zhe) 69-2003	(0~1000) kg	$U_{rel}=0.72\%$	
247	General Pressure Gauge	pressure	1230.01	General Pressure Gauge /Y	Verification Regulation of Bourdon Tube Pressure Gauge, Pressure Vacuum Gauge and Vacuum Gauge for General Use JIG 52-1999	(-0.1~60) MPa	$U_{rel}=0.72\%$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
248	Checker of Speed and Milege Meter for Cars	Speed	1324.02	Checker of Speed and Milege Meter for Cars /ZJY-1	Verification Regulation of Chcker of Speed and Milege Meter for Cars JIG 779-2004	(4~4000)r/min	$U_{rel}=0.04\%$	
249	Electron Load of Direct Current	Voltage	0402.05	Electron Load of Direct Current	Electron Load of Direct Current ZTSM/JX DC 22-2003	(0~60) V	$U_{rel}=1 \times 10^{-4}$	
		DC voltage	0402.05	Electron Load of Direct Current	Electron Load of Direct Current ZTSM/JX DC 22-2003	(0~60) V	$U_{rel}=1.7 \times 10^{-4}$	
		DC current	0402.05	Electron Load of Direct Current	Electron Load of Direct Current ZTSM/JX DC 22-2003	(0~100) A	$U_{rel}=2 \times 10^{-4}$	
		DC resistance	0402.05	Electron Load of Direct Current	Electron Load of Direct Current ZTSM/JX DC 22-2003	(0.1~4000) Ω	$U_{rel}=4 \times 10^{-4}$	
250	Standard of thread-stuff	length	1301.01 1302.02	Standard of thread-stuff/	Column-thread inspect regulations JIG 888-1995	Ring gauge: (2-200)mm Plug guage : (2-120)mm	$U=3 \mu m$	
251	Stuff-ruler	length	1303.25	Stuff-ruler	Sstuff-ruler inspect regulations JIG 62-1995	thinkness: (0.02-1.00)m m length: (75-300)mm	$U=2.4 \mu m$	
252	Electronic digital humidity meter	humidity	1517.01	Electronic digital humidity meter /HM34	Digital humidity meter JIG (Zhe) 77-2004	(20~95) %RH	$U = (0.4 \sim 1.7) \%RH$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
253	On-site Testing equipment for alternating current electric meters	electric energy	0410.12	n-site Testing equipment for alternating current electric meters/ HPU3001	Electrical Energy Meters with Electronics JIG 596-1999	3×(57.7~380)V 3× (0.1~100) A	$U_{rel}=0.011\%$	
254	fluxmeter	magnetic flux	0405.05	Volt-second generator MTC-1	Try-out regulation of fluxmeter JIG 317-1983	0.1 mWb -10Wb	$U_{rel}=(0.07\sim 0.1)\%$	
255	Tesla meter	magnetic induction	0405.08	NMR magnetism-intensity indicator: FW101 Tesla meter: 7010	Regulation of tesla meter JIG 242-1995	(0-3.0)T	$U_{rel}=(0.04\sim 0.1)\%$	
256	Hydraulic Tension Jack	Force	1323.04	Hydraulic Tension Jack /YDC-5000	Hydraulic Jack JIG 621-2005	1N~8MN	$U_{rel}=1.6\%$	
257	Digital Radio Communication Tester	RF Generator Frequency Accuracy	0419.02	Digital Radio Communication Tester /CMU200, 8960S	Calibration Specification for Digital Mobile Communication Test Set JIF 1131-2005	10Hz-26.5GHz	$U_{rel}=2.2\times 10^{-8}$	
		RF Generator Level Accuracy	0419.02	Digital Radio Communication Tester /CMU200, 8960S	Calibration Specification for Digital Mobile Communication Test Set JIF 1131-2005	-145dBm+30dBm	$U=0.22\text{dB}$	
		Harmonic Spectral Purity	0419.02	Digital Radio Communication Tester /CMU200, 8960S	Calibration Specification for Digital Mobile Communication Test Set JIF 1131-2005	-145dBm+30dBm	$U=0.94\text{dB}$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
257	Digital Radio Communication Tester	Phase Noise	0419.02	Digital Radio Communication Tester /CMU200, 8960S	Calibration Specification for Digital Mobile Communication Test Set JJF 1131-2005	-145dBm+30dBm	$U=0.32\text{dB}$	
		RF Analyzer Frequency Accuracy	0419.02	Digital Radio Communication Tester /CMU200, 8960S	Calibration Specification for Digital Mobile Communication Test Set JJF 1131-2005	250kHz-6GHz	$U_{\text{rel}}=1.7 \times 10^{-8}$	
		RF Analyzer Power Accuracy	0419.02	Digital Radio Communication Tester /CMU200, 8960S	Calibration Specification for Digital Mobile Communication Test Set JJF 1131-2005	-136dBm-20dBm	$U=0.25\text{dB}$	
		AF Generator Frequency Accuracy	0419.02	Digital Radio Communication Tester /CMU200, 8960S	Calibration Specification for Digital Mobile Communication Test Set JJF 1131-2005	0.1Hz-1GHz	$U_{\text{rel}}=2.0 \times 10^{-6}$	
		AF Generator Level Accuracy	0419.02	Digital Radio Communication Tester /CMU200, 8960S	Calibration Specification for Digital Mobile Communication Test Set JJF 1131-2005	0-750Vac	$U_{\text{rel}}=0.076\%$	
		AF Generator Distortion	0419.02	Digital Radio Communication Tester /CMU200, 8960S	Calibration Specification for Digital Mobile Communication Test Set JJF 1131-2005	(0.003-100) %	$U=0.018\%$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note	
257	Digital Radio Communication Tester	AF Generator Frequency Accuracy	0419.02	Digital Radio Communication Tester /CMU200, 8960S	Calibration Specification for Digital Mobile Communication Test Set JJJF 1131-2005	0.1Hz-100kHz	$U=0.0058\text{Hz}$		
		AF Analyzer Level Accuracy	0419.02	Digital Radio Communication Tester /CMU200, 8960S	Calibration Specification for Digital Mobile Communication Test Set JJJF 1131-2005	0-5Vpp	$U_{\text{rel}}=0.13\%$		
		GSM Modulation Accuracy	Peak Phase Error	0419.02	Digital Radio Communication Tester CMU200, 8960S	Calibration Specification for Digital Mobile Communication Test Set JJJF 1131-2005	$-4^{\circ} \sim 4^{\circ}$	$U=1.2^{\circ}$	
			RMS Phase Error				$-1^{\circ} \sim 1^{\circ}$	$U=0.35^{\circ}$	
			Amplitude Error				$(-45 \sim +20)\text{dBm}$	$U=0.12\text{dB}$	
			Frequency Error				$3\text{Hz} \sim 26.5\text{GHz}$	$U=5.8 \times 10^{-8}$	
		GSM Analyzer Accuracy	Peak Phase Error	0419.02	Digital Radio Communication Tester CMU200, 8960S	Calibration Specification for Digital Mobile Communication Test Set JJJF 1131-2005	$-4^{\circ} \sim 4^{\circ}$	$U=1.2^{\circ}$	
			RMS Phase Error				$-1^{\circ} \sim 1^{\circ}$	$U=0.35^{\circ}$	
			Frequency Error				$\text{DC} \sim 40\text{MHz}$	$U=1.2\text{Hz}$	
		RF Input/Output VSWR	0419.02	Digital Radio Communication Tester CMU200, 8960S	Calibration Specification for Digital Mobile Communication Test Set JJJF 1131-2005	$1.02 \sim \infty$	$U=1.2$		

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
258	Level Monitor	voltage Level	0419.01	Level Monitor /ZBL8810	Verification Regulation for ZBL8810 series TV/FM Level Monitor JJG (Zhe) 55-1996	(30~120) dB μ	$U=1.2\text{dB}$	Accredited Only for 100kHz-1000MHz
259	The communication standard DC Voltage Power Supply	voltage	0415.01	The communication standard DC Voltage Power Supply /6654	Verification regulation for DC Voltage stable source JJG(hangtian) 6-1999	(0~1000) V	$U_{\text{rel}}=0.0092\%$	
260	Function signal transpirer	Voltage level	0416.02	Function signal transpirer /FG503	Function signal transpirer JJG 840-1993	Voltage: 30 μ V~300V	$U_{\text{rel}}=0.10\%$	
		frequency	0416.01	Function signal transpirer /FG503	Function signal transpirer JJG 840-1993	Frequency: 0.03Hz~30MHz	$U_{\text{rel}}=0.029\%$	
261	ECG/EEG tester	frequency	0416.01	ECG/EEG tester /EGC-1B	Verification Regulation for ECG/EEG tester JJG 749-1997	0.03Hz~100Hz	$U_{\text{rel}}=0.029\%$	
		Voltage	0416.02	ECG/EEG tester /EGC-1B	Verification Regulation for ECG/EEG tester JJG 749-1997	(0~100) V	$U_{\text{rel}}=0.2\%$	
262	Burst audio generator	Frequency	0416.01	Burst audio generator /AWA5551	Verification Regulation for Burst audio generator JJG 199-2005	0.03Hz-100 MHz	$U_{\text{rel}}=1.5 \times 10^{-6}$	
263	Audio analyzer	Voltage	0409.02	Audio analyzer /8903B	Verification Regulation for voltmeter JJG 250-1990	1mV-300V	$U_{\text{rel}}=0.042\%$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
263	Audio analyzer	Distortion	0413.04	Audio analyzer /8903B	Verification Regulation for Distortion tester JJJ 251-1997	0-100%	$U=0.12\%$	
264	Modulation tester	FM deviation	0416.03	Modulation tester /8901B	Verification Regulation for Modulation tester JJJ 1111-2003	(0.1~400) kHz	$U_{rel}=1.4\%$	
		AM depth	0416.03	Modulation tester /8901B	Verification Regulation for Modulation tester JJJ 1111-2003	(0-100) %	$U_{rel}=1.6\%$	
265	Radar Velocity-Meter	Speed	0335.02	Radar Velocity-Meter /LDR	Handle Radar Velocity-Meter JJJ 528-2004	(20-150) km/h	$U=0.67\text{km/h}$	
266	Working Measuring Vibration Instruments	Acceleration	1407.02	Working Measuring Vibration Instruments /HS5944	Verification Regulation of Working Measuring Vibration Instruments JJJ 676-2000	(1-700)m/s ²	$U_{rel}=2\%-3\%$	
267	Piezoelectric Accelerometer	Acceleration	1407.01	Piezoelectric Accelerometer /YD-3A	Verification Regulation of Piezoelectric Accelerometer JJJ 233-1996	(1-700) m/s ²	$U_{rel}=2\%-3\%$	
268	Pile Dynamic Measuring Instrument	Acceleration	1407.02	Pile Dynamic Measuring Instrument /RS-1616K (P)	Verification Regulation of Pile Dynamic Measuring Instrument JJJ 930-1998	(1-700) m/s ²	$U_{rel}=2\%-3\%$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
269	Digital Electrodynamic Vibration Testing System	Acceleration	1409.01	Digital Electrodynamic Vibration Testing System /ES-6	Verification Regulation of Digital Electrodynamic Vibration Testing System JJJ 948-1999	(1-1000) m/s ²	$U_{rel}=2\%-3\%$	
		Speed	1409.01	Digital Electrodynamic Vibration Testing System /ES-6	Verification Regulation of Digital Electrodynamic Vibration Testing System JJJ 948-1999	(0.1-100) _{rms} cm/s	$U_{rel}=2\%-5\%$	
		displacement	1409.01	Digital Electrodynamic Vibration Testing System /ES-6	Verification Regulation of Digital Electrodynamic Vibration Testing System JJJ 948-1999	(0.01-100) _{p-p} mm	$U_{rel}=3\%-6\%$	
270	Electrodynamic Vibration Generator for Testing	Acceleration	1409.01	Digital Electrodynamic Vibration Testing System /D-350	Verification Regulation of Electrodynamic Vibration Generator for Testing JJJ 190-1997	(1-1000) m/s ²	$U_{rel}=2\%-3\%$	
		Speed	1409.01	Digital Electrodynamic Vibration Testing System /D-350	Verification Regulation of Electrodynamic Vibration Generator for Testing JJJ 190-1997	(0.1-100) _{rms} cm/s	$U_{rel}=2\%-5\%$	
		displacement	1409.01	Digital Electrodynamic Vibration Testing System /D-350	Verification Regulation of Electrodynamic Vibration Generator for Testing JJJ 190-1997	(0.01-100) _{p-p} mm	$U_{rel}=3\%-6\%$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
271	Mechanical Vibration Generator for Testing	Acceleration	1409.01	Mechanical Vibration Generator for Testing /Y5050/ZF	Verification Regulation of Mechanical Vibration Generator for Testing JJJ 189-1997	(1-1000) m/s ²	$U_{rel}=2\%-3\%$	
		displacement	1409.01	Mechanical Vibration Generator for Testing /Y5050/ZF	Verification Regulation of Mechanical Vibration Generator for Testing JJJ 189-1997	(0.01-100) _{p-p} mm	$U_{rel}=3\%-6\%$	
272	Ultrasonic flaw detector	Error of decaying amount of the attenuator	1101	Mechanical Vibration Generator for Testing /CTS-22A	V.R.of Ultrasonic flaw detector JJJ 746-2004	Range of attenuation $\leq 61\text{dB}$	At 12dB level $U=0.28\text{dB}$	
273	High Insulation Resistance Meters	resistance	0410.09	High Insulation Resistance Meters/ZC36	Verification Regulation of High Insulation Resistance Meters JJJ 690-2003	(0.001~151111.221) M Ω	$U_{rel}=2\times 10^{-2}$	
274	Electrical measuring transducer	Voltage, Current	0406.05	DC Voltage transducer /TC6/GP6	Electrical measuring transducer for converting a.c. electrical quantities to analogue or digital signals JJJ 126-1995	(0~5)V、(0~20)mA	$U_{rel}=2\times 10^{-4}$	
			0406.04	AC Voltage transducer /TC/GP	Electrical measuring transducer for converting a.c. electrical quantities to d.c. electrical quantities JJJ 126-1995	(0~5)V、(0~20)mA	$U_{rel}=2\times 10^{-4}$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
274	Electrical measuring transducer	Voltage, Current	0410.03	DC current transducer /TC6/GP6	Electrical measuring transducer for converting a.c. electrical quantities to d.c. electrical quantities JIG 126-1995	(0~5)V、 (0~20)mA	$U_{rel}=2 \times 10^{-4}$	
			0410.04	AC current transducer /TC/GP	Electrical measuring transducer for converting a.c. electrical quantities to d.c. electrical quantities JIG 126-1995	(0~5)V、 (0~20)mA	$U_{rel}=2 \times 10^{-4}$	
		Voltage, Current	0406.03	Active power transducer /TC/GP	Electrical measuring transducer for converting a.c. electrical quantities to d.c. electrical quantities JIG 126-1995	(0~5)V (0~20)mA	$U_{rel}=3 \times 10^{-4}$	
		Voltage, Current	0406.06	Frequency transducer /FPF	Electrical measuring transducer for converting a.c. electrical quantities to d.c. electrical quantities JIG 126-1995	(0~5)V、 (0~20)mA	$U_{rel}=2 \times 10^{-4}$	
		Voltage, Current	0406.10	Power factor, phase transducer /FPPF	Electrical measuring transducer for converting a.c. electrical quantities to d.c. electrical quantities JIG 126-1995	(0~5)V、 (0~20)mA	$U_{rel}=2 \times 10^{-4}$	

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
275	Standard Dynamometer	Force	0333.02	Standard Dynamometer /C2000	Standard Dynamometer JIG 144-1992	200kN-2MN	$U_{rel}=0.13\%$	
		Force	0333.02	Standard Dynamometer /C500	Standard Dynamometer JIG 144-1992	(20-500)kN	$U_{rel}=0.037\%$	
		Force	0333.02	Standard Dynamometer /C60	Standard Dynamometer JIG 144-1992	(1-60)kN	$U_{rel}=0.04\%$	
		Force	0333.02	Standard Dynamometer /C6	Standard Dynamometer JIG 144-1992	(50-6000)N	$U_{rel}=0.072\%$	
276	Working Dynamometers	Force	0333.02	Standard Dynamometer /GZ6	Working Dynamometers JIG 455-2000	(20-500)kN	$U_{rel}=0.47\%$	
		Force	0333.02	Standard Dynamometer /GZ200	Working Dynamometers JIG 455-2000	200kN-2MN	$U_{rel}=0.25\%$	
		Force	0333.02	Standard Dynamometer /GZ500	Working Dynamometers JIG 455-2000	(50-6000)N	$U_{rel}=0.47\%$	
		Force	0333.02	Standard Dynamometer /GZ60	Working Dynamometers JIG 455-2000	(1-60)kN	$U_{rel}=0.25\%$	
277	Hydraulic tensiometer (contain: immobile loading instrument)	Force	1323.04	Standard Dynamometer /YCW-150C	Hydraulic Jack JIG 621-2005	10kN-10MN	$U_{rel}=1.8\%$	
278	Universal Tension and Compression Testing Machine	Force	1326.01 1326.02	Standard Dynamometer /WE-100B	Universal Tension and Compression Testing Machine JIG 139-1999	10kN-2MN	$U_{rel}=0.42\%$	
279	Non-self-indication Weighing Instruments	MASS	1311.03	Standard Dynamometer /TGT	Non-self-indication Weighing Instruments JIG 14-1997	$\leq 50t$	$U_{rel}=0.013\%$	Accredited Only for III、III level

No	Name of measuring instrument	Parameter	Code of Field	Category/ Typical Model	Name, Code of Calibration Regulation	Measuring Range	Best Measurement Capability (Expressed As An Uncertainty)	Note
280	Simulated indicational balance	MASS	1311.03	Standard Dynamometer /ATZ	Simulated indicational balance JJG 13-1997	$\leq 30t$	$U_{rel}=0.045\%$	Accredited Only for III、III level
281	Numeric indicational balance	MASS	1311.03	Standard Dynamometer /SCS、ACS	Numeric indicational balance JJG 539-1997	$\leq 150t$	$U_{rel}=0.012\%$	Accredited Only for III、III level
282	Mobile auto weighing apparatus	MASS	1311.03	Standard Dynamometer /DCS	Mobile auto weighing apparatus JJG 907-2003	$\leq 100t$	$U_{rel}=0.048\%$	Accredited Only for 0.2 level and less
283	Gravity auto-input weighing apparatus	MASS	1311.04	Standard Dynamometer /CJD	Gravity auto-input weighing apparatus JJG 564-2002	$\leq 1000kg$	$U_{rel}=0.20\%$	Accredited Only for X(0.1) level and less
284	Auto continuous accumulative Weighing apparatus (beet balance)	MASS	1311.03	Standard Dynamometer /ICS	Auto continuous accumulative Weighing apparatus (beet balance) JJG 195-2002	$\leq 4000t/h$	$U_{rel}=0.10\%$	Accredited Only for 0.5 level and less



中国合格评定国家认可委员会 实验室认可证书附件

(No. CNAS L2181)

名称: 浙江省方正校准集团有限公司

地址: 浙江省杭州市天目山路 222 号

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附件 2 认可的授权签字人及其授权签字领域

序号	姓名	授权签字领域	备注
1	罗进	电磁校准检测项目	
2	严瑾	公路车辆智能监测记录系统、闯红灯自动记录系统、汽车行驶记录仪检测；发射光谱仪校准项目	
3	俞醒言	公路车辆智能监测记录系统、闯红灯自动记录系统、汽车行驶记录仪检测；发射光谱仪校准项目	