

Name: Testing Center of Metal Research Institute, Chinese Academy of Sciences

Address: No. 91, Wencui Road, Shenhe District, Shenyang, Liaoning, China

Registration No. CNAS L4975

Accreditation Criteria: ISO/IEC 17025:2017 and relevant requirements of CNAS

Effective Date: 2024-10-17 Expiry Date: 2029-05-25

SCHEDULE 3 ACCREDITED TESTING SCOPE

№	Test Object	Item/Parameter		Standard or Method	Note	Effective Date
		№	Item/ Parameter			
Metals and alloys						
1	Metals and alloys	1	C、Si、Mn、P、S、Cr、Ni、W、Mo、V、Al、Ti、Cu、Nb、Co、B、Zr、As、Sn	Carbon and low-alloy steel—Determination of multi-element contents—Spark discharge atomic emission spectrometric method (routine method) (Amendment No. 1) GB/T 4336-2016/XG1-2017		2024-01-19
		2	C、S	Steel and iron--Determination of total carbon and sulfur content--Infrared absorption method after combustion in an induction furnace(routine method) GB/T 20123-2006		2024-01-19
		3	Si、Mn、P、Ni、Cr、Mo、Cu、V、Co、Ti、Al	Low-alloy steel - Determination of multi-element contents - Inductively coupled plasma atomic emission spectrometric method GB/T 20125-2006		2024-01-19
		4	Cr	Iron,steel and alloy-Determination of chromium content-Visual titration or potentiometric titration method GB/T 223.11-2008 Methods for chemical analysis of titanium sponge,titanium and titanium alloys—Part 10:Determination of chromium content—	only ICP	2024-01-19

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CHINA NATIONAL ACCREDITATION SERVICE FOR CONFORMITY ASSESSMENT SCHEDULED ACCREDITATION CERTIFICATE				Ammonium ferrous sulfate titration and inductively coupled plasma atomic emission spectrometry (with vanadium) GB/T 4698.10-2020			
		5	O	Steel and Iron-Determination of oxygen content-The pulse heating inert gas fusion-infra-red absorption method GB/T 11261-2006		2024-01-19	
				Methods for chemical analysis of copper and copper alloys-Part 8:Determination of oxygen content GB/T 5121.8-2008		2024-01-19	
		6	N	Steel and iron -- Determination of nitrogen content -- Thermal conductimetric method after fusion in a current of inert gas (Routine method) GB/T 20124-2006		2024-01-19	
		H		Steel and iron - Determination of hydrogen content - Thermal conductivity/infrared method after fusion under inert gas GB/T 223.82-2018		2024-01-19	
				Methods for chemical analysis of titanium sponge,titanium and titanium alloys-Determination of hydrogen content GB/T 4698.15-2011		2024-01-19	
				Standard Test method for Determination of Hydrogen in Titanium and Titanium Alloys by Inductively Coupled Plasma Thermal Conductivity/Infrared Detection Method ASTM E1447-22		2024-01-19	
	Ca,Mg,Ba			Steel and alloy-- Determination of trace element contents - Part 3 : Determination of calcium, magnesium, barium content by inductively coupled plasma atomic emission spectrometric method GB/T 20127.3-2006	国电标委 认可	2024-01-19	
		9	C、Si、Mn、P、S、Cr、Ni、Mo、Al、Cu、W、Ti、Nb、V、Co、B、As、Sn、Pb	Stainless steel-Determination of multi-element contents - Spark discharge atomic emission spectrometric method (Routine method) GB/T 11170-2008	国电标委 认可	2024-01-19	



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		10	Si、Mn、P、S、Cu、Al、Ni、Cr、Mo、V、Ti、W、Nb	Iron and steel—Determination of multi-element contents—X-ray fluorescence spectrometry(Routine method) GB/T 223.79-2007		2024-01-19
		11	Si、Mn、P、Ni、Cu、Mo、Ti、Al、V、Co	Stainless steel—Determination of multi-element contents-Inductively coupled plasma atomic emission spectrometric method YB/T 4396-2014		2024-01-19
		12	O、N	Methods for chemical analysis of titanium sponge,titanium and titanium alloys—Determination of oxygen and nitrogen content GB/T 4698.7-2011	Accredited only for method 2	2024-01-19
				Standard Test method for Determination of Oxygen and Nitrogen in Titanium and Titanium Alloys by Inert Gas Fusion ¹ ASTM E1409-13(2021)		2024-01-19
				Methods for chemical analysis of superalloys-Part 49: Determination of oxygen, nitrogen content by impulse heating-infrared, thermal conductivity method HB 5220.49-2008		2024-01-19
		13	Mn	Methods for chemical analysis of titanium sponge,titanium and titanium alloys—Part 4:Determination of manganese content—Potassium periodate spectrophotometry and inductively coupled plasma atomic emission spectrometry GB/T4698.4-2017	Accredited only for Inductively coupled plasma atomic emission spectrometry	2024-01-19
		14	Mo	Methods for chemical analysis of titanium sponge, titanium and titanium alloys - Part 5: Determination of molybdenum content - Thiocyanate spectrophotometry and inductively coupled plasma atomic emission spectrometry GB/T4698.5-2017	Accredited only for Inductively coupled plasma	2024-01-19

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		15	Al	Methods for chemical analysis of titanium sponge, titanium and titanium alloys—Part 8:Determination of aluminum content—Separation with sodium hydroxide-EDTA complex-metric titration and inductively coupled plasma atomic emission spectrometry GB/T 4698.8-2017	atomic emission spectrometry Accredited only for Inductively coupled plasma atomic emission spectrometry	2024-01-19
		16	Sn	Methods for chemical analysis of titanium sponge, titanium and titanium alloys - Part 9: Determination of tin content - Potassium iodate titration and inductively coupled plasma atomic emission spectrometry GB/T 4698.9-2017	Accredited only for Inductively coupled plasma atomic emission spectrometry	2024-01-19
		17	V	Methods for chemical analysis of titanium sponge,titanium and titanium alloys—Part 12:Determination of vanadium content—Ammonium ferrous sulfate titration and inductively coupled plasma atomic emission spectrometry GB/T 4698.12-2017	Accredited only for Inductively coupled plasma atomic emission spectrometry	2024-01-19

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		18	Zr	Methods for chemical analysis of titanium sponge, titanium and titanium alloys - Part 13: Determination of zirconium content-EDTA complexometric titration and inductively coupled plasma atomic emission spectrometry GB/T 4698.13-2017	Accredited only for Inductively coupled plasma atomic emission spectrometry	2024-01-19
		19	Nb	Methods for chemical analysis of titanium sponge, titanium and titanium alloys - Part 22: Determination of niobium content-5-Br-PADAP spectrophotometry and inductively coupled plasma atomic emission spectrometry GB/T 4698.22-2017	Accredited only for Inductively coupled plasma atomic emission spectrometry	2024-01-19
		20	C	Methods for chemical analysis of titanium sponge,titanium and titanium alloys—Determination of carbon content GB/T 4698.14-2011		2024-01-19
				Methods for chemical analysis of super alloys-part 3: Determination of carbon contet by high frequency induction combustion-infrared absorption method HB 5220.3-2008		2024-01-19
				Standard Test Method for Determination of Carbon in Refractory and Reactive Metals and Their Alloys by Combustion Analysis ASTM E1941-10 (2016)		2024-01-19
		21	Al、B、Co、Cr、Cu、Fe、Mn、Mo、Ni、Nb、	Standard Test Method for Analysis of Titanium and Titanium Alloys by Direct Current Plasma and Inductively Coupled Plasma Atomic Emission Spectrometry (Performance-Based Test	Accredited only for Inductively	2024-01-19

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			Pd、Ru、Si、Ta、Sn、W、V、Y、Zr	Methodology) ASTM E2371-21a	coupled plasma atomic emission spectrometry	
		22	Al、Cr、Cu、Fe、Mn、Mo、Ni、Nb、Pd、Ru、Si、Sn、V、Y、Zr	Standard Test Method for Analysis of Titanium and Titanium Alloys by Direct Current Plasma and Inductively Coupled Plasma Atomic Emission Spectrometry (Performance-Based Test methodology) ASTM E539-19		2024-01-19
		23	Cr,V	Methods for spectrometric analysis of super alloys - Part 3: Determination of chromium and vanadium contents by inductively coupled plasma atomic emission spectrometric method HB 20241.3-2016	2024-01-19	
		24	B	Methods for spectrometric analysis of super alloys - Part 4: Determination of boron content by inductively coupled plasma atomic emission spectrometric method HB 20241.4-2016		2024-01-19
		25	Si	Methods for spectrometric analysis of super alloys- Part 5: Determination of silicon content by inductively coupled plasma atomic emission spectrometric method HB 20241.5-2016	2024-01-19	
		26	Ce,La,Y	Methods for spectrometric analysis of super alloys - Part 6: Determination of cerium, lanthanum and yttrium contents by inductively coupled plasma atomic emission spectrometric method HB 20241.6-2016		2024-01-19
		27	Al,Co,Cu,Fe,Mn,Mo,Ti	Methods for spectrometric analysis of super alloys- Part 7: Determination of aluminium, cobalt, copper, iron, manganese, molybdenum and titanium contents by inductively coupled plasma atomic emission spectrometric method HB 20241.7-2016	2024-01-19	
		28	Hf,Nb,W	Methods for spectrometric analysis of super alloys - Part 8: Determination of hafnium, niobium and tungsten contents by		2024-01-19

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				inductively coupled plasma atomic emission spectrometric method HB 20241.8-2016		
		29	Re,Ta,Zr	Methods for spectrometric analysis of super alloys - Part 9: Determination of rhenium, tantalum and zirconium contents by inductively coupled plasma atomic emission spectrometric method HB 20241.9-2016		2024-01-19
		30	S	Methods for chemical analysis of superalloys-part 6: Determination of sulfur content by high frequency induction combustion-infrared absorption method HB 5220.6-2008		2024-01-19
		31	B、Sc、Ga、Ag、In、Sn、Sb、Ce、Hf、Tl、Pb、Bi	Analysis methods for trace elements in super alloys - Part 16 : Determination of boron, scandium, gallium, silver, indium, tin, antimony, cerium, hafnium, thallium, lead and bismuth contents by inductively coupled plasma-mass spectrometric method GJB8781.16-2015		2024-01-19
		32	Mn、P、Si、Cr、Ni、Al、Mo、Cu、Ti、Nb、Fe、W、Co	Standard Test Method for Analysis of Ni-Base Alloys by Wavelength Dispersive X-Ray Fluorescence Spectrometry ASTM E2465-23		2024-08-01
		33	Al、B、C、Cr、Cu、Co、Fe、Mg、Mn、Mo、Nb、Ni、P、Si、S、Ti、Ta、Sn、W、V、Zr	Standard Test Method for Analysis of Nickel Alloys by Spark Atomic Emission Spectrometry ASTM E3047-22		2024-01-19
		34	Sb、As、Ba、Be、Bi、B、Cd、Ca、Ce、Cr、Cu、Ga、Fe、Pb、Li、Mg、	Optical emission spectrometric analysis method of aluminum and aluminum alloys GB/T 7999-2015	Accredited only for Sb 0.0040-0.50%, Be 0.0001-	2024-01-19

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			Mn、Ni、P、Sc、Si、Na、Sr、Sn、Ti、V、Zn、Zr		0.0050%, Bi 0.0010-0.50%, B 0.0001-0.0030%, Cd 0.0010-0.030%, Ca 0.0010-0.0050%, Cr 0.0010-0.050%, Cu 0.0010-6.00%, Ga 0.004-0.020%, Fe 0.0010-2.00%, Pb 0.0007-0.60%, Li 0.0005-0.0030%, Mg 0.0005-5.00%, Mn 0.0005-1.20%, Ni 0.0010-1.00%, P 0.0005-0.0050%,	

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				Si 0.0025-15.00%, Na 0.0005-0.0050%, Sr 0.0010-0.20%, Sn 0.0010-0.50%, Ti 0.0005-0.50%, V 0.0001-0.20%, Zn 0.0010-1.00%, Zr 0.0001-0.20%。		
		35	Fe、Cr、Cu、Zn、Mg、Ni、Mn、Cd、Ga、Zr、Ti、Be、V、Pb、In、B、Sn、Si、Bi、Sr、Ca、Sb	Methods for chemical analysis of aluminium and aluminium alloys.Part 25:Determination of elements content.Inductively coupled plasma atomic emission spectrometric method GB/T 20975.25-2020		2024-01-19
		36	Fe、Ni、Cu、Zr、Mn、Be、Ti、Pb、Zn、Ca、Y、Al、Nd、Ce、Sr	Chemical analysis methods of magnesium and magnesium alloys - Part 20: Determination of elements by inductively coupled plasma atomic emission spectrometry GB/T 13748.20-2009	Accredited only for Ni0.001%-0.010%, Be0.01%-0.10%	2024-01-19



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		37	P、Ag、Bi、Sb、As、Fe、Ni、Pb、Sn、S、Zn、Mn、Cd、Se、Te、Al、Si、Co、Ti、Mg、Be、Zr、Cr、B、Hg	Methods for chemical analysis of copper and copper alloys - Part 27: The inductively coupled plasma atomic emission spectrometric method GB/T5121.27-2008	Accredited only for P0.001%-1.00%, Bi0.001%-3.00%, Sb0.001%-0.10%, As0.001%-0.20%, Fe0.001%-7.00%, Ni0.001%-35.00%, Pb0.002%-7.00%, Sn0.001%-10.00%, Zn0.001%-7.00%, Mn0.001%-14.00%, Cd0.001%-3.00%, Se0.001%-0.002%, Te0.001%-1.00%; Hg:0.001%	2024-01-19



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					~1.00%。	
		38	碳、硫、氮、氧	Standard Test Methods for Determination of Carbon, Sulfur, Nitrogen, and Oxygen in Steel, Iron, Nickel, and Cobalt Alloys by Various Combustion and Inert Gas Fusion Techniques ASTM E1019-18		2024-01-19
		39	Al、B、Ca、Cu、Mg、Mn、Nb、P、Ta、Sn、Ti、W、V、Zr	Standard Test Method for Analysis of Nickel Alloys by Inductively Coupled Plasma Atomic Emission Spectrometry (Performance-Based) ASTM E2594-20		2024-01-19
		40	La、Ce、Mg	Cast iron and low alloy steel-Determination of lanthanum,cerium and magnesium content-Inductively coupled plasma atomic emission spectrometric method GB/T 24520-2009		2024-01-19
		41	Si、Mn、P、Cr、Ni、Mo、Cu、Co、V、Ti、Nb	High alloy steel.Determination of multi-element contents.X-ray fluorescence spectrometry (routine method) GB/T 36164-2018		2024-01-19
		42	Fe	Methods for chemical analysis of titanium sponge, titanium and titanium alloys-Determination of iron content GB/T 4698.2-2011	Accredited only for Inductively coupled plasma atomic emission spectrometry	2024-01-19
		43	Ni	Methods for chemical analysis of titanium sponge, titanium and titanium alloys-Part 24:Determination of nickel content-Dimethylglyoxime spectrophotometry and inductively coupled plasma atomic emission spectrometry GB/T 4698.24-2017	Accredited only for Inductively coupled plasma	2024-01-19

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					atomic emission spectrometry	
		44	Mo、Nb、W	Steel-Determination of molybdenum, niobium and tungsten contents-Inductively coupled plasma atomic emission spectrometric method YB/T 4395-2014		2024-01-19
		45	Sn、Sb、Ce、Pb、Bi	Steel and iron-Determination of tin, antimony, cerium, lead and bismuth-Inductively coupled plasma mass spectrometric method GB/T 32548-2016		2024-01-19
		46	Li、Be、B、C、N、O、F、Na、Mg、Al、Si、P、S、Cl、K、Ca、Sc、Ti、V、Cr、Mn、Fe、Co、Ni、Cu、Zn、Ga、Ge、As、Se、Br、Rb、Y、Zr、Nb、Mo、Ru、Rh、Ag、Pd、Cd、In、Sn、Sb、I、Te、Cs、Ba、La、Ce、Nd、Hf、Ta、W、Re、Os、Ir、Pt、Au、Hg、Tl、Pb、Bi、Th、U	Standard Test Method for Trace Metallic Impurities in Electronic Grade Titanium by High Mass-Resolution Glow Discharge Mass Spectrometer1 ASTM F 1710 – 08 (2016)	Accredited only for B、C、N、O、Mg、Al、Si、P、S、Ti、V、Cr、Mn、Fe、Co、Ni、Cu、Zn、Y、Zr、Nb、Mo、Ru、Pd、Sn、Hf、Ta、W、Re、TI	2024-01-19

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		47	Ag、K、Ti、As、Li、U、Au、Mg、Mn、B、V、Zn、Be、Na、Zr、Ca、Ni、Ce、P、Cr、Sb、Cs、Si、Cu、Sn、Fe、Th	Standard Test Method for Trace Metallic Impurities in Electronic Grade Aluminum by High Mass-Resolution Glow-Discharge Mass Spectrometer1 ASTM F1593 – 08 (Reapproved 2016)	不测 K、U、Au、Na、Cs、Th	2024-01-19
		48	Al、Sb、As、B、Ca、C、Cr、Co、Cu、Pb、Mn、Mo、Ni、Nb、N、P、Si、S、Sn、Ti、V、Zr	Standard Test Method for Analysis of Carbon and Low-Alloy Steel by Spark Atomic Emission Spectrometry1 ASTM E415-21		2024-01-19
		49	Cr、Ni、Mo、Mn、Si、Cu、C、P、S	Standard Test Method for Analysis of Austenitic Stainless Steel by Spark Atomic Emission Spectrometry1 ASTM E1086-22		2024-01-19
		50	Si、Fe、Cu、Mn、Mg、Cr、Ni、Zn、Ti、Ag、As、B、Ba、Be、Bi、Ca、Cd、Co、Ga、Li、Mo、Na、P、Pb、Sb、Sc、Sn、Sr、Ti、Tl、V、Zr	Standard Test Method for Analysis of Aluminum and Aluminum Alloys by Inductively Coupled Plasma Atomic Emission Spectrometry (Performance Based Method) ASTM E3061-17	中国合格评定国家认可委员会 认可证书专用章	2024-01-19
		51	Sb、Bi、Ga、Pb、Ag、Sn、Tl	Standard Test Method for Analysis of Nickel Alloys by Inductively Coupled Plasma Mass Spectrometry (Performance-		2024-01-19



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		No	Item/ Parameter			
				Based)1 ASTM E2823-17		
1	Metal materials and products	1	Tensile at ambient temperature	Metallic materials-Tensile testing- Part 1:Method of test at room temperature GB/T 228.1-2021	Accredited only for $R_{eH}, R_{eL}, R_m, R_{p0.2}, A, Z$	2024-01-19
				Metallic materials—Tensile testing—Part 1:Method of test at room temperature GB/T 228.1-2010	Accredited only for $R_{eH}, R_{eL}, R_m, R_{p0.2}, A, Z$, in valid standard, special customer requirements only	2024-01-19
				Destructive tests on welds in metallic materials—Transverse tensile test GB/T 2651-2023		2024-01-19
				Tensile test method on welded joints GB/T 2651-2008	Invalid standard, special customer requirements only	2024-01-19
				Method of Tensile test at ambient temperature for Metals HB 5143-1996	Accredited only for $\sigma_{su}, \sigma_{sl}, \sigma_{p0.2}$	2024-01-19



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	2	Tensile at elevated temperature	Method of Tensile test at ambient temperature for Metals Pipe HB 5145-1996		σ_b, δ, ψ	
				Method of Tensile test at ambient temperature for Metals Pipe HB 5145-1996	Accredited only for $\sigma_{su}, \sigma_{sl}, \sigma_{p0.2}, \sigma_b, \delta, \psi$	2024-01-19
			Standard Test Methods for Tension Testing of Metallic Materials ASTM E8/E8M-24	Standard Test Methods for Tension Testing of Metallic Materials ASTM E8/E8M-24	Accredited only for UYS, LYS, yield strength(off set=0.2%), tensile strength, elongation after fracture, reduction of area	2024-08-01
		Tensile at elevated temperature	Metallic materials- Tensile testing- Part 2:Method of test at elevated temperature GB/T 228.2-2015	Metallic materials- Tensile testing- Part 2:Method of test at elevated temperature GB/T 228.2-2015	Accredited only for $\leq 1250^{\circ}\text{C}, R_e, R_{eL}, R_m, R_{p0.2}, A, Z$	2024-01-19
			Method of Tensile test at Elevated Temperature for metals HB 5195-1996	Method of Tensile test at Elevated Temperature for metals HB 5195-1996	Accredited only for $100\sim 1100^{\circ}\text{C}, \sigma_{su}, \sigma_{sl}, \sigma_{p0.2}, \sigma_b, \delta, \psi$	2024-01-19
			Standard Test Methods for Elevated Temperature Tension Tests of Metallic Materials ASTM E21-20	Standard Test Methods for Elevated Temperature Tension Tests of Metallic Materials ASTM E21-20	Accredited only for	2024-01-19

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				≤1250°C, UYS, LYS, yield strength(off set=0.2%),a pproximate yield strength (offset = 0.2 %),tensile strength,elo ngation after fracture, reduction of area		
		3	Tensile at low temperature	Metallic materials.Tensile testing.Part 3:Method of test at low temperature GB/T 228.3-2019	Accredited only for (- 150°C~ 10°C) and- 196°C, R_{eH} , R_{eL},R_m , $R_{p0.2},A,Z$	2024-01-19
		4	Compression at ambient temperature	Metallic materials- Compression test method at room temperature GB/T 7314-2017	Accredited only for R_{mc}	2024-01-19
		5	Bend	Metallic materials- Bend test method GB/T 232-2024		2024-10-17



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				Bend test methods on welded joints GB/T 2653-2008		2024-01-19
		6	Brinell hardness	Metallic materials-Brinell hardness test-Part 1:Test method GB/T 231.1-2018	Accredited only for HBW10/30 00 HBW10/10 00 HBW5/750 HBW5/250	2024-01-19
				Standard Test Method for Brinell Hardness of Metallic Materials ASTM E10-23	Accredited only for HBW10/30 00 HBW10/10 00 HBW5/750 HBW5/250	2024-01-19
		7	Rockwell hardness	Metallic materials- Rockwell hardness test- Part 1:Test method GB/T 230.1-2018	Accredited only for HRA,HRB W,HRC	2024-01-19
				Standard Test Methods for Rockwell Hardness of Metallic Materials ASTM E18-24	Accredited only for HRA,HRB W,HRC	2024-10-17
		8	Vickers hardness	Metallic materials- Vickers hardness test- Part 1:Test method GB/T 4340.1-2009	Accredited only for HV0.1~HV 30	2024-01-19



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		9	Impact	Standard Test Methods for Vickers Hardness and Knoop Hardness of Metallic Materials ASTM E92-23	Accredited only for HV2~HV30	2024-01-19
				Metallic materials - Charpy pendulum impact test method GB/T 229-2020	Accredited only for -150°C~10°C, room temperature, -196°C, KV ₂ , KU ₂	2024-01-19
				Destructive tests on welds in metallic materials—Impact tests GB/T 2650-2022	Accredited only for -150°C~10°C, room temperature, -196°C, KV ₂ , KU ₂	2024-01-19
		10	Fatigue	Method materials—Fatigue testing—Axial-strain-controlled method GB/T 26077-2021	符合	2024-01-19
				Metallic material—Fatigue testing—Strain-controlled thermomechanical fatigue testing method GB/T 33812-2017	通过	2024-01-19
				Metallic material—Fatigue testing—Axial force-controlled method GB/T 3075-2021	认可	2024-01-19
				The test method for axial loading constant-amplitude low-cycle fatigue of metallic materials GB/T 15248-2008	通过	2024-01-19

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				Metallic materials—Fatigue testing—Fatigue crack growth method GB/T 6398-2017		2024-01-19
				Standard Practice for Conducting Force Controlled Constant Amplitude Axial Fatigue Tests of Metallic Materials ASTM E466-21		2024-01-19
				Standard Test Method for Strain-Controlled Fatigue Testing ASTM E606/E606M-21		2024-01-19
		11	Creep test	Metallic materials.Uniaxial creep testing method in tension GB/T 2039-2012	Accredited only 300°C~120 0°C	2024-01-19
				Metal creep testing method in tension at elevated temperature HB 5151-1996	Accredited only 300°C~120 0°C	2024-01-19
				Standard Test Methods for Conducting Creep, Creep-Rupture, and Stress-Rupture Tests of Metallic Materials ASTM E139-11(2018)	Accredited only 300°C~120 0°C	2024-01-19
		12	Stress-rupture test in tension	Metal stress-rupture test in tension at elevated temperature HB 5150-1996	Accredited only 300°C~120 0°C	2024-01-19
				Standard Test Methods for Conducting Time-for-Rupture Notch Tension Tests of Materials ASTM E292-18	Accredited only 300°C~120 0°C	2024-01-19
		13	Fracture toughness	Metallic materials—Determination of plane-strain fracture toughness GB/T 4161-2007		2024-01-19



№	Test Object	Item/Parameter		Standard or Method	Note	Effective Date
		№	Item/ Parameter			
				Metallic materials—Unified method of test for determination of quasistatic fracture toughness GB/T 21143-2014		2024-01-19
		14	Tube - Drift-expending	Metal materials-Tube - Drift-expending test GB/T 242-2007		2024-01-19
		15	Flattening	Metal materials-Tube - Flattening test GB/T 246-2017		2024-01-19
		16	Thermophysical properties	Test methods for thermal expansion characteristic parameters of metallic materials GB/T 4339-2008	Accredited only for -150°C~200 0°C	2024-01-19
				Determination of melting temperature range for precious metals and their alloys—Testing method of thermal analysis GB/T 1425-2021		2024-01-19
				Determination of thermal diffusivity or thermal conductivity by the flash method GB/T 22588-2008		2024-01-19
		17	Resistivity	Metallic materials--Resistivity measurement method GB/T 351-2019	Accredited only for 50°C~1100 °C	2024-01-19
		18	Elastic Modulus	Metallic materials - Determination of modulus of elasticity and poisson's ratio GB/T 22315-2008	Accredited only for dynamic method	2024-01-19



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The scope of the accreditation in Chinese remains the definitive version.

