

Testing Laboratory  
Accreditation  
Certificate

Accreditation No. RTL00070



**JFE Techno-Research Corporation  
Kurashiki Division Analysis for Production Control Dept.**

**1-chome, Kawasaki-dori, Mizushima, Kurashiki-city,  
Okayama, 712-8074 Japan**

meets the following criteria. On the basis of this, Japan Accreditation Board (JAB) grants accreditation to the said testing laboratory.

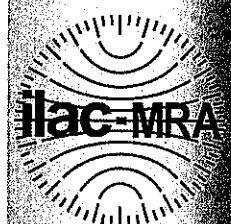
Applicable accreditation criteria	:	JIS Q 17025:2018 (ISO/IEC 17025:2017)
Scope of accreditation	:	<b>Chemical testing</b> (As described in the appendix)
Premises covered by accreditation	:	As described in the appendix.
Expiry date of accreditation	:	November 30, 2025

Revised	February 14, 2022
Renewed	December 1, 2021
Initial accreditation	November 5, 1997

A handwritten signature in black ink, appearing to read 'Y. Iizuka'.

Y. Iizuka, President

**Japan Accreditation Board**



# Accreditation Certificate Appendix

(Page 1/4)

Type of Laboratory	Testing Laboratory
Name of Laboratory	JFE Techno-Research Corporation Kurashiki Division Analysis for Production Control Dept.
Address	1-chome, Kawasaki-dori, Mizushima, Kurashiki-city, Okayama, 712-8074 Japan

## 1) Premises on which testing activities are performed

Name of Premises	JFE Techno-Research Corporation Kurashiki Division Analysis for Production Control Dept.	
Address of Premises	Postal code	712-8074
	Address	1-chome, Kawasaki-dori, Mizushima, Kurashiki-city, Okayama, Japan

Testing service at permanent facilities or on site testing service	<input checked="" type="checkbox"/> Testing service at permanent facilities <input type="checkbox"/> On site testing service
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## Scope of Accreditation

FIELD	M26 Chemical Testing
CODE OF CIT <sup>*1</sup>	M26.A1
NAME OF CIT	Metal: Iron and steel, Related products

<sup>\*1</sup>CIT: Classification of Item to be Tested<sup>\*2</sup>TCT: Technical Classification of Test

CODE & NAME OF TCT <sup>*2</sup>	PROPERTIES MEASURED	TEST METHOD STANDARD / STANDARD OPERATING PROCEDURE
B2.1 Molecular absorption spectrometry: Infrared spectrometry	0.001 % ≤ C ≤ 4.5 %	JIS G 1211-3
B2.1 Molecular absorption spectrometry: Infrared spectrometry	0.0005 % ≤ C ≤ 0.01 %	JIS G 1211-4
B1.1 Gravimetric analysis: Precipitation gravimetric analysis	0.10 % ≤ Si ≤ 3.19 %	JIS G 1212 4(1)
B2.1 Molecular absorption spectrometry: Ultraviolet-visible spectrometry	0.01 % ≤ Si ≤ 1.0 %	JIS G 1212 4(3)
B2.1 Molecular absorption spectrometry: Ultraviolet-visible spectrometry	0.01 % ≤ Mn ≤ 7.09 %	JIS G 1213 4 b)



Accreditation No.

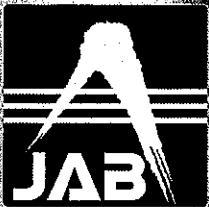
RTL00070

# Accreditation Certificate Appendix

(Page 2/4)

Type of Laboratory	Testing Laboratory	
Name of Laboratory	JFE Techno-Research Corporation Kurashiki Division Analysis for Production Control Dept.	
Address	1-chome, Kawasaki-dori, Mizushima, Kurashiki-city, Okayama, 712-8074 Japan	

CODE & NAME OF TCT <sup>*2</sup>	PROPERTIES MEASURED	TEST METHOD STANDARD / STANDARD OPERATING PROCEDURE
B2.1 Molecular absorption spectrometry: Ultraviolet-visible spectrometry	0.005 % ≤ P ≤ 0.05 %	JIS G 1214 4 a)
B2.1 Molecular absorption spectrometry: Infrared spectrometry	0.001 % ≤ S ≤ 0.06 %	JIS G 1215-4 (except 10.1, 10.2)
B1.2 Volumetric analysis I : Complexometric titration	0.1 % ≤ Ni ≤ 30.0 %	JIS G 1216 4(2)
B2.1 Molecular absorption spectrometry: Ultraviolet-visible spectrometry	0.02 % ≤ Mo ≤ 5.74 %	JIS G 1218 3(2)
B2.1 Molecular absorption spectrometry: Ultraviolet-visible spectrometry	0.001 % ≤ Mo ≤ 0.02 %	JIS G 1218 3(3)
B2.1 Molecular absorption spectrometry: Ultraviolet-visible spectrometry	0.005 % ≤ V ≤ 0.50 %	JIS G 1221 4 c)
B2.1 Molecular absorption spectrometry: Ultraviolet-visible spectrometry	0.0009 % ≤ B ≤ 0.0106 %	JIS G 1227 4 d)
B4.3 Specific thermal conductivity measurement	0.0008 % ≤ N ≤ 0.032 %	JIS G 1228 4 e) (except 7.5.1, 7.5.2, 7.5.3)
B2.4 Atomic emission spectrometry: Spark discharge atomic emission spectrometry	*1	JIS G 1253
B3.1 X-ray fluorescence analysis	*2	JIS G 1256
B2.2 Atomic absorption spectrometry: Flame atomic absorption spectrometry	0.01 % ≤ Ni ≤ 1.0 %	JIS G 1257-3



Accreditation No.

RTL00070

# Accreditation Certificate Appendix

(Page 3/4)

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CODE & NAME OF TCT <sup>*2</sup>	PROPERTIES MEASURED	TEST METHOD STANDARD / STANDARD OPERATING PROCEDURE
B2.2 Atomic absorption spectrometry: Flame atomic absorption spectrometry	0.01 % ≤ Cr ≤ 1.3 %	JIS G 1257-4
B2.2 Atomic absorption spectrometry: Flame atomic absorption spectrometry	0.01 % ≤ Cu ≤ 0.6 %	JIS G 1257-6
B2.2 Atomic absorption spectrometry: Flame atomic absorption spectrometry	0.005 % ≤ Al ≤ 0.1 %	JIS G 1257-10-1
B2.2 Atomic absorption analysis: Flameless atomic absorption spectrometry	0.0005 % ≤ As ≤ 0.0030 %	JIS G 1257-19-1
B2.4 Atomic emission spectrometry: ICP-AES	*3	JIS G 1258-1
B2.4 Atomic emission spectrometry: ICP-AES	*4	JIS G 1258-2
B2.4 Atomic emission spectrometry: ICP-AES	*5	JIS G 1258-3
B2.4 Atomic emission spectrometry: ICP-AES	0.0101 % ≤ Nb ≤ 0.49 %	JIS G 1258-4
B2.2 Atomic absorption spectrometry: Flame atomic absorption spectrometry	10 mg/kg ≤ Cd ≤ 100 mg/kg 10 mg/kg ≤ Pb ≤ 1000 mg/kg	IEC 62321-5
B2.2 Atomic absorption spectrometry: Cold vapor atomic absorption spectrometry	4 mg/kg ≤ Hg ≤ 1000 mg/kg	IEC 62321-4
B2.1 Molecular absorption spectrometry: Ultraviolet-visible spectrometry	Cr(VI) ≥ 0.05 µg/cm <sup>2</sup>	JIS H 8625 Annex 2 4.1



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(Page 4/4)

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CODE & NAME OF TCT <sup>*2</sup>	PROPERTIES MEASURED			TEST METHOD STANDARD / STANDARD OPERATING PROCEDURE		
(Note)						
*1 : 0.01 % 0.034 % 0.0021 % 0.01 % 0.001 % 0.003 % 0.011 % 0.003 %	≤ C ≤ Mn ≤ S ≤ Ni ≤ Mo ≤ V ≤ Nb ≤ Co	≤ 1.03 %, ≤ 1.88 %, ≤ 0.036 %, ≤ 9.94 %, ≤ 2.08 %, ≤ 1.50 %, ≤ 0.223 %, ≤ 0.20 %	0.02 % 0.006 % 0.01 % 0.01 % 0.0010 % 0.007 % 0.006 % 0.006 %	≤ Si ≤ P ≤ Cu ≤ Cr ≤ B ≤ Al ≤ Ti ≤	≤ 3.02 %, ≤ 0.128 %, ≤ 0.44 %, ≤ 15.27 %, ≤ 0.0031 %, ≤ 1.06 %, ≤ 0.35 %, ≤	
*2 : 0.03 % 0.006 % 0.010 % 0.001 % 0.003 %	≤ Si ≤ P ≤ Ni ≤ Mo ≤ V	≤ 3.02 %, ≤ 0.128 %, ≤ 9.94 %, ≤ 2.08 %, ≤ 1.50 %,	0.034 % 0.0021 % 0.01 % 0.01 % 0.006 %	≤ Mn ≤ S ≤ Cr ≤ Cu ≤ Ti	≤ 1.88 %, ≤ 0.036 %, ≤ 15.27 %, ≤ 0.44 %, ≤ 0.35 %	
*3 : 0.01 % 0.003 % 0.01 % 0.01 % 0.003 % 0.005 %	≤ Si ≤ P ≤ Cr ≤ Cu ≤ Co ≤ Al	≤ 0.60 %, ≤ 0.10 %, ≤ 3.00 %, ≤ 0.50 %, ≤ 0.20 %, ≤ 0.10 %	0.01 % 0.01 % 0.01 % 0.002 % 0.006 % 0.005 %	≤ Mn ≤ Ni ≤ Mo ≤ V ≤ Ti ≤	≤ 2.00 %, ≤ 4.00 %, ≤ 1.20 %, ≤ 0.50 %, ≤ 0.30 %, ≤	
*4 : 0.01 % 0.01 % 0.01 % 0.01 % 0.006 %	≤ Mn ≤ Cr ≤ Cu ≤ V ≤ Ti	≤ 7.09 %, ≤ 24.68 %, ≤ 1.47 %, ≤ 3.25 %, ≤ 1.23 %,	0.01 % 0.01 % 0.10 % 0.01 % 0.0101 %	≤ Ni ≤ Mo ≤ W ≤ Co ≤ Nb	≤ 30.0 %, ≤ 5.47 %, ≤ 10.0 %, ≤ 12.46 %, ≤ 0.49 %	
*5 : 0.10 % 0.003 % 0.03 % 0.01 % 0.01 % 0.005 %	≤ Si ≤ P ≤ Cr ≤ Cu ≤ Co ≤ Al	≤ 1.02 %, ≤ 0.10 %, ≤ 24.68 %, ≤ 1.47 %, ≤ 1.0 %, ≤ 1.23 %	0.01 % 0.02 % 0.10 % 0.01 % 0.006 % 0.005 %	≤ Mn ≤ Ni ≤ Mo ≤ V ≤ Ti ≤	≤ 7.09 %, ≤ 10.0 %, ≤ 3.0 %, ≤ 1.0 %, ≤ 2.5 %, ≤	

# Japan Accreditation Board