



JAB



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 17025:2005 (ISO/IEC 17025:2005)
Scope of accreditation	: Chemical testing (As described in the appendix)
Premises covered by accreditation	: As described in the appendix.
Expiry date of accreditation	: November 30, 2021

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system.

The management system requirements in ISO/IEC 17025:2005 meet the principles of ISO 9001:2008 and are aligned with its pertinent requirements.

Renewed (6)	October 2, 2017
Initial accreditation	November 5, 1997

T. Oda, Chairman
Laboratory Accreditation Committee

Y. Mizuka, President
Japan Accreditation Board

Accreditation No.

RTL00070

Accreditation Certificate

Appendix

(Page 1/4)



JAB



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-shi, 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		

Scope of Accreditation

FIELD	M26 Chemical Testing
CODE OF CIT*1	M26.A1
NAME OF CIT	Metal:Iron and steel

*1 CIT: Classification of Item to be Tested

*2 TCT: Technical Classification of Test

CODE & NAME OF TCT*2	PROPERTIES MEASURED	TEST METHOD STANDARD / STANDARD OPERATING PROCEDURE
B2.1 Absorption spectrophotometry: Infrared spectroscopic analysis	$0.001 \% \leq C \leq 4.5 \%$	JIS G 1211-3
B2.1 Absorption spectrophotometry: Infrared spectroscopic analysis	$0.0005 \% \leq C \leq 0.01 \%$	JIS G 1211-4
B1.1 Gravimetric analysis: Precipitation gravimetry	$0.10 \% \leq Si \leq 3.19 \%$	JIS G 1212 4(1)
B2.1 Absorption spectrophotometry: UV-visible spectroscopy	$0.01 \% \leq Si \leq 1.0 \%$	JIS G 1212 4(3)
B2.1 Absorption spectrophotometry: UV-visible spectroscopy	$0.01 \% \leq Mn \leq 7.09 \%$	JIS G 1213 4 b)
B2.1 Absorption spectrophotometry:UV-visible spectroscopy	$0.005 \% \leq P \leq 0.05 \%$	JIS G 1214 4 a)

Accreditation Certificate

Appendix

(Page 2/4)



JAB



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*2	PROPERTIES MEASURED	TEST METHOD STANDARD / STANDARD OPERATING PROCEDURE
B2.1 Absorption spectrophotometry: Infrared spectroscopic analysis	$0.001 \% \leq S \leq 0.06 \%$	JIS G 1215-4 (except 7.6.1, 7.6.2)
B1.2 Volumetric analysis: Complexometry	$0.1 \% \leq Ni \leq 30.0 \%$	JIS G 1216 4(2)
B2.1 Absorption spectrophotometry: UV-visible spectroscopy	$0.02 \% \leq Mo \leq 5.74 \%$	JIS G 1218 3(2)
B2.1 Absorption spectrophotometry: UV-visible spectroscopy	$0.001 \% \leq Mo \leq 0.02 \%$	JIS G 1218 3(3)
B2.1 Absorption spectrophotometry: UV-visible spectroscopy	$0.005 \% \leq V \leq 0.50 \%$	JIS G 1221 4 c)
B2.1 Absorption spectrophotometry: UV-visible spectroscopy	$0.0009 \% \leq B \leq 0.0106 \%$	JIS G 1227 4 d)
B4.3 Thermal conductivity measurement	$0.0008 \% \leq N \leq 0.032 \%$	JIS G 1228 4 d)
B2.4 Emission spectroscopic analysis: Spark discharge optical emission spectroscopy	*1	JIS G 1253
B3.1 Fluorescent X-ray analysis	*2	JIS G 1256
B2.2 Atomic absorption analysis: Flame atomic absorption spectrometry	$0.01 \% \leq Ni \leq 1.0 \%$	JIS G 1257- 3
B2.2 Atomic absorption analysis: Flame atomic absorption spectrometry	$0.01 \% \leq Cr \leq 1.3 \%$	JIS G 1257-4

Accreditation Certificate

Appendix



JAB



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*2	PROPERTIES MEASURED	TEST METHOD STANDARD / STANDARD OPERATING PROCEDURE
B2.2 Atomic absorption analysis: Flame atomic absorption spectrometry	0.01% \leq Cu \leq 0.6 %	JIS G 1257-6
B2.2 Atomic absorption analysis: Flame atomic absorption spectrometry	0.005 % \leq Al \leq 0.1 %	JIS G 1257-10-1
B2.4 Emission spectroscopic analysis: ICP-AES	*3	JIS G 1258-1
B2.4 Emission spectroscopic analysis: ICP-AES	*4	JIS G 1258-2
B2.4 Emission spectroscopic analysis: ICP-AES	*5	JIS G 1258-3
B2.4 Emission spectroscopic analysis: ICP-AES	0.0101 % \leq Nb \leq 0.49 %	JIS G 1258-4

(Note)

*1 : 0.01 % \leq C \leq 1.03 %, 0.02 % \leq Si \leq 3.02 %,
 0.034 % \leq Mn \leq 1.88 %, 0.006 % \leq P \leq 0.128 %,
 0.0021 % \leq S \leq 0.036 %, 0.01 % \leq Cu \leq 0.44 %,
 0.01 % \leq Ni \leq 9.94 %, 0.01 % \leq Cr \leq 15.27 %,
 0.001 % \leq Mo \leq 2.08 %, 0.0010 % \leq B \leq 0.0031 %,
 0.003 % \leq V \leq 1.50 %, 0.007 % \leq Al \leq 1.06 %,
 0.011 % \leq Nb \leq 0.223 %, 0.006 % \leq Ti \leq 0.35 %,
 0.003 % \leq Co \leq 0.20 %

*2 : 0.03 % \leq Si \leq 3.02 %, 0.034 % \leq Mn \leq 1.88 %,
 0.006 % \leq P \leq 0.128 %, 0.0021 % \leq S \leq 0.036 %,
 0.010 % \leq Ni \leq 9.94 %, 0.01 % \leq Cr \leq 15.27 %,
 0.001 % \leq Mo \leq 2.08 %, 0.01 % \leq Cu \leq 0.44 %,
 0.003 % \leq V \leq 1.50 %, 0.006 % \leq Ti \leq 0.35 %

Accreditation Certificate

Appendix

(Page 4/4)



JAB



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*2	PROPERTIES MEASURED	TEST METHOD STANDARD / STANDARD OPERATING PROCEDURE
*3 : 0.01 % ≤ Si ≤ 0.60 % 0.003 % ≤ P ≤ 0.10 % 0.01 % ≤ Cr ≤ 3.00 % 0.01 % ≤ Cu ≤ 0.50 % 0.003 % ≤ Co ≤ 0.20 % 0.005 % ≤ Al ≤ 0.10 %	0.01 % ≤ Mn ≤ 2.00 % 0.01 % ≤ Ni ≤ 4.00 % 0.01 % ≤ Mo ≤ 1.20 % 0.002 % ≤ V ≤ 0.50 % 0.006 % ≤ Ti ≤ 0.30 %	
*4 : 0.01 % ≤ Mn ≤ 7.09 % 0.01 % ≤ Cr ≤ 24.68 % 0.01 % ≤ Cu ≤ 1.47 % 0.01 % ≤ V ≤ 3.25 % 0.006 % ≤ Ti ≤ 1.23 %	0.01 % ≤ Ni ≤ 30.0 % 0.01 % ≤ Mo ≤ 5.47 % 0.10 % ≤ W ≤ 10.0 % 0.01 % ≤ Co ≤ 12.46 % 0.0101 % ≤ Nb ≤ 0.49 %	
*5 : 0.10 % ≤ Si ≤ 1.02 % 0.003 % ≤ P ≤ 0.10 % 0.03 % ≤ Cr ≤ 24.68 % 0.01 % ≤ Cu ≤ 1.47 % 0.01 % ≤ Co ≤ 1.0 % 0.005 % ≤ Al ≤ 1.23 %	0.01 % ≤ Mn ≤ 7.09 % 0.02 % ≤ Ni ≤ 10.0 % 0.10 % ≤ Mo ≤ 3.0 % 0.01 % ≤ V ≤ 1.0 % 0.006 % ≤ Ti ≤ 2.5 %	

Japan Accreditation Board