



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 17025:2018 (ISO/IEC 17025:2017)
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

Revised (18)	June 5, 2019
Renewed (6)	October 2, 2017
Initial accreditation	November 5, 1997

Y. Iizuka, President

Japan Accreditation Board

Accreditation No.

RTL00070

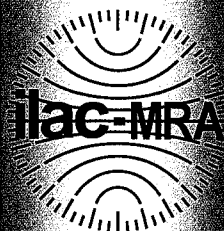
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Type of Laboratory	Testing Laboratory
Name of Laboratory	JFE Techno-Research Corporation Kurashiki Division Analysis for Production Control Dept.
Address	1-chome, Kawasaki-dori, Mizushima, Kurashiki-city, Okayama, 712-8074 Japan

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, Related products

*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)

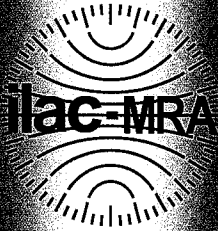
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Type of Laboratory	Testing Laboratory
Name of Laboratory	JFE Techno-Research Corporation Kurashiki Division Analysis for Production Control Dept.
Address	1-chome, Kawasaki-dori, Mizushima, Kurashiki-city, Okayama, 712-8074 Japan

CODE & NAME OF TCT*2	PROPERTIES MEASURED	TEST METHOD STANDARD / STANDARD OPERATING PROCEDURE
B2.1 Absorption spectrophotometry:UV-visible spectroscopy	$0.005 \% \leq P \leq 0.05 \%$	JIS G 1214 4 a)
B2.1 Absorption spectrophotometry:Infrared spectroscopic analysis	$0.001 \% \leq S \leq 0.06 \%$	JIS G 1215-4 (except 10.1, 10.2)
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

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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% ≤ Cr ≤ 1.3%	JIS G 1257-4
B2.2 Atomic absorption analysis:Flame atomic absorption spectrometry	0.01% ≤ Cu ≤ 0.6%	JIS G 1257-6
B2.2 Atomic absorption analysis:Flame atomic absorption spectrometry	0.005% ≤ Al ≤ 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% ≤ Nb ≤ 0.49%	JIS G 1258-4
B2.2 Atomic absorption analysis: 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 analysis: Cold vapor atomic absorption analysis	4 mg/kg ≤ Hg ≤ 1000 mg/kg	IEC 62321-4
B2.1 Absorption spectrophotometry UV-visible spectroscopy	Cr(VI) ≥ 0.05 μg/cm ²	JIS H 8625 Annex 2 4.1
(Note)		
*1 : 0.01% ≤ C ≤ 1.03%, 0.02% ≤ Si ≤ 3.02%, 0.034% ≤ Mn ≤ 1.88%, 0.006% ≤ P ≤ 0.128%, 0.0021% ≤ S ≤ 0.036%, 0.01% ≤ Cu ≤ 0.44%, 0.01% ≤ Ni ≤ 9.94%, 0.01% ≤ Cr ≤ 15.27%, 0.001% ≤ Mo ≤ 2.08%, 0.0010% ≤ B ≤ 0.0031%,		

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

Japan Accreditation Board