

中国船级社 CHINA CLASSIFICATION SOCIETY 工厂认可证书

证书编号/Certificate No. DB25PWA00001

CERTIFICATE OF WORKS APPROVAL

兹证明本证书所述制造厂具备按照下列标准的要求生产本证书所列产品的能力和条件。

This is to certify that the manufacturer stated in the certificate meets the requirements of the standards listed below and is available with the ability and conditions to produce the products described in the certificate.

制造厂/Manufacturer

Ibaraki Plant, Welding Division, Kobe Steel, Ltd.

地址/Address

2-19, Higashiunobe-cho, Ibaraki-shi, Osaka-fu, Japan

产品名称/Product

焊接材料

MARINE WELDING CONSUMABLE

附加标志/Notations

无/Ni1.

认可标准/Approval Standard

1. 中国船级社《材料与焊接规范》第3篇第2章

Chapter 2, Part Three of China Classification Society Rules for Materials and Welding

用于/Intended for

船舶/Ships

产品明细/Product Description

船用焊接材料/Marine Welding Materials (M0001)

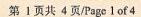
名称/Name	属性(值)/Value	单位/Unit	
产品名称/Product Name	Refer to Additional Page(s)		
牌号 (型号) /Brand (Model)	Refer to Additional Page(s)		
等级/Grade	Refer to Additional Page(s)		
规格/Specification	Refer to Additional Page(s)		
焊接位置/Welding Position	Refer to Additional Page(s)		
电流极性/Current Polarity	Refer to Additional Page(s)		
保护气体/Gas Shield	Refer to Additional Page(s)		

证书有效期至/This Certificate is valid until 2030年10月11日/Oct. 11,2030

发证机构 中国船级社大阪分补 Issued by CCS Osaka Branch

2025年09月22日 Sep. 22,2025

UTN:P025-83004645



批准的图纸/Approved Drawings

图纸批准号/ Drawings Approval No.: 无/Nil.

产品认可试验报告/ Approval Test Report

```
试验报告编号/ Test Report No.: --
试验报告日期/ Test Report Date: 2013-04-26
试验单位/ Laboratory: Fujisawa Plant, Kobe Steel, Ltd.
试验单位地址/ Test Address: 100-1 Miyamae, Fujisawa City, Kanagawa Prefecture, Japan
试验报告编号/ Test Report No.: --
试验报告日期/ Test Report Date: 2013-06-26
试验单位/ Laboratory: Fujisawa Plant, Kobe Steel, Ltd.
试验单位地址/ Test Address: 100-1 Miyamae, Fujisawa City, Kanagawa Prefecture, Japan
试验报告编号/ Test Report No.: -
试验报告日期/ Test Report Date: 2013-07-03
试验单位/Laboratory: Fujisawa Plant, Kobe Steel, Ltd.
试验单位地址/ Test Address: 100-1 Miyamae, Fujisawa City, Kanagawa Prefecture, Japan
试验报告编号/ Test Report No.: -
试验报告日期/ Test Report Date: 2013-10-03
试验单位/ Laboratory: Fujisawa Plant, Kobe Steel, Ltd.
试验单位地址/ Test Address: 100-1 Miyamae, Fujisawa City, Kanagawa Prefecture, Japan
试验报告编号/ Test Report No.: -
试验报告日期/ Test Report Date: 2014-07-31
试验单位/ Laboratory: Fujisawa Plant, Kobe Steel, Ltd.
试验单位地址/ Test Address: 100-1 Miyamae, Fujisawa City, Kanagawa Prefecture, Japan
试验报告编号/ Test Report No.: --
试验报告日期/ Test Report Date: 2014-10-03
试验单位/ Laboratory: Fujisawa Plant, Kobe Steel, Ltd.
试验单位地址/ Test Address: 100-1 Miyamae, Fujisawa City, Kanagawa Prefecture, Japan
试验报告编号/ Test Report No.: --
试验报告日期/ Test Report Date: 2015-05-08
试验单位/ Laboratory: Fujisawa Plant, Kobe Steel, Ltd.
试验单位地址/ Test Address: 100-1 Miyamae, Fujisawa City, Kanagawa Prefecture, Japan
试验报告编号/ Test Report No.: --
试验报告日期/ Test Report Date: 2015-06-29
试验单位/ Laboratory: Fujisawa Plant, Kobe Steel, Ltd.
试验单位地址/ Test Address: 100-1 Miyamae, Fujisawa City, Kanagawa Prefecture, Japan
试验报告编号/ Test Report No.: -
试验报告日期/ Test Report Date: 2015-07-16
试验单位/Laboratory: Fujisawa Plant, Kobe Steel, Ltd.
试验单位地址/ Test Address: 100-1 Miyamae, Fujisawa City, Kanagawa Prefecture, Japan
试验报告编号/ Test Report No.: -
试验报告日期/ Test Report Date: 2016-10-17
试验单位/ Laboratory: Fujisawa Plant, Kobe Steel, Ltd.
试验单位地址/ Test Address: 100-1 Miyamae, Fujisawa City, Kanagawa Prefecture, Japan
试验报告编号/ Test Report No. : 一
试验报告日期/ Test Report Date: 2017-12-27
试验单位/Laboratory: Fujisawa Plant, Kobe Steel, Ltd.
试验单位地址/ Test Address: 100-1 Miyamae, Fujisawa City, Kanagawa Prefecture, Japan
```

第 2 页 共 4 页 / Page 2 of 4

```
试验报告编号/ Test Report No.: DB19PWA00020
试验报告日期/ Test Report Date: 2019-11-24
试验单位/ Laboratory: Fujisawa Plant, Kobe Steel, Ltd.
试验单位地址/ Test Address: 100-1 Miyamae, Fujisawa City, Kanagawa Prefecture, Japan
试验报告编号/ Test Report No.: DB20PWA00017
试验报告日期/ Test Report Date: 2020-07-22
试验单位/ Laboratory: Fujisawa Plant, Kobe Steel, Ltd.
试验单位地址/ Test Address: 100-1 Miyamae, Fujisawa City, Kanagawa Prefecture, Japan
试验报告编号/ Test Report No.: DB21PWA00004
试验报告日期/ Test Report Date: 2021-03-05
试验单位/ Laboratory: Fujisawa Plant, Kobe Steel, Ltd.
试验单位地址/ Test Address: 100-1 Miyamae, Fujisawa City, Kanagawa Prefecture, Japan
试验报告编号/ Test Report No.: DB21PWA00004
试验报告日期/ Test Report Date: 2021-05-14
试验单位/ Laboratory: Fujisawa Plant, Kobe Steel, Ltd.
试验单位地址/ Test Address: 100-1 Miyamae, Fujisawa City, Kanagawa Prefecture, Japan
试验报告编号/ Test Report No.: DB21PWA00004
试验报告日期/ Test Report Date: 2021-06-28
试验单位/ Laboratory: Fujisawa Plant, Kobe Steel, Ltd.
试验单位地址/ Test Address: 100-1 Miyamae, Fujisawa City, Kanagawa Prefecture, Japan
试验报告编号/ Test Report No.: DB22PWA00015
试验报告日期/ Test Report Date: 2022-07-22
试验单位/ Laboratory: Fujisawa Plant, Kobe Steel, Ltd.
试验单位地址/ Test Address: 100-1 Miyamae, Fujisawa City, Kanagawa Prefecture, Japan
试验报告编号/ Test Report No.: DB23PWA00007
试验报告日期/ Test Report Date: 2023-03-10
试验单位/ Laboratory: Fujisawa Plant, Kobe Steel, Ltd.
试验单位地址/ Test Address: 100-1 Miyamae, Fujisawa City, Kanagawa Prefecture, Japan
试验报告编号/ Test Report No.: DB23PWA00019
试验报告日期/ Test Report Date: 2023-07-10
试验单位/ Laboratory: Fujisawa Plant, Kobe Steel, Ltd.
试验单位地址/ Test Address: 100-1 Miyamae, Fujisawa City, Kanagawa Prefecture, Japan
试验报告编号/ Test Report No.: DB24PWA00003
试验报告日期/ Test Report Date: 2024-08-09
试验单位/ Laboratory: Fujisawa Plant, Kobe Steel, Ltd.
试验单位地址/ Test Address: 100-1 Miyamae, Fujisawa City, Kanagawa Prefecture, Japan
试验报告编号/ Test Report No.: DB25PWA00001
试验报告日期/ Test Report Date: 2025-09-22
试验单位/Laboratory: Fujisawa Plant, Kobe Steel, Ltd.
试验单位地址/ Test Address: 100-1 Miyamae, Fujisawa City, Kanagawa Prefecture, Japan
```

认可后的产品检验方式/Method of Product Inspection after Approval

按规范只认可不进行产品检验的产品/The product approved only in term of the rules: 认可后的产品由制造厂检验合格后签发合格证明,并连同该产品的本社认可证书复印件一并交付用户,制造厂对产品符合公约、法规、本社规范和本社认可的标准规定负责。

After approval, product inspection should be carried out by the Manufacturer. Upon satisfactory inspection, and the Quality Certificate issued by the Manufacturer should be provided to the purchaser together with the copy of the approval certificate issued by the Society. The manufacturer should take responsibility for the product being in compliance with the convention, statutory regulation, the Society rules and the standard accepted by the Society.

认可保持条件/Maintenance Requirements of Approval

第 3 页 共 4 页 / Page 3 of 4

1. 工厂认可后,如果图纸、技术文件、工艺规程有较大改变,应征得本社同意。若改变涉及或影响到产品的设计、主要制造材料、关键工艺或产品的特性、特征,则与特性有关的图纸和技术文件应经过本社审批,并在检验机构认为必要时,经本社检验人员到厂进行检查和见证有关试验,其结果应能证实仍符合认可条件。

After works approval, if there are any major changes to the drawings, technical documents, specifications, prior consent should be obtained from the survey office of the Society. If the changes involve or affect product design, major construction materials, key workmanship or product characteristics and properties, drawings and technical documents related to properties are to be examined and approved by the Society and, where deemed necessary by the survey office, the surveyor to the Society will go to the manufacturer to inspect or witness relevant tests and the results of the tests should be able to demonstrate compliance with the approval conditions 2. T厂的质量管理体系应保持有效运行。并且与认可时一致。如果质量管理体系发生改变、应经原体系认证机构自核

2. 工厂的质量管理体系应保持有效运行,并且与认可时一致。如果质量管理体系发生改变,应经原体系认证机构审核并报本社批准。

The quality management system of the factory shall be ensure effective operation, and shall be the same as the situation of approval. If there are any changes to the quality management system, auditing of the original certification organization for quality management system and the society's approval shall be obtained.

3. 工厂认可证书获得者应接受本社每年一次的定期审核,定期审核日为认可证书期满之日对应的每一周年日,检查工作应在定期审核日的前后三个月内进行。

Those who have obtained the certificate of works approval shall receive periodical audit done by the Society on an annual basis. The date of periodical audit shall be each anniversary date which corresponds to the date of expiry of the relevant certificate and the periodical audit shall be done within a time span of three months before and after the annual surveillance date.

4. 在认可证书有效期内,本社检验人员可在未经事先通知的情况下对工厂的产品制造过程进行审核,以验证产品的生产是否符合业经本社批准的图纸和文件。工厂应予以配合。

Within the validity of the approval certificate, the surveyor to the Society may pay unannounced audit to the manufacturing process of the product in order to confirm whether it is in compliance with the drawings and documents approved by the Society. The factory should provide an active cooperation and necessary for the surveyor.

5.认可证书有效期内,如果出现可能导致本社暂停或撤消认可的情况,工厂应及时采取有效的纠正措施。 Within the validity of the approval certificate, if cases occur that may cause the Society to suspend or withdraw the certificate, the manufacturer should take corrective actions in a prompt and effective manner.

备注/Remarks

1. 本证书由原工厂认可证书 (No. DB24PWA00003) 换新并替代原证书。

This certificate is renewed from and supersedes the previous Works Approval Certificate No. DB24PWA00003.

- 2.本社已审核了产品厂无石棉声明,但本社的审核不免除产品厂按照合同关系向订货方保证产品无石棉的责任。 The declaration of asbestos-free submitted by manufacturer has been reviewed by the Society. However, liability of the manufacturer to guarantee the products are asbestos-free to purchaser under contract will not be exempted.
- 3. When to be used in deep cryogenic cases, $-196\,^{\circ}\mathrm{C}$ Charpy test temperature for the following types of welding consumables should be imposed:
- (1) NI-C70S
- (2) DW-N709SP/Ar-C02
- (3) DW-N609SV/CO2
- (4) DW-N609S/C02

中国船级社大阪分社

CCS Osaka Branch

注: 本证书含有附页, 共2页

Note: The certificate is attached with additional 2 page(s)

Name of	Brand	Gas	Grade	Position	Current	Specification
Consumable	(Model)	Shield	Graue	1 OSITION	Polarity	(mm)
Flux-cored wire-gas		CO2	2S H10			Ф1.2
Combination for	DW-100			F, Vu, H, OH	DCEP	Ф1.4
semi-Automatic welding		(C1)	2YS H10	H-Fillet, Vd-Fillet		Ф1.6
Flux-cored wire-gas		GOA				Ф1,2
Combination for	DW-100E	CO2	3YS H10	F, H, Vu, Vd, OH	DCEP	Ф1.4
semi-Automatic welding		(C1)				Ф1,6
Flux-cored wire-gas		CO2 (C1)	2YSH5	F F-Fillet, H-Fillet	DCEP	Ф1.2
Combination for	MX-200					Ф1.4
semi-Automatic welding						Ф1.6
Flux-cored wire-gas						
Combination for	MX-200H(X2)	CO2	3YM	H-Fillet	DCEP	Ф1.4, Ф1.
automatic welding		(C1)				
Flux-cored wire-gas						
Combination for	DW-55L	CO2	5Y40S H5	F, H, Vu, Vd, OH	DCEP	Ф1.2, Ф1.
semi-Automatic welding		(C1)	0.100110	1,11, 10, 10, 011		
Flux-cored wire-gas				F, H, Vu, Vd, OH	DCEP	Ф1.2
Combination for	DW-A55L	Ar-CO2	5Y46S H5			
semi-Automatic welding		(M21)				
Marine Electrode for		-	3Y50 H10	F, H, Vu, OH	AC/DC	Ф3.2, Ф4.
Manual Arc welding	LB-62UL					Ф5.0, Ф6.
A TOTAL STATE OF THE STATE OF T						Ф3.2
Marine Electrode for	LB-80UL		3Y69 H5	F, H, Vu, OH	AC/DC	Ф4.0
Manual Arc welding						
		_	AS2-B	F, H, Vu, OH	AC/DC	Ф5.0
Marine Electrode for	NC-39					Ф3.2, Ф4.
Manual Arc welding	110 05					Ф5.0, Ф6.
Flux-cored wire-gas						Ψ3.0, Ψ6.
Combination for	DW-100V	CO2 (C1)	2YS H10	F, H, Vu, Vd, OH	DCEP	Ф1.2
semi-Automatic welding	DW-1007					Ф1,4
Flux-cored wire-gas						
Combination for	DW-100V/FB-B3	CO2 (C1)	2YS H10	F, H, Vu	DCEP	Ф1.2
	DW-100 V/1 D-D3					Ф1.4
semi-Automatic welding Flux-cored wire-gas						Ф1.2
Combination for	DW-Z100	CO2	2Y40S H10	F, H, Vu, Vd, OH	DCEP	
	DW-2100	(C1)	214051110	1,11, 70, 70, 011	DCEP	Ф1.4
semi-Automatic welding *Flux-cored						Ф1.6
Wire/Backing material		CO2 (C1)	3Y	Vu	DCEP	Ф1.6
combination gas shield	DW-S43G/KL-4					
for electrogas arc welding *Flux-cored						
Wire/Backing material		CO2		Vu	DCEP	Ф1.6
	DW-S1LG/KL-4	CO2	5Y40			
combination gas shield		(C1)				
for electrogas arc welding						

证书编号/Certificate No.:DB25PWA00001 1/2

Marine Electrode for Manual Arc welding	NI-C70S	-	9Ni	F, H, Vu, OH	AC	Ф3.2 Ф4.0 Ф5.0
Flux Cored Wire/Gas		CO2	4Y40S H5	F, H, Vu, Vd, OH	DCEP	Ф1.2, Ф1.4
Combination for semi-Automatic welding	DW-55E	(C1)		F, H, Vu		Ф1.6
Flux Cored Wire/Gas Combination for semi-Automatic welding	DW-55E/FB-B3	CO2 (C1)	4Y40S	F, H, Vu	DCEP	Ф1.2 Ф1.4 Ф1.6
Flux Cored Wire/Gas Combination	DW-A55LSR	Ar-CO2 (M21)	5Y42S H5	F, H, Vu, OH	DCEP	Ф1.2
Flux Cored Wire/Gas Combination	DW-100RK	CO2 (C1)	2YS,2YM, H10	HF, Vu-Fillet	DCEP	Ф1.4
Covered Electrode	LB-80L	-	5Y69 H5	F, H (Φ2.6-Φ5.0) Vu, OH (Φ2.6-Φ4.0) HF (Φ5.0)	DCEP	Ф2.6-Ф4.0
Flux Cored Wire/Gas Combination	DW-460L	CO2 (C1)	For YP47 Steel Plates	F, H, Vu, OH	DCEP	Ф1.2-Ф1.4
Covered Electrode	LB-83E	-	4Y69 H5	F, H, HF (Φ3.2-Φ5.0) Vu, OH (Φ3.2-Φ4.0)	DCEP	Ф3.2-Ф5.0
Flux Cored Wire	DW-309LP	CO2 (C1)	309L	F, H, Vu, OH	DCEP	Ф1,2
Flux Cored Wire	DW-329AP	Ar-CO2 (M21)	2205	F, H, Vu, OH, HF	DCEP	Ф1.2
Flux Cored Wire	DW-329AP	CO2 (C1)	2205	F, H, Vu, OH, HF	DCEP	Ф1,2
Flux Cored Wire	DW- N609SV	CO2 (C1)	9Ni	F, Vu, HF	DCEP	Ф1.2
Flux Cored Wire	DW- N609S	CO2 (C1)	9Ni	F, H, Vu, HF	DCEP	Ф1.2
Flux Cored Wire	DW-N709SP	Ar-CO2 (M21)	9Ni	F, H, Vu, HF	DCEP	Ф1.2

^{*}Flux-cored Wire DW-S43G and DW-S1LG Combined with Backing Material KL-4. Notes:

(1) Welding Position:

F----- Flat position welding; H ----- Horizontal welding

Vu--- Vertical-up position welding; Vd ---- Vertical-down position welding HF--- Horizontal-vertical fillet welding; OH --- Overhead position welding

(2) Current Polarity:

AC---- Alternating Current; DC----Direct Current

DCEN--Direct current electrode negative DCEP-Direct current electrode positive;

