



Bremick Pty Ltd

ABN 68 000 496 131

290 Kurrajong Road

Prestons 2170 NSW

PO Box 6070

Alexandria NSW 2015

Tel: +61 2 8332 1501

Fax: +61 2 9690 1474

ATTESTATION OF PRODUCT CONFORMITY

TEST REPORT NUMBER: 54355-20090-824010833

DATE OF ISSUE: 24/05/2024

CERTIFICATE NUMBER: 00120Q31689R6M/3302

Bremick Fasteners manufactured K0 8.8 STRUCTURAL ASSEMBLIES M20 x 90, job number 54355 to meet the technical requirements of AS/NZS 1252.1:2016, and comply with the verification testing requirements of AS/NZS 1252.2:2016.

Initial Type Third Party Testing has been conducted by Ningbo Zhongji Inspection of Machinery Parts Co, Ltd, an ILAC accredited laboratory.

The Assembly Test requirements (as required by AS/NZS1252.2:2016) have also been conducted by the same ILAC Laboratory.

The remainder of the testing requirements for AS/NZS 1252.2:2016 have been performed by the Bremick NATA accredited Laboratory that complies to ISO/IEC 17025. The Bremick NATA accreditation number is 15567.

Product K0 8.8 STRUCTURAL ASSEMBLIES M20 x 90, job number 54355 has been tested and complies with AS/NZS 1252.1:2016 and AS/NZS 1252.2:2016 and are supported by the attached documentation.

Authorised Bremick representative

A handwritten signature in black ink, appearing to read "Afshin Mohammadiazar".

Afshin Mohammadiazar,
Quality and Technical Manager

Certificate of Conformity of Factory Production Control

This certificate is issued to:

Manufacturer: Bremick PTY LTD

Approved factory No. 3

In compliance with *Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011* (the Construction Products Regulation or CPR), this certificate applies to the construction product:

High-strength Structural Bolting Assemblies for Preloading

This certificate attests that all provisions concerning the assessment and verification of constancy of performance and the performances described in Annex ZA of the standard(s)

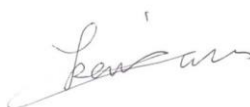
EN 14399-1:2015 High-strength Structural Bolting Assemblies for Preloading
– Part 1: General Requirements

under system 2+ are applied and that the factory production controls fulfil all the prescribed requirements set out above.

The attached Schedule, of the same date, details the manufacturing location(s), harmonised product standard and product parameters and shall form a part of this certificate.

This Certificate will remain valid as long as the test methods and/or factory production control requirements included in the harmonised standard, used to assess the performance of the declared characteristics, do not change, and the product, and the manufacturing conditions in the plant are not modified significantly.

Certificate No:	0343/CPR/SHA/BJG6041035/01
Original Approval:	10 November 2016
Current Certificate:	01 April 2024
Expiry Date:	09 November 2025
LRQA Notified Body Number:	0343



Kevin Wu on behalf of LRQA Nederland B.V.

Certificate of Conformity of Factory Production Control No: 0343/CPR/SHA/BJG6041035/01 Schedule

Manufacturer: Bremick PTY LTD

Approved factory No. 3

Manufacturing Location and Products	Standard, Grade and Size
Bremick approved factory 3	
-Bolt	EN14399-3
-Nut	M (12-36) X (30-200) — 8.8/10.9 — HR
	M (12-36) — 8/10—HR
-Bolt	EN14399-4
-Nut	M (12-36) X (30-200) — 10.9 — HV
	M (12-36) — 10 — HV
-Bolt	EN14399-10
-Nut	M (12-36) X (30-200) —10.9 — HRC
	M (12-36) — 10 — HRC
-Washer	EN14399-5
	D (12-36)
-Washer	EN14399-6
	D (12-36)

Remark of finished surface coating type: hot dip galvanizing, electrolytic zinc plating, black/self-color

Schedule Issue: 03

Date of Schedule Issue: 01 April 2024

LRQA Notified Body Number 0343



Kevin Wu on behalf of LRQA Nederland B.V.

Structural Assembly K0 Range

TEST REPORT No: 54355-20090-824010833 DATE OF ISSUE: 24/05/2024 HEAD No:

Product Information

CODE	K08MG200901	JOB NUMBER	54355
DESCRIPTION	K0 8.8 STRUCTURAL ASSEMBLIES M20 x 90	MANUFACTURE LOT QTY	1800
STANDARD	AS 1252.1-2016	TEST QTY	5
QUALITY SYSTEM	GB/T19001-2016/ISO9001:2015	CERTIFICATE NUMBER	00120Q31689R6M/3302

Chemical Composition Complies to ISO898.1-2/AS4291.1-2

PART	HEAT No	C %	Mn %	P %	S %	B %
REQUIRED		0.25-0.55	N/A	0.035 max	0.035 max	0.003 max
BOLT	824010833	0.31	0.76	0.009	0.001	0.0028
REQUIRED		0.58 max	0.25 min	0.060 max	0.150 max	N/A
NUT	G331010233	0.35	0.62	0.016	0.003	0.74
REQUIRED		N/A	N/A	N/A	N/A	N/A
WASHER	HA3154593	0.44	N/A	0.013	0.003	0.72

Mechanical Properties Tested to AS/NZS1252.1-2016 Table B1

BOLT			NUT		
TEST	REQUIREMENT	RESULT	TEST	REQUIREMENT	RESULT
Hardness	d <= 16mm 22-32 HRC d > 16mm 23-34 HRC	27-28	Hardness	24-36 HRC	30-31
Wedge Test 6 °	d <= 16mm 800MPa d > 16mm 830 MPa	951-968	Proof Stress (min)	1165 MPa	PASS
Yield	N/A	758-779	WASHER		
Proof Stress	d <= 16mm 580 MPa d > 16mm 600 MPa	PASS	Hardness	33-41 HRC	36-37

Hardness Test to ASTM E18 - Wedge test and proof load to ISO 898-1, Nut proof load test to AS 1252.1-2016

Assembly Test Tested to AS/NZS1252.1-2016

TEST CONDITIONS				REQUIREMENT			RESULTS		
CLAMP LENGTH (mm)	No. OF SHIMS	ROTATION SPEED	LUBRICATION CONDITIONS	BOLT LENGTH	MIN NUT Rotation °	TENSION kN MINIMUM	SAMPLE No.	NUT ROTATION DEGREES	BOLT TENSION (kN)
60	2	3	Dry to touch	>3d=7d	240	183	SAMPLE 1	248	188
							SAMPLE 2	248	189
							SAMPLE 3	248	189
							SAMPLE 4	248	192
							SAMPLE 5	248	193

Visual, Dimensions, Coating & Markings

VISUAL INSPECTION ISO 6157-1. 2.		DIMENSIONS AS/NZS1252-2016	COATING COMPLIES TO AS/NZS1214 REQUIREMENT 50 min		MARKINGS
PART			TYPE	Av µm	
BOLT	PASS	PASS	HDG	60	Bolt : BF 8.8 THREE RADIAL LINES
NUT	PASS	PASS	HDG	61	Nut : BF 8 THREE ARC LINES
WASHER	PASS	PASS	HDG	62	Washer : THREE NIBS

This certificate complies with AS/NZS1252.1-2016
The results relate only to the item tested

Name: Afshin Mohammadiazar
Position: Quality Manager

Signature : 

TEST REPORT

TEST REPORT No: 54355-20090-824010833

DATE OF ISSUE: 24/05/2024

PRODUCT DETAILS

ITEM CODE	K08MG200901	DESCRIPTION	K0 8.8 STRUCT ASS GAL M20 X 90
BOLT HEAT No.	824010833	MATERIAL STANDARD	AS/NZS 1252-2016
NUT HEAT No.	G331010233	JOB No.	54355
WASHER HEAT No.	HA3154593	HEAD MARK	

BOLT

PROOF LOAD

TEST DATE: 16/12/2024

DESCRIPTION	Proof load testing of class 8.8 Bolt to SOP 22-07, AS/NZS 1252.1 and ISO 898.1				
TEST METHOD	Proof load to ISO 898.1 and ISO 6892-1				TEST TEMP ° C
REQUIREMENTS	Minimum hold time 15 seconds - min proof load			147.00 kN	30
	PROOF LOAD (Kn)	INITIAL LENGTH (mm)	FINAL LENGTH (mm)	CHANGE (mm)	COMPLIANCE
SAMPLE 1	PASS	89.14	89.14	0.01	COMPLIES
SAMPLE 2	PASS	89.05	89.06	0.01	COMPLIES
SAMPLE 3	PASS	89.09	89.09	0.01	COMPLIES

WEDGE LOAD TENSILE TEST

TEST DATE: 16/12/2024

DESCRIPTION	Wedge test of class 8.8 Bolt to SOP 22-05, AS/NZS 1252.1 and ISO 898.1				TEST TEMP ° C
TEST METHOD	Wedge test ISO 898.1 and ISO 6892-1				21
	TENSILE STRENGTH Mpa (Rm)	ULTIMATE TENSILE LOAD Kn (Fm)	WEDGE ANGLE	FRACTURE LOCATION	COMPLIANCE
REQUIREMENTS	830 MIN	203 MIN	6	THREAD	
SAMPLE 1	969	237.50	6	THREAD	COMPLIES
SAMPLE 2	969	237.40	6	THREAD	COMPLIES
SAMPLE 3	963	235.90	6	THREAD	COMPLIES

HARDNESS

TEST DATE: 12/12/2024

DESCRIPTION	K0 8.8 STRUCT ASS GAL M20 X 90- AS/NZS 1252-2016				
TEST METHOD	Rockwell Hardness test using scale "C" from 98N to 147N by the methods of ASTM E18				
REQUIREMENTS	d <= 16mm 22-32 HRC - d > 16mm 23-34 HRC				
	AVERAGE * HARDNESS (HRC)	COMPLIANCE	SAMPLE	AVERAGE * HARDNESS (HRC)	COMPLIANCE
SAMPLE 1	30	COMPLIES	SAMPLE 5	30	COMPLIES
SAMPLE 2	31	COMPLIES	SAMPLE 6	30	COMPLIES
SAMPLE 3	31	COMPLIES	SAMPLE 7	31	COMPLIES
SAMPLE 4	31	COMPLIES	SAMPLE 8	32	COMPLIES

* Average of 5 measurements per sample



M5/M7 Logistics Park, Warehouse 4B,
290 Kurrajong Road, Prestons NSW 2170

Accredited for compliance with
ISO/IEC 17025 - testing.
NATA Accredited Laboratory 15567



TEST REPORT

TEST REPORT No: 54355-20090-824010833

DATE OF ISSUE: 24/05/2024

PRODUCT DETAILS

ITEM CODE	K08MG200901	DESCRIPTION	K0 8.8 STRUCT ASS GAL M20 X 90
BOLT HEAT No.	824010833	MATERIAL STANDARD	AS/NZS 1252-2016
NUT HEAT No.	G331010233	JOB No.	54355
WASHER HEAT No.	HA3154593	HEAD MARK	

NUT

PROOF LOAD

TEST DATE: 12/12/2024

DESCRIPTION	Proof load testing of Nut to SOP 22-09, AS/NZS 1252.1 and ISO 898.2		TEST TEMP °C
TEST METHOD	Proof load to ISO 898.2 and ISO 6892-1		28
REQUIREMENTS	Minimum hold time 15 seconds - Minimum proof load		285.40 kN
	PROOF LOAD (Kn)	NUT REMOVED BY FINGER	COMPLIANCE
SAMPLE 1	PASS	YES	COMPLIES
SAMPLE 2	PASS	YES	COMPLIES
SAMPLE 3	PASS	YES	COMPLIES

HARDNESS

TEST DATE: 12/12/2024

DESCRIPTION	K0 8.8 STRUCT ASS GAL M20 X 90- AS/NZS 1252-2016				
TEST METHOD	Rockwell Hardness test using scale "C" from 98N to 147N by the methods of ASTM E18				
REQUIREMENTS	24 - 36 HRC				
	AVERAGE * HARDNESS (HRC)	COMPLIANCE	SAMPLE	AVERAGE * HARDNESS (HRC)	COMPLIANCE
SAMPLE 1	29	COMPLIES	SAMPLE 5	30	COMPLIES
SAMPLE 2	29	COMPLIES	SAMPLE 6	30	COMPLIES
SAMPLE 3	30	COMPLIES	SAMPLE 7	30	COMPLIES
SAMPLE 4	31	COMPLIES	SAMPLE 8	29	COMPLIES

* Average of 5 measurements per sample



M5/M7 Logistics Park, Warehouse 4B,
290 Kurrajong Road, Prestons NSW 2170

Accredited for compliance with
ISO/IEC 17025 - testing.
NATA Accredited Laboratory 15567



TEST REPORT

TEST REPORT No: 54355-20090-824010833

DATE OF ISSUE: 24/05/2024

PRODUCT DETAILS

ITEM CODE	K08MG200901	DESCRIPTION	K0 8.8 STRUCT ASS GAL M20 X 90
BOLT HEAT No.	824010833	MATERIAL STANDARD	AS/NZS 1252-2016
NUT HEAT No.	G331010233	JOB No.	54355
WASHER HEAT No.	HA3154593	HEAD MARK	

WASHER

HARDNESS

TEST DATE: 12/12/2024

DESCRIPTION	K0 8.8 STRUCT ASS GAL M20 X 90- AS/NZS 1252-2016				
TEST METHOD	Rockwell Hardness test using scale "C" from 98N to 147N by the methods of ASTM E18				
REQUIREMENTS	33 - 41 HRC				
	AVERAGE * HARDNESS (HRC)	COMPLIANCE	SAMPLE	AVERAGE * HARDNESS (HRC)	COMPLIANCE
SAMPLE 1	35	COMPLIES	SAMPLE 5	36	COMPLIES
SAMPLE 2	35	COMPLIES	SAMPLE 6	36	COMPLIES
SAMPLE 3	34	COMPLIES	SAMPLE 7	35	COMPLIES
SAMPLE 4	36	COMPLIES	SAMPLE 8	35	COMPLIES

* Average of 5 measurements per sample

Signed:



Afshin Mohammadiazar

Accredited for compliance with
ISO/IEC 17025 - testing.
NATA Accredited Laboratory 15567



Issue Date:

24/05/2024

Note that this report is based on the products supplied to the laboratory and it remains the responsibility of the client to ensure the samples presented are representative of the whole batch. Reproduction of this report, other than in its entirety, must be approved by Bremick Pty Ltd

The results relate only to the item tested



M5/M7 Logistics Park, Warehouse 4B, 290 Kurrajong Road, Prestons NSW 2170



中国认可
国际互认
检测
TESTING
CNAS L4800

Ningbo Zhongji Inspection of Machinery Parts Co.,Ltd

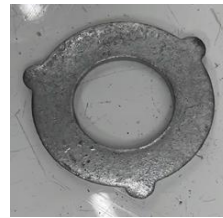
TEST REPORT

Report number: NBZJB202404049

Page 1 of 2

Receiving Date:	27, Mar., 2024
Test Date:	27, Mar., 2024~03, Apr., 2024
Sample Source:	Supplied by client
Name of Client	Bremick Pty Ltd
Address	88 Dalmeny Avenue, Rosebery NSW 2018
Test Requirements	AS/NZS 1252.1:2016 The technical requirement supplied by client

Description	20*90 HDG 8.8	Number of Sample(s)	3 PCS
Dimension	M20 X 90	Class	Bolt class 8.8 Nut class 8
Part Number	K08MG200901	PO No	54355-Auckland
TRACE No	/	Heat Treatment Lot number	/
(Steel) Heat number	B:824010833 N:G331010233		
The information above is provided by the client. Our laboratory is not responsible for its authenticity			



Approved by
Manager

[Signature]

Audit by
Engineer



Test by
Engineer

[Signature]



中国认可
国际互认
检测
TESTING
CNAS L4800

Ningbo Zhongji Inspection of Machinery Parts Co.,Ltd

TEST REPORT

Report number: NBZJB202404049

Page 2 of 2

NO.	Test Items	Test Method	Requirement	Test Results		Item Conclusion
1	Assembly test	EN 14399-2:2015	Bolt tension force ≥ 183 kN Nut rotation Degrees ≥ 240°	1A	216.4 kN 240°	Pass
				2A	204.9 kN 240°	Pass
				3A	210.0 kN 240°	Pass
	Equipment : Microcomputer controlled torsion tester; NBZJ/SB-Z-JC-110 WNJ-3000; Validity Of Calibration: 2024.07.03					



THE END



客户名称 Sold To		上海资申实业有限公司				产品名称 Product		热轧盘条 Hot rolled wirerods				证明书编号 Certificate no.		240126Q000375								
收货单位 Consignee		上海资申实业有限公司				提货单号 Delivery no.		FB2401250176				订单编号 Order no.		02401250266								
执行标准 Spec.		Q/320412 ZTG 5003-2023		牌号 Grade		10B33		加工用途 Purpose		客户编号 Customer no.		0201187		证明书日期 Issue Date		20240126						
生产许可证号 Approvalcerf No.				钢筋标识 Bar Mark				交货状态 Cond. Of Supply		热轧		车船号 Train/Ship No.		苏GU2031								
项次 Item No.	轧制序号 Lot No.	炉号 Heat No.	尺寸及规格Material Description		化学成分 % Chemical Analysis										*A01 屈服 强度 (Re) MPa	*A02 抗拉 强度 (Rm) MPa	*A03 断后 伸长 率(A) %	*A05 断面 收缩 率(Z) %	*E09 总脆 变层 深度 mm	*O01 冷弯 试验		
			产品尺寸 Product Size	数量 Qty	重量 Weight	C	Si	Mn	P	S	Cr	Ni	Cu	Mo							Al	Ti
			规格 Specification			X10 ⁻²	X10 ⁻²	X10 ⁻²	X10 ⁻²	X10 ⁻²	X10 ⁻²	X10 ⁻²	X10 ⁻³	X10 ⁻³	X10 ⁻³	X10 ⁻⁴						
001	K2401170005	624010801	Φ20mm	3	7.217	32	4	78	15	6	18	2	2	0	45	23	322 306	574 567	27.5 27	44 48	0.09 0.1	OK OK
001	K2401170006	824010833	Φ20mm	11	26.409	31	6	76	9	1	18	1	2	0	53	28	327 314	573 575	25.5 26	48 35	0.11 0.11	OK OK
						TOTAL:		14		33.626												
*A01=ReL,*A03=A5.65,*O01=1/2; 外观、形状、尺寸和标识依据中间检查记录判定为合格 ACCORDING TO PROCESS INSPECTION RECORD,VISUAL INSPECTION(SURFACE&SHAPE) AND CHECK OF DIMENSION&MARK: OK 注：产品牌号以质量证明书为准																						
Made in China CN-code 722790 We herewith confirm that no russian raw material was used																						
1、兹证明本表所列产品，均依材料规格制造及试验，并且符合规范之要求。11月、12月、1月、2月、3月时效12天，其它月份时效7天。It is to certify that the products described herein have been manufactured and tested with satisfactory results in accordance with the requirements of the material specification. The aging time should be 12 days during November, December, January, February and March , and 7 days during the other months. 2、品质证明书影本不作有效证明文件。The copy of this Certificate is invalid except stamped. 3、用户验收后使用，如有异议应详细告知其牌号，炉号，并保留实物及标志。Please inform us the steel grade and the heat number of under qualified material(s) found in inspection on time, and keep the material(s) and the marking card.																						
CE 0038		GENERAL MANAGEMENT RESEARCH and DEVELOPMENT DEPARTMENT:										质量管理处		综合判定 Comprehensive judgment								
		合格												合格								



江苏沙钢集团有限公司
Jiangsu Shagang Group CO., LTD.

高速线材质量证明书

沙 钢

High-speed Wire Rod Quality Certificate

SG03B-1914E

江苏省张家港市锦丰镇 邮编: 215625
Jinfeng, Zhangjiagang, Jiangsu, P. R. CHINA
TEL: (0512) 58568866, 58568829
FAX: (0512) 58550366, 58550818

订货单位CUSTOMER	宁波办事处	用户代码CUSTOMER CODE		合同号CONTRACT NO.	X3BD0001Q006	
					X3BD0001Q001	
					X3BD0001Q002	
牌号STEEL GRADE	SWRCH35K	提货单号DELIVERY	231114323001	发货日期DATE OF DELIVERY	20231118	
交 货 标 准 SPECIFICATION	Q/320582 SGY303-2018	质证书号CERTIFICATE NO.	2311143230 010228	1	签发日期DATE OF ISSUE	20231118
		用途USE			精炼方式REFINING MATHOD	炉外精炼

序号 NO	炉批号 HEAT NO.	直径 Dia. mm.	盘数 Coils	重量 kg	化学成分CHEMICAL COMPOSITION %										拉伸试验TENSILE TEST				顶锻 试验 H. T.	硬度 试验 HRB	脱碳层 D. of. D	晶粒度 Micro- Grade	索氏体 Sorbite %	备注 REMARKS					
					C	Si	Mn	P	S	Cr	Ni	Cu	Al		Rm	ReL	A11.3	Z											
					2	2	2	3	3	2	2	2	3																
															MPa		%												
1= $\times 10^{-1}$ 2= $\times 10^{-2}$ 3= $\times 10^{-3}$ 4= $\times 10^{-4}$ 5= $\times 10^{-5}$																													
1	G331010233	20.0	22	49611	35	13	74	16	3	3	1	2	48		582	333		46.0	0	81.00	0.01	8		BOF					
2	G331010233	20.0	17	38234	35	13	74	16	3	3	1	2	48		593	337		46.0	1/3	83.00	0.01	8		BOF					
															582	333		46.0	0	81.00	0.01	8		BOF					
															593	337		46.0	1/3	83.00	0.01	8		BOF					
3	G331010233	20.0	1	2258	35	13	74	16	3	3	1	2	48		582	333		46.0	0	81.00	0.01	8		BOF					
合计 Total			353	792196	说明 NOTES		1. 本质量证明书适用于合金类线材;本产品不含有任何辐射元素。It is guaranteed that the products don't contain radiochemical impurities. 2. 沙钢线材生产均采用外购废钢回料。All the scrap steel recycling materials that used for production of Shagang wire rod are outsourced. 3. We, SHAGANG, hereby certify that the products specified in the present certificate have been fully processed in china. (facility and address information is stated above). *1. H. T. —Head-colding Test; *2 D. of D. —Depth of Decarburization;																						
综合判定 FINAL RESULT		合格 PASS		注意事项 ATTENTIVE ITEMS		1. 质量证明书复印件不作有效证明文件, 除非盖章; The copy of this Certificate is not valid except stamped. 2. 用户验货后使用如有异议应及时告知炉号、牌号, 并保留实物及标志。Please inform us the steel grade and the heat number of under quanlified material(s) found in inspection on time, and keep the material(s) and the marking card																		沙钢集团 质检印章 SEAL 质检专用章				签证人 VISA 周建新	



江苏沙钢集团有限公司
Jiangsu Shagang Group CO., LTD.

高速线材质量证明书

沙 钢

High-speed Wire Rod Quality Certificate

SG03B-1914E

江苏省张家港市锦丰镇 邮编: 215625
Jinfeng, Zhangjiagang, Jiangsu, P. R. CHINA
TEL: (0512) 58568866, 58568829
FAX: (0512) 58550366, 58550818

订货单位CUSTOMER	宁波办事处	用户代码CUSTOMER CODE		合同号CONTRACT NO.	X3BD0001Q006	
					X3BD0001Q001	
					X3BD0001Q002	
牌号STEEL GRADE	SWRCH35K	提货单号DELIVERY	231114323001	发货日期DATE OF DELIVERY	20231118	
交 货 标 准 SPECIFICATION	Q/320582 SGY303-2018	质证书号CERTIFICATE NO.	2311143230 010228	2	签发日期DATE OF ISSUE	20231118
		用途USE			精炼方式REFINING MATHOD	炉外精炼

序号 NO	炉批号 HEAT NO.	直径 Dia. mm.	盘数 Coils	重量 kg	化学成分CHEMICAL COMPOSITION %										拉伸试验TENSILE TEST				顶锻 试验 H. T.	硬度 试验 HRB	脱碳层 D. of. D	晶粒度 Micro- Grade	索氏体 Sorbite %	备注 REMARKS	
					C	Si	Mn	P	S	Cr	Ni	Cu	Al		Rm	ReL	A11.3	Z							
					2	2	2	3	3	2	2	2	3												
					1= $\times 10^{-1}$ 2= $\times 10^{-2}$ 3= $\times 10^{-3}$ 4= $\times 10^{-4}$ 5= $\times 10^{-5}$										MPa		%								
4	G331010233	20.0	12	26960	35	13	74	16	3	3	1	2	48		593	337		46.0	1/3	83.00	0.01	8	BOF		
														582	333		46.0	0	81.00	0.01	8				
														593	337		46.0	1/3	83.00	0.01	8				
5	G331010234	20.0	16	33285	36	14	75	18	1	1	1	1	33		587	340		47.0	0	81.00	0.01	8			
															588	356		48.0	1/3	82.00	0.01	8			
合计 Total			353	792196	说明 NOTES		1. 本质量证明书适用于合金类线材;本产品不含有任何辐射元素。It is guaranteed that the products don't contain radiochemical impurities. 2. 沙钢线材生产均采用外购废钢回料。All the scrap steel recycling materials that used for production of Shagang wire rod are outsourced. 3. We, SHAGANG, hereby certify that the products specified in the present certificate have been fully processed in china. (facility and address information is stated above). *1. H. T. —Head-colding Test; *2 D. of D. —Depth of Decarburization;																		
综合判定 FINAL RESULT		合格 PASS		注意事项 ATTENTIVE ITEMS		1. 质量证明书复印件不作有效证明文件, 除非盖章; The copy of this Certificate is not valid except stamped. 2. 用户验货后使用如有异议应及时告知炉号、牌号, 并保留实物及标志。Please inform us the steel grade and the heat number of under quanlified material(s) found in inspection on time, and keep the material(s) and the marking card																		签证人 VISA 同发新	





江苏沙钢集团有限公司
Jiangsu Shagang Group CO., LTD.

高速线材质量证明书

沙 钢

High-speed Wire Rod Quality Certificate

SG03B-1914E

江苏省张家港市锦丰镇 邮编: 215625
Jinfeng, Zhangjiagang, Jiangsu, P. R. CHINA
TEL: (0512) 58568866, 58568829
FAX: (0512) 58550366, 58550818

订货单位CUSTOMER	宁波办事处	用户代码CUSTOMER CODE		合同号CONTRACT NO.	X3BD0001Q006
					X3BD0001Q001
					X3BD0001Q002
牌号STEEL GRADE	SWRCH35K	提货单号DELIVERY	231114323001	发货日期DATE OF DELIVERY	20231118
交 货 标 准 SPECIFICATION	Q/320582 SGY303-2018	质证书号CERTIFICATE NO.	2311143230 010228	3 签发日期DATE OF ISSUE	20231118
		用途USE		精炼方式REFINING MATHOD	炉外精炼

序号 NO	炉批号 HEAT NO.	直径 Dia. mm.	盘数 Coils	重量 kg	化学成分CHEMICAL COMPOSITION %										拉伸试验TENSILE TEST				顶锻 试验 H. T.	硬度 试验 HRB	脱碳层 D. of. D	晶粒度 Micro- Grade	索氏体 Sorbite %	备注 REMARKS				
					C	Si	Mn	P	S	Cr	Ni	Cu	Al		Rm	ReL	A11.3	Z										
					2	2	2	3	3	2	2	2	3															
															MPa		%											
1= $\times 10^{-1}$ 2= $\times 10^{-2}$ 3= $\times 10^{-3}$ 4= $\times 10^{-4}$ 5= $\times 10^{-5}$																												
6	G331010234	20.0	19	42632	36	14	75	18	1	1	1	1	33		587	340		47.0	0	81.00	0.01	8		BOF				
7	G331010234	20.0	21	45743	36	14	75	18	1	1	1	1	33		588	356		48.0	1/3	82.00	0.01	8						
															587	340		47.0	0	81.00	0.01	8						
															588	356		48.0	1/3	82.00	0.01	8						
8	G332010119	20.0	5	11269	35	11	73	15	3	3	1	2	32		571	340		47.0	0	82.00	0.01	8						
合计 Total			353	792196	说明 NOTES	1. 本质量证明书适用于合金类线材;本产品不含有任何辐射元素。It is guaranteed that the products don't contain radiochemical impurities. 2. 沙钢线材生产均采用外购废钢回料。All the scrap steel recycling materials that used for production of Shagang wire rod are outsourced. 3. We, SHAGANG, hereby certify that the products specified in the present certificate have been fully processed in china. (facility and address information is stated above). *1. H. T. —Head-colding Test; *2 D. of D. —Depth of Decarburization;																						
综合判定 FINAL RESULT	合格 PASS	注意事项 ATTENTIVE ITEMS			1. 质量证明书复印件不作有效证明文件, 除非盖章; The copy of this Certificate is not valid except stamped. 2. 用户验货后使用如有异议应及时告知炉号、牌号, 并保留实物及标志。Please inform us the steel grade and the heat number of under quanlified material(s) found in inspection on time, and keep the material(s) and the marking card																		江苏沙钢集团有限公司 质检印章 SEAL 质检专用章				签证人 VISA 周建新	



江苏沙钢集团有限公司
Jiangsu Shagang Group CO., LTD.

高速线材质量证明书

沙 钢

High-speed Wire Rod Quality Certificate

SG03B-1914E

江苏省张家港市锦丰镇 邮编: 215625
Jinfeng, Zhangjiagang, Jiangsu, P. R. CHINA
TEL: (0512) 58568866, 58568829
FAX: (0512) 58550366, 58550818

订货单位CUSTOMER	宁波办事处	用户代码CUSTOMER CODE		合同号CONTRACT NO.	X3BD0001Q006	
					X3BD0001Q001	
					X3BD0001Q002	
牌号STEEL GRADE	SWRCH35K	提货单号DELIVERY	231114323001	发货日期DATE OF DELIVERY	20231118	
交 货 标 准 SPECIFICATION	Q/320582 SGY303-2018	质证书号CERTIFICATE NO.	2311143230 010228	4	签发日期DATE OF ISSUE	20231118
		用途USE			精炼方式REFINING MATHOD	炉外精炼

序号 NO	炉批号 HEAT NO.	直径 Dia. mm.	盘数 Coils	重量 kg	化学成分CHEMICAL COMPOSITION %										拉伸试验TENSILE TEST				顶锻 试验 H. T.	硬度 试验 HRB	脱碳层 D. of. D	晶粒度 Micro- Grade	索氏体 Sorbite %	备注 REMARKS					
					C	Si	Mn	P	S	Cr	Ni	Cu	Al		Rm	ReL	A11.3	Z											
					2	2	2	3	3	2	2	2	3																
					1= $\times 10^{-1}$ 2= $\times 10^{-2}$ 3= $\times 10^{-3}$ 4= $\times 10^{-4}$ 5= $\times 10^{-5}$										MPa		%												
9	G332010119	20.0	13	29378	35	11	73	15	3	3	1	2	32		578	341		48.0	1/3	82.00	0.01	8		BOF					
10	G332010495	20.0	6	13507	35	14	73	14	2	4	1	1	28		571	340		47.0	0	82.00	0.01	8							
															578	341		48.0	1/3	82.00	0.01	8							
															578	341		48.0	0	81.00	0.01	8		BOF					
															595	349		49.0	1/3	83.00	0.01	8							
合计 Total			353	792196	说明 NOTES		1. 本质量证明书适用于合金类线材;本产品不含有任何辐射元素。It is guaranteed that the products don't contain radiochemical imparities. 2. 沙钢线材生产均采用外购废钢回料。All the scrap steel recycling materials that used for production of Shagang wire rod are outsourced. 3. We, SHAGANG, hereby certify that the products specified in the present certificate have been fully processed in china. (facility angd address information is stated above). *1. H. T. —Head-colding Test; *2 D. of D. —Depth of Decarburization;																						
综合判定 FINAL RESULT		合格 PASS		注意事项 ATTENTIVE ITEMS		1. 质量证明书复印件不作有效证明文件, 除非盖章; The copy of this Certificate is not valid except stamped. 2. 用户验货后使用如有异议应及时告知炉号、牌号, 并保留实物及标志。Please inform us the steel grade and the heat number of under quanlified material(s) found in inspection on time, and keep the material(s) and the marking card																			质检印章 SEAL 质检专用章			签证人 VISA 周爱新	





江苏沙钢集团有限公司
Jiangsu Shagang Group CO., LTD.

高速线材质量证明书

沙 钢

High-speed Wire Rod Quality Certificate

SG03B-1914E

江苏省张家港市锦丰镇 邮编: 215625
Jinfeng, Zhangjiagang, Jiangsu, P. R. CHINA
TEL: (0512) 58568866, 58568829
FAX: (0512) 58550366, 58550818

订货单位CUSTOMER	宁波办事处	用户代码CUSTOMER CODE		合同号CONTRACT NO.	X3BD0001Q006	
					X3BD0001Q001	
					X3BD0001Q002	
牌号STEEL GRADE	SWRCH35K	提货单号DELIVERY	231114323001	发货日期DATE OF DELIVERY	20231118	
交 货 标 准 SPECIFICATION	Q/320582 SGY303-2018	质证书号CERTIFICATE NO.	2311143230 010228	5	签发日期DATE OF ISSUE	20231118
		用途USE			精炼方式REFINING MATHOD	炉外精炼

序号 NO	炉批号 HEAT NO.	直径 Dia. mm.	盘数 Coils	重量 kg	化学成分CHEMICAL COMPOSITION %										拉伸试验TENSILE TEST				顶锻 试验 H. T.	硬度 试验 HRB	脱碳层 D. of. D	晶粒度 Micro- Grade	索氏体 Sorbite %	备注 REMARKS				
					C	Si	Mn	P	S	Cr	Ni	Cu	Al		Rm	ReL	A11.3	Z										
					2	2	2	3	3	2	2	2	3															
															MPa		%											
1= $\times 10^{-1}$ 2= $\times 10^{-2}$ 3= $\times 10^{-3}$ 4= $\times 10^{-4}$ 5= $\times 10^{-5}$																												
11	G332010495	20.0	20	45134	35	14	73	14	2	4	1	1	28		578	341		48.0	0	81.00	0.01	8		BOF				
12	G332010495	20.0	10	22534	35	14	73	14	2	4	1	1	28		595	349		49.0	1/3	83.00	0.01	8		BOF				
13	G332010495	20.0	22	49637	35	14	73	14	2	4	1	1	28		578	341		48.0	0	81.00	0.01	8		BOF				
合计 Total			353	792196	说明 NOTES	1. 本质量证明书适用于合金类线材; 本产品不含有任何辐射元素。It is guaranteed that the products don't contain radiochemical impurities. 2. 沙钢线材生产均采用外购废钢回料。All the scrap steel recycling materials that used for production of Shagang wire rod are outsourced. 3. We, SHAGANG, hereby certify that the products specified in the present certificate have been fully processed in china. (facility and address information is stated above). *1. H. T. —Head-colding Test; *2 D. of D. —Depth of Decarburization;																						
综合判定 FINAL RESULT	合格 PASS	注意事项 ATTENTIVE ITEMS			1. 质量证明书复印件不作有效证明文件, 除非盖章; The copy of this Certificate is not valid except stamped. 2. 用户验货后使用如有异议应及时告知炉号、牌号, 并保留实物及标志。Please inform us the steel grade and the heat number of under quanlified material(s) found in inspection on time, and keep the material(s) and the marking card																		江苏沙钢集团有限公司 质检印章 SEAL 质检专用章				签证人 VISA 周建新	



江苏沙钢集团有限公司
Jiangsu Shagang Group CO., LTD.

高速线材质量证明书

沙 钢

High-speed Wire Rod Quality Certificate

SG03B-1914E

江苏省张家港市锦丰镇 邮编: 215625
Jinfeng, Zhangjiagang, Jiangsu, P. R. CHINA
TEL: (0512) 58568866, 58568829
FAX: (0512) 58550366, 58550818

订货单位CUSTOMER	宁波办事处	用户代码CUSTOMER CODE		合同号CONTRACT NO.	X3BD0001Q006	
					X3BD0001Q001	
					X3BD0001Q002	
牌号STEEL GRADE	SWRCH35K	提货单号DELIVERY	231114323001	发货日期DATE OF DELIVERY	20231118	
交 货 标 准 SPECIFICATION	Q/320582 SGY303-2018	质证书号CERTIFICATE NO.	2311143230 010228	6	签发日期DATE OF ISSUE	20231118
		用途USE			精炼方式REFINING MATHOD	炉外精炼

序号 NO	炉批号 HEAT NO.	直径 Dia. mm.	盘数 Coils	重量 kg	化学成分CHEMICAL COMPOSITION %										拉伸试验TENSILE TEST				顶锻 试验 H. T.	硬度 试验 HRB	脱碳层 D. of. D	晶粒度 Micro- Grade	索氏体 Sorbite %	备注 REMARKS		
					C	Si	Mn	P	S	Cr	Ni	Cu	Al		Rm	ReL	A11.3	Z								
					2	2	2	3	3	2	2	2	3													
1= $\times 10^{-1}$ 2= $\times 10^{-2}$ 3= $\times 10^{-3}$ 4= $\times 10^{-4}$ 5= $\times 10^{-5}$										MPa		%														
14	G333003330	20.0	22	49515	36	14	74	18	4	4	2	2	34		595	349		49.0	1/3	83.00	0.01	8		BOF		
															587	357		48.0	0	85.00	0.01	8				
															588	369		50.0	1/3	86.00	0.01	8				
15	G333003330	20.0	2	4522	36	14	74	18	4	4	2	2	34		587	357		48.0	0	85.00	0.01	8		BOF		
															588	369		50.0	1/3	86.00	0.01	8				
合计 Total			353	792196	说明 NOTES		1. 本质量证明书适用于合金类线材;本产品不含有任何辐射元素。It is guaranteed that the products don't contain radiochemical imparities. 2. 沙钢线材生产均采用外购废钢回料。All the scrap steel recycling materials that used for production of Shagang wire rod are outsourced. 3. We, SHAGANG, hereby certify that the products specified in the present certificate have been fully processed in china. (facility angd address information is stated above). *1. H. T. —Head-colding Test; *2 D. of D. —Depth of Decarburization;																			
综合判定 FINAL RESULT		合格 PASS		注意事项 ATTENTIVE ITEMS		1. 质量证明书复印件不作有效证明文件, 除非盖章; The copy of this Certificate is not valid except stamped. 2. 用户验货后使用如有异议应及时告知炉号、牌号, 并保留实物及标志。Please inform us the steel grade and the heat number of under quanlified material(s) found in inspection on time, and keep the material(s) and the marking card																		签证人 VISA 质检印章 SEAL 质检专用章		





江苏沙钢集团有限公司
Jiangsu Shagang Group CO., LTD.

高速线材质量证明书

沙 钢

High-speed Wire Rod Quality Certificate

SG03B-1914E

江苏省张家港市锦丰镇 邮编: 215625
Jinfeng, Zhangjiagang, Jiangsu, P. R. CHINA
TEL: (0512) 58568866, 58568829
FAX: (0512) 58550366, 58550818

订货单位CUSTOMER	宁波办事处	用户代码CUSTOMER CODE		合同号CONTRACT NO.	X3BD0001Q006	
					X3BD0001Q001	
					X3BD0001Q002	
牌号STEEL GRADE	SWRCH35K	提货单号DELIVERY	231114323001	发货日期DATE OF DELIVERY	20231118	
交 货 标 准 SPECIFICATION	Q/320582 SGY303-2018	质证书号CERTIFICATE NO.	2311143230 010228	7	签发日期DATE OF ISSUE	20231118
		用途USE			精炼方式REFINING MATHOD	炉外精炼

序号 NO	炉批号 HEAT NO.	直径 Dia. mm.	盘数 Coils	重量 kg	化学成分CHEMICAL COMPOSITION %										拉伸试验TENSILE TEST				顶锻 试验 H. T.	硬度 试验 HRB	脱碳层 D. of. D	晶粒度 Micro- Grade	索氏体 Sorbite %	备注 REMARKS
					C	Si	Mn	P	S	Cr	Ni	Cu	Al		Rm	ReL	A11.3	Z						
					2	2	2	3	3	2	2	2	3											
															MPa		%							
1= $\times 10^{-1}$ 2= $\times 10^{-2}$ 3= $\times 10^{-3}$ 4= $\times 10^{-4}$ 5= $\times 10^{-5}$																								
16	G333003330	20.0	21	47370	36	14	74	18	4	4	2	2	34		587	357		48.0	0	85.00	0.01	8		BOF
17	G333003330	20.0	16	36112	36	14	74	18	4	4	2	2	34		588	369		50.0	1/3	86.00	0.01	8		BOF
															587	357		48.0	0	85.00	0.01	8		
															588	369		50.0	1/3	86.00	0.01	8		
18	G333003330	20.0	3	6764	36	14	74	18	4	4	2	2	34		587	357		48.0	0	85.00	0.01	8		BOF
合计 Total			353	792196	说明 NOTES		1. 本质量证明书适用于合金类线材;本产品不含有任何辐射元素。It is guaranteed that the products don't contain radiochemical impurities. 2. 沙钢线材生产均采用外购废钢回料。All the scrap steel recycling materials that used for production of Shagang wire rod are outsourced. 3. We, SHAGANG, hereby certify that the products specified in the present certificate have been fully processed in china. (facility and address information is stated above). *1. H. T. —Head-colding Test; *2 D. of D. —Depth of Decarburization;																	
综合判定 FINAL RESULT	合格 PASS	注意事项 ATTENTIVE ITEMS		1. 质量证明书复印件不作有效证明文件, 除非盖章; The copy of this Certificate is not valid except stamped. 2. 用户验货后使用如有异议应及时告知炉号、牌号, 并保留实物及标志。Please inform us the steel grade and the heat number of under quanlified material(s) found in inspection on time, and keep the material(s) and the marking card																		签证人 VISA 质检印章 SEAL 质检专用章		





江苏沙钢集团有限公司
Jiangsu Shagang Group CO., LTD.

高速线材质量证明书

沙 钢

High-speed Wire Rod Quality Certificate

SG03B-1914E

江苏省张家港市锦丰镇 邮编: 215625
Jinfeng, Zhangjiagang, Jiangsu, P. R. CHINA
TEL: (0512) 58568866, 58568829
FAX: (0512) 58550366, 58550818

订货单位CUSTOMER	宁波办事处	用户代码CUSTOMER CODE		合同号CONTRACT NO.	X3BD0001Q006	
					X3BD0001Q001	
					X3BD0001Q002	
牌号STEEL GRADE	SWRCH35K	提货单号DELIVERY	231114323001	发货日期DATE OF DELIVERY	20231118	
交 货 标 准 SPECIFICATION	Q/320582 SGY303-2018	质证书号CERTIFICATE NO.	2311143230 010228	8	签发日期DATE OF ISSUE	20231118
		用途USE			精炼方式REFINING MATHOD	炉外精炼

序号 NO	炉批号 HEAT NO.	直径 Dia. mm.	盘数 Coils	重量 kg	化学成分CHEMICAL COMPOSITION %										拉伸试验TENSILE TEST				顶锻 试验 H. T.	硬度 试验 HRB	脱碳层 D. of. D	晶粒度 Micro- Grade	索氏体 Sorbite %	备注 REMARKS			
					C	Si	Mn	P	S	Cr	Ni	Cu	Al		Rm	ReL	A11.3	Z									
					2	2	2	3	3	2	2	2	3														
1= $\times 10^{-1}$ 2= $\times 10^{-2}$ 3= $\times 10^{-3}$ 4= $\times 10^{-4}$ 5= $\times 10^{-5}$										MPa		%															
19	J331010045	10.0	5	11278	36	15	73	18	4	3	1	1	31		588	369		50.0	1/3	86.00	0.01	8		BOF			
														595	391		51.0	0	83.00	0.01	8						
														604	399		55.0	1/3	85.00	0.01	8						
20	J331010048	10.0	2	4544	36	15	73	17	3	4	1	1	42		592	394		52.0	0	82.00	0.01	8		BOF			
														600	395		54.0	1/3	84.00	0.01	8						
合计 Total			353	792196	说明 NOTES	1. 本质量证明书适用于合金类线材;本产品不含有任何辐射元素。It is guaranteed that the products don't contain radiochemical imparities. 2. 沙钢线材生产均采用外购废钢回料。All the scrap steel recycling materials that used for production of Shagang wire rod are outsourced. 3. We, SHAGANG, hereby certify that the products specified in the present certificate have been fully processed in china. (facility and address information is stated above). *1. H. T. —Head-colding Test; *2 D. of D. —Depth of Decarburization;																					
综合判定 FINAL RESULT	合格 PASS	注意事项 ATTENTIVE ITEMS			1. 质量证明书复印件不作有效证明文件, 除非盖章; The copy of this Certificate is not valid except stamped. 2. 用户验货后使用如有异议应及时告知炉号、牌号, 并保留实物及标志。Please inform us the steel grade and the heat number of under quanlified material(s) found in inspection on time, and keep the material(s) and the marking card																			质检印章 SEAL 质检专用章			签证人 VISA 周爱新





江苏沙钢集团有限公司
Jiangsu Shagang Group CO., LTD.

高速线材质量证明书

沙 钢

High-speed Wire Rod Quality Certificate

SG03B-1914E

江苏省张家港市锦丰镇 邮编: 215625
Jinfeng, Zhangjiagang, Jiangsu, P. R. CHINA
TEL: (0512) 58568866, 58568829
FAX: (0512) 58550366, 58550818

订货单位CUSTOMER	宁波办事处	用户代码CUSTOMER CODE		合同号CONTRACT NO.	X3BD0001Q006	
					X3BD0001Q001	
					X3BD0001Q002	
牌号STEEL GRADE	SWRCH35K	提货单号DELIVERY	231114323001	发货日期DATE OF DELIVERY	20231118	
交 货 标 准 SPECIFICATION	Q/320582 SGY303-2018	质证书号CERTIFICATE NO.	2311143230 010228	9	签发日期DATE OF ISSUE	20231118
		用途USE			精炼方式REFINING MATHOD	炉外精炼

序号 NO	炉批号 HEAT NO.	直径 Dia. mm.	盘数 Coils	重量 kg	化学成分CHEMICAL COMPOSITION %										拉伸试验TENSILE TEST				顶锻 试验 H. T.	硬度 试验 HRB	脱碳层 D. of. D	晶粒度 Micro- Grade	索氏体 Sorbite %	备注 REMARKS		
					C	Si	Mn	P	S	Cr	Ni	Cu	Al		Rm	ReL	A11.3	Z								
					2	2	2	3	3	2	2	2	3													
					1= $\times 10^{-1}$ 2= $\times 10^{-2}$ 3= $\times 10^{-3}$ 4= $\times 10^{-4}$ 5= $\times 10^{-5}$										MPa		%									
21	J331010048	10.0	13	29527	36	15	73	17	3	4	1	1	42		592	394		52.0	0	82.00	0.01	8		BOF		
22	J331010315	12.0	17	38191	35	15	73	13	2	3	2	1	24		600	395		54.0	1/3	84.00	0.01	8		BOF		
															601	393		54.0	0	83.00	0.01	8		BOF		
23	J332009817	10.0	6	13656	34	15	72	13	4	3	1	1	37		611	394		56.0	1/3	85.00	0.01	9		BOF		
															594	374		53.0	0	84.00	0.01	8		BOF		
合计 Total			353	792196	说明 NOTES	1. 本质量证明书适用于合金类线材; 本产品不含有任何辐射元素。It is guaranteed that the products don't contain radiochemical imparities. 2. 沙钢线材生产均采用外购废钢回料。All the scrap steel recycling materials that used for production of Shagang wire rod are outsourced. 3. We, SHAGANG, hereby certify that the products specified in the present certificate have been fully processed in china. (facility and address information is stated above). *1. H. T. —Head-colding Test; *2 D. of D. —Depth of Decarburization;																				
综合判定 FINAL RESULT	合格 PASS		注意事项 ATTENTIVE ITEMS		1. 质量证明书复印件不作有效证明文件, 除非盖章; The copy of this Certificate is not valid except stamped. 2. 用户验货后使用如有异议应及时告知炉号、牌号, 并保留实物及标志。Please inform us the steel grade and the heat number of under quanlified material(s) found in inspection on time, and keep the material(s) and the marking card																		质检印章 SEAL 质检专用章		签证人 VISA 周永新	





江苏沙钢集团有限公司
Jiangsu Shagang Group CO., LTD.

高速线材质量证明书

沙 钢

High-speed Wire Rod Quality Certificate

SG03B-1914E

江苏省张家港市锦丰镇 邮编: 215625
Jinfeng, Zhangjiagang, Jiangsu, P. R. CHINA
TEL: (0512) 58568866, 58568829
FAX: (0512) 58550366, 58550818

订货单位CUSTOMER	宁波办事处	用户代码CUSTOMER CODE		合同号CONTRACT NO.	X3BD0001Q006	
					X3BD0001Q001	
					X3BD0001Q002	
牌号STEEL GRADE	SWRCH35K	提货单号DELIVERY	231114323001	发货日期DATE OF DELIVERY	20231118	
交 货 标 准 SPECIFICATION	Q/320582 SGY303-2018	质证书号CERTIFICATE NO.	2311143230 010228	10	签发日期DATE OF ISSUE	20231118
		用途USE			精炼方式REFINING MATHOD	炉外精炼

序号 NO	炉批号 HEAT NO.	直径 Dia. mm.	盘数 Coils	重量 kg	化学成分CHEMICAL COMPOSITION %										拉伸试验TENSILE TEST				顶锻 试验 H. T.	硬度 试验 HRB	脱碳层 D. of. D	晶粒度 Micro- Grade	索氏体 Sorbite %	备注 REMARKS	
					C	Si	Mn	P	S	Cr	Ni	Cu	Al		Rm	ReL	A11.3	Z							
					2	2	2	3	3	2	2	2	3												
1= $\times 10^{-1}$ 2= $\times 10^{-2}$ 3= $\times 10^{-3}$ 4= $\times 10^{-4}$ 5= $\times 10^{-5}$															MPa		%								
24	J333003211	10.0	21	47666	35	16	73	18	3	3	2	1	34		601	380		56.0	1/3	85.00	0.01	8			BOF
															592	388		53.0	0	83.00	0.01	8			
															602	392		54.0	1/3	83.00	0.01	8			
25	J333003211	10.0	10	22655	35	16	73	18	3	3	2	1	34		592	388		53.0	0	83.00	0.01	8			BOF
															602	392		54.0	1/3	83.00	0.01	8			
合计 Total			353	792196	说明 NOTES		1. 本质量证明书适用于合金类线材;本产品不含有任何辐射元素。It is guaranteed that the products don't contain radiochemical imparities. 2. 沙钢线材生产均采用外购废钢回料。All the scrap steel recycling materials that used for production of Shagang wire rod are outsourced. 3. We, SHAGANG, hereby certify that the products specified in the present certificate have been fully processed in china. (facility angd address information is stated above). *1. H. T. —Head-colding Test; *2 D. of D. —Depth of Decarburization;																		
综合判定 FINAL RESULT		合格 PASS		注意事项 ATTENTIVE ITEMS		1. 质量证明书复印件不作有效证明文件, 除非盖章; The copy of this Certificate is not valid except stamped. 2. 用户验货后使用如有异议应及时告知炉号、牌号, 并保留实物及标志。Please inform us the steel grade and the heat number of under quanlified material(s) found in inspection on time, and keep the material(s) and the marking card																			
						江苏沙钢集团有限公司 质检印章 SEAL 质检专用章 签证人 VISA 周建新																			



江苏沙钢集团有限公司
Jiangsu Shagang Group CO., LTD.

高速线材质量证明书

沙 钢

High-speed Wire Rod Quality Certificate

SG03B-1914E

江苏省张家港市锦丰镇 邮编: 215625
Jinfeng, Zhangjiagang, Jiangsu, P. R. CHINA
TEL: (0512) 58568866, 58568829
FAX: (0512) 58550366, 58550818

订货单位CUSTOMER	宁波办事处	用户代码CUSTOMER CODE		合同号CONTRACT NO.	X3BD0001Q006
					X3BD0001Q001
					X3BD0001Q002
牌号STEEL GRADE	SWRCH35K	提货单号DELIVERY	231114323001	发货日期DATE OF DELIVERY	20231118
交 货 标 准 SPECIFICATION	Q/320582 SGY303-2018	质证书号CERTIFICATE NO.	2311143230 010228	11 签发日期DATE OF ISSUE	20231118
		用途USE		精炼方式REFINING MATHOD	炉外精炼

序号 NO	炉批号 HEAT NO.	直径 Dia. mm.	盘数 Coils	重量 kg	化学成分CHEMICAL COMPOSITION %										拉伸试验TENSILE TEST				顶锻 试验 H. T.	硬度 试验 HRB	脱碳层 D. of. D	晶粒度 Micro- Grade	索氏体 Sorbite %	备注 REMARKS		
					C	Si	Mn	P	S	Cr	Ni	Cu	Al		Rm	ReL	A11.3	Z								
					2	2	2	3	3	2	2	2	3													
															MPa		%									
					1= $\times 10^{-1}$ 2= $\times 10^{-2}$ 3= $\times 10^{-3}$ 4= $\times 10^{-4}$ 5= $\times 10^{-5}$																					
26	J333003211	10.0	2	4535	35	16	73	18	3	3	2	1	34		592	388		53.0	0	83.00	0.01	8		BOF		
27	J333003211	10.0	21	47541	35	16	73	18	3	3	2	1	34		602	392		54.0	1/3	83.00	0.01	8		BOF		
28	J333003211	10.0	8	18138	35	16	73	18	3	3	2	1	34		592	388		53.0	0	83.00	0.01	8		BOF		
合计 Total			353	792196	说明 NOTES	1. 本质量证明书适用于合金类线材; 本产品不含有任何辐射元素。It is guaranteed that the products don't contain radiochemical impurities. 2. 沙钢线材生产均采用外购废钢回料。All the scrap steel recycling materials that used for production of Shagang wire rod are outsourced. 3. We, SHAGANG, hereby certify that the products specified in the present certificate have been fully processed in china. (facility and address information is stated above). *1. H. T. —Head-colding Test; *2 D. of D. —Depth of Decarburization;																				
综合判定 FINAL RESULT	合格 PASS		注意事项 ATTENTIVE ITEMS		1. 质量证明书复印件不作有效证明文件, 除非盖章; The copy of this Certificate is not valid except stamped. 2. 用户验货后使用如有异议应及时告知炉号、牌号, 并保留实物及标志。Please inform us the steel grade and the heat number of under quanlified material(s) found in inspection on time, and keep the material(s) and the marking card																		质检印章 SEAL 质检专用章		签证人 VISA 	



沙 钢

江苏沙钢集团有限公司
Jiangsu Shagang Group CO., LTD.

高速线材质量证明书

High-speed Wire Rod Quality Certificate

SG03B-1914E

江苏省张家港市锦丰镇 邮编: 215625
Jinfeng, Zhangjiagang, Jiangsu, P. R. CHINA
TEL: (0512) 58568866, 58568829
FAX: (0512) 58550366, 58550818

订货单位CUSTOMER	宁波办事处	用户代码CUSTOMER CODE		合同号CONTRACT NO.	X3BD0001Q006	
					X3BD0001Q001	
					X3BD0001Q002	
牌号STEEL GRADE	SWRCH35K	提货单号DELIVERY	231114323001	发货日期DATE OF DELIVERY	20231118	
交 货 标 准 SPECIFICATION	Q/320582 SGY303-2018	质证书号CERTIFICATE NO.	2311143230 010228	12	签发日期DATE OF ISSUE	20231118
		用途USE			精炼方式REFINING MATHOD	炉外精炼

序号 NO	炉批号 HEAT NO.	直径 Dia. mm.	盘数 Coils	重量 kg	化学成分CHEMICAL COMPOSITION %										拉伸试验TENSILE TEST				顶锻 试验 H. T.	硬度 试验 HRB	脱碳层 D. of. D	晶粒度 Micro- Grade	索氏体 Sorbite %	备注 REMARKS			
					C	Si	Mn	P	S	Cr	Ni	Cu	Al		Rm	ReL	A11.3	Z									
					2	2	2	3	3	2	2	2	3														
					1= $\times 10^{-1}$ 2= $\times 10^{-2}$ 3= $\times 10^{-3}$ 4= $\times 10^{-4}$ 5= $\times 10^{-5}$										MPa		%										
															602	392		54.0	1/3	83.00	0.01	8					
合计 Total			353	792196	说明 NOTES	1. 本质量证明书适用于合金类线材;本产品不含有任何辐射元素。It is guaranteed that the products don't contain radiochemical imparities. 2. 沙钢线材生产均采用外购废钢回料。All the scrap steel recycling materials that used for production of Shagang wire rod are outsourced. 3. We, SHAGANG, hereby certify that the products specified in the present certificate have been fully processed in china. (facility andg address information is stated above. *1. H. T. —Head-colding Test; *2 D. of D. —Depth of Decarburization;																					
综合判定 FINAL RESULT	合格 PASS		注意事项 ATTENTIVE ITEMS		1. 质量证明书复印件不作有效证明文件, 除非盖章; The copy of this Certificate is not valid except stamped. 2. 用户验货后使用如有异议应及时告知炉号、牌号, 并保留实物及标志。Please inform us the steel grade and the heat number of under quanlified material(s) found in inspection on time, and keep the material(s) and the marking card																			沙钢集团有限公司 质检印章 SEAL 质检专用章			签证人 VISA 周新





产品质量证明书

CERTIFICATE OF PRODUCT QUALITY



宁波钢铁有限公司
Ningbo Iron & Steel Co.,Ltd
中国 宁波市北仑区霞浦临港二路168号
No.168,Lingang 2 Road,Xiapu,Beilun District,Ningbo,China
TEL: 86-574-86859187 FAX: 86-574-86859900-1750

H0299

客户名称 SOLD TO	浙商中拓集团股份有限公司				产品名称 PRODUCT	热轧钢卷 Hot Rolled Coil			
收货人名称 SEND TO	浙商中拓集团股份有限公司				应收凭单号码 AR.NO.	AR2310007003	证明书编号 CERTIFICATE NO.	231031H0299	
标准 SPEC.	GB/T 711-2017; 45; 建议不露天储存				牌号 STEEL GRADE	客户编号 CUSTOMER NO.	00107531	订单编号 ORDER NO.	32N01222J
					45	交运日期 SHIPPING DATE	2023/10/31	证明书日期 T/C ISSUE DATE	2023/10/31
检验 INSP.	NINGBOSTEEL MILL INSPECTION			工厂许可证编号 WORKS APPROVAL LETTER NO.	客户采购案号 CUST. ORDER NO.		T/C	1/0	

项次 ITEM NO.	产品序号 SLAB NO.	钢卷编号 COIL NO.	熔炼号 HEAT NO.	尺寸及规格 MATERIAL DESCRIPTION					化学成分 CHEMICAL ANALYSIS %								拉伸试验 A01 G.L.=565S			备注 REMARK			
				厚度 THICK mm	宽度 WIDTH mm	长度 LENGTH mm	数量 QTY	重量 WEIGHT t	C	Si	Mn	P	S	Cr	Ni	Cu	屈服 YS	抗拉 TS Rm	伸长 率 EL A				
14	HA3154593	3A115067	N326467	4.00	1250	C	1	21.840	44	28	72	13	3	1	0	1		691	27.5				
				TOTAL: 1 21.840																			

SURVEYOR		注释 NOTES	A01 GAGE LENGTH 标距 Rm等同 σ_b 565S: 5.65*SQRT(S) A 原始标距为5.65sqrt(S)的断后伸长率 化学成分: 熔炼分析
		兹证明本表所列产品, 均依材料规范制造及试验, 并且符合规范的要求。 WE HEREBY CERTIFY THAT MATERIAL DESCRIBED HEREIN HAS BEEN MANUFACTURED AND TESTED WITH SATISFACTORY IN ACCORDANCE WITH THE REQUIREMENT OF THE ABOVE MATERIAL SPECIFICATION.	

