

## DECLARATION OF PERFORMANCE

No. JQ.TH550—NQ—II

- 1 Unique identification code of the product type:  
JQ.TH550—NQ—II: EN ISO 14341-B-G 55A 4 M21 SZ
- 2 Type, batch or serial no. or any element allowing identification of the construction product as required pursuant to Article 11(4):  
Solid wire for gas shielded metal arc welding
- 3 Intended use or uses of the construction product, in accordance with the applicable harmonized technical specification, as foreseen by the manufacturer:  
Use in metallic structures or in composite metal and concrete structures
- 4 Name, registered trade name or registered trade mark and contact address of the manufacturer as required acc. to Article 11(5):  
Tianjin Golden Bridge Welding Materials Group Co., Ltd.  
1 Liujiang Road, Development Area Dongli District, Tianjin City, 300300, P. R. China
- 5 Where applicable, name and contact address of the authorized representative whose mandate covers the tasks acc. to Article 12(2):  
n.r.
- 6 System or systems of assessment and verification of constancy of performance of the construction product as set out in Annex V:  
System 2+
- 7 In case of the declaration of performance concerning a construction product covered by a harmonized standard:  
The Notified Body- TÜV SÜD Industrie Service GmbH, Westandstr. 199, D - 80386 Munich, no. 0036 - has performed the initial inspection of the manufacturing plant and of factory production control as well as the continuous surveillance, assessment and evaluation of factory production control under system 2+ and issued a certificate of conformity of the factory production control with no. 0036 - CPR - S082
- 8 In case of the declaration of performance concerning a construction product for which an European Technical Assessment has been issued:  
n.r.

9 Declared performance:

Essential characteristics (EN 13479: 2004, Anhang ZA)	Performance	Harmonized technical specification
Tolerances on dimensions	passed	EN 13479 EN ISO 544
Elongation	≥ 17%	EN 13479 EN ISO 14341
Tensile strength	≥ 550-740MPa	EN 13479 EN ISO 14341
Yield strength	≥ 460MPa	EN 13479 EN ISO 14341
Impact strength	≥ 47J(-40°C)	EN 13479 EN ISO 14341
Chemical composition	passed	EN 13479 EN ISO 14341
Durability	passed	EN 13479
Dangerous substances	passed	EN 13479
Emission of radioactivity	not relevant	EN 13479

- 10 The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 9. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.  
Signed for and on behalf of the manufacturer by:

Tianjin 2017.11.1  
(place and date of issue)



**Bureau Veritas Marine & Offshore**

6771 Boulevard du Château  
92200 Neuilly-sur-Seine - France

Tel 33 1 55 24 70 00  
Fax 33 1 55 24 70 45  
www.veristar.com



Certificate number : WM 51259/21/D.0

File number : 51259 N 2015

**TYPE APPROVAL CERTIFICATE**

as per Bureau Veritas Marine & Offshore Classification Rules

This certificate is issued to

**Tianjin Golden Bridge Welding Material Co., Ltd.**  
Tianjin - CHINA

for the product

**Flux-Cored Wire for Semi-Automatic or Automatic Welding**

Designation	: JC-316L
Grade	: 316L
Description	: Gas Shield CO2 100%
Diameter	: 1.6 mm
Welding current	: DC(+)
Welding position	: All positions for butt and fillet welding except vertical downwards (PA, PF, PC, PE, PD, PB)
Remark	: Nil

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements of Bureau Veritas Marine & Offshore Rules on Materials and Welding for the Classification of Marine Units.

This certificate is a renewal of certificate N° WM 51259/21/D.0 expiring on 08/12/2017.

**This certificate will expire on: 08 Dec 2020**

At Neuilly, on 07 Dec 2017  
For Bureau Veritas Marine & Offshore,  
By order of the Secretary

Local office: BV SHANGHAI  
Issued on 07 Dec 2017  
Surveyor: Q. Chen

L. CHIRRECELONGUE




The certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent pages are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) have to be re-approved prior to (they being placed on board vessels in which the amended regulations or standards apply). This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document and in connection with any activities for which it may provide.

The Electronic Version is available at: <http://www.veristarpm.com/venstamb.jsp/viewPublicP/Welding.jsp?hd=mmv6mptfus>

BV Mod. A/E 537 June 2017

This certificate consists of 1 page(s)





DB Systemtechnik  
Zertifizierungsstelle für Schweißzusätze  
14774 Brandenburg-Kirchmöser

### Zulassungszertifikat für Schweißzusätze und Schweißhilfsstoffe

**Hersteller:** Tianjin Golden Bridge Welding Materials Group Co., Ltd.  
No. 1 Lijiang Road, Dongli Development Area  
Tianjin 300300  
CHINA

<b>Schweißzusatz:</b>	SG-Fülldrahtelektrode	<b>DB-Zulassungs-Nr.:</b>	42.133.04
<b>Markenbezeichnung:</b>	JQ.YJ501-1	<b>Geltungsdauer:</b>	31.03.2021
<b>Normbezeichnung:</b>	DIN EN ISO 17632-A-T 46 2 P M 1 H10 DIN EN ISO 17632-A-T 42 2 P C 1 H5		

#### Geltungsbereich aufgrund der nach VA 918 490 durchgeführten Eignungsprüfung:

<b>Werkstoffgruppe nach CEN ISO/TR 15608<sup>1)</sup>:</b>	<u>Mit den Schutzgasen nach DIN EN ISO 14175 - M2, M3:</u> 2.1 ( $R_{m} \leq 460$ MPa) <u>Mit den Schutzgasen nach DIN EN ISO 14175 - C1:</u> 2.1 ( $R_{m} \leq 420$ MPa)
<b>Schweißprozess nach DIN EN ISO 4063:</b>	136
<b>Schweißpositionen nach DIN EN ISO 6947:</b>	PA, PB, PC, PD, PE, PF, PG
<b>Stromart und Polung:</b>	*(*)
<b>Durchmesserbereich:</b>	1,0 - 1,6 mm
<b>Bemerkungen/Schweißbedingungen:</b>	./



Kirchmöser, den 22.02.2018

*Kuriec*  
.....  
(Dip.-Ing. (FH) Kuriec - Leiter Zertifizierungsstelle)

<sup>1)</sup> Erläuterungen zu den mitgeltenden Werkstoffen sind der VA 918 490, Anhang 3 zu entnehmen.

# BAODING ZHIPENG IMPORT&EXPORT CO., LTD

ADD: ROOM 701 B BUILDING LONGXING BUSINESS CENTER, NO.77 LONGXING MIDDLE ROAD, BAODING, HEBEI, CHINA

## QUALITY CERTIFICATION OF WELDING ELECTRODE

CERTIFICATE NO: Y-6

AWS E6013 WELDING ELECTRODE: 3.2mm x 350mm

PRODUCTS NAME	TYPE	DIAMETER	LOT NO	EXECUTIVE STANDARD	MANUFACTUREDATE
WELDING ELECTRODE	AWS E6013	3.2mm x 350mm	18632	GB/T5117-1995	Nov. 2018

### CHEMICAL COMPOSITION (%)

ELEMNTS	C	Mn	Si	S	P
REQUIREMENT	≤0.12	0.30-0.60	≤0.35	≤0.035	≤0.040
ACTUALRESULT	0.010	0.40	0.20	0.026	0.025

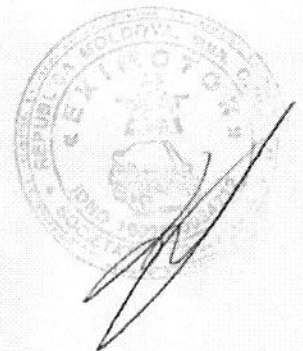
### MECHANICAL PROPERTIES OF DEPOSITED METAL

ITEM	TENSILE STRENGTH	YIELD POINT	ELONGATION	IMPACT VALE	X-RAY
STANDARD	≥420	≥330	≥17	-	II
ACTUAL RESULT	450	350	19	-	II

This is to certify the E6013 Welding Electrode conforms to the above standard.



任维维



# BAODING XULU IMPORT&EXPORT TRADING CO.,LTD

ADD: RM 308 WANHE APARTMENT LEKAI NORTH STREET, HANCUN TOWN, JINGXIU DISTRICT, BAODING, HEBEI, CHINA

## QUALITY CERTIFICATE OF WELDING WIRE

CERTIFICATE NO: Y-6

AWS ER70S-6 CO2 WELDING WIRE: 0.8mm X 5kg

PRODUCTS NAME	TYPE	DIAMETER	LOT NO	EXECUTIVE STANDARD	MANUFACTURE DATE
WELDING WIRE	AWS ER70S-6	0.8mm	19603	GB/T8110-2008	March, 2019

### CHEMICAL COMPOSITION (%)

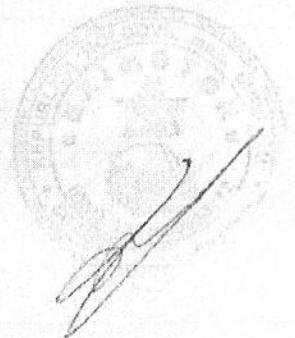
ELEMNTS	C	Mn	Si	P	S	Cu	Ni	Cr	Mo	V
REQUIREMENT	0.06-0.15	1.40-1.85	0.80-1.15	≤0.025	≤0.035	≤0.50	≤0.15	≤0.15	≤0.15	≤0.03
ACTUALRESULT	0.08	1.50	0.92	0.010	0.020	0.30	0.08	0.09	0.07	0.009

### MECHANICAL PROPERTIES OF DEPOSITED METAL

ITEM	TENSILE STRENGTH	YIELD POINT	ELONGATION (%)	IMPACT TEMPOC	IMPACT VALE (J)	X-RAY
STANDARD	≥500	≥420	≥22	-30	≥27	I
ACTUAL RESULT	530	430	25	-30	30	I

This is to certify the CO2 Welding Wire conforms to the above standard.

保定市旭禄进出口贸易有限公司  
 BAODING XULU IMPORT & EXPORT TRADING CO.,LTD  
 谢 禄 续





# BAODING ZHIPENG IMPORT & EXPORT CO., LTD.

ADD: ROOM 701 B BUILDING LONGXING BUSINESS CENTER, NO.77 LONGXING MIDDLE ROAD, BAODING, HEBEI, CHINA

## QUALITY CERTIFICATE OF WELDING WIRE

CERTIFICATE NO: Y-6

AWS ER70S-6 CO2 WELDING WIRE: 1.2mm X 15kg

PRODUCTS NAME	TYPE	DIAMETER	LOT NO	EXECUTIVE STANDARD	MANUFACTURE DATE
WELDING WIRE	AWS ER70S-6	1.2mm	18612	GB/T8110-2008	Nov. 2018

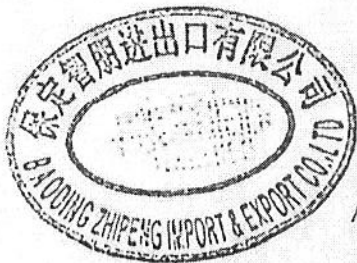
### CHEMICAL COMPOSITION (%)

ELEMNTS	C	Mn	Si	P	S	Cu	Ni	Cr	Mo	V
REQUIREMENT	0.06-0.15	1.40-1.85	0.80-1.15	≤0.025	≤0.035	≤0.50	≤0.15	≤0.15	≤0.15	≤0.03
ACTUAL RESULT	0.076	1.540	0.82	0.011	0.008	0.160	0.10	0.11	0.13	0.02

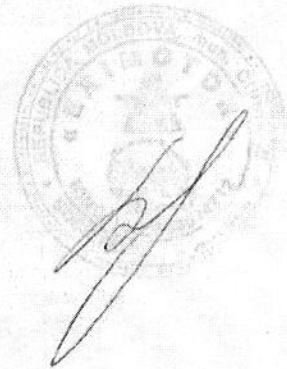
### MECHANICAL PROPERTIES OF DEPOSITED METAL

ITEM	TENSILE STRENGTH	YIELD POINT	ELONGATION (%)	IMPACT TEMPOC	IMPACT VALE (J)	X-RAY
STANDARD	≥500	≥420	≥22	-30	≥27	I
ACTUAL RESULT	560	450	28	-30	33	I

This is to certify the CO2 Welding Wire conforms to the above standard.



任继维



# BAODING XULU IMPORT&EXPORT TRADING CO.,LTD

ADD: RM 308 WANHE APARTMENT LEKAI NORTH STREET, HANCUN TOWN, JINGXIU DISTRICT, BAODING, HEBEI, CHINA

## QUALITY CERTIFICATION OF WELDING ELECTRODE

CERTIFICATE NO: Y-6

AWS E6013 WELDING ELECTRODE: 4.0mm x 400mm

PRODUCTS NAME	TYPE	DIAMETER	LOT NO	EXECUTIVE STANDARD	MANUFACTUREDATE
WELDING ELECTRODE	AWS E6013	4.0mm x 400mm	19603	GB/T5117-1995	March, 2019

### CHEMICAL COMPOSITION (%)

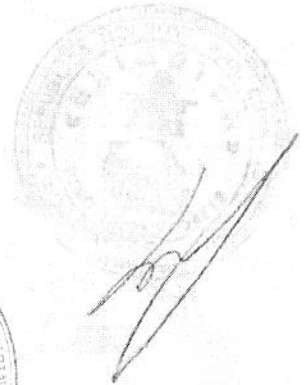
ELEMNTS	C	Mn	Si	S	P
REQUIREMENT	≤0.12	0.30-0.60	≤0.35	≤0.035	≤0.040
ACTUALRESULT	0.015	0.50	0.30	0.030	0.030

### MECHANICAL PROPERTIES OF DEPOSITED METAL

ITEM	TENSILE STRENGTH	YIELD POINT	ELONGATION	IMPACT VALE	X-RAY
STANDARD	≥420	≥330	≥17	-	II
ACTUAL RESULT	500	400	20	-	II

This is to certify the E6013 Welding Electrode conforms to the above standard.

保定市旭禄进出口贸易有限公司  
 BAODING XULU IMPORT & EXPORT TRADING CO.,LTD  
 旭 禄 接



CHEMICAL COMPOSITION (%)

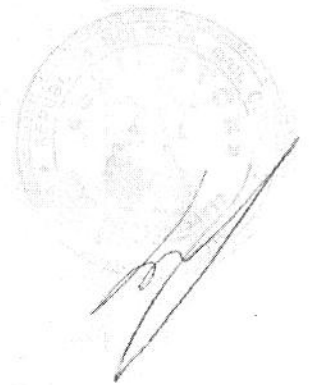
ELEMNTS	C	Mn	Si	S	P
REQUIREMENT	≤0.12	0.30-0.60	≤0.35	≤0.035	≤0.040
ACTUAL RESULT	0.015	0.50	0.30	0.030	0.030

MECHANICAL PROPERTIES OF DEPOSITED METAL

ITEM	TENSILE STRENGTH	YIELD POINT	ELONGATION	IMPACT VALE	X-RAY
STANDARD	≥420	≥330	≥17	-	II
ACTUAL RESULT	500	400	20	-	II

This is to certify the E6013 Welding Electrode conforms to the above standard.

保定市旭禄进出口贸易有限公司  
 BAODING XULU IMPORT & EXPORT TRADING CO.,LTD  
 谢 禄 续



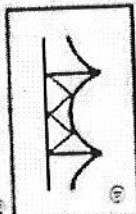
BAODING XULU IMPORT&EXPORT TRADING CO.,LTD

ADD: RM 308 WANHE APARTMENT LEKAI NORTH STREET, HANCUN TOWN, JINGXIU DISTRICT, BAODING, HEBEI, CHINA

QUALITY CERTIFICATE OF WELDING WIRE

CERTIFICATE NO: X6 *electrodes*





金桥焊材™

TIANJIN GOLDEN BRIDGE WELDING MATERIALS GROUP CO., LTD.  
天津市金桥焊材集团股份有限公司

MILL CERTIFICATE  
产品质量证明书

NO. 890000306023

GB/T 19001-2016/ISO 9001:2015

Commodity 品名	Trade Model 牌号	GB Model 国标型号	AWS Model 美标型号	ISO Model ISO型号	Size 规格	Batch No. 批号		
碳钢板条	J38.12 (1421)	E4313	E6013	ISO 2560-A-E 35 0 R 12	2.5	22051641		
Execute Standard 执行标准			GB/T 5117-2012及AWS A5.1及ISO 2560					
Chemical Composition of Deposited Metal 熔敷金属化学成分 (%)			Mechanical Properties of Deposited Metal 熔敷金属力学性能					
Items 项目	Requirement 标准要求	Test Result 实测值	Items 项目	Requirement 标准要求	Test Result 实测值	Items 项目	Requirement 标准要求	Test Result 实测值
C	≤0.20	0.073	Tensile Strength 抗拉强度 $R_m$ (N/mm <sup>2</sup> )	430—560	495	Filllet 角焊缝 Radiographic Inspection 焊缝射线探伤	合格	合格
S	≤0.035	0.015	Yield Strength 屈服强度 $R_{eL}$ (MPa)	≥330	395		II级	I级
Mn	≤1.20	0.30	Percentage Elongation after Fracture 伸长率A (%)		≥22	28.0		
Si	≤0.040	0.022	V-notch Impact Test V型缺口冲击试验	0	0			
P	≤0.20	0.038	Impact Temp. 试验温度(°C)	0	0			
Cr	≤0.30	0.008	Absorbed Energy 吸收能量KV <sub>2</sub> (J)	≥47	64、65、66			
Ni	≤0.30	0.005						
Mo	≤0.30	0.005						
V	≤0.08	0.008						
Approved by 产品认证			CCS、LR、BV、ABS、DNVGL、NK、BKI					
Remarks 备注			Complied with CCS 《Rules for Materials and Welding》 《材料与焊接规范》 满足CCS					
			QUA 质量检验印章					

WE HEREBY CERTIFY THAT THIS REPORT IS CORRECT AND THAT ALL TEST RESULTS ARE IN COMPLIANCE WITH THE SPECIFICATION DESCRIBED HEREIN. THE MANUFACTURING PROCESS AND THE QUALITY CONTROL ACCORDANCE WITH THE CERTIFICATION CONDITION. WE ARE RESPONSIBLE FOR THE QUALITY OF OUR PRODUCTS.  
兹证明此报告所载实测结果皆正确并符合通用规范要求。产品的生产过程与可条件符合。我们对产品质量负责。  
张秀兰 审核：张秋彦  
制表日期：2022年06月07日

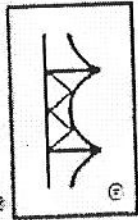


Add: No.1, LiuJing Road, Dongli Development Area, Tianjin, CHINA  
地址：中国天津市东丽开发区六经路1号

Post Code: 300300

Tel: (86)-(022)-58296666  
Website: WWW.TJGoldenBridge.com

Fax: (86)-(022)-24992103  
E-Mail: Market@TJGoldenBridge.com



金桥焊材

TIANJIN GOLDEN BRIDGE WELDING MATERIALS GROUP CO., LTD.  
天津市金桥焊材集团股份有限公司

MILL CERTIFICATE

产品质量证明书

NO. 890000306033

GB/T 19001-2016/ISO 9001:2015

Commodity 品名	Trade Model 牌号	GB Model 国标型号	AWS Model 美标型号	ISO Model ISO型号	Size 规格	Batch No. 批号			
碳钢焊条	J38.12 (J421)	E4313	E6013	ISO 2560-A-E 35 0 R 12	4.0	22051651			
Execute Standard 执行标准				GB/T 5117-2012及AWS A5.1及ISO 2560					
Chemical Composition of Deposited Metal 熔敷金属化学成分(%)			Mechanical Properties of Deposited Metal 熔敷金属力学性能						
Items 项目	Requirement 标准要求	Test Result 实测值	Items 项目	Requirement 标准要求	Test Result 实测值	Items 项目	Requirement 标准要求	Test Result 实测值	
C	≤0.20	0.089	Tensile Strength 抗拉强度 $R_m(N/mm^2)$	430—560	505	Fillet 角焊缝	合格	合格	
S	≤0.035	0.013	Yield Strength 屈服强度Rel (MPa)	≥330	405				Radiographic Inspection 焊缝射线探伤
Mn	≤1.20	0.40	Percentage Elongation after Fracture 伸长率A (%)	≥22	29.0				
Si	≤1.00	0.18	V-notch Impact Test V型缺口冲击试验	0	0				
P	≤0.040	0.023	Impact Temp. 试验温度(°C)	≥47	75、76、77				
Cr	≤0.20	0.041	Absorbed Energy 吸收能量KV <sub>2</sub> (J)						
Ni	≤0.30	0.008							
Mo	≤0.30	0.005							
V	≤0.08	0.008							
Approved by 产品认证			CCS, LR, BV, ABS, DNVGL, NK, BKI				Complied with CCS 《材料焊接规范》		满足CCS
Remarks 备注			OUD: 80912841						

WE HEREBY CERTIFY THAT THIS REPORT IS CORRECT AND THAT ALL TEST RESULTS WERE IN ACCORDANCE WITH THE SPECIFICATION DESCRIBED HEREIN. THE MANUFACTURING PROCESS OF OUR PRODUCT IS IN ACCORDANCE WITH THE CERTIFICATION CONDITION. WE ARE RESPONSIBLE FOR THE QUALITY OF OUR PRODUCTS.

兹证明此报告所载实测结果皆正确并符合适用规范要求。产品的生产制造过程与认证质量保障部承诺对该产品质量负责。

制表日期: 2022年06月07日

张秀兰 审核: 张秋彦

质量保证部



Add: No. 1, LiuJing Road, Dongli Development Area, Tianjin, CHINA  
地址: 中国天津市东丽开发区六经路1号

Tel: (86) - (022) - 58296666  
WebSite: WWW.TJGoldenBridge.com  
Fax: (86) - (022) - 24992135  
E-Mail: Market@TJGoldenBridge.com



