

Shandong Solid Solder Co., Ltd.

Http://www.sldhc.com

CE:



QA-AC-0625/12

QA TECHNIC – ATTESTATION OF CONFORMITY
EN ISO 14341:2011

Shandong Solid Solder Co., Ltd.
Shiheng Town , Feicheng City, Shandong Province, P.R.China

Product (s)	: Welding Wire
Product Type(s) / Model (s)	ER50-6, SLD-60, SLD-70, SLD-80, H08A, H08MnA, H10Mn2
Test Report(s) and Date(s)	CARTER Testing Technology Co., Ltd. CARTER20120405, 05.04.2012

The Present certificate is valid just for the analysed product design. The certificate shall lose its validity in case of any changes in the product.

The CE mark as shown below can be used, under the responsibility of the manufacturer or the importer, after completion of an EC Declaration of Conformity and compliance with all relevant EC Directives.

Certificate Issue Date: 06.04.2012

ALBERK QA INTERNATIONAL
TECHNICAL CONTROL AND
CERTIFICATION CO., LTD.
www.qatechnic.com
ce@qatechnic.com
Notified Body ID No: 2138



Latif Murat YILMAZ
General Manager

Shandong Solid Solder Co., Ltd.

Http://www.sldhc.com

ISO:

格式: MH102R01



中国船级社质量认证公司
CHINA CLASSIFICATION SOCIETY CERTIFICATION COMPANY

质量管理体系认证证书
QUALITY MANAGEMENT SYSTEM CERTIFICATE

编号: No. 00512Q21111R1M

兹证明

山东索力得焊材有限公司
(注册/生产地址: 山东省肥城市石横镇 邮编: 271612)

This is to certify that the Quality Management System (QMS) of

SHANDONG SOLID SOLDER CO., LTD.
(Registered/Production Add: SHIHENG TOWN, FEICHENG CITY, SHANDONG PROVINCE,
271612, P.R.CHINA)

建立的质量管理体系符合标准: **GB/T 19001-2008 / ISO 9001:2008.**
has been found to conform to standard **GB/T 19001-2008 / ISO 9001:2008.**

本证书对下述范围的质量管理体系有效: ***气体保护焊丝和埋弧焊丝的生产*.**

This certificate is valid to the following scope for QMS: ***PRODUCTION OF GAS METAL
ARC WELDING WIRE AND SUBMERGED ARC WELDING WIRE*.**

本证书有效期至: 2015 年 7 月 22 日.
This certificate is valid until 22 July 2015.





发证日期: 2012 年 7 月 23 日
Issued on 23 July 2012

总经理: 
General Manager **Huang Shiyuan**

本证书依据中国船级社质量管理体系认证规则颁发, 证书的有效性依赖于获证组织的质量管理体系。获证组织必须接受本公司的监督审核, 以保持其符合性。获证组织必须遵守认证规则的要求, 并接受本公司的监督审核。获证组织必须遵守认证规则的要求, 并接受本公司的监督审核。获证组织必须遵守认证规则的要求, 并接受本公司的监督审核。

China Classification Society Certification Company, 40 Dong Huang Chang Gei Nan Jie, Beijing, 100006, China. Tel: +86(10)55239001. Web: www.ccs-c.com.cn

Shandong Solid Solder Co., Ltd.

Http://www.sldhc.com

ABS:



WELDING CONSUMABLE CERTIFICATE

Certificate No.: QD2139691-X1

Port of: QINGDAO PORT MLO

Date: 28 April 2012

THIS IS TO CERTIFY

THAT THE UNDERSIGNED SURVEYOR TO THIS BUREAU DID, AT THE REQUEST OF SHANDONG SOLID SOLDER CO., LTD., ATTEND THEIR PLANT AT FEICHENG, ON THE 25TH DAY OF APRIL, 2012 AND ON SUBSEQUENT DATES, IN ORDER TO CARRY OUT A PLANT SURVEY OF FACILITIES AND ASSOCIATED QUALITY ASSURANCE AND QUALITY CONTROL PROCEDURES AND TO WITNESS AND REPORT ON THE ANNUAL APPROVAL TESTING OF WELDING CONSUMABLES; AND,

THAT THE FACILITY IS CONSIDERED CAPABLE OF PROVIDING AN ACCEPTABLE UNIFORM PRODUCT, AND THAT EACH WELDING CONSUMABLE LISTED BELOW WAS FOUND IN COMPLIANCE WITH THE SPECIFICATION INDICATED AND IS ELIGIBLE TO BE PLACED ON THIS BUREAU'S APPROVED WELDING CONSUMABLES LIST IN THE WIRE-GAS SECTION:

TRADE NAME	SPECIFICATION	GRADE OR CLASS	SHIELDING GAS	POSITION	CURRENT/ POLARITY	SIZE
ER50-6	ABS	3YSA	CO2	F	DCEP	0.8-1.6mm

Expiry Date of This Certificate: 27 April 2013


G.WANG SURVEYOR
28. Apr. 2012

Note: This Certificate evidences compliance with one or more of the Rules, guides, standards or other criteria of American Bureau of Shipping and is issued solely for the use of the Bureau, its committees, its clients or other authorized entities. This Certificate is a representation only that the structure, item of material, equipment, machinery or any other item covered by this Certificate has met one or more of the Rules, guides, standards or other criteria of American Bureau of Shipping as of the date of issue. Parties are advised to review the Rules for the scope and conditions of classification and to review the survey records for a fuller description of any restrictions or limitation on the vessel's service or surveys. The validity, applicability and interpretation of this Certificate is governed by the Rules and standards of American Bureau of Shipping who shall remain the sole judge thereof. Nothing contained in this Certificate or in any notation made in contemplation of this Certificate shall be deemed to relieve any designer, builder, owner, manufacturer, seller, supplier, repairer, operator or other entity of any warranty express or implied.

Shandong Solid Solder Co., Ltd.

Http://www.sldhc.com

NK1:



NIPPON KAIJI KYOKAI

Certificate

Certificate No.
NKY-2910

OF

TYPE APPROVAL FOR WELDING CONSUMABLE

Brand : ER50-6
Applicant : Shandong Solid Solder Co., Ltd.
Feicheng, Shandong, China
Kind : Semi-Automatic Welding Consumable
Purpose : For High Tensile Steel
Approval Condition :
Grade : KSW53G(C)
Current : DCEN
Position : Flat
Max. Dia. of Wire : F ; 1.6mm
Shield Gas : CO₂

THIS IS TO CERTIFY that the above mentioned welding consumable has been approved by the NIPPON KAIJI KYOKAI in accordance with the requirements of the Society's Rules.

This Certificate will remain in force until the 25th day of May, 2011.
Issued at Tokyo on the 26th day of May, 2010.

127.4
H. Takano
General Manager
Material and Equipment Department



Note : The validity of this certificate may be renewed by endorsement on the attached sheet upon completion of the annual inspections.



CS-2 © 2002.01

Shandong Solid Solder Co., Ltd.

[Http://www.sldhc.com](http://www.sldhc.com)

NK2:


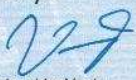
Certificate No. NKY-2910

<p>The validity of this certificate has been renewed until <u>25 May 2012</u>.</p> <p>Date: <u>17 May 2011</u></p> <p>Surveyor: </p>	<p>The validity of this certificate has been renewed until <u>25 May 2013</u>.</p> <p>Date: <u>25 Apr. 2012</u></p> <p>Surveyor: </p>
<p>The validity of this certificate has been renewed until _____.</p> <p>Date: _____</p> <p>Surveyor: _____</p>	<p>The validity of this certificate has been renewed until _____.</p> <p>Date: _____</p> <p>Surveyor: _____</p>
<p>The validity of this certificate has been renewed until _____.</p> <p>Date: _____</p> <p>Surveyor: _____</p>	<p>The validity of this certificate has been renewed until _____.</p> <p>Date: _____</p> <p>Surveyor: _____</p>
<p>The validity of this certificate has been renewed until _____.</p> <p>Date: _____</p> <p>Surveyor: _____</p>	<p>The validity of this certificate has been renewed until _____.</p> <p>Date: _____</p> <p>Surveyor: _____</p>
<p>The validity of this certificate has been renewed until _____.</p> <p>Date: _____</p> <p>Surveyor: _____</p>	<p>The validity of this certificate has been renewed until _____.</p> <p>Date: _____</p> <p>Surveyor: _____</p>

Shandong Solid Solder Co., Ltd.

Http://www.sldhc.com

GL:

<h1>Certificate of Approval</h1> <p>Zulassungsbescheinigung</p>		
Certificate no. <i>Bescheinigungs-Nr.</i>	WF 1250184 HH	
The Welding Consumables <i>Die Schweißzusätze und -hilfsstoffe</i>	Wire-Gas-Combination	
Electrode/Wire Manufacturer/Supplier <i>Elektroden-, Draht Hersteller/Lieferer</i>	Shandong Solid Solder Co., Ltd.	
Brand <i>Marke</i>	ER50-6	
Flux/Shielding Gas Manufacturer/Supplier <i>Schweißpulver / Schutzgas Hersteller/Lieferer</i>	---	
Brand <i>Marke</i>	CO2	
Classification <i>Klassifizierung (DIN, EN, ISO o.ä.)</i>	GB/T8110 ER50-6	
are approved based upon the approval test as follows *: <i>werden aufgrund der Zulassungsprüfung wie folgt zugelassen*:</i>		
Grade, Suffix(es) <i>Stufengrad, Zusatzzeichen</i>	3YS	
Welding Process <i>Schweißprozess</i>	Metal-arc Active Gas Welding (MAG)	
Welding Position(s) <i>Schweißposition(en)</i>	(4)+ PA, PB (d, h)	
Diameter (mm) <i>Durchmesser (mm)</i>	0,8 - 1,6	
Welding Current/Polarity <i>Schweißstrom/Polarität</i>	DC-	
Range of Application: <i>Anwendungsbereich:</i>	GL-A - E;	
Materials and Heat Treatment: <i>Werkstoffe und Wärmebehandlung:</i>	GL-A32 - E36: For plates over 50 mm one quality grade higher shall be used, for plates over 70 mm up to 100 mm two quality grades higher shall be used - in each case in compliance with the higher base material requirements.	
Service Temperature: <i>Anwendungstemperatur:</i>	As welded condition.	
Remarks: <i>Bemerkungen:</i>	---	
Initial test: <i>Ersprüfung:</i>	This certificate of approval is valid until 04/2013	
Hamburg, 2012-08-22	<i>Diese Zulassungsbescheinigung ist gültig bis</i>	
Germanischer Lloyd		
 Hans-Joachim Vogt		
<small>* In References to the approval by Germanischer Lloyd (e.g. in catalogues), the grade, suffix notations and approval welding positions are to be indicated. Bei Bezugnahme auf die Zulassung durch den Germanischen Lloyd (z.B. in Prospektangaben) sind Gütegrad, Zusatzzeichen und zugelassene Schweißpositionen anzugeben. Concerning the period of validity or the extension of approval and the duty to notify GL if the preconditions change under which approval was granted, the statements given in the Rules for Working are to be observed. Additional requirements, if any, in the covering letter are to be observed. The latest edition of the General Terms and Conditions of Germanischer Lloyd is applicable (see Chap. I - Ship Technology, Part 0 - Classification and Surveys), Germanischer Lloyd SE, Registered Office Hamburg, HRB 115442. Hinsichtlich der Geltungsdauer, der Aufrechterhaltung bzw. der Verlängerung der Zulassung sowie bezüglich der Mitteilungsfrist bei evtl. Änderungen der Zulassungsbedingungen gelten die Festlegungen der jeweils aktuellen Ausgabe unserer Schweißrichtlinien. Eventuelle weitere Forderungen im Anhang des zu dieser Zulassung erteilten Bescheides sind zu beachten. Es gelten die allgemeinen Geschäftsbedingungen in ihrer jeweils letzten Fassung (siehe Kapitel I - Schiffstechnik, Teil 0 - Klassifikation und Bescheinigungen), Germanischer Lloyd SE, Handelsregister Hamburg, HRB 115442.</small>		

Shandong Solid Solder Co., Ltd.

Http://www.sldhc.com

LR:

Certificate Number MATS/CHR-1136/1/1



CERTIFICATE OF APPROVAL OF WELDING
CONSUMABLE FOR SHIP CONSTRUCTION

This certificate is issued to the company named below. The welding consumable or combination described has been tested in accordance with the requirements of Lloyd's Register for use in ship construction. This approval is subject to annual tests being carried out in accordance with the requirements of Lloyd's Register. The continued validity of this approval will be confirmed by appropriately dated Annual Reapproval Certificates issued to the company.

Name of Company: *SHANDONG SOLID SOLDER CO. LTD, CHINA, PEOPLE'S REPUBLIC OF*

Type of Welding Consumable: *Section 5 - Solid Wire/Gas Shield*

Trade Name: *ER50-6(SLD-50)*

Welding Position: *Downhand only.*

Joint Type: *Butt and Fillet Welding.*

Grade: *3Y, suitable for welding steel Grade(s) EH36, EH32, EH27S, E (and any corresponding strength grade(s) of lower toughness), using semi-automatic gas metal arc welding. (Approved also for automatic multirun welding in the downhand position only.)*

Remarks: *Approved low hydrogen consumable, conforming to standard H15.
Approved for wires of 1.2-1.6mm diameter only.*

Date: *1 October 2012*

Valid until: *1 October 2013*

J S Nirankari

Surveyor to Lloyd's Register EMEA

On behalf of Lloyd's Register Group

BV:

MARINE DIVISION

67/71 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 89471/01/A.0

File number : 89471 N 2012

TYPE APPROVAL CERTIFICATE

as per Bureau Veritas Classification Rules

This certificate is issued to

Shandong Solid Solder Co., Ltd.
SHANDONG - CHINA

for the product

Solid Wire / Gas Combination for Semi-Automatic or Automatic Welding

Designation : ER50-6
Grade : 3YSA
Description : Gas Shield 100% CO2
Diameter : 0.8, 0.9, 1.0, 1.2, 1.6 mm
Welding current : DC(-)
Welding position : Flat butt weld (PA bw), Flat fillet weld (PA fw)
Remark : NIL

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

This certificate will expire on: 06 Jul 2013

At Neuilly, on 06 Jul 2012

For BUREAU VERITAS,

By order of the Secretary

Local office: BV SHANGHAI

Issued on 11 Jul 2012

Surveyor: Q. Chen

L. COURREGELONGUE



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) 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. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of BUREAU VERITAS Marine Division. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against BUREAU VERITAS 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.

Shandong Solid Solder Co., Ltd.

Http://www.sldhc.com

TUV:



Industrie Service

CERTIFICATE

0036 - CPR - S 058

In compliance with the Directive 89/106/EEC of the Council of European Communities of 21 December 1988, substituted by Construction Products Regulation 305/2011, on the approximation of laws, regulations and administrative provisions of the Member States relating to the construction products (Construction Products Directive – CPD) amended by the Directive 93/68/EEC of the Council of European Communities of 22 July 1993, it has been stated that the construction product

welding consumables

Wire electrodes acc. to EN ISO 14341 and EN ISO 16834

of the company

Shandong Solid Solder Co., Ltd.

**Shiheng Town, Taian City,
271612, Shandong Province, P. R. China**

is submitted to a factory production control.

The Notified Body TÜV SÜD Industrie Service GmbH has performed the initial inspection of the factory and of the factory production control (FPC) and performs the continuous surveillance, assessment and approval of the FPC.

This certificate attests that all provisions concerning the attestation of conformity and the properties of the product described in Annex ZA of the standard

DIN EN 13479: 03.2005

were applied.

This certificate was first issued on 08.04.2013 and remains valid as long as the conditions laid down in the harmonized technical specification in reference or the manufacturing conditions in the factory or the FPC itself are not modified significantly, and latest on 07.04.2016.

The certificate authorizes the company to use the CE mark for the approved welding consumables mentioned in the enclosure to this certificate.



Munich, April 08th, 2013

Certification Body for Welding Consumables

(M. Stel)

Notified Body, Identification No. 0036



TUV®

TÜV SÜD TÜV SÜD TÜV SÜD TÜV SÜD TÜV SÜD TÜV SÜD TÜV SÜD TÜV SÜD TÜV SÜD TÜV SÜD
ZERTIFIKAT ◆ CERTIFICATE ◆ 認證證書 ◆ CERTIFICADO ◆ CERTIFICAT

DB:

DB Systemtechnik
Zertifizierungsstelle für Schweißzusätze
32423 Minden

Zulassungszertifikat für Schweißzusätze und Schweißhilfsstoffe

Hersteller: Shandong Solid Solder Co. Ltd.
Shiheng Town, Taian City
271612 Shandong Province
China

Schweißzusatz:	SG-Drahtelektrode	DB-Zulassungs-Nr.:	42.220.01
Markenbezeichnung:	ER-50-6	Geltungsdauer:	30.04.2016
Normbezeichnung:	DIN EN ISO 14341-A-G 42 3 C/M 3Si1		

Geltungsbereich aufgrund der nach VA 918 490 durchgeführten Eignungsprüfung:

Werkstoffgruppe nach CEN ISO/TR 15608 ¹⁾:	<u>Mit den Schutzgasen nach DIN EN ISO 14175 – C1, M2, M3:</u> 2.1 ($R_{mH} \leq 420$ MPa)
Schweißprozess nach DIN EN ISO 4063:	135
Schweißpositionen nach DIN EN ISO 6947:	PA, PB, PC
Stromart und Polung:	= (+)
Durchmesserbereich:	0,8 - 1,6 mm
Bemerkungen/Schweißbedingungen:	J.

Minden, den 26.04.2013



 (Dipl.-Ing. Bittencor - Leiter Zertifizierungsstelle)

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

AWS ER70S-6 Welding Wire Test Report:



山东索力得焊材有限公司焊丝质量证明书
Shandong solid solder Co.,Ltd. Electrode Quality Certificate

型号(Brand No.): ER70S-6

证书编号(Cert No.): 67304 使用单位(User): 韩国

炉批号 (Lot No.)	规格 (Size) Φ(mm)	化 学 成 分 (%) (Chemical Composition)														熔 敷 金 属 (Deposited Metal)				探伤 检查 (X-ray Inspect)		
		C	Si	Mn	P	S	Cr	Ni	Cu	Mo	Ti	B	V	Al	Zr	R _m (MPa)	R _{0.2} (MPa)	A (%)	AKV-30℃			
0109011	0.9	0.070	0.870	1.500	0.017	0.013	0.012	0.005	0.140	0.002	/	/	0.002	/	/	565	453	29	95	96	85	11级
0109011	1.0	0.070	0.870	1.500	0.017	0.013	0.012	0.005	0.140	0.002	/	/	0.002	/	/	565	453	29	95	96	85	11级
0109011	1.2	0.070	0.870	1.500	0.017	0.013	0.012	0.005	0.140	0.002	/	/	0.002	/	/	565	453	29	95	96	85	11级

注:1、本产品执行GB/T8110-2008标准(AWS A5.18/A5.18M:2005,AWS A5.28/A5.28M:2005)。
Application standard:GB/T8110-2008(AWS A5.18/A5.18M:2005,AWS A5.28/A5.28M:2005)。

2、本企业通过ISO9001:2008质量体系认证,编号:00509Q21047R0M。
ISO9001:2008 No: 00509Q21047R0M

3、对该产品质量有异议,请在货到10日内提出,并注明发货日期、批号、证书编号。
If there're any quality problems,please propose within 10 days after receipt,and note the delivery date.
Heat & Lot No.Cert. NO.

4、本次供货量 Φ0.9规格 1.2000吨、Φ1.0规格 2.4000吨、Φ1.2规格19.3800吨 共计: 22.9800吨。
This delivery is 22.9800t.

5、本证明书无质检章或复印无效(有分销商专用章者除外)。
The certificate without QC stamp or the copy is not valid.

质检员(Inspector): 01

审核(Examiner):

日期(Date): 2013年1月21日

地址(Add): 山东省肥城市石横镇
邮编(P.C.): 271612

山东索力得焊材有限公司(Qc Dept.)
电话(Tel): 0538-3660400
传真(Fax): 0538-3660249