



BIRO KLASIFIKASI INDONESIA

Laporan Asesmen Persetujuan Kawat Las Assessment Report for Approval of Welding Consumables

No. Laporan : 1261-TP/C1/2010
Report No.

1. Informasi Umum General Information

1.1 Perusahaan : Atlantic China Welding Consumables, Inc. Company

Alamat : No.2, Machongkou Street, Daan District Zigong, Sichuan, China. Potalcode: 63010.
Address

No. telepon : 0086 813-8253827/8253829
Telephone no.

No. fax : 0086 813-8253828
Fax no.

Email: dxyzxb@163.com
Email

Elektroda/Kawat :
Electrode/Wire

☒Pembuat
Manufacturer

☐Penyalur
Supplier

☐Distributor
Distributor

☐Pemegang lisensi
Licensee (where applicable)

Pemberi lisensi : -
Licensor

Serbuk Fluks / Gas Pelindung :
Flux Powder / Shielding Gas

☒Pembuat
Manufacturer

☐Penyalur
Supplier

☐Distributor
Distributor

☐Pemegang lisensi
Licensee (where applicable)

Pemberi lisensi : -
Licensor

1.2 Jumlah karyawan : 110 persons (technique employees) No. of employees

Jumlah karyawan pada departemen inspeksi (QA/QC): 30 persons
No. of employees in (QA/QC) inspection departement

1.3 Kepala departemen produksi : Zeng Zhichau Head of production department

Kepala departemen QA: He Rongsheng
Head of QA department

Kepala laboratorium / pengujian material (jika ada) : Li Duorong
Head of the laboratory / materials testing (if any)

Apakah ada departemen yang bertanggung jawab terhadap penyelesaian klaim? Jika ada, sebutkan penanggung jawabnya :
Is there any department responsible for the settlement of claims? If yes, please mention the person who responsible for it

Xiao Huachang

☐ 1 Ya Yes ☐ 2 Tidak No ☐ 3 Tidak berlaku Not Applicable

2. Lingkup Permohonan
Scope of Application

2.1 Kawat las:
Welding consumables

Merek Dagang ¹ <i>Trademark¹</i>	Merek ¹ <i>Brand¹</i>	Grade mutu & simbol tambahan <i>Quality grade & added symbol</i>	Posisi pengelasan <i>Welding position</i>	Arus pengelasan & polaritas <i>Welding current & polarity</i>	Ukuran (diameter & panjang) <i>Dimension (diameter & length)</i>	Bahan dasar yang dilas <i>Base material to be welded</i>	Kondisi perlakuan panas (pasca pengelasan) <i>(Post-weld) heat treatment conditions</i>
Atlantic	CHT711	3YH10S	(1) PA (d), PB (h), PC (h-v), PD (h-o), PE (o), PF (v-u), PG (v-d)	DC +	Φ 1,0; Φ 1,2; Φ 1,4; Φ 1,6	Mild Steel, High Tensile Steel	-

¹ Hanya yang diminta dalam lingkup persetujuan yang disebutkan.
Only applicable scope of approval is to specify.

3. Pemeriksaan

Inspection

- 3.1 Tanggal pemeriksaan : 14.07.2010 - 16.07.2010 (witness by other Class on 23.03.2010 – 26.03.2010)
Date of inspection
- 3.2 Pabrik / departemen yang dikunjungi : Flux-cored Wire Factory, Wire Factory, Electrode Factory & Technical Center
Shops / departments visited
- 3.3 Semua fasilitas yang diperlukan untuk proses pembuatan yang tepat sesuai dengan standar teknik umum tersedia
All facilities are available, which are necessary for a proper manufacturing corresponding to general technical standards
- 3.4 Jika ada penambahan dan/atau tindakan perbaikan yang diperlukan, sebutkan!
If any supplement and/or corrective action are required, what kind!
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4. Jaminan Mutu

Quality Assurance

- 4.1 Bagian sistem kendali mutu terpisah dari manajemen produksi
Quality control system is independent of the production management
- 4.2 Tersedia deskripsi tentang sistem manajemen mutu
Description of the quality management system is available
- 4.3 Tersedia instruksi pengujian tertulis
Written testing instructions are available
- 4.4 Mesin uji dikalibrasi ulang secara periodik
The testing machines be periodically recalibrated
- 4.5 Institusi yang melaksanakan kalibrasi ulang
Institution effects the recalibration
- National Institute of Measurement and TestingTecnology**
- 4.6 Jika ada pihak laboratorium luar yang digunakan untuk pengujian, sebutkan!
If any external laboratories commissioned with tests, please stated!
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- 4.7 Laboratorium / departemen inspeksi yang dikunjungi
Laboratories / inspection departments visited

- 4.7.1 Pengujian mekanik dan teknologi
Mechanical and technological testing

- 4.7.2 Kimia
Chemical

- 4.7.3 Pengujian tak rusak
Non-destructive testing

- 4.8 Tersedia semua fasilitas yang diperlukan untuk kendali mutu yang tepat sesuai dengan standar teknik umum
All facilities are available which are necessary for proper quality control corresponding to general technical standards

- 4.9 Ada personil yang berkualifikasi untuk melaksanakan pengujian
Qualified personnel is available for carrying out the tests

- 4.10 Jika ada penambahan dan/atau tindakan perbaikan yang diperlukan, sebutkan !
If any supplement and/or corrective action are required, what kind!
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- 4.11 Jika ada klaim dari pihak konsumen terkait dengan kualitas kawat las yang dimintakan Persetujuan, sebutkan !
If any claim from customers related to quality of welding consumables for which approval is sought, please specify !

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- 4.12 Klaim ditindaklanjuti dan tindakan perbaikan yang diperlukan dilakukan.
The claim(s) are followed-up and corrective action been conducted as required.

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5. Pengadaan bahan baku
Raw material procurement

- 5.1 Jika ada bahan baku / produk setengah jadi yang dibeli, sebutkan!
If any raw materials / semi products to be purchased, please stated !

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- 5.2 Nama dan no. persetujuan penyedia bahan baku
Names and approval no. of the raw material suppliers

- 5.3 Ada sistem pemeriksaan yang memadai terhadap penerimaan barang
An adequate receiving inspection is available

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6 Pengujian kawat las
Welding consumables testing

- 6.1 Tersedia semua fasilitas yang diperlukan untuk persiapan, pengelasan, pemanasan awal
All facilities necessary for the preparation, welding, preheating, perlakuan panas pasca las, pembubutan dan pengujian produk post heat treatment, machining and testing of the products are available.

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- 6.2 Juru las berkualifikasi dengan sertifikat yang masih berlaku
Qualification tested welders with valid certificates are available

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Nomor Sertifikat <i>Certificate number</i>	Nama juru las <i>Welder's name</i>	Badan sert. dan standar uji <i>Cert. body and test standard</i>	Grade material <i>Material grade</i>	Periode masa berlaku <i>Period of validity</i>
CQH080176	Liu Yong Jun	CCS	MnR(KI-A36)	07.05.2011
CQH080172	Song Jun Yang	CCS	MnR(KI-A36)	07.05.2011
CQH080178	Lan Quan	CCS	MnR(KI-A36)	07.05.2011
CQH080173	Huang Zhihua	CCS	MnR(KI-A36)	07.05.2011
CQH080180	Qiu Zhiming	CCS	MnR(KI-A36)	07.05.2011

- 6.3 Uji kualifikasi juru las
Welder's qualification tests

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7. Dokumentasi
Documentation

Dokumen berikut :
The following documents

A = terlampir
are attached

H = tersedia di Kantor Pusat
are available at Head Office

R = telah ditunjukkan untuk ditelaah
have been presented for review

- 7.1 Deskripsi tentang fasilitas produksi
Description of the manufacturing facilities ☐A ☐H ☒R
- 7.2 Deskripsi tentang fasilitas pengujian
Description of the testing facilities ☐A ☐H ☒R
- 7.3 Pedoman manajemen mutu
Quality management manual ☐A ☐H ☒R
- 7.4 Bagan organisasi
Organisation plan ☒A ☐H ☐R
- 7.5 Data tentang proses produksi dan kendali mutu kawat las
Data related to manufacturing process and quality control of welding consumables ☐A ☐H ☒R
- 7.6 Data tentang metode penyimpanan kawat las
Data on storage method of welding consumables ☐A ☐H ☒R

7.7 Data tentang penandaan pada kemasan
Data on packaging marking

☐A ☐H ☒R

7.8 Dokumentasi hasil uji saat ini
Documentation of current test results

☒A ☐H ☐R

7.9 Dokumen lain
Other documents

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8 Persetujuan *Approvals*

Telah diberikan oleh badan inspeksi lain
Already granted by other inspection authorities

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Badan inspeksi <i>Inspection authority</i>	Tanggal <i>Date</i>	Jenis dan lingkup persetujuan <i>Kind and scope of approval</i>
Germanischer Lloyd	23.03.2010 – 26.03.2010	Manufacturers & product approval
China Classification Society	23.03.2010 – 26.03.2010	Manufacturers & product approval

9 Evaluasi oleh Surveyor BKI *Evaluation by BKI-Surveyor*

9.1 Pembuktian sifat material telah dilakukan melalui :
Proof of material properties has been effected by

Approval

a. pengujian di bawah pengawasan BKI
under the supervision by BKI

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b. dari pengakuan badan inspeksi lain

Acknowledgement of the approval tests of other inspection authorities

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9.2 Pemeriksaan kawat las yang diambil dari produksi saat ini
Inspection of welding consumables taken from current production

9.2.1 Tipe dan No. produksi
Type and Lot No..

CHT 711 and Lot No. T100110 & T100113

9.2.2 Kawat las disimpan dalam kemasan yang baik
The welding consumables are in good packaging

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9.2.3 Kawat las memperlihatkan adanya cacat (noda, karat, fluks pecah, bengkok, dll.)
The consumables show any defect (stain, rust, flux fracture, bent, etc.)

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9.2.4 Prosedur pengujian yang diterapkan
Testing procedures applied

☐ Uji radiografi
Radiographic test

☒ Uji tarik
Tensile test

☒ Uji dampak
Impact test

☒ Uji lengkung
Bending test

☒ Uji hidrogen
Hydrogen test

☒ Uji kekerasan
Hardness test

☒ Pemeriksaan makrografi
Macrographic examination

9.3 Apakah pabrik pembuat dapat diberikan persetujuan ?
Whether the manufacturer can be approved ?

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Bilamana jawaban tersebut di atas adalah "tidak" sebutkan alasannya!
In case where the answer for above question is "No" please state the reason!

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Lain-lain (catatan khusus, bila ada)
Others (special description, if any)

This assessment carried out for transfer of approval for welding consumables (initial approval)
without all weld metal test (weld metal test witness by other Class).

Jakarta, 19 July 2010

Tempat / Place tanggal / date



AGUS SISWOKO

Tanda tangan Surveyor BKAI
Signature of BKAI Surveyor



PT. BIRO KLASIFIKASI INDONESIA

TEST REPORT OF WELDING ELECTRODE

No. 1261 -TP/C1/2010

INITIAL / ANNUAL APPROVAL

Manufacturer		: ATLANTIC CHINA WELDING CONSUMABLES, INC				
Brand		: ATLANTIC		Type:	CHT 711	GRADE: 3YH10S
Diameter		: 1,0 – 1,6 mm		Welding process : FCAW		
Welding Current		: DC +		Welding Position : ALL POSITION, INCLUDE (V-D)		
Place/Date of Test : ZIGONG, 23.03.2010 – 26.03.2010						
1. RADIOGRAPHIC TEST : --						
2. MECHANICAL TEST :						
2.1 Deposited Metal						
Diameter (mm)	Yield Point (N/mm ²)	Tensile Strength (N/mm ²)	Elongation %	Charpy" V" Notch Impact Test		Result
				Test Temp (°C)	Average Energy (Joule)	
1,0	446	541	28,2	-20	126	Accepted
1,6	543	620	28,0	-20	127	Accepted
1,6	464	542	29,6	-20	131	Accepted
2.2 Welding Procedure						
Position	Tensile Strength (N/mm ²)	Charpy"V" Notch Impact Test		Bending Test		Result
		Test Temp (°C)	Average energy (Joule)	Root	Face	
1G (1,0/1,6)	595	-20	124	Qualified	Qualified	Accepted
1G (1,6/1,6)	580	-20	120	Qualified	Qualified	Accepted
3G (V – U)	600	-20	121	Qualified	Qualified	Accepted
3G (V – D)	591	-20	110	Qualified	Qualified	Accepted
4G (O)	602	-20	98	Qualified	Qualified	Accepted
3. CHEMICAL ANALYSIS OF DEPOSITED METAL						
Element %	C	Mn	Si	P	S	Remarks
Dia. 1,0 mm	0,068	1,37	0,38	0,012	0,007	--
Dia. 1,6 mm	0,066	1,66	0,45	0,012	0,006	--
Dia. 1,6 mm	0,060	1,29	0,35	0,013	0,004	--



PT. BIRO KLASIFIKASI INDONESIA

No. 1261 – TP/C1/2010

INITIAL / ANNUAL APPROVAL

4. HYDROGEN TEST : **CLASSIFICATION H10**

5. FILLED WELD TEST :

Macro Section Test : No Defect

Breaking Test : No Defect

Hardness Test : Accepted

Base Metal : Dia. 1,0 mm. Hv = 148,33
 Dia. 1,6 mm. Hv = 146,33
 Weld Metal : Dia. 1,0 mm. Hv = 260,28
 Dia. 1,6 mm. Hv = 264,89
 HAZ : Dia. 1,0 mm. Hv = 266,56
 Dia. 1,6 mm. Hv = 290,28

6. HOT CRACKING TEST :

Filled Weld	Visual Inspection for Cracks	Fracture Inspection for Cracks	Result
1 st filled weld	--	--	--
2 nd filled weld	--	--	--

7. REMARKS : --

Jakarta , 19 Juli 2010

Surveyor



AGUS SISWOKO