Certificate No.:
ROT 2011.10502

DET NORSKE VERITAS

WELDING PROCEDURE QUALIFICATION CERTIFICATE

According to EN ISO 15614-1

Manufacturer's welding procedure No.
003 Rev. 0

Manufacturer Herstaco Tube Welding b.v.

Place of business Middelburg

Purchaser's spec. No. --

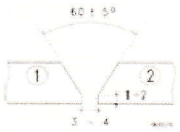
Examination

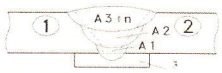
Place MIddelburg date 25.02.2011

Project --

Requirements beyond code/standard: EN ISO 15614-1

Joint preparation and welding sequence (Sketch).
State rolling direction, if applicable.





BASE MATERIAL SPECIFICATION AND GROUPING:
1: API 5L X65 acc. certificate SL 10.5514-1, material group 1.3
2: API 5L X65 acc. certificate SL 10.5514-1, material group 1.3
if applicable for un- and low alloyed steel

Grade	C,%	C eq %		Grade	C,%	C eq %
X65	0.07	0.37	to	X65	0.07	0.37

If applicable, the following C eq based on ladle analysis is to be

$$C\,eq = C + \frac{Mn}{6} + \frac{Cr + Mo + V}{5} + \frac{Cu + Ni}{15} \quad (\%)$$

Welding process(es): 136 - 121 Welding position: PA rotating Single -/double sided welding: ss

WELDING CONSUMABLES:

Index	Consumable(s), trade name	Code designation
A	Hyundai SC-70ML:E70C-6M	EN ISO 1732-A: T 46 M M 2 H5
B	Hyundai S-707 x M-12K	EN 75f6: S2Si
C		

WELDING PARAMETERS

Pass no.	Index	Diam. mm	Gas Composition	Gas L/min	Current Polarity	Amps	Volts	Travel Speed mm/min	Wire feed m/min	Heat input kJ/mm
A1	A	1.2	80%Ar+20%CO_2	14-16	DC+	250	26	240		2.1
A2	B	4.0	Flux S-717	--	DC+	530	28	500-550		2.69-2.97
A3n	B	4.0	Flux S-717	--	DC+	580-620	30-34	550-580		2.8-3.1

OTHER INFORMATION (weaving, backing, groove preparation, gouging, grinding etc.)

If any person suffers loss or damage which is proved to have been caused by any negligent act or omission of Det Norske Veritas, then Det Norske Veritas shall pay compensation to such person for his proved direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question, provided that the maximum compensation shall never exceed USD 2 million.
In this provision "Det Norske Veritas" shall mean the Foundation Det Norske Veritas as well as all its subsidiaries, directors, officers, employees, agents and any other acting on behalf of Det Norske Veritas.

EA

Certificate No.:

ROT 2011.10502

SPECIAL REQUIREMENTS: Preheat min. RT | Interpass max 250°C | PWHT --°C | Time -- Hr(s)

Heating/cooling rate: -- | Baking of electrodes: -- | Others: --

WORK CARRIED OUT BY: Herstaco Tube Welding b.v., Middelburg
welder: T.L. Heinstman, ID Card IHBH9R768

TEST PIECE MARKED: SL 11.2075-1

We certify that the statements in this record are correct and that the test weld was prepared, welded and heat treated in accordance with the above specified code/standard and/or purchaser's requirements.

Manufacturer's signature and stamp

DNV surveyor's
Signature
M. Cooijmans

NON-DESTRUCTIVE TESTING

☒ **1. Radiographic examination, see RTD report 1213-2011-09-013, film no. 2075**

Film type D4		Screens Pb0.027mm		IQI 10FE EN
KV 280	mAmin. 24	Sensitivity %	Density	Interpretation: acceptable

☐ **2. Ultrasonic examination**

Procedure	Result

☒ **3. Magnetic Particle Examination: see RTD report 1213-2011-09-014, lab no. 2075**

Procedure : EN 1290 / EN 1291	Result acceptable

Place and date Roosendaal, 01.03.2011 Laboratory test report no: SL 11.2075-1	Witnessed/reviewed by DNV ☐ ☒ M. Cooijmans

MECHANICAL TESTING (According to EN ISO 15614-1)

☒ **1. Tensile tests** | Specified R_{EH} | Specified Rm: ≥ 535 N/mm²

Test No.	Dim. (mm)	Area (mm²)	Yield load (kN)	REH (N/mm²)	U.T. load (kN)	Rm (N/mm²)	A, % on	Fracture location
2075	25.00x25.90					573		Weld material
2075	25.02x25.25					574		Weld material

☒ **2. Bend tests** | Specified bending angle 180° | Former diameter : 4t

Type and dimensions	Results	Type and dimensions	Results
Side bend test	acceptable	Side bend test	acceptable
Side bend test	acceptable	Side bend test	acceptable

☒ **3. Impact tests** | Type: Charpy KV | Size: 55x10x10mm | Requirement: ≥ 27J Av. / ≥ 19J Si.

Notch Location/Direction	Temp °C	Values, J 1	2	3	Average J	Remarks
midweld	-20	107	116	123	115	
fusion line	-20	319	330	318	322	

Certificate No.:

ROT 2011.10502

☒ **4. Macro examination (5-10X):** acceptable

(If picture considered necessary, attach separate sheet)

☒ **5. Hardness tests** Specified type of test: Vickers HV10kg; requirements; ≤ 380 HV10kg

Point	Hardness	Point	Hardness	Point	Hardness	Point	Hardness
Traverse 1-2mm below outer surface		Traverse midway		Traverse 1-2mm above inner surface		--	--
BM	203-202-203	--	--	BM	189-187-187	--	--
HAZ	195-195-199-197-197	--	--	HAZ	21-202-208-198-213	--	--
Weld	212-212-198-205-206	--	--	Weld	195-186-191-192-182	--	--
HAZ	202-197-206-199-193	--	--	HAZ	199-197-198-203-205	--	--
BM	206-206-206	--	--	BM	205-204-202	--	--

☐ **6. Other tests** Type and results:

Validity Range

Specification/code/standard : EN ISO 15614-1	Range of approval: EN ISO 15614-1
Welding Process: 136 / 121	136 / 121
Joint Type: BW ss nb	BW, ss-nb, ss-mb, bs
Parent Metal Group: 1.3	1 -1[a]
Parent Metal Thickness (mm): 27	13.5 – 54 mm
Pipe Outside Diameter (mm): Ø 1220	≥ 610
Filler Metal Type/Designation: 136: Hyundai SC-70ML: E70C-6M EN ISO 1732-A: T46MM2H5	same type of designation
121: Hyundai S-717 x N-12K EN 756: S2Si	same type of designation; this specific make only
Gas/Flux: 80%Ar+20%CO_2 / Flux Hyundai S-717	M21 (with a max. CO_2 of 22% / same type and make of flux
Type of Welding Current: DC+	DC+
Welding Positions: PA Rotating	PA
Preheat / Interpass temp. RT / ≤ 250°C	RT / ≤ 250°C
Post Weld Heat Treatment: n.a.	n.a.

Note 1): Covers the equal or lower specified yield strength steels of the same group

Place and date	Witnessed/reviewed by DNV
Breda, 04.03.2011	☐ ☒
Laboratory test report no: 11.2075-1	M Cooijmans
	Certification Agreement No.2005.1588090
	Signed on behalf of DNV Certification B.V.: A.A. den Boer

We hereby certify that by virtue of the information given on page 1 of this form and the laboratory test results given above, this welding procedure meets the Code/Standard and/or purchaser's specification, and that within the limitations given in the code/Standard and/or purchaser's specification by our signature is approved for welding on said project

Herstaco Tube Welding B.V.

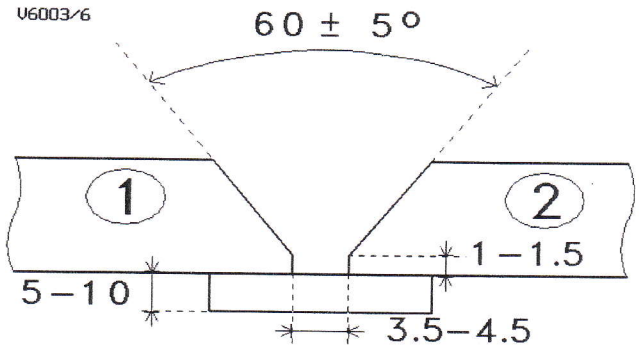
Nijverheidsweg 24 - 4338 PC Middelburg (Holland)

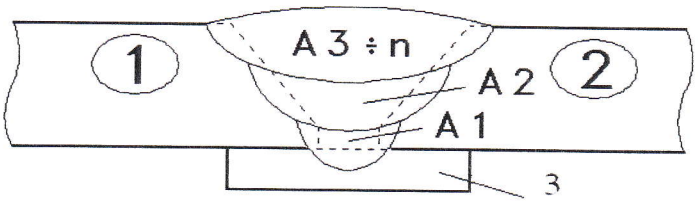
Lasmethodebeschrijving (pWPS)

Plaats:	Middelburg
Opdrachtgever:	ArcelorMittal Projects Netherlands
Beschrijving volgens norm:	EN 15609-1
pWPS-nummer:	003Rev. 0

Lasproces:	136-121
Type naad:	BW
Methode voorbereiding en reiniging:	mechanisch/ontvetten
Moedermateriaalspecificatie:	X65
Materiaaldikte (mm):	27
Buitenmiddellijn (mm):	Ø 1220
Laspositie:	PA rotating

Lasnaadvoorbereiding (tekening *):





Lasgegevens:

laag	proces	afmeting toevoegmat.	stroom A	spanning V	stroomsoort/ polariteit	draadtoevoer-snelheid	voortloop-snelheid mm/min.	warmte-inbreng KJ
A1	136	1,2	250	26	DC +		240	2,1
A2	121	4	530	28	DC+		500-550	2,69-2,97
A3n	121	4	580-620	30-34	DC+		550-580	2,8-3,1

Toev.mat.: codering & handelsnaam	136:SC-70ML:E70C-6M 121: S-717 x M-12K
Speciale bak- of droogbehandeling:	n.v.t.
Gas/poeder 1: 136 beschermg gas:	80%Ar+20%CO2:14-16l/min.
tegengas:	n.v.t.
Gas/poeder 1: 121 Poeder:	S-717
tegengas	n.v.t.

Wolfraamelektrode type/maat:	n.v.t.
Gegevens tegenbew.ondersteuning	n.v.t.
Wolfraamelektrode type/mat:	n.v.t.
Voorwarmtetemperatuur:	KT
Tussenlaagtemperatuur:	≤ 250 C
Warmtebehandeling na het lassen en/of verouderen	n.v.t.
tijd, temperatuur en methode:	n.v.t.
Opwarm- en afkoelsnelheid*):	

Overige informatie*):

Bijv. zwaaien van de elektrode (maximale zwaaibreedte):
Oscillatie: amplitude, frequentie, verblijftijd:

Gegevens pulslassen:	n.v.t.
Uitsteeklengte:	n.v.t.
Gegevens plasmalassen:	n.v.t.
Hoek van de lastoorts:	n.v.t.

Beoordelaar of keuringsinstantie:

naam en handtekening:
J. Jobse

naam en handtekening:

*) indien vereist

Radiographic Examination report

TD branch office	Roosendaal	RTD report no	1213-2011-09-013
elephone number	0031 (0) 165 560126	RTD order no	
ax	0031 (0) 165 538417	F&A-number	1102-58625/001-111
ontact	Hr. de Krom	Examination date	1-03-2011

Röntgen Technische Dienst bv

Delftweg 144
Postbus 10065
3004 AB Rotterdam

Tel. (010) 208 82 08
Fax (010) 415 80 22
E-mail rtd@rtd.nl

lient	Schielab BV	Carried out at	Applus/RTD Benelux
ddress	PB 10065	Address	Belder 8
ost code and city	3004 AB Rotterdam	Post code and city	4704 RK Roosendaal
ountry	Nederland	Country	Nederland
ontact	S. Wevers		
rder no		Contractor	Herstaco
equest no		Project	LMK
eport no client		Drawing no	
		Object	Testwelds

Exam. standard	EN 1435 , Class B		
Exam. procedure	RT 21013	R	9
Accept. standard	EN 12517 niv 1		
Accept. procedure	RT 21031	R	0
Material	X65		
Weld metal			
Weld method	Gmaw/Saw		
Heat treated	☐ Yes ☒ No		

Film type	D4	Manufacturer	Agfa
Screens (f/b)	Pb 0.027 mm	Per cassette	1
IQI	10 FE EN	Pct. exam.	100 %
Processing	Sectie Roosendaal		
Set no	749	Focal spot eff.	3 mm
Source type	Röntgen 280 kV		6 mA
	Ci		GBq

emarks

ilm no		Film Dim. [cmxcm]	Discontinuity type / location Na [cm]	A/Na			Welder	Weld prep.	Weld [mm x mm]	[kV]	[mA. min]	Pen. th. [mm]	D [mm]	d [mm]	Setup
074	1	10 x 48		A				BW	Ø x 27	280	24	27	800	27	SWSI
075	1	10 x 48		A		met lasstrip 5mm		BW	Ø x 32	280	36	32	800	27	SWSI

Films and reporting	Operators		Filminterpretation	Report checked by
Film quantity 2	Name 0948 H.van Wezel Level 2 Cert. no 473/187 Applus RTD ND Testing H. van Wezel	Name Level Cert. no	Name 0948 H.van Wezel Level 2 Cert. no 473/187 Applus RTD ND Testing H. van Wezel	Name Date
Page 1 Total pages 1				

Magnetic Particle Examination Report

F&A number	Report number
5002--58625/001	1213-2011-09-014

Röntgen Technische Dienst bv

Delftweg 144
Postbus 10065
3004 AB Rotterdam

Tel. (010) 208 82 08
Fax (010) 415 80 22
E-mail rtd@rtd.nl

Client	Schielab B.V	**Exam. standard**	EN1290		
Address	Postbus 10065	**Accept. standard**	EN1291		
Post code and city	3004 AB Rotterdam	**Exam. procedure**	MT-21203	**Rev.**	19
Country	The Netherlands	**Accept. procedure**	MT-21201	**Rev.**	19
Contact	Sandra Wevers				
		Parent material	X65	**Thickness** [mm]	27
Carried out at	Applus/RTD	**Temp. object** [°C]	17	**Heat treated**	☐ Yes ■ No
Address	Belder 8	**Surface condition**	As welded		
Post code and city	4704 RK Roosendaal				
Country	The Netherlands	**Welding process**	Gmaw/Saw		
Date	1-3-2011	**Weld material**			
		Weld preparation	BW		
Client order number		**Prod equip. no.**		**Yoke no.**	98-699
Client	Herstaco	**Perm. mag. no.**		**Cal. expiry**	14-1-2012
Project	LMK				
Drawing number		**Blacklight**		**Cal. expiry**	
Object	2x Steelplate				
		Prod current	[A]	**Yoke magnet**	Tiede
RTD branch office	Roosendaal	**Centr. cond.**	[A]	**Coil**	[A.turns]
Telephone number	(0165) 56 01 26				
Fax	(0165) 53 84 17	**Test medium**	Marker	**Type**	MR76S
Contact	Dhr. de Krom	■ Wet		■ Colour	
		☐ Dry		☐ Fluorescent	
Remarks		**Contrast paint**	■ Yes ☐ No	**Demagnetized**	☐ Yes ■ No

Purpose of examination: Detection of surface defects

Items examined:

Schielab Nr	Thick (mm)	Joint Design	Welder	Result
2074	27	BW	--	Acc.
2075	27+5 mm	BW	--	Acc.

Result: No defects were detected during the examination

For client	Operator	No.	Level	Cert.no.	Report checked for RTD
	a H.van Wezel	0948	2	473/187	Name
	b				
Page 1	Date, signature and stamp				Date, signature and stamp
Total pages 1	1/3 Applus® RTD ND Testing H. van Wezel				

6914E rev. 3

WELDING PROCEDURE QUALIFICATION RECORD

Testing in accordance with	: ISO 15614-1:2004/A1:2008
Purchaser	: Herstaco
Purchase order no.	: --
Manufacturer	: Herstaco
WPS	: 003 Rev. 0
Description of sample(s)	: Pipe with buttweld
Dimension(s)	: Ø 1220 x 27 mm
Material grade	: API 5L grade X65 (Group 11.1)
Material certificate	: SL 10.5514-1
Welding process(es)	: 136 / 121
Filler	: 136 : Hyundai SC-70ML : E70C-6M EN ISO 1732-A : T 46 M M 2 H5 121 : Hyundai S-717 x M-12K EN 756 : S2Si
Shielding gas	: 80 % Argon + 20% CO_2: 14-16 l/min.
Backing gas	: n.a.
Flux	: Hyundai S-717 EN 756-S42 4 AB S2Si
Welding position	: PA rotating
Preheat / Interpass temp.	: ≥ 10 °C / 250 °C
Joint type	: BW ss mb
PWHT	: No
Welder	
Date / place of birth	
ID	
Welding witnessed by	: M. Cooijmans d.d. 25.02.2011, representing DNV

NON DESTRUCTIVE EXAMINATION

* Visual examination	: performed by examiner
* Radiographic examination	: acceptable, see RTD/Applus report 1213-2011-09-013, film no. 2075
* Magnetic particle examination	: acceptable, see RTD/Applus report 1213-2011-09-014. SL no. 2075

CROSS WELD TENSILE TEST

Dimensions(s) [mm]	Rm [N/mm^2]	Fracture location
25.00x25.90	573	weld material
25.02x25.25	574	weld material
Requirements	≥ 535	

BEND TEST

Type	Former / Bending angle	Results
side bend	4t / 180°	4 x acceptable

MACROSCOPIC EXAMINATION

Amount of cross sections	Result
1 x	No welddefects observed. (see appendix A)

IMPACT TESTS - Type: Charpy KV

Notch location	Size [mm]	Test temp. [°C]	Results [J]	Average value [J]
Midweld	10 x 10	-20	107-116-123	115
Fusion line	10 x 10	-20	319-330-318	322
Requirements;			Av.≥ 20J	Av.≥ 27J

HARDNESS MEASUREMENTS

Method : Vickers HV10
Requirements : Max. 380HV

Location of indentations	Traverse 1-2mm Below outer surface	Traverse 1-2mm Above inner surface
Base material	203-202-203	189-187-187
HAZ	195-195-199-197-197	211-202-208-198-213
Weld metal	212-212-198-205-206	195-186-191-192-182
HAZ	202-197-206-199-193	199-197-198-203-205
Base material	206-206-206	205-204-202

Conclusion: The results satisfy the requirements.

All characteristics of the above object(s) have, as far as accessible and relevant, been verified by Schielab b.v. Other information was provided by the purchaser. This information was verified as far as possible and has been copied into this report, unchanged. We hereby certify that the reported test data is correct and that the above object(s) was (were) tested/examined in accordance with purchasers requirements and/or the above procedure(s) and/or code(s)/specification(s). On occasion a destructive test is subcontracted by Schielab b.v. (marked 'U' on the report). Opinions, interpretations and advice expressed in this report are outside the scope of any possible RvA accreditation, but are presented in a true and fair manner based on the best knowledge of the Schielab personnel involved. If, upon reproduction, only part of this report is copied, Schielab will not bear any responsability for content, purport and conclusions of that reproduction. This report has legal value only when printed on Schielab paper and furnished with an authorised signature. Digital versions of this report have no legal value.

Breda, 04.03.2011

S. Wevers

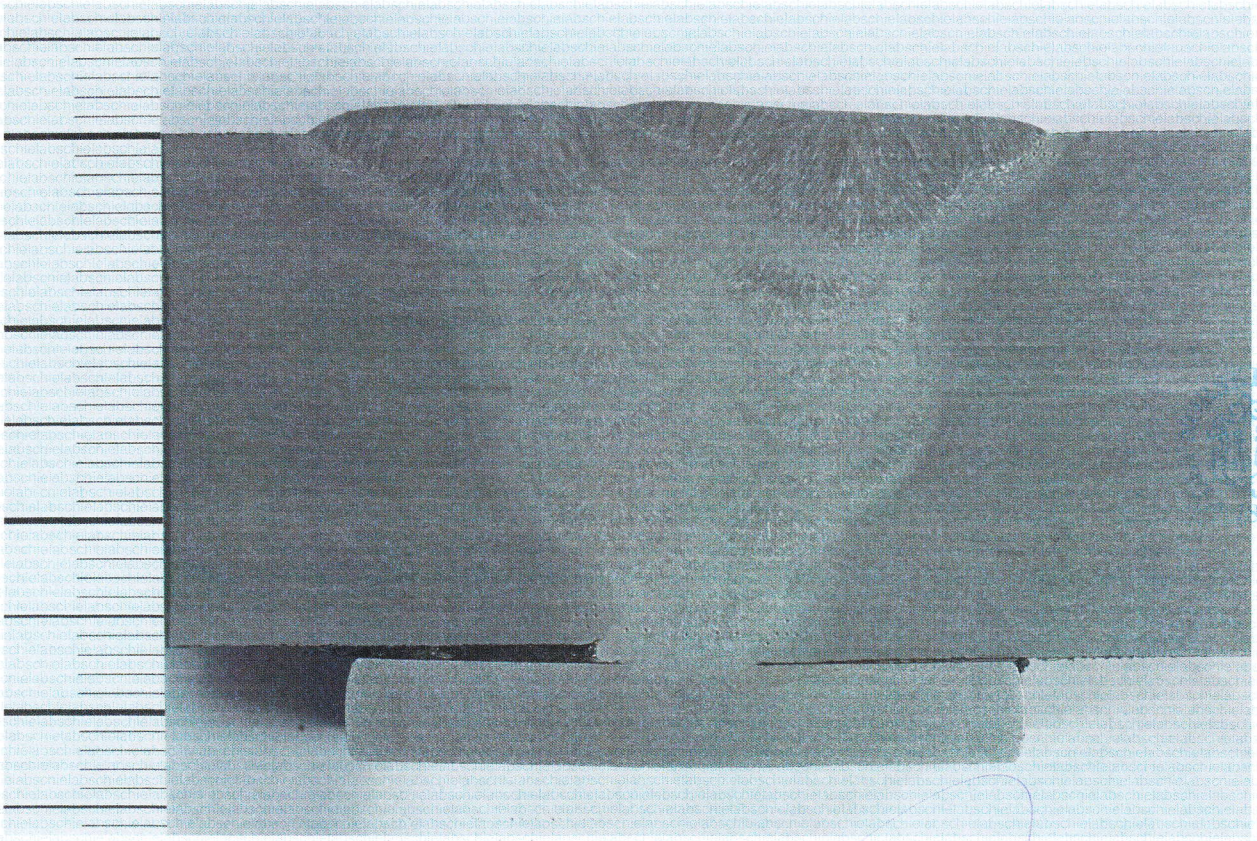
TESTING RvA L 063

Ingeschreven in het RvA register voor laboratoria onder nr. L 063 voor gebieden zoals nader omschreven in de erkenning.
Entered in the RvA register for laboratories under number L 063 for the areas outlined in the approval.

Schielab-Breda Voorerf 18-20, 4824 GN Breda, Tel. 076 - 5424 300, Fax 076 - 5424 848
Schielab b.v. Handelsregister/Register of Commerce Rotterdam nr. 24170257

Appendix A
SL 11.2075-1
Page 1 of 1

MACROPHOTO
Cross section no. 2075



S. Wevers

TESTING
RvA L 063
Ingeschreven in het RvA register voor laboratoria onder nr. L 063 voor gebieden zoals nader omschreven in de erkenning.
Entered in the RvA register for laboratories under number L 063 for the areas outlined in the approval.

CERTIFIED MATERIAL REPORT

CMR No. :LG1311331309 Date of Issue 2010/07/13

Customer	M.BINDT TRADING		
Trade Name	S-717 X M-12K	Size	12 X 60 Mesh
Lot No.	0051148	Purchaser's Order No.	-
Applicable Specification	AWS A5.17 F7A6 X EM12K Equivalent to EN 760 S A AB 1	* According to EN10204 3.1 : 2004	

Welding Current	AC	Shielding Gas	-	Post Weld Heat Treatment (℃ × hr.)	AS WELDED

Mechanical Properties	Tensile Test			Impact Test (CVN - Joule)				
	YS (N/㎟)	TS (N/㎟)	EL (%)	Temp.(℃)	X1	X2	X3	Avg.
	490	578	23.6	-51	82	90	95	89
Spec.	≥400	482~655	≥22	≥27				

Chemical Composition (%)

	C	Si	Mn	P	S	Cu					
(WIRE)	0.07	0.24	1.11	0.019	0.015	0.09					
Spec.	0.05 ~0.15	0.10 ~0.35	0.80 ~1.25	≤0.030	≤0.030	≤0.35					

Others

*CONTRACT NO.:15374
20MT

We hereby certifies that the material covered by this report has been inspected in accordance with and been found to meet the applicable requirements of specification and customer's requirements.

Approved by

Sang Hee Lee

QA Manager Lee, S. H.

HYUNDAI WELDING CO., LTD.
Head Office 157-37, Samsung-dong, Gangnam-gu, Seoul, Republic of Korea
Pohang Plant 90-5, Jangheung-dong, Nam-gu, Pohang-si, Republic of Korea

SC-70ML

AWS A5.18/ ASME SFA5.18 E70C-6M

Applications

SC-70ML can be used on mild and high tensile steels in single and multi-pass applications. It is ideally suited for high production and automatic applications. Typical industrial applications include offshore, heavy equipment and general structural fabrications.

Characteristics on Usage

SC - 70ML is a gas shielded metal-cored wire which combines high deposition rates of a flux cored wire with high efficiency of a solid wire. Its design achieves low temperature impacts and can be used in semiautomatic and automatic applications.

Notes on Usage

① Use Ar + 20 ~ 25% CO_2 gas.

Welding Position	Current	Shielding Gas
1G 2F 3G	DC+	Ar+20~25%CO_2

Typical Chemical Composition of All-Weld Metal(%)

C	Si	Mn	P	S	Ni
0.05	0.57	1.56	0.014	0.013	0.42

Typical Mechanical Properties of All-Weld Metal

Y.S N/㎟(lbs/in²)	T.S N/㎟(lbs/in²)	EL. (%)	Temp. ℃(℉)	CVN Impact Value J (ft - lbs)
510(73,950)	560(81,200)	27.0	-40(-40)	70(52)

Approval

Packing

Dia. (mm)	1.2	1.4	1.6	Spool(Kg)	15
(in)	.045	.052	1/16	(lbs)	33

Sizes Available and Recommended Currents(Amp.)

Size mm (in)	1.2 (.045)	1.4 (.052)	1.6 (1/16)
F & HF	200 ~ 300	3260 ~ 340	300 ~ 350
V-up, OH	100 ~ 150	140 ~ 180	150 ~ 180

S-717 × M-12K

AWS A5.17 / ASME SFA5.17 F7A(P)6-EM12K
JIS Z3183 S502-H

Applications

Multi-layer welding of structural steels, shipbuildings, offshore structures and thick pressure vessels.

Characteristics on Usage

Good weldability for all range of thickness of plate. Excellent impact properties and crack-resistibility of welded metal. Inactive type flux is not affected by welding parameter, especially suitable for multi-layer welding of thick plate.

Notes on Usage

① Dry the flux at 300~350°c (572~662°F) for 60 minutes before use.
② For the first layer in groove, keep the current and speed low in the case of multi-layer welding.

Approval	Current	Basicity Index
KR, ABS, LR, BV, DNV, GL, NK	AC, DC+	1.9

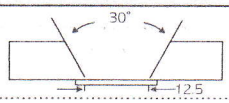
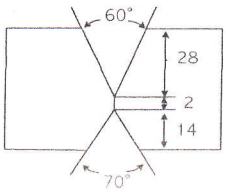
Typical Chemical Composition of All-Weld Metal (%)

C	Si	Mn	P	S	BM	Th.(mm)
0.08	0.36	1.64	0.027	0.015	SS400	25
0.08	0.54	1.47	0.025	0.018	BS4360-Gr.50D	44

Typical Mechanical Properties of All-Weld Metal

Y.S N/㎟(lbs/in²)	T.S N/㎟(lbs/in²)	EL. (%)	Temp. ℃ (°F)	CVN-Impact Value J (ft · lbs)	BM	Th.(mm)
500 (72,600)	580 (84,000)	32	-51 (-60)	60 (44)	SS400	25
510 (74,000)	580 (84,000)	28	-20 (-4)	70 (52)	BS4360-Gr.50D	44

Typical Welding Conditions

Th. (mm)	Dia. (mm)	Groove Design	Pass	Amp.	Volt.	Cpm.	Remarks
25	4.0		1~13	570	30	40	AWS A5.17
44	4.0		1	500	32	40	1st
			2~14	600	36	50	
				Back Gouging			ML
			15	500	32	40	2nd
			16~23	600	36	50	

S-717

HYUNDAI

AWS A5.17/ASME SFA5.17 F7A6-EM12K, F7P6-EM12K

Approved by KR,LR,ABS,BV,GL,NK,NV,TUV,RS

EN 756-S 42 4 AB S2Si(flux-wire-comb.)

EN 760-SA AB1(flux)

DB 51.108.01/02

MESH 12×60 **AC or DC (+)**

Lot No.	0051148
Mfg.Date	LOT NO & MFG DATE 09/06/11

Net 20 kg (44 lb)

SC-70ML

AWS A5.18 / ASME SFA5.18 E70C-GM
JIS Z3313 YFW-A50DM
Approved by LR,ABS,BV,GL,NV

FLUX CORED WIRE

MF9120G8
LOT NO & MFG DATE
901207

1.2 mm
(.045")

15 kg
(33 lb)

WINDARC™

M-12K

SUB ARC WIRE

AWS A5.17/ASME SFA5.17 EM12K

JIS Z3351 YS-S3

EN 756-S2Si

Approved by KR,LR,ABS,BV,GL,NK,NV,TÜV,DB,MR

CE

0035

06

0035-CPD-C760

EN13479+EN756

DB. 52.108.01/02

4.0 mm

(5/32")

LOT NO & MFG DATE

400 kg

(882 lb)