



SAFETY ASSESSMENT
FEDERATION

Guidelines

Welding Procedures and Welders Approval Testing

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The Safety Assessment Federation (SAFed) represents the interests of companies engaged in independent inspection and safety assessment of engineering and manufacturing plant, systems and machinery.

FOREWORD

This revision on WG01 has been prepared under the direction of SAFed Technical Committee No. 4 (TC4). It incorporates technical and editorial changes developed from experience gained in the use of the document since it was first published in 1998. WG01 Issue 03 supersedes WG01 Issue 02 which is now withdrawn.

SAFed member organisations should abide by the principles and practices referenced in WG01.

WG01 does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

1. Introduction

1.1. Weld Procedure Qualification

The primary purpose of Weld Procedure Qualification is to demonstrate that the joining process proposed for construction can produce joints having the required mechanical properties for the intended application. When qualifying welders, the emphasis is placed on the welder's ability manually to manipulate the electrode, welding torch or welding blow pipe, thereby producing a weld of acceptable quality.

1.2. Terminology and Definitions

The more commonly used terms associated with Weld Procedure and Welder Qualification Testing (definitions taken from PD ISO/TR 25901-1)

- **Preliminary Welding Procedure Specification (pWPS)**

Document containing the required variables of the welding procedure which has to be qualified.

- **Welding Procedure Test**

Welding and testing of a standardized test piece, as indicated in the preliminary welding procedure specification, to qualify a welding procedure.

- **Weld Procedure Qualification Record (WPQR)**

Record comprising all necessary data needed for qualification of a preliminary welding procedure specification

- **Weld Procedure Specification (WPS)**

Document that has been qualified and provides the required variables of the welding procedure to ensure repeatability during production welding

1.3. Commonly used Welding Standards in the United Kingdom

- **BS EN ISO 9606 Series. Qualification Testing of Welders**

BS EN ISO 9606-1 - Steels

BS EN ISO 9606-2 - Aluminium and Aluminium Alloys

BS EN ISO 9606-3 - Copper and Copper Alloys

BS EN ISO 9606-4 - Nickel and Nickel Alloys

BS EN ISO 9606-5 - Titanium, Zirconium and Alloys

BS EN ISO 9606-6 - Nickel and Nickel Alloys

- **BS EN ISO 15614 Series. Specification and qualification of welding procedures for metallic materials.**

BS EN ISO 15614-1 - Steels, Nickels and Nickel Alloys

BS EN ISO 15614-2 - Aluminium and Aluminium Alloys

BS EN ISO 15614-3 - Non Alloyed and Low Alloyed Cast Irons

BS EN ISO 15614-4 - Aluminium Castings

BS EN ISO 15614-5 - Titanium, Zirconium and Alloys

BS EN ISO 15614-6 - Copper and Copper Alloys

BS EN ISO 15614-7 - Overlay

BS EN ISO 15614-8 - Tube to Tube Plate Joints

- **BS EN ISO 14732**

BS EN ISO 14732 - Welding Personnel, Qualification testing of welding operators and weld setters for mechanized and automatic welding of metallic materials

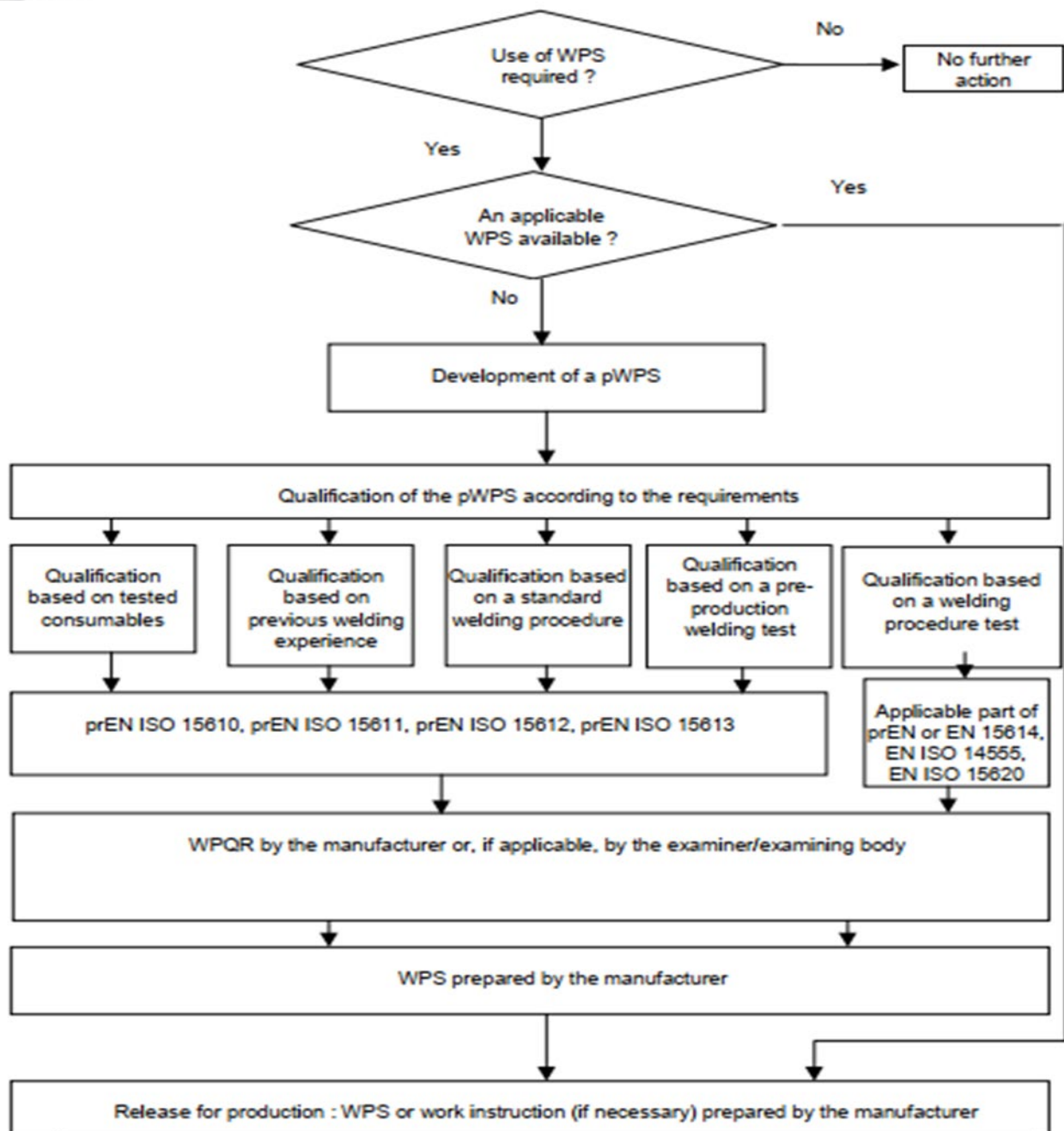
- **BS 4872 Series. Specification for approval testing of welders when welding procedure approval is not required.**

BS 4872-1 - Steels

BS 4872-2 - Aluminium and Aluminium Alloys

2. Obtaining Welding Certification

The following flow diagram shows the route for the development and qualifications of a WPS (taken from Annex C, EN ISO15607)



2.1. Initial Investigation – Contract Review

Ultimately a contract is an agreement between two parties. Each party is asking for and receiving something in exchange from the other party. If a problem were to arise, both parties can refer to the contract and pinpoint exactly what is expected of them.

The SAFed member organisation should seek access to the contract documentation to confirm what standards are involved. This will subsequently lead to being able to work with the manufacturer to determine the relevant ranges of approval, essential variables, and the selection of appropriate tests/test pieces.

In some cases, end user ‘application standards’ or National ‘product standards’ may also be applicable, and the manufacturer should work with the SAFed member organisation to ensure that these are adhered to.

2.2. Pre Visit Preparation

Prior to the SAFed member organisation arriving on site, it is advisable that the manufacturer completes the following steps:

- Preparation of a pWPS (see Para 1.2)
- Machining of Test Pieces (in accordance with pWPS)
- Procurement of all consumables
- Weld test trials – this can be done as a part of pWPS development
- Welder Briefing – Many manufacturers fail to see the importance in briefing the welder regarding his/her role
- Manufacturer Briefing – The SAFed member organisation should make the manufacturer aware of their role during the visit.

The SAFed member organisation should pass on as much information and provide as much guidance as possible, based on experiences within the industry. Note – This does not extend to offering consultancy services.

2.3. Examining Bodies

An Organisation that has been appointed to verify compliance with the applicable standard.

It is the responsibility of the manufacturer to ensure that the Examining Body is acceptable to all contracting parties.

An examining Body which holds national accreditation and International notifications (approvals) is recommended as acceptability can vary between industry sectors.

Where authority to issue welding certification is not fully defined by legislation, the major UK Examining Bodies generally utilise notification under relevant European Union (EU) Directives as the criteria by which to assess potential Examining Bodies. This approach provides assurances of the Examining Body's quality system,

technical competence and adequacy of liability insurance. SAFed members adopt the above approach to assess the capability of members and other bodies to issue welding certification.

The United Kingdom Accreditation Service (UKAS) is the sole national accreditation body recognized by government to assess against internationally agreed standards. Organizations that provide welding certification and testing services should have such described in their schedules of accreditation.

3. Welding of Test Pieces

3.1. Compliance Verification

A SAFed member organisation should be contacted directly so that a suitable location, date and time can be arranged. The SAFed member/examining body is contracted by a manufacturer and appointed to verify compliance with the applicable standards. SAFed member organisations shall verify compliance by being present for the duration of the welding activity. The welding activity includes, but is not limited to, the following:

- Weld preparations and joint type/Set up
- Tacking of joint
- Confirmation of Welding Position
- Confirmation of Material being welded
- Confirmation of Consumables
- Confirmation of Gas Flow Rates
- Application and monitoring of Pre Heat
- Welding Plant and Electrode Details (if relevant to process)
- Welder/Operator Identification
- Amperage, Voltage, Wire Feed, Travel Speed (recording thereof)
- Method of Back Gouging
- Interpass Temperature (from Start-Completion)
- Run Sequence (from Start-Completion)
- Post Weld Cleaning, Peening, Cooling (if applicable)
- Specific pWPS/WPS requirements.

Some of the above are applicable to WPQR/PQR and or Welder/Operator qualifications as relevant.

The examiner/examining body shall satisfy themselves that welding has been conducted in accordance with the relevant standard (see Para 2.1)

During welder qualification tests, the welder will be expected to show adequate practical experience and knowledge of the welding process, materials and safety requirements for which approval is being sought. The examiner/examining body may stop the test if the welding conditions are not correct or if it appears the welder does not have the skill to fulfil the requirements, e.g. where there are excessive and/or systematic repairs.

3.2. Job Knowledge Testing

Testing a welder's job knowledge is non-mandatory in BS EN 9606 (series), but it may be specifically required by some European countries.

Job knowledge testing can be performed by the SAFed member organisation and would be an additional activity carried out by the engineer surveyor. BS EN ISO 14732 has a mandatory requirement that job knowledge is tested.

4. Testing

On completion of welding, and in accordance with the applicable standard, the test pieces shall undergo non-destructive and/or destructive testing.

Suitable facilities are provided by laboratories accredited by the United Kingdom Accreditation Service (UKAS) against the requirement of ISO/IEC 17025 - General

requirements for the competence of testing and calibration laboratories. The examiner / examining body shall ensure that the scope of accreditation covers the required tests.

It may be that a non 17025 accredited NDT / test facility is used, where this is the case the examiner / examining body shall ensure that such a facility is competent to perform the applicable testing. The examiner / examining body shall also identify during a contract review process with the client if a 17025 facility should be used to ensure contract compliance.

5. Certification

5.1. Description of Certification

When Certification is issued by the SAFed member organisation it will be in a standard format bearing the SAFed logo and watermark.

If manufacturers wish to use their own certificates, such certificates will be endorsed by a SAFed member company provided they are presented in a format that is both technically and factually correct (to the relevant Standard).

In all cases, certification will only be issued on satisfactory completion of the approval process and will only be valid when bearing the SAFed member company stamp and signature of a SAFed member organisation representative.

5.2. Validity and Renewal of Welder Qualification Certification

Welding Procedures, once approved, remain valid indefinitely and are thus valuable

documents, this is of course subject to them continuing to meet the requirements of the current version of the applicable standard)

For the most common Welder Approval Standard in the United Kingdom, BS EN ISO 9606-1, the revalidation of welder qualification remains valid for:

- 3 years; then a retest is required (Subclause 9.3a)
- 2 years; then two welds made during the last 6 months of the validity period shall be tested by radiographic or ultrasonic or destructive testing in accordance with Subclause 9.3b of the standard.
- Continual Validity; providing Subclause 9.2 and Subclause 9.3c are satisfied - Note – this option is not permitted for categories II, III and IV products relating to EU Directive 2014/68/EU (PED)

It should be noted that revalidation of welder qualification is only possible if Subclause 9.2 has been adhered to. This Subclause is applicable to all parts specified above and requires the person responsible for welding activities/SAFed member organisation to confirm every 6 months that the welder has worked within the range of qualification.

6. SAFed Member Organisation Services

SAFed member companies are major providers of Welding Certification United Kingdom.

Considerable experience and expertise is available to make the whole process of obtaining Weld Procedure Qualifications and Welder/Operator Approvals easier for manufacturers. SAFed member companies can share experiences and knowledge relating, but not limited to:

- Product and Welding Standards
- Test methods, regimes and programmes
- Qualification process

The above not only ensures technical accuracy but reduces costs and maximises the future worth of the approvals gained.

SAFed member companies, via a nation-wide network of engineer surveyors, can deal with all aspects of welding approvals including:

- Examiner/Examining Body Services (Surveillance, Witnessing and Inspection)
- Weld Testing (Non-Destructive and Destructive)
- Issue of Certification

SAFed member organisations have considerable technical involvement in the drafting and issuing of British, European and International Welding Specifications/Standards, thus providing the ability to give advice on known or anticipated future developments.

SAFed has a technical committee infrastructure that assists uniform application of the relevant Standards and provides authoritative interpretations of key issues within the Standards to aid the fabrication industry.

Appendix I

Welding Procedure and Welder Qualification Certification

It is essential, for the validity of the certificates, that the details entered are accurate and complete. (Examples of correctly completed certificates are shown in the next section).

Welding certificates, correctly completed, potentially span many projects and can therefore have a long life: they are valuable documents and their accuracy is of the utmost importance.

Welding Procedure and Welder Qualification Certification takes the form of one, or a combination of, the following:

E1 - Welding Procedure Qualification Record (WPQR)

This is a record comprising all necessary data needed for the qualification of a preliminary welding procedure specification.

E2 – Record of Weld Test

This details the actual welding parameters recorded during the welding of the WPQR test coupon. A continuation sheet E2c is available.

E3 - Test Results

This document is used to record the results of the relevancy Non-Destructive and Destructive Testing. It is mandatory to issue this with any WPQR, failure to do shall result in the WPQR being invalid. For Welder Qualification Certification, it is not necessary to issue such a document as a summary table showing acceptability is included on the Welder Qualification Test Certificate (E4).

Application Standards or End User Requirements may dictate the need for additional information to be included within a WPQR package such as, but not limited to:

- Photomacrographs
- Individual Technique NDT reports
- Material Certification
- Consumable Certification
- PWHT Graphs/Reports

E4 - Welder Qualification Test Certificate

Ref EN ISO 9606 (series) this single certificate will include details of the welder who is gaining qualification, the pWPS/WPS followed during the test, test piece Details, range of qualification gained, test results, route of chosen revalidation, and SAFed member organisation signatures and stamps.

Certificates E1 - E4 supplied by SAFed have translation details on the reverse for use if necessary.

NB: - SAFed was once a member of CEOC, which is now Known as the TIC Council – you may see these certificates with or without a CEOC Logo.

**E1****WELDING PROCEDURE APPROVAL TEST CERTIFICATE**

Page 1 of 3

1
 2
 3 *Manufacturer's Welding Procedure*
 4 *Reference No.* PQR 001
 5 *Manufacturer:* A FABRICATOR
 6 *Address:* 1 WELDING STREET
 JOINHAM

Inspecting Authority ZC/WP/120580*Reference No.* SS42528876/300

7 *Code / Testing Standard:* BSEN ISO 15614-1 A2 2012
 8 *Date of Welding:* 31/05/2012
 9 **RANGE OF QUALIFICATION**
 10 *Welding Process:* MANUAL TIG (141)wm & MMA (111)
 11 *Joint Type:* BUTT WELDS(1) & FILLET WELDS(2)
 12 *Parent Metal Groups Sub Groups:* 5.1 - 5.1, 5.1 - 1, 5.1 - 2
 13 *Parent Metal Thickness (mm):* 3 - 22.14mm
Weld Metal Thickness (mm): 141: 3 - 6mm, 111: 3 - 16.14mm
Throat Thickness (mm): NOT RESTRICTED
Single run / Multi run: MULTI RUN ONLY
 14 *Pipe Outside Diameter (mm):* >=30.15mm
 15 *Filler Metal Type / Designation:* 141: ISO 21952-A W CrMo1Si, 111: ISO 3580-A ECrMo1 B
Filler Material Make: 141: NOT RESTRICTED, 111: METRODE CHROMET 1 (3)
Filler Material Size: WITHIN HEAT INPUT RESTRICTIONS
 16 *Designation of Gas / Flux:* ISO 14175 I1 / BASIC COATED
Designation of Backing Gas: N/A
 17 *Type of Welding Current / Polarity:* DC-VE / DC+VE
Mode of Metal Transfer: N/A
Heat Input: ±25% OF RECORDED VALUES (4)
 18 *Welding Position(s):* ALL EXCEPT VERTICAL DOWN
 19 *Preheat Temperature:* 120°C MINIMUM, INTERPASS: 250°C MAXIMUM
Post-Heating: NONE
 20 *Post Weld Heat Treatment:* 650°C SOAK TEMPERATURE
 21 **OTHER INFORMATION** SEE BSEN ISO 15614-1 A2 2012
 (1) 141: ss,nb,mb,bs,ng,gg, 111: ss,mb,bs,gg
 (2) SEE CLAUSE 8.4.3a
 (3) RESTRICTED FOR IMPACT TESTED APPLICATIONS
 (4) FOR NON IMPACT TESTED APPLICATIONS -25% RECORDED VALUES MAX

22 *Certified that test welds were prepared, welded and tested satisfactorily in accordance with the requirements of the code / testing standard indicated above.*

23 *Location:* BIRMINGHAM
Date of Issue: 14/06/2012
Name and Signature: A ENGINEER

24
 25
Inspecting Authority
(CEOC Member Organization
Notified Body/ SaFed

Übersetzung des vorgedruckten
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 Translation of printed test
 on the reverse side
 Traduction des rubriques imprimées
 au verso

Note: This is a Welding Procedure Qualification Record and is applicable to the named manufacturer alone.
 This qualification is not a Standard Welding Procedure and may not be reproduced in whole or part and used as such.

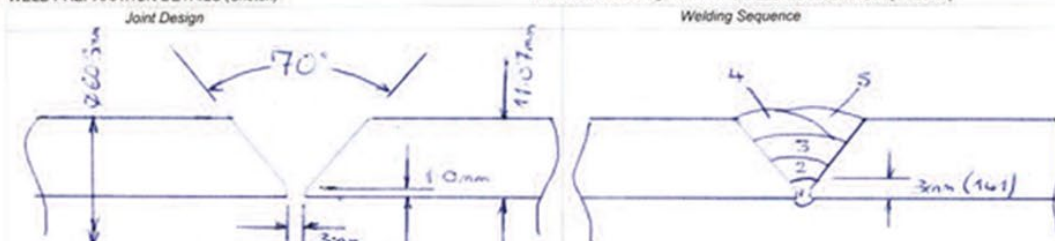
CEOC
INTERNATIONAL

E2
DETAILS OF WELD TEST

Page 2 of 3

1
 2
 3 Manufacturer's Welding Procedure
 4 Reference No. PQR 001
 5 Manufacturer: A FABRICATOR
 6 Address: 1 WELDING STREET JOINHAM
 7
 8 Welder's Name: A WELDER
 9
 10 Welding Process: MANUAL TIG (141)wm & MMA (111)
 11 Joint Type: SINGLE V BUTT IN PIPE
 12 WELD PREPARATION DETAILS (Sketch)
 13 Joint Design

Inspecting Authority
 Reference No. ZC/WP/120580
 SS42528876/300
 Date of Welding: 31/05/2012
 Location: WORKSHOP
 Method of Preparation and Cleaning: MACHINE & DEGREASE
 Parent Metal Specification: ASTM A335 P11
 Parent Metal Thickness(mm): 11.07mm
 Pipe Outside Diameter(mm): 60.3mm
 Test Piece / Welding Position: FIXED 45°INC/V-UP (H-L045)
 Welding Sequence


WELDING DETAILS

Run	Process	Size of Filler Metal	Current A	Voltage V	Type of Current and Polarity	Wire Feed / Travel Speed *	Heat Input *
1	TIG 141	2.4mm	120	12	DC-VE	N/A / 1.4mm SEC	0.51 KJ/mm
2	MMA 111	2.5mm	90	24	DC-VE	N/A / 1.9mm SEC	0.91 KJ/mm
3	MMA 111	2.5mm	90	23	DC-VE	N/A / 1.8mm SEC	0.92 KJ/mm
4 - 5	MMA 111	2.5mm	89	24	DC-VE	N/A / 2.1mm SEC	0.81 KJ/mm
							EN1011-1

16 Filler Metal: 141: BOHLER DCMS-IG, ISO 21952-A WCrMo1Si
 17 Type, Designation, Trade Name: 111: METRODE CHROMET 1, ISO 3580-A E CrMo1B
 18 Any Special Baking or Drying: 141: NONE, 111: VACUUM PACKED
 19 Gas / Flux: 99.99% ARGON (ISO 14175 11) / BASIC COATED
 20 Gas Flow Rate - Shield: 12 LPM
 21 Backing: N/A
 22 Tungsten Electrode Type / Size: 2% THORIATED, 2.4mm DIAMETER
 23 Details of Back Gouging / Backing: 141: NONE, 111: BACKED
 24 Preheat Temperature: 120°C
 25 Interpass Temperature: 250°C MAXIMUM

26 POST WELD HEAT TREATMENT SOAK @ 650°C FOR 1 HOUR.
 27 Time, Temperature, Method: >300°C HEAT & COOL @ 220°C/Hr MAX
 28 Heating and Cooling Rates *: ELECTRIC INDUCTION FURNACE

OTHER INFORMATION

29 The above test piece was A N ENGINEER
 welded in the presence of Notified Body/SaFed Member

Name and Signature A N OTHER

 30
31

Inspecting Authority
 (CEOC Member Organization)
 Notified Body/SaFed Member

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E2c

DETAILS OF WELD TEST
(continuation sheet)



Run	Process	Size of filler (mm)	Current A	Voltage V	Type of current / polarity	Wire feed speed	Travel speed (mm/sec)	Heat input (kJ/mm)
1	141	2.4	95	11	DC Elec Neg	N/R	0.54	1.16
2	141	2.4	152	12.5	DC Elec Neg	N/R	0.83	1.37
3	111	3.2	97	23	DC Elec Pos	N/R	2.76	0.65
4	111	3.2	93	22	DC Elec Pos	N/R	2.80	0.58
5	111	3.2	93	22	DC Elec Pos	N/R	3.39	0.48
6	111	3.2	93	22	DC Elec Pos	N/R	3.40	0.48
7	111	3.2	93	22	DC Elec Pos	N/R	3.39	0.48
8	111	3.2	93	22	DC Elec Pos	N/R	4.23	0.39
9	111	3.2	93	22	DC Elec Pos	N/R	4.23	0.39
10	111	3.2	93	22	DC Elec Pos	N/R	4.11	0.40
11	111	3.2	93	22	DC Elec Pos	N/R	3.63	0.45
12	111	3.2	93	22	DC Elec Pos	N/R	3.89	0.42
13	111	3.2	93	22	DC Elec Pos	N/R	3.78	0.43
14	111	3.2	93	22	DC Elec Pos	N/R	3.10	0.53
15	111	3.2	88	22	DC Elec Pos	N/R	3.48	0.45
16	111	3.2	88	22	DC Elec Pos	N/R	3.75	0.41
17	111	3.2	88	22	DC Elec Pos	N/R	3.48	0.45
18	111	3.2	88	22	DC Elec Pos	N/R	3.72	0.42
19	111	3.2	88	22	DC Elec Pos	N/R	3.66	0.42
20	111	3.2	88	22	DC Elec Pos	N/R	3.45	0.45
21	111	3.2	88	22	DC Elec Pos	N/R	2.87	0.54

**E3****TEST RESULTS**

Page 3 of 3

1
2
3 Manufacturer's Welding Procedure: PQR 001
4 Reference No. SS42528876/300
5 Visual Examination: ACCEPTABLE
6 Penetrant Test *: ACCEPTABLE
7 Tensile Tests: ISO 6892-1

Inspecting Authority: ZC/WP/120580
Reference No. SS42528876/300
Radiography *: ACCEPTABLE
Ultrasonic Examination*: NOT REQUIRED
Temperature: 20°C

Type / No.	Re N/mm ²	Rm N/mm ²	A %on	Z%	Fracture Location	Remarks
Requirement		415				
TRANSVERSE 1	-	536	-	-	8mm CLEAR	ACCEPTABLE
TRANSVERSE 2	-	540	-	-	6mm CLEAR	ACCEPTABLE

10 Bend Tests: ISO 5173 Former Diameter: 4t

Type No.	Bend Angle	Elongation	Result	Fillet Fracture Test *
ROOT X 2	180°	-	ACCEPTABLE	NOT REQUIRED
FACE X 2	180°	-	ACCEPTABLE	Macro Examination: ACCEPTABLE

13 IMPACT TESTS *: ISO 148-1 Type: KV150 Size: 10 X 7.5 X 2mm Requirement: NOT STATED

Notch Location / Direction	Temp. °C	Values	Average	Remarks
WELD CAP C/LINE	+20°	94, 92, 89	91.6 J	VALUES TO BE ASSESSED FOR APPLICATION
HAZ F/LINE	+20°	148, 148, 148	148 J	

15 HARDNESS TESTS *: ISO 9015-1

16 Type / Load VICKERS 10 Kg LOAD

17 Values - Parent Metal 151 - 162

18 - H.A.Z. 182 - 245

19 - Weld Metal 212 - 233

20 OTHER TESTS MACRO PHOTOGRAPH, SEE ADDENDUM 1

21 REMARKS

NONE

22 Tests carried out in accordance with the requirements of: BSEN ISO 15614-1 A2 2012

23 Laboratory Report Reference No SS42528876/300

24 Test Results Were ACCEPTABLE

25 Test carried out in the presence of: A N ENGINEER
Notified Body/SaFed Member

Name and Signature A N OTHER

27

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**E4**

WELDER APPROVAL TEST CERTIFICATE

DESIGNATION BS EN 287-1,MAN141,T,BW,5.1,t3,D60.3,H-L045,ss,nb
BS EN 287-1,111,T,BW,5.1,B,t8.07,D60.3,H-L045,ss,mb

Page 1 of 2

Manufacturer's Welding Procedure

Inspecting Authority

ZC/WA/123446

Reference No.

WPS 001

Reference No.

SS42520000/99

Welder's Name:

A WELDER

Identification:

W007

Method of Identification:

WELDER I/D

Date and Place of Birth:

06/06/66 - BIG CITY

Employer:

A FABRICATOR

Code / Testing Standard:

BS EN 287-1 2011

Job Knowledge:

Not Tested

	Weld Test Details		Range of Approval	
Welding Process(es)	MANUAL TIG (141)	& MMA (111)	MAN 141,142,143,145	& MMA (111)
Plate or Pipe	PIPE (T)		P.T	
Type of Joint / Weld	BUTT WELD (BW)		BW ONLY	
Material Group / Sub-Group	5.1		1 THRU 7, 9.1 and 11	
Welding Consumable(s)	ISO21952-A WCrMo1Si	ISO 3580-A ECrMo1B	COMPATIBLE FILLERS	
Shielding Gas / Flux	ARGON 99.99%	BASIC FLUX	COMPATIBLE GAS	B.A,R.A,R.B,RC,RR,R
Auxiliaries	-		-	
Material Thickness	11.07mm		3mm to 22.14mm	
Weld Metal Thickness	3mm	8.07mm	3mm to 6mm	3mm-16.14mm
Pipe Outside Diameter	60.3mm		>=30.15mm	
Welding Position	H-L045		ALL EXCEPT PG & J-L045	
Weld Details (Backing / Gouging)	NONE	BACKED		
	ss,nb	ss,mb	ss,nb,mb,bs	ss,mb, bs
Single layer / Multi layer	ML		-	

Additional information is available on attached sheet / or welding procedure Specification No:

WPS 001

Type of Test	Performed and Acceptable	Not Required	Name and Signature	THE ENGINEER
Visual	ACCEPTABLE	-	Inspecting Authority	NOTIFIED BODY / SaFed MEMBER
Radiography	ACCEPTABLE	-	(CEOC Member Organization)	
Magnetic Particle	-	NOT REQUIRED	Date of Issue:	31/05/2012
Penetrant	-	NOT REQUIRED	Location:	BIRMINGHAM
Macro	-	NOT REQUIRED	Approval Valid Until:	30/05/2014
Fracture	-	NOT REQUIRED	PROLONGATION FOR APPROVAL BY EMPLOYER / SUPERVISOR	
Bend	-	NOT REQUIRED		
Additional Tests *	-	NOT REQUIRED		

PROLONGATION FOR APPROVAL BY INSPECTING AUTHORITY

Date Signature Position or Title

Date	Signature	Position or Title

Date Signature Position or Title

Date	Signature	Position or Title

*) Append separate sheet if required

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