

Weld qualification test report

Report number	LP26-0601-03 WPWQ Rev. 3	(This report supersedes LP26-0601-03 WPWQ Rev. 2)
Customer	ASGARD Engineering	
Address	51 Miguel Road, Bibra Lake, WA 6163	
Requested by	Paul Thariyan	
Purchase Order	168712	
Client Job Request No.	AGE-WPQR-BW001	
Test activity dates	10/03/2026 to 11/03/2026	
Description	Welding procedure, Welder qualification testing	
Identification	Refer to the WPWQ identification data	
WPQR No.	AGE-WPQR-BW001	
Welders name	Simon Garvey	
Welders ID	647	
Material shape	Plate to plate	
Joint type	Open Square Butt weld-welded from one side	
Thickness	T1: 3 mm T2: 3 mm	
Weld process	GMAW (Position 3G, Vertical Down)	
Material Grade	AS 1594 Grade HA350	
Material Heat No.	7992629	
Test results	Refer to the following summary and details on the following pages.	



REVOKED

Macro test	Complied
Tension test	Complied
Bend test	Complied



Accreditation No. 15840

**Accredited for compliance with
ISO/IEC 17025-Testing**

Refer to the following pages for details of test conducted and Signatories.

Issue date : 02/04/2026

Report no. LP26-0601-03 WPWQ Rev. 3, ASGARD Engineering, Page 1 of 6, Format no. OMS MF-RP-26 WPWQ OMS(Rev. 5.0 20250412)

Macro test

Accredited laboratory	LMATS Perth Laboratory
Job address	LMATS Perth Laboratory
Test specification	AS/NZS 1554.1:2014 - Category SP (WPS/Welder Qualification tests)
Test method	AS/NZS 2205.5.1:2024 (ISO 17639:2022)-Macro test - weld
Specimen location	Location as per specification Standard
Preparation	Cold cutting followed by stage grinding to P#1200 coated abrasives
Etchant & process	10% Nital swabbing
Weld geometry	Scale indicates 1mm graduation Refer to the photographs on following pages.
Approved tester	Aaron Jamieson
Other testers	Sophia Stevenson

Specimen 1 :

Test date	10/03/2026
Magnification	x 5 approximately (refer to the photograph)
Width	7.9
Throat thickness	2.8 mm
Discontinuities	Nil
Comments	The etched cross-section showed complete penetration and fusion with no evidence of cracks, gross porosity or inclusions.
Test results	The test results comply with the specification requirements.

REVOKED



Accreditation No. 15840

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ISO / IEC 17025 - Testing

Signatory
Alex Khomoutov

LMATS Engineering Report LP26-0601-03 WPWQ Rev. 3, ASGARD Engineering, Page 2 of 6

Report issued on 02/04/2026

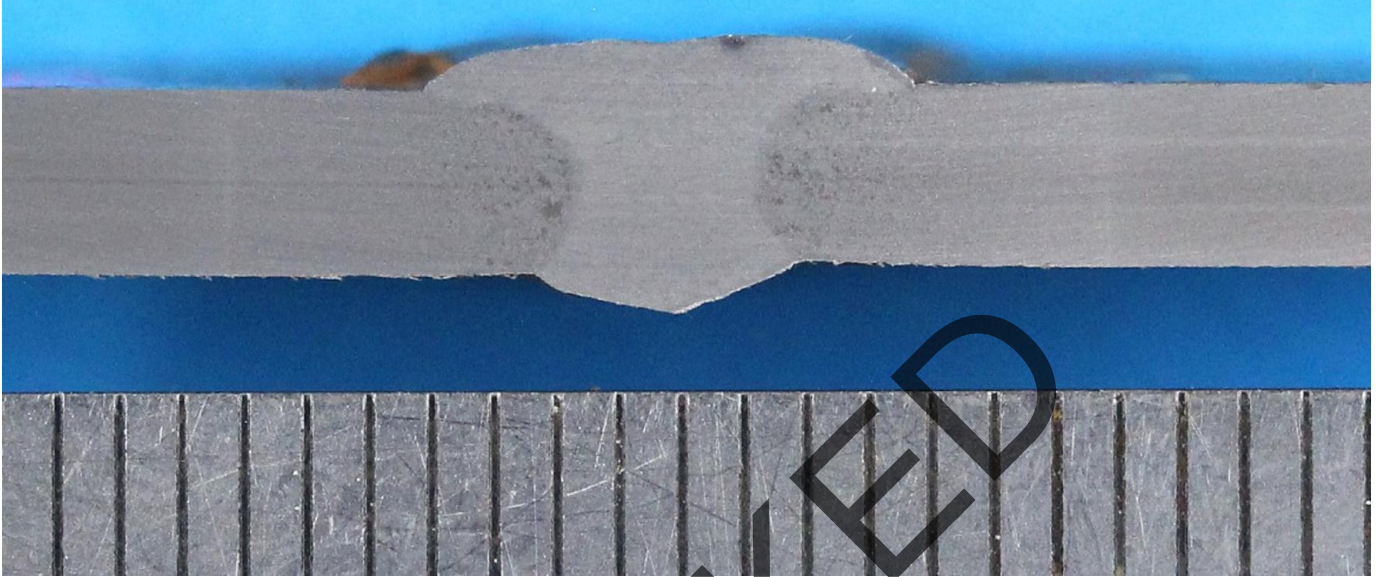


Image 1 of 1 - Macro Specimen 1

REVOKED

Tension test

Accredited laboratory LMATS Perth Laboratory

Job address LMATS Perth Laboratory

Test specification AS/NZS 1554.1:2014 - Category SP (WPS/Welder Qualification tests)

Test method AS 2205.2.1-2003 (R2018)-Tensile test - transverse weld

Specimen location As per specification Standard

Specimen type Machined

Weld reinforcement As welded

Specimen identification	Thickness (mm)	Width (mm)	Fracture position	Max force (kN)	UTS (MPa)	Result	Test date
LP26-0601-01 TT1	2.75	19.95	Weld	29.40	536	C	11/03/2026
Requirements : AS 1594 Grade HA350				Minimum	500		
				Maximum	N/A		

Test result The test results complied with the specification requirements.

Comments Nil

Approved tester Mahmood Alhabsi

REVOKED

Bend test

Accredited laboratory	LMATS Perth Laboratory
Job address	LMATS Perth Laboratory
Test date	11/03/2026
Test specification	AS/NZS 1554.1:2014 - Category SP (WPS/Welder Qualification tests)
Acceptance criteria	AS/NZS 1554.1:2014 - Category SP (WPS/Welder Qualification tests)
Test method	AS/NZS 2205.3.1:2024 (ISO 5173:2023)-Bend test
Test type symbol	TRBB (Transverse Root Bend), TFBB (Transverse Face Bend)
Specimen location	Location as per specification Standard
Test temperature	Ambient
Bend method	180° with a former and roller support

Specimen ID	Dimensions (mm)	Former (mm)	Roller distance (mm)	Type & dimensions of imperfections observed	Result
TFBB 1	3.00 X 10.00	9.00	18.00	No cracks or tears were observed	C
TRBB 1	3.00 X 10.00	9.00	18.00	No cracks or tears were observed	C

Test result The test results complied with the specification requirements.

Approved tester Aaron Jamieson

Other testers Sophia Stevenson

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Normative general notes

1. Test and inspection items may be discarded after 6 weeks, unless alternative arrangements are made with LMATS.
2. Samples, identification of samples and all job specific details were supplied by the client. The test results relate only to the items tested or sampled.
3. Any stated nominal pipe sizes and nominal thickness of the material were provided by the client.
4. Where applicable, the Measurement Uncertainty (MU) applies to the test results as per LMATS procedure. MU can be obtained by contacting one of LMATS ISO 17025 accredited laboratories.
5. Acceptance criteria is applied from the test specification. If the test specification does not include acceptance criteria, then the test or inspection results should be referred to a competent authority for further action.
6. Refer to the attached revision notes if this report has been revised. This report shall not be reproduced except in full without approval of the issuing laboratory to ensure that parts of a report are not taken out of context. The client or their representatives shall not edit this report.
7. LMATS or its professional indemnity insurance provider do not indemnify the contents within this report or the conformity of a tested product unless the invoice for the reported work is paid in full within the agreed credit terms. Reports will be revoked if the invoice for the completed work is not paid in full.

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Abbreviations used in this report

A - No discontinuities detected	KC - Crater crack	RP - Report findings
BT - Burn (melt) Through	KL - Longitudinal crack	SED - Excessive Dressing (underflushing)
C - Comply	KT - Transverse crack	SGI - Incompletely filled Groove
CP - Crater Pipe	LI - lack of Inter-run fusion	SGS - Shrinkage Groove
DNC - Does Not Comply	LP - Incomplete root Penetration	SMG - Grinding Mark
EC - Elongated Cavity (hollow bead)	LR - lack of Root fusion (missed edge)	SMH - Hammer Mark
F - Failed	LS - lack of Side fusion	SMT - Tool Mark (chipping mark)
GP - Gas Pore	NRRD - No Recordable Reflections Detected	SRC - Root Concavity (Suck back)
HiLo - Linear misalignment	NUSID - No unacceptable Surface Indications Detected	SSP - Spatter
IC - Copper Inclusion	P - Passed	SUC(e) - Undercut External
IL - Linear Inclusion (slag line)	p.d. - Processing / film Defects	SUC(i) - Undercut Internal
IN - Inclusion	PG - Localized Porosity	SXP - Excessive Penetration
IO - Oxide Inclusion (wagon tracks)	PL - Linear Porosity	WH - Worm Hole
IT - Tungsten Inclusion	PU - Uniform Porosity	

Normative revision notes for Report No. LP26-0601-03 WPWQ Rev. 3

Description revised from "1 x 3mm Butt weld" to "Welding procedure, Welder qualification testing"

Report No. revised from "LP26-0601-03 WPWQ Rev. 2" to "LP26-0601-03 WPWQ Rev. 3"

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Normative revision notes for Report No. LP26-0601-03 WPWQ Rev. 3 for WPWQ - Macro

Test specification revised from "AS/NZS 1554.1:2014 - Category SP (WPS/Welder Qualification tests)" to "AS/NZS 1554.1:2014 - Category SP (WPS/Welder Qualification tests)"

Test method revised from "AS/NZS 2205.5.1:2019 (ISO 17639:2003)-Macro test - weld" to "AS/NZS 2205.5.1:2024 (ISO 17639:2022)-Macro test - weld"

REVOKED

Normative revision notes for Report No. LP26-0601-03 WPWQ Rev. 3 for WPWQ - Tension

Test specification revised from "AS/NZS 1554.1:2014 - Category GP (WPS/Welder Qualification tests)" to "AS/NZS 1554.1:2014 - Category SP (WPS/Welder Qualification tests)"

REVOKED

Normative revision notes for Report No. LP26-0601-03 WPWQ Rev. 3 for WPWQ - Bend

Test specification revised from "AS/NZS 1554.1:2014 - Category SP (WPS/Welder Qualification tests)" to "AS/NZS 1554.1:2014 - Category SP (WPS/Welder Qualification tests)"

Test method revised from "AS/NZS 2205.3.1:2020 (ISO 5173:2009)-Bend test" to "AS/NZS 2205.3.1:2024 (ISO 5173:2023)-Bend test"

REVOKED