

## Magnetic particle test report

<b>Report number</b>	LW21-1297-1 MT	
<b>Customer name</b>	Asme Welding Pty Ltd	
<b>Address</b>	61 Neumann Rd Capalaba QLD Australia 4157	
<b>Requested by</b>	Kenny Nguyen	
<b>Purchase order</b>	PO-1783	
<b>Accredited laboratory</b>	LMATS Melbourne Laboratory	
<b>Test date</b>	13/07/2021	
<b>Job address</b>	17 Champion road, newport	
<b>Job description</b>	Magnetic Particle Inspection of Weld Repairs	
<b>Identification</b>	Refer to Table 1 (identification provided by the client)	
<b>Material grade</b>	Carbon steel	
<b>Test specification</b>	AS 2885.2 - 2020 - Section 17 - Tier 1	
<b>Test method</b>	AS 1171 - 1998 (Superseded)	
<b>Test procedure</b>	TP-MT-01 (I1,R7)	
<b>Magnetization</b>	Magnetic Flow Method - AC	
<b>Test area</b>	All repaired areas including the surrounding HAZ.	
<b>Surface condition</b>	As welded	
<b>Equipment</b>	L003540 Magflux Y-2 MT Yoke, L0923 Callington Fig.B2 MT Calibration block, L003574 Digital Lux Meter Light meter	
<b>Consumables</b>	<b>Background:</b> DUBL-CHEK CP-2	<b>Particle type:</b> DUBL-CHEK BO-1
<b>Demagnetised</b>	No	
<b>Approved tester</b>	Kurtis Mears (AINDT L2 - RT MT PT VT)	

**Test results** Refer to Table 1 for test area identification and results



Accredited for compliance with  
ISO/IEC 17025 – Testing  
Accreditation No. 15840

### Signatory

(M.E.(Mech) B.Eng, ASNT L3 -  
UT MT PT, AINDT L2 PAUT UT  
ET RT MT PT)



Mir Katouzi  
15/07/2021

**Table 1: Test area identification (provided by the client) and results (All dimensions are in mm)**

Drawing No.	Identification	Weld No.	Description	Material Grade	PQR/WPS No.	Welder name (ID)	Discontinuities	Result
DOW-034-ISO-001	Unique ID: LSR	LSR	Repaired section	ASTM A537	LP-013	AP-019	NUSID	C
DOW-034-ISO-001	Unique ID: LSL	LSL	Repaired section	ASTM A537	LP-013	AP-052	NUSID	C



**Image 1 of 2 - General view of the repaired area after inspection**



**Image 2 of 2 - General view of the repaired area after inspection**

**Test restrictions** Nil.

**Comments** Inspection was carried out on repaired areas only. Refer to photos for further information. No unacceptable surface indications were detected at the time of inspection.

**Notes**

1. All test and inspection items will be discarded after 6 weeks, unless retrieved by the clients representative
2. Samples, identification of samples and all job specific details were supplied by the client.
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 the LMATS ISO 17025 accredited laboratory.
5. If this report does not specify acceptance criteria, then the test or inspection results should be referred to a competent authority for further action.
6. 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.

**Abbreviations used in this report**

A - No discontinuities detected	KC - Crater crack	SED - Excessive Dressing (underflushing)
BT - Burn (melt) Through	KL - Longitudinal crack	SGI - Incompletely filled Groove
C - Comply	KT - Transverse crack	SGS - Shrinkage Groove
CP - Crater Pipe	LI - lack of Inter-run fusion	SMG - Grinding Mark
DNC - Does Not Comply	LP - Incomplete root Penetration	SMH - Hammer Mark
EC - Elongated Cavity (hollow bead)	LR - lack of Root fusion (missed edge)	SMT - Tool Mark (chipping mark)
GP - Gas Pore	LS - lack of Side fusion	SRC - Root Concavity (Suck back)
HiLo - Linear misalignment	NRRD - No Recordable Reflections Detected	SSP - Spatter
IC - Copper Inclusion	NUSID - No unacceptable Surface Indications Detected	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	

**End of LMATS report. Information included on the following pages (if any) was provided by the client.**