

Certificate Ref: 3000425949

Order Ref: PO-04288  
Received: 30/07/2021  
Issue Date: 12/08/2021

For the attention of: Leah Hatch  
K & S Aerospace Components  
Unit 14 Eddystone Road  
South Hants Industrial Park  
SOUTHAMPTON  
Hampshire  
SO40 3SA

KEIGHLEY LABORATORIES LIMITED

Ashley Payne  
Metallurgical Technician

**BUTT WELDED ALUMINIUM ALLOY SHEET**

**Material Advised - 5052\***

**\*Full specification not advised**

Welded By : K Hatch  
Welder ID : KS01  
Welding Process : TIG  
Filler Rod : Not Advised  
Job Number : 01985

**Weld Test**

Overall Result Acceptable

**Visual Examination**

Condition As Welded  
Magnification Up to x25  
Result Acceptable

**Tensile Test**

Laboratory Temperature		22 °C
Dimensions	a x b	25.0 x 0.98 mm
Area	So	24.50 mm <sup>2</sup>
Maximum Force	Fm	4.95 kN
Tensile Strength	Rm	202 N/mm <sup>2</sup>
Tensile Strength	Rm	29.5 ksi
Broke		Clear of weld
Result		Acceptable - providing tensile strength meets the design requirements

**Specification**

BOOKED IN  
GRN: 07856  
BY: [Signature]  
DATE: 12/08/21  
K&S  
13

WELD AUTHORITY  
[Signature]  
DATE: 12.8.21

When a certificate of conformity is required, and where guidance from the material/testing specification is not available, the Simple Acceptance Rule (ILAC - G8:09/2019) will be applied for borderline results that are within the uncertainty budgets for the test carried out as detailed within KLL procedure QP006 Appendix 1 (Guard band zero: Risk less than 50 % Probability of False Accept).

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Results relate only to the item(s) tested.

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### **Bend Test**

Laboratory Temperature	23 °C
Bend Radius	5 x thickness
Face Bend	Bent 180° without cracking.
Result	Acceptable

### **Metallographic Examination**

Magnification	x7 - x500
Etchant	Keller's Reagent
Section(s) assessed	1
Result	Acceptable

### **Note**

Test Schedule: C.A.A. - British Civil Airworthiness Requirements Chapter A8-10 as applicable.

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When a certificate of conformity is required, and where guidance from the material/testing specification is not available, the Simple Acceptance Rule (ILAC - G8:09/2019) will be applied for borderline results that are within the uncertainty budgets for the test carried out as detailed within KLL procedure QP006 Appendix 1 (Guard band zero: Risk less than 50 % Probability of False Accept).

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