





Certificate Ref:

3000424657

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

Order Ref:

PO-04232

Received: Issue Date: 25/05/2021

09/06/2021



Ashley Payne Metallurgical Technician

## BUTT WELDED STAINLESS STEEL SHEET Material Specification - MSRR 6523 (S527)

Welded By: S Kerr Welder ID: KS08

Welding Process: TIG - ISO 24394-141-S-PA1-B-T1.2

Filler Rod: 9500/002

DPI Examination Certificate: : N149099LIQ1

Carried out by another UKAS laboratory prior to arrival at Keighley Laboratories.

Radiographic Examination Certificate: : N149099RAD1

Carried out by another UKAS laboratory prior to arrival at Keighley Laboratories.

Visual Examination Certificate: : N149099VIS1

Carried out by another UKAS laboratory prior to arrival at Keighley Laboratories.

### Weld Test

Overall Result

Acceptable

#### Visual Examination

Condition

As Welded

Magnification

Up to x25

Result

Acceptable

#### **Tensile Test**

Laboratory Temperature

20 °C

**Dimensions** 

axb

25.0 x 1.24 mm

Area

So

31.0 mm<sup>2</sup>

Maximum Force

Fm

18.80 kN

Tensile Strength Tensile Strength Rm

606 N/mm<sup>2</sup>

Rm

88.0 ksi

Broke

Result

Clear of weld

Acceptable - providing tensile strength meets the design requirements

WELD AUTHORITY

**BOOKED IN** 

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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### **Bend Test**

Test Piece Pickled in accordance with BS EN ISO 3651:1998 Method 'A'

Laboratory Temperature

22 °C

Bend Radius

3 x thickness

Face Bend

Bent 90° without cracking.

Result

Acceptable

# Metallographic Examination

Magnification

x7 - x500

Etchant

Super Kallings Reagent

Section(s) assessed

1

Result

Acceptable

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

Test Schedule: British Standard BS ISO 24394:2018 as applicable. Test Schedule: Rolls Royce plc. - RPS 912 Issue 18 as applicable.

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