

Certificate Ref: 3000420624

Order Ref: PO-04009  
Received: 28/10/2020  
Issue Date: 14/11/2020

For the attention of: Paul Holmes  
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Matthew Mellor  
Technical Services Director

**BUTT WELDED STAINLESS STEEL SHEET**  
**Material Specification - S527**

Welded By : G Winter  
Welder ID : KS03  
Welding Process : TIG  
Filler Rod : MSRR 9500/2  
Job Number : 01841

**Weld Test**

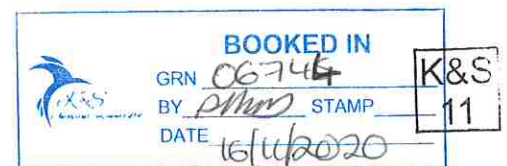
Overall Result Acceptable

**Visual Examination**

Condition As Welded  
Magnification Up to x25  
Result Acceptable

**Tensile Test**

Laboratory Temperature		20 °C
Dimensions	a x b	25.03 x 1.25 mm
Area	So	31.3 mm <sup>2</sup>
Maximum Force	Fm	20.6 kN
Tensile Strength	Rm	658 N/mm <sup>2</sup>
Tensile Strength	Rm	95 ksi
Broke		Clear of weld
Result		Acceptable - providing tensile strength meets the design requirements



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**

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

Laboratory Temperature	21 °C
Bend Radius	3 x thickness
Face Bend	Bent 90° without cracking.
Result	Acceptable

### **Metallographic Examination**

Magnification	x7 - x500
Etchant	Ferric Chloride
Section(s) assessed	1
Result	Acceptable

### **Note**

\* Although the welding is deemed to be acceptable to the criteria specified, the size of the test plate received did not comply with the minimum required by ISO 24394:2018.

Test Schedule: C.A.A. - British Civil Airworthiness Requirements Chapter A8-10 as applicable.  
Test Schedule: Rolls Royce plc. - RPS 912 Issue 18 as applicable.  
Test Schedule: British Standard BS ISO 24394:2018 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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