

Certificate Ref: 3000424653

Order Ref: PO-04232
Received: 25/05/2021
Issue Date: 09/06/2021

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 NICKEL ALLOY SHEET
Material Specification - MSRR 7203 (Inconel 625)

Welded By : G Winter
Welder ID : KS03
Welding Process : TIG - ISO 24394-141-S-PA1-B-T1.2
Filler Rod : 9500/237
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

WELD AUTHORITY
DATE 11.6.21

K&S
01

Tensile Test

Laboratory Temperature 19 °C
Dimensions a x b 25.0 x 1.23 mm
Area So 30.8 mm²
Maximum Force Fm 25.91 kN
Tensile Strength Rm 841 N/mm²
Tensile Strength Rm 122 ksi
Broke Adjacent to weld
Result Acceptable - providing tensile strength meets the design requirements

BOOKED IN
GRN 7380
DATE 09/06/21
STAMP K&S 13

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	19 °C
Bend Radius	2 x thickness
Face Bend	Bent 180° without cracking.
Result	Acceptable

Metallographic Examination

Magnification	x7 - x500
Etchant	Super Kallings Reagent
Section(s) assessed	1
Result	Acceptable

Note

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.

*** END OF DOCUMENT ***

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