



**X-Ray Laboratories Limited**

**Client Number 146**

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**Authorised Representative**

Mr Israel Hughes  
Technical Manager

**Programme**

Mechanical Testing Laboratory

**Accreditation Number 188**

**Initial Accreditation Date 11 October 1982**

**Conformance Standard**

ISO/IEC 17025:2017

General requirements for the competence of testing and calibration laboratories

**Laboratory Services Summary**

- 4.75 Welder Qualification Tests
- 4.76 Metals and Metal Products
- 4.79 Metallographic Tests on Metals
- 4.81 Non Destructive Tests by Radiography
- 4.82 Non Destructive Tests by Ultrasonics
- 4.83 Non Destructive Tests by Visual Inspection
- 4.84 Non Destructive Tests by Dye Penetrant Methods
- 4.85 Non Destructive Tests by Magnetic Particle methods

**Key Technical Personnel**

Mr Scott Burfoot	4.75, 4.76, 4.79, 4.83, 4.84, 4.85
Mr Israel Hughes	4.75, 4.76, 4.79, 4.81, 4.83, 4.84, 4.85
Mr Paul Jensen	4.82, 4.83, 4.85

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**4.75 Welder Qualification Tests**

Test in accordance with the standards such as:

- API 1104
- AS/NZS 1554 Part 1 to 7
- AS 1665
- ASME-9
- AS 2205.2.1
- AS 2205.3.1
- AS 2205.4.1
- AS 2205.4.2
- AS/NZS 2980
- BS EN ISO 9606.1

**4.76 Metals and Metal Products**

Tests in accordance with the standards such as:

**(a) Tension tests in accordance with the following standards in the load range 5 kN to 500 kN (Excluding proof stress)**

- AS 1391
- BS EN 10002.1
- BS EN ISO 6892-1

**(c) Bend tests (including transverse root and face, longitudinal and side) in accordance with the following standards:**

- AS 2205
- ASME IX
- BS EN ISO 15614-1
- BS EN ISO 15614-2
- ISO 5173


**(e) Hardness tests in accordance with the following standards**

Vickers hardness tests in the load range 5 kgf to 50 kgf in accordance with:

- BS EN ISO 6507.1
- AS 1817

**(f) Impact tests in accordance with the following standards**

Charpy impact tests in the load range between -50 °C and ambient

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AS 1544.2  
 BS EN 10045.1  
 BS EN ISO 148-1:2016

**(g) Weld tests (tensile, hardness, bend, nick breaks and macro-examination) in accordance with the following standards**

AS 2205  
 ASME IX  
 BS EN 15614-1  
 BS EN 15614-2  
 ISO 9017  
 ISO 17639

**4.79 Metallographic Tests on Metals**

**(h) Tests on welds in accordance with the following standards**

AS 1665  
 AS 2205  
 BS EN ISO 9606-2  
 ASME IX  
 EN 15614-1  
 EN 1321  
 ISO 17639  
 AS/NZS 1554


**4.81 Non Destructive Tests by Radiography**

**(a) Radiographic examination of metals**  
 (Aluminium, Iron, Stainless steel)

- (i) Single wall or rolled products
  - thickness measurements
  - corrosion pitting
- (ii) Welded Joints
- (iii) Castings
- (iv) Forgings

**X and gamma radiography of butt welded joints in accordance with:**

ASME V Article 2  
 AS 2177- Part 1  
 BS EN 1435  
 ISO 17636-1

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**4.82 Non Destructive Tests by Ultrasonics**

In accordance with standards such as:

**(a) Ultrasonic examination of metals**  
 (Aluminium, Iron)

- (i) Single wall or rolled product
  - thickness measurements
  - corrosion pitting
- (ii) Welded joints

**4.83 Non Destructive Tests by Visual Inspection**

**(a) Visual inspection of metals**  
 (Aluminium, Iron)

- (i) Flat or rolled product
- (ii) Welded joints
- (iii) Castings
- (iv) Forgings

**4.84 Non Destructive Tests by Dye Penetrant Methods**

Penetrant Testing in accordance with standards:  
 (Aluminium, Copper, Iron, Nickel, Magnesium, Zinc, Stainless Steel)

**(a) Visible dye**

- (i) Water washable
- (ii) Solvent removable method


**(b) Fluorescent dye**

- (i) Water washable
- (ii) Solvent removable method

**4.85 Non Destructive Tests by Magnetic Particle Methods**

**(a) Magnetic flow method**  
 (Iron)

- (i) Welded joints
- (ii) Forgings
- (iii) Castings

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