

CERTIFICATE OF ACCREDITATION

In terms of section 22(2) (b) of the Accreditation for Conformity Assessment, Calibration and Good Laboratory Practice Act, 2006 (Act 19 of 2006), read with sections 23(1), (2) and (3) of the said Act, I hereby certify that:-

FRANKTECH METALLURGICAL SERVICES A DIVISION OF FRANKWEN FORGE (PTY) LTD

Co. Reg. No.: 1971/010346/07

Facility Accreditation Number: **T0244**

is a South African National Accreditation System accredited facility
provided that all conditions and requirements are complied with

This certificate is valid as per the scope as stated in the accompanying schedule of accreditation,
Annexure "A", bearing the above accreditation number for

MECHANICAL AND PHYSICAL TESTING

The facility is accredited in accordance with the recognised International Standard

ISO/IEC 17025:2017

The accreditation demonstrates technical competency for a defined scope and the operation of a
quality management system

While this certificate remains valid, the Accredited Facility named above is authorised to
use the relevant accreditation symbol to issue facility reports and/or certificates

Mr T Baleni
Acting Chief Executive Officer

Effective Date: 30 December 2021
Certificate Expires: 29 December 2026

ANNEXURE A
SCHEDULE OF ACCREDITATION

Facility Number: **T0244**

Permanent Address of Laboratory:

Franktech Metallurgical Services
 A Division of Frankwen Forge (Pty) Ltd
 No.43 Liverpool Rd
 Benoni South
 Benoni
 1502

Postal Address:

PO Box 10583
 Aston Manor
 1630

Tel: (011) 746 9200

Fax: (011) 749 0690

E-mail: Graham@mtlabs.co.za

Technical Signatories:

Ms N Mothlajoe
 Mr G Knight
 Mr G Henning
 Mr S Dyantyi (Excluding Corrosion & Inclusion Content)

Nominated Representative:

Mr G Knight

Issue No.: 19

Date of Issue: 25 May 2023

Expiry Date: 29 December 2026

Materials / Products Tested	Type of Tests / Properties Measured, Range of Measurement	Standard Specifications, Techniques / Equipment Used
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Mechanical Testing

Metallic Materials

Tensile Testing:

Ultimate tensile strength	ASTM E8:2016
0.2% Proof stress	ISO 6892-1:2016(MCP08)
Reduction of area	
Percentage Elongation	
Hot tensile testing up too 600°C	ISO 6892-2:2016 (MCP08) ASTM E21:2020 (MCP08)

Impact Testing

Joules absorbed (-40°C to room temperature)	ASTM E23:2018 (MCP10) ISO 148-1:2016
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Lateral expansion

Percentage shear

Hardness Testing:

Brinell (3000 kg)	ASTM E10:2018 (MCP03) BS EN ISO 6506-1:2018
Vickers (10 kg) (30 kg)	ASTM E92:2017 (MCP01) BS EN ISO 6507-1:2018

Welded Test Plates

Bend Testing

ASME 1X
 AWS D1. 1-1.6
 BS EN ISO 15614:2017
 ASTM E290

Stainless Steel Samples

Corrosion Testing:

ASTM A923-14 Method B& C (MCP06)
 ASTM A262:2015 Practice E (MCP 06)
 ASTM A262:2015 Practice C (MCP 22)

Metallurgical	Metallography and Grain size Evaluation	ASTM E112-13:2013 (MCP23) Chart (Comparison Method)
Metallic material (Ferrous & non-ferrous)	Inclusion Content	ASTM E45:2013
<u>Chemical</u>		
Ferrous & non-ferrous	Laboratory spectrograph chemical analysis for the determination of C, Mn, P, S, Cu, Ni, Mo, Nb, V, Ti, Al, B, Si, Sn, Ca, Zr, Sb, Pb and N by OES	ASTM E415 (MCP19)

Original Date of Accreditation: 01 December 2006

ISSUED BY THE SOUTH AFRICAN NATIONAL ACCREDITATION SYSTEM

Accreditation Manager