

ANNEXURE A
SCHEDULE OF ACCREDITATION

Facility Number: **T0013**

Permanent Address of Laboratory:

Columbus Stainless (Pty) Ltd
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Technical Signatories:

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Ms FT Motau (Chemistry)
Mr EM Seedat (Chemistry)
Ms B Havemann (Spectrochemical)
Ms CJE Hattingh (Chemistry)
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| Material or Products Tested | Type of Tests / Properties Measured, Range of Measurement | Standard Specifications, Techniques / Equipment Used |
|-----------------------------|---|--|
| SPECTROCHEMICAL | | |
| Stainless Steel | Determination of Co, Cr, Cu, Mn, Mo, Nb, Ni, P, S, Si, V, Ti, by XRF Spectroscopy | ILB-TEST-219 |
| | Determination of Al, B, Sn, C, N Spark Emission Spectroscopy | ILB-TEST-219 |
| High Carbon Ferrochromium | Determination of C by Leco | ILB-TEST-221 |
| | Determination of N by Leco | ILB-TEST-222 |
| | Determination of C and S by Leco | ILB-TEST-221 |
| CHEMICAL | | |
| High Carbon Ferrochromium | Determination of Al ₂ O ₃ , Fe, Mn, Si by ICP | WLB-TEST-205 |

| | | |
|--|---|--|
| | Determination of Cr by Autotitration | WLB-TEST-347 |
| Process/boiler effluent and Pollution, Control Water | Determination of Chemical Oxygen Demand (COD) | WLB-TEST-009 |
| | Determination of Conductivity by Autotitration | WLB-TEST-311 |
| | Determination of pH by Autotitration | WLB-TEST-313 |
| | Determination of Fluoride by Autotitration | WLB-TEST-312 |
| | Determination of Cr, Mn, Na, Mg by ICP | WLB-TEST-016 |
| | Determination of Cl ⁻ , NO ₃ ⁻ , PO ₄ ³⁻ and SO ₄ ²⁻ by Ion Chromatography | WLB-TEST-310 |
| | Determination of the following using Aquakem: | |
| | NO ₂ ⁻ | WLB-TEST-337 |
| | NO ₃ ⁻ | WLB-TEST-336 |
| | Cr ⁶⁺ | WLB-TEST-341 |
| SO ₄ ²⁻ | WLB-TEST-335 | |
| PO ₄ ³⁻ | WLB-TEST-340 | |
| Cl ⁻ | WLB-TEST-334 | |
| MECHANICAL | | |
| Metallic materials Austenitic & Ferritic | Tensile Testing (up to 250KN) (At ambient temperature) 0,2% Proof Stress 1,0% Proof Stress UTS Elongation | ISO 6892-1, ASTM E8 M |
| | Impact Charpy (up to 406J) | ISO 148-1, ASTM E23 |
| | Hardness Testing (Laboratory) | |
| | Vickers method | ISO 6507-1, ASTM E384 |
| | Rockwell method | ISO 6508-1, ASTM E18 |
| METALLURGICAL | | |
| Metallic material Austenitic, Ferritic & Duplex Stainless Steels | Grain Size & Microstructure | ASTM E112 (comparison method) |
| | Inter-granular corrosion test-Austenitic Inter-granular corrosion test-Ferritic | ASTM A262 (practice A & E) ASTM A763 (practice W & Z) |

Detrimental Intermetallic Phase in ASTM A923
Duplex

Original Date of Accreditation: 01 November 1992

ISSUED BY THE SOUTH AFRICAN NATIONAL ACCREDITATION SYSTEM



Accreditation Manager

