

Schedule of Accreditation

issued by

United Kingdom Accreditation Service

2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

 <p>0046</p> <p>Accredited to ISO/IEC 17025:2005</p>	<h3>Special Testing Ltd</h3>	
	<p>Issue No: 058 Issue date: 09 December 2019</p>	
<p>Bacon Lane Sheffield South Yorkshire S9 3NH</p>	<p>Contact: Mr L Burdett Tel: +44 (0)114 244 1061 Fax: +44 (0)114 244 5566 E-Mail: liamburdett@specialsteelgroup.com Website: www.specialtesting.co.uk</p>	
<p>Testing performed at the above address only</p>		

DETAIL OF ACCREDITATION

Flexible Scope

The laboratory is accredited to ISO/IEC17025:2005 for testing activities in accordance with the standards highlighted in the schedule and internal procedure for flexible scope QP17. This may also include tests on the same or similar product types against standards, or customer-specified methods, that are not specifically listed in this Schedule, providing that:

- (1) The method or standard does not introduce new principles of measurement.
- (2) The method or standard does not require measurements to be made outside the parametric boundaries defined within the standard specifications already accredited and detailed within this Schedule of Accreditation.

Information about flexible scopes of accreditation is available in UKAS document GEN4

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
METALS, ALLOYS and METAL PRODUCTS	<u>Corrosion Tests</u>	
Austenitic stainless steels	Susceptibility to intergranular attack	BS EN ISO 3651-2 Method A, B & C ASTM A262 Practice A, C & E
Wrought, nickel and Chromium bearing alloys	Susceptibility to intergranular attack	ASTM G28 Practice A, B
Stainless steels	Crevice & pitting resistance	ASTM G48 Practice A, B
Duplex stainless steels	Detecting detrimental intermetallic phases	ASTM A923 (Method C)
	<u>Mechanical Tests</u>	
	Bend	BS EN ISO 7438



0046
Accredited to
ISO/IEC 17025:2005

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Special Testing Ltd
Issue No: 058 Issue date: tbc

Testing performed at main address only

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
METALS, ALLOYS and METAL PRODUCTS (cont'd)	<u>Mechanical Tests</u> (cont'd) Hardness: Brinell (10/1000), (10/3000)	BS EN ISO 6506-1 ASTM A370 ASTM E10
	Rockwell (Scales B & C) Vickers (HV10 and HV30) Vickers Micro-hardness (HV0.3, 0.5 and HV1.0) Impact: Izod Charpy (V and U notches) (temperatures from -196°C to ambient) Tensile - Ambient temperature (forces from 0.6 kN to 250 kN) Tensile – Elevated temperatures (from ambient to 990°C and forces from 0.6 kN to 250 kN) Stress rupture (temperatures from ambient to 1000°C)	BS EN ISO 6508-1 ASTM A370 ASTM E18 BS EN ISO 6507-1 ASTM E92 BS EN ISO 6507-1 ASTM E384 BS 131:Part 1 BS EN ISO 148-1 ASTM E23 ASTM A370 ASTM A923 (Method B) BS 4A4-1-1 BS EN 2002-1 BS EN ISO 6892-1 ASTM E8/E8M ASTM A370 BS EN 2002-2 BS EN ISO 6892-2 ASTM E21 BS EN ISO 204 BS 4A4-Part 1-Section 3(Withdrawn) BS EN 2002-005 ASTM E139 ASTM E292
Fasteners – external threads	Proof load (Force from 20kN to 1500kN)	ASTM A370 (Annex 3) ASTM F606/F606M BS EN ISO 898-1 BS EN ISO 3506-1



0046
Accredited to
ISO/IEC 17025:2005

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Special Testing Ltd
Issue No: 058 Issue date: tbc

Testing performed at main address only

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
METALS, ALLOYS and METAL PRODUCTS (cont'd)	<u>Mechanical Tests</u> (cont'd)	
	Tensile - including wedge loading (Force from 20kN to 1500kN)	ASTM A370 (Annex 3) ASTM F606/F606M BS EN ISO 898-1 BS EN ISO 3506-1
Fasteners – internal threads	Proof load (Force from 20kN to 1500kN)	ASTM A194/A194M ASTM A962/A962M ASTM F606/F606M BS EN ISO 898-2 BS EN ISO 3506-2
	<u>Metallurgical Tests</u>	
	Decarburisation	BS EN ISO 3887 (microscopic method) ASTM E1077 (macro & microscopic methods)
	Alpha Case	Documented In-House Method TP/1075
	Macroetch examination	Documented In-House Method TP/1036 ASTM E381 ASTM A604/A604M API 6A718
	Volume Fraction Counting	BS 7590 ASTM E562
Duplex stainless steels	Detecting detrimental Intermetallic phases	ASTM A923 (Method A)
	Ferrite content	Documented In-House Method TP/1057 using Fischer Ferritscope
	Grain size	BS EN ISO 643 ASTM E112 (comparison & Intercept methods) ASTM E930 ASTM E1181
	Inclusion content	ASTM E45 Documented In-House Method TP/1028 BS4S100 (withdrawn)



0046

Accredited to
ISO/IEC 17025:2005

Schedule of Accreditation

issued by

United Kingdom Accreditation Service

2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Special Testing Ltd

Issue No: 058 Issue date: tbc

Testing performed at main address only

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
METALS, ALLOYS and METAL PRODUCTS (cont'd)	<u>Metallurgical Tests</u> (cont'd) Replica Microstructures Sulphur prints Determination of surface features including fracture surfaces at magnifications of X10 to X2000	ASTM E1351 ASTM E1180 Documented In-House Method TP/1046 ASM Metals Handbook Vol. 9
Ferrous and Non-ferrous alloys including: Manganese Steel, Tool Steel, General Steel and Low Alloy Steel Nickel base alloys Stainless Steel, Low Allow Steel Nickel Base Alloys Ferrous and Non-ferrous metals and alloys	<u>Chemical Tests</u> Elemental analysis Fe, C, Si, Mn, P, S, Cr, Mo, Ni, Al, As, B, Co, Cu, Nb, Pb, Sn, Ti, V, W Fe, C, Si, Mn, P, S, Cr, Mo, Ni, Al, As, B, Co, Cu, Nb, Pb, Sn, Ti, V, W Fe, C, Si, Mn, P, S, Cr, Mo, Ni, Al, As, B, Co, Cu, Nb, Pb, Sn, Ti, V, W, Ta, Sb Carbon/Sulphur Analysis Oxygen/Nitrogen Analysis Hydrogen Analysis	Documented In-House Method TP/1050 using a Rank Hilger E200 Optical Emission Spectroscopy Documented In-House Method TP/1058 using a Spectro Maxx M Optical Emission Spectroscopy Documented In House Method TP 1051 using an ELTRA CS800 analyser Documented In House Method TP 1052 using an ELTRA ON900 analyser Documented In House Method TP 1052a using an LECO H836 analyser

END