


Schedule of Accreditation

issued by

United Kingdom Accreditation Service

21 - 47 High Street, Feltham, Middlesex, TW13 4UN, UK

 <p>UKAS TESTING 1091</p> <p>Accredited to ISO/IEC 17025:2005</p>	<h3>London & Scandinavian Metallurgical Co Limited</h3> <p>Issue No: 021 Issue date: 11 April 2012</p>	
	<p>Analytical Services Laboratory Fullerton Road Rotherham South Yorkshire S60 1DL</p>	<p>Contact: Mr Paul Hurditch Tel: +44 (0)1709 828500 Fax: +44 (0)1709 830391 E-Mail: labsales@lsm.co.uk Website: www.lsmanalytical.com</p>
<p>Testing performed at the above address only</p>		

DETAIL OF ACCREDITATION

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
<p>METALS AND ALLOYS</p> <p>Metals, alloys, refractories, ceramics, coatings, metal solutions</p> <p>Aluminium alloys</p> <p>Alloys (Aluminium, Vanadium, Titanium, Zirconium, Chromium, Manganese, Cobalt, Iron, Nickel, Copper, Niobium, Molybdenum, Tin, Tungsten, Magnesium, Calcium, Zinc, Hafnium, Tantalum and Lead). Metal Carbides</p> <p>Chrome and Chrome alloys</p> <p>Boron alloys Iron alloys</p>	<p><u>Chemical Tests</u></p> <p>Elemental analysis (1ppm – 25%)</p> <p>Aluminium, Boron, Calcium, Cobalt, Chromium, Copper, Iron, Lead, Potassium, Manganese, Magnesium, Nickel, Lithium, Silicon, Tin, Strontium, Titanium, Zinc, Vanadium, Zirconium</p> <p>Carbon, Sulphur, Nitrogen, Oxygen, Aluminium, Silicon, Titanium, Vanadium, Chromium, Manganese, Iron, Cobalt, Nickel, Copper, Niobium, Molybdenum, Tin, Tungsten, Phosphorus, Magnesium, Calcium, Zinc, Zirconium, Hafnium, Tantalum, Lead</p> <p>Carbon, Sulphur, Nitrogen, Oxygen, Titanium, Phosphorus, Cobalt, Lead, Tin, Copper, Manganese, Nickel, Aluminium, Iron, Silicon, Boron, Zinc</p> <p>Carbon, Sulphur, Nitrogen, Oxygen, Boron, Nickel, Iron, Aluminium, Silicon, Phosphorus, Chromium, Manganese, Cobalt, Copper</p>	<p>Documented In-house methods and flexible scope protocol using ICP, AAS or GFAAS techniques</p> <p>Documented In-House methods using ICP</p> <p>Documented In-House methods using XRF, IR, Thermal Conductivity</p> <p>Documented In-House methods using ICP, IR, Thermal Conductivity</p> <p>Documented In-House methods using ICP, IR, Thermal Conductivity</p>



1091
Accredited to
ISO/IEC 17025:2005

Schedule of Accreditation
issued by
United Kingdom Accreditation Service

21 - 47 High Street, Feltham, Middlesex, TW13 4UN, UK

London & Scandinavian Metallurgical Co Limited

Issue No: 021 Issue date: 11 April 2012

Testing performed at main address only

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
METALS AND ALLOYS (cont'd)	<u>Chemical Tests (cont'd)</u>	
Titanium metal/alloys Zirconium metal/alloys	Carbon, Sulphur, Nitrogen, Oxygen, Aluminium, Silicon, Titanium, Vanadium, Chromium, Manganese, Iron, Cobalt, Nickel, Copper, Niobium, Molybdenum, Tin, Tungsten, Phosphorus, Magnesium, Calcium, Zinc, Zirconium, Hafnium, Tantalum, Lead, Bismuth	Documented In-House methods using AAS, XRF, IR, Thermal Conductivity
REFRACTORIES AND RELATED RAW MATERIALS	<u>Chemical Tests</u>	
Refractories and related raw materials	Carbon, Sulphur, Nitrogen, Oxygen, Sodium, Magnesium, Aluminium, Silicon, Phosphorus, Sulphur, Potassium, Calcium, Titanium, Manganese, Vanadium, Chromium, Iron, Barium, Zirconium, Zinc, Strontium	Documented In-House methods using XRF, IR, Thermal Conductivity
Colloidal Silica	Aluminium, Calcium, Cobalt, Chromium, Copper, Iron, Magnesium, Manganese, Nickel, Titanium, Zinc, Phosphate, Sulphate	Documented In-House methods using ICP
Calcium Phosphate Ores	Tin, Arsenic, Cadmium, Copper, Mercury, Nickel, Lead	Documented In-House methods using ICP
Calcium Phosphate Ores	Elemental Oxides (Sodium, Magnesium, Aluminium, Silicon, Phosphorus, Potassium, Calcium, Titanium, Manganese, Vanadium, Chromium, Iron, Barium, Zirconium, Zinc, Strontium, Copper, Hafnium, Lead, Tin)	Documented In-House methods using XRF
Refractories and related raw materials	Free lime (Range 0-10.5%)	Documented In-House methods using ICP



1091
Accredited to
ISO/IEC 17025:2005

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
21 - 47 High Street, Feltham, Middlesex, TW13 4UN, UK

London & Scandinavian Metallurgical Co Limited

Issue No: 021 Issue date: 11 April 2012

Testing performed at main address only

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
<p>METALS, ALLOYS, REFRACTORIES AND RELATED RAW MATERIALS</p> <p>Alloys, refractories, metals, carbides, coatings, rare earth products, flue dust, corrosion products, slags, powders/solids of suitable dimensions</p> <p>Alloys, refractories, metals, carbides, coatings, rare earth products, flue dust, corrosion products, slags, powders/solids of suitable dimensions</p>	<p><u>Chemical Tests</u></p> <p>Phase identification by structural fingerprints with reference to ICD/PDF</p> <p>Elemental analysis 50 ppm - 100% range</p> <p>Fluorine</p>	<p>Documented In-House method using qualitative XRD</p> <p>Documented In-House method using semi-quantitative XRF and UniQuant™ programme</p> <p>Documented In-House method by pyrohydrolysis</p>
<p>METALS, ALLOYS, REFRACTORIES AND RELATED RAW MATERIALS</p> <p>Metal carbides</p> <p>Metals, alloys, metal carbides, refractories and related raw materials and rare earth products</p> <p>Refractories and related raw materials</p> <p>Rare earth products</p>	<p><u>Physical Tests</u></p> <p>Particle size</p> <p>Particle size analysis</p> <p>Bulk (Grain) density</p> <p>Crystallite Size</p>	<p>Documented In-House method using Fisher Sub-Sieve Sizer</p> <p>Documented In-House method using Malvern Mastersizer (laser scattering technique)</p> <p>Documented In-House method based upon BSI 902, Section 36, 1984 and ASTM 357-94</p> <p>Documented In-House method using XRD</p>
	END	