Schedule of Accreditation

issued by

United Kingdom Accreditation Service

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



Locations covered by the organisation and their relevant activities

Laboratory locations:

Location details		Activity	Location code
Address	Local contact		
Longwood Drive Forest Farm Cardiff Wales CF14 7HY	Mr Jon Coldman Tel: +44 (0)2920 540000 Fax: +44 (0)2920 540111 Email: jon.coldman@minton.co.uk Website: www.minton.co.uk	Mechanical Testing Environmental Chemistry Non-Destructive Testing Construction Testing Petroleum Products Testing Solid Fuels Testing	A

Site activities performed away from the locations listed above:

Location details	Activity	Location code
All site locations suitable for the activities listed	Inspection _ Permanent Joining Non-Destructive Testing of Metals	В

	Schedule of Accreditation issued by United Kingdom Accreditation Service 2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK
UKAS TESTING 0077	Minton, Treharne and Davies Limited
Accredited to ISO/IEC 17025:2017	issue no: 063 issue date: 15 December 2020

DETAIL OF ACCREDITATION			
Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
METALS, ALLOYS and METAL PRODUCTS	<u>Mechanical Tests</u>	Flexible scope enabling new versions of existing accredited standard test methods and technically equivalent standard methods to be introduced in accordance with documented in- house procedure QP19	
	Tensile (ambient temperature) (Forces up to 500 kN)	BS EN ISO 6892-1 Method B ASTM A370	А
	Vickers hardness (HV10)	BS EN ISO 6507-1	А
	Charpy V-notch impact (temperatures from -50°C to ambient)	BS EN ISO 148-1	A
WELDMENTS	Mechanical and Metallurgical Tests Bend, Fracture, Hardness, Tensile, Charpy and Macro- examination tests in accordance with the specified welding codes	BS 4872-1 BS 4872-2 BS EN 287-1 BS EN ISO 9606-1 BS EN ISO 9606-2 BS EN ISO 15614-1 BS EN ISO 15614-2 BS EN ISO 9017 BS EN ISO 5178 BS EN ISO 5173 BS EN ISO 5173 BS EN ISO 9015-1 BS EN ISO 17639 ASME IX	A

DETAIL OF ACCREDITATION

	Schedule of Accreditation issued by United Kingdom Accreditation Service 2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK		
UKAS TESTING 0077 Accredited to ISO/IEC 17025:2017		arne and Davies Limited ssue date: 15 December 2020	
Testing performed by the Organisation at the locations specified			
	1		
Materials/Products tested	Type of test/Properties	Standard specifications/	Location

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
LIGHT and DENSE METALS and ALLOYS including Castings, Weldments, Forgings, Components and Structures, Composite Materials	Non-Destructive Tests	Flexible scope enabling new versions of existing accredited standard test methods and technically equivalent standard methods to be introduced in accordance with documented in- house procedure QP19	
	Ultrasonic Testing		
	Flaw Detection and Thickness Measurement	BS EN ISO 17635 BS EN ISO 17640	А, В
		ISO 16809:2019 ISO 16810:2014 ASME V Article 5	
		Equipment Ultrasonic 'A-Scan' Flaw Detection Equipment and Thickness Meters	
	Liquid Penetrant Inspection		
	Colour Contrasts and Fluorescent Penetrants	BS EN ISO 3452-1 ASME V Article 6 RRP 58003	А, В
	Radiography	Equipment Fixed Penetrant Line Equipment and Portable Equipment	
	X-Ray (<300 Kv) and	BS EN ISO 17636-1 ASME V Article 2 RRP 58006	А, В
	γ-Ray; Iridium 192 (<27 Ci's)	Equipment Fixed and Portable X-Ray and Gamma Equipment	В

UKAS UKAS UKAS 0077 Accredited to ISO/IEC 17025:2017	Schedule of Accreditation issued by United Kingdom Accreditation Service 2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK Minton, Treharne and Davies Limited Issue No: 063 Issue date: 15 December 2020		
	Testing performed by the Organisation a	t the locations specified	
Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
LIGHT and DENSE METALS and ALLOYS including Castings, Weldments, Forgings, Components and Structures, Composite Materials (cont'd)	S <u>Non-Destructive Tests</u> (cont'd)	Flexible scope enabling new versions of existing accredited standard test methods and technically equivalent standard methods to be introduced in accordance with documented in- house procedure QP19	
	Magnetic Particle Inspection		
LIGHT and DENSE METALS and ALLOYS including Castings, Weldments, Forgings, Components and Structures, Composite Materials (cont'd)	S Ferromagnetic materials, Permanent and electrically induced magnetism	BS EN ISO 17638 BS EN ISO 9934, Part 1 ASME V Article 7 <u>Equipment</u> Permanent magnets Electromagnets 110 v/240 v Prods & Flexible Coil Horizontal Bench Unit (3000 amps)	А, В
WELDMENTS ONLY	Eddy Current Testing (By complex plane analysis using Portable Flaw Detectors)	BS EN ISO 15549 ISO 17643:2015 ASME V Article 8	А, В
	Visual Examination of Welds	BS EN 13018 BS EN ISO 17637 ASME V Article 9	A

	Schedule of Accreditation issued by United Kingdom Accreditation Service 2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK
UKAS TESTING 0077	Minton, Treharne and Davies Limited
Accredited to ISO/IEC 17025:2017	Issue No: 063 Issue date: 15 December 2020
	Testing performed by the Organisation at the locations specified

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
SOLID FUELS, COAL and COKE	<u>Chemical Tests</u>	Flexible scope enabling new versions of existing accredited standard test methods and technically equivalent standard methods to be introduced in accordance with documented in- house procedure QP19	
	Phosphorus	Modification of: ASTM D3682 using ICP-OES	A
	Ultimate Analysis: Sulphur	BS ISO 334 BS 1016:Part 106.4.2 ISO 351	A
	Proximate Analysis	ISO 1171 BS ISO 562 ISO 11722 BS ISO 687	A
	Micum and Irsid Indices	BS 1016:Part 108, 2 ISO 556 section 6.3	A
	Total moisture of Coal	ISO 11722 ISO 589	A
	Total moisture of Coke	BS ISO 579	А
	Gross Calorific Value	ISO 1928	A

	Schedule of Accreditation issued by United Kingdom Accreditation Service 2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK
	Minton, Treharne and Davies Limited
Accredited to ISO/IEC 17025:2017	Issue No: 063 Issue date: 15 December 2020
Testing performed by the Organisation at the locations specified	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
PETROLEUM PRODUCTS	Chemical and Physical Tests	Flexible scope enabling new versions of existing accredited standard test methods and technically equivalent standard methods to be introduced in accordance with documented in- house procedure QP19	
	Cloud point of petroleum oils	IP 219 ISO 3015 EN 23015	A
	Density and relative density of liquids	Using digital density meter IP 365 ISO 12185 EN 12185 BS 2000-365	A
	Colour	Using Seta Lovibond Colour comparator ASTM D1500	A
	Stability Test	Seta sediment tester by hot filtration IP390A & B	A
	Density and API Gravity	Using Anton Paar/Kyoto Densitometer ASTM D4052	A
	Flash point	by Pensky-Martens closed tester IP 34 <i>IP-ASTM Joint Method</i> ASTM D 93 Methods A&B BS 2000: Part 34: Methods A&B EN ISO 2719 Methods A&B ISO 2719 Methods A&B	A
	Water content of liquids	Coulometric Karl-Fischer Titration: IP438 BS EN ISO 12937 BS 2000-438	A
	Ash content	IP 4 <i>IP-ASTM Joint Method</i> ASTM D 482 BS 2000: Part 4 EN ISO 6245 ISO 6245	A

	Schedule of Accreditation issued by United Kingdom Accreditation Service 2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK
UKAS TESTING 0077	Minton, Treharne and Davies Limited Issue No: 063 Issue date: 15 December 2020
Accredited to ISO/IEC 17025:2017	Testing performed by the Organisation at the locations specified

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
PETROLEUM PRODUCTS (cont'd)	<u>Chemical and Physical Tests</u> (cont'd)	Flexible scope enabling new versions of existing accredited standard test methods and technically equivalent standard methods to be introduced in accordance with documented in- house procedure QP19	
	Sulphur Content	Using UV Fluorescence EN ISO 20846 ASTM D5453	A
	Acid Number (TAN)	ASTM D664 IP 177	А
Residual Oil	Determination of - Aluminium, Calcium, Iron, Sodium, Nickel, Phosphorus, Silicon, Vanadium and Zinc	IP 501 by ICP-OES	A
Fuels oils and lubricating oils	Kinematic viscosity	IP 71 Section 1 <i>IP-ASTM</i> <i>Equivalent Test Method</i> ASTM D 445 BS 2000: Part 71: Section 1 EN ISO 3104 ISO 3104	A
	Pour point of petroleum oils	IP 15 IP-ASTM Joint Method ASTM D 97 BS 2000: Part 15 ISO 3016	A
	Water content	Dean and Stark distillation: IP 74 IP-ASTM Joint Method ASTM D 95 BS 2000: Part 74 ISO 3733	A
Fuel Oils	Sulphur Content	Using Energy dispersive x-ray Fluorescence spectrometry: IP336 ISO 8754 EN 8754 BS 2000-336	A

	Schedule of Accreditation issued by United Kingdom Accreditation Service 2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK
	Minton, Treharne and Davies Limited
Accredited to ISO/IEC 17025:2017	Issue No: 063 Issue date: 15 December 2020
	Testing performed by the Organisation at the locations specified

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
PETROLEUM PRODUCTS (cont'd)	<u>Chemical and Physical Tests</u> (cont'd)	Flexible scope enabling new versions of existing accredited standard test methods and technically equivalent standard methods to be introduced in accordance with documented in- house procedure QP19	
Fuel Oils (cont'd)	Carbon Residue	IP398 IP-ASTM Joint Method ASTM D4530 ISO 10370 EN 10370 BS2000-398	A
	Total Sediments	IP 375 /11 IP-ASTM Joint Method ASTM D 4870 BS 2000: Part 375 ISO 10307-1	A
TRADE EFFLUENT	<u>Chemical Tests</u>	Documented In-House Methods based on Standing Committee of Analysts (SCA), 'Methods for the Examination of Water and Waste Water'	A
	Alkalinity	Documented In-House Method AES 1025 using Titration	A
	Total Cyanide	Documented In-House Method AES 1018 using Distillation / Spectrometry	A
	Chloride	Documented In-House Method AES 1042 using Titration	A
	Electrical conductivity	Documented In-House Method AES 1044 using Meter & Probe	A
	Phenols, monohydric	Documented In-House Method AES 1021 base on "Phenols in waters and effluents, 1981" Method B, (MEWAM)	A
	pH value (pH range 4-10 only)	Documented In-House Method AES 1035 using Meter & Probe	A

	Schedule of Accreditation issued by United Kingdom Accreditation Service 2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK
U K A S TESTING	Minton, Treharne and Davies Limited
0077 Accredited to ISO/IEC 17025:2017	Issue No: 063 Issue date: 15 December 2020
	Testing performed by the Organisation at the locations specified

Materials/Products tested	Type of test/Properties measured/Range of	Standard specifications/ Equipment/Techniques used	Location Code
TRADE EFFLUENT (cont'd)	measurement <u>Chemical Tests</u> (cont'd)	Documented In-House Methods based on Standing Committee of Analysts (SCA), 'Methods for the Examination of Water and Waste Water'	
	Suspended solids	Documented In-House Method AES 1041 using Gravimetry	A
	Silicate	Documented In-House Method AES 1040 using Colourimetry	A
Including Sewage	Chemical Oxygen Demand	Documented In-House Method AES 1029 using Oxidation / Colourimetry	A
POTABLE WATERS (Non-regulatory) and HEALTHCARE WATER (Dialysis Water)	Determination of: Antimony Arsenic Barium Beryllium Cadmium Chromium Copper Lead Mercury Nickel Selenium Silver Thallium Tin Zinc	Documented In House Method AES 1048 using ICP-MS	A

UKAS UKAS TESTING 0077 Accredited to	Schedule of Accreditation issued by United Kingdom Accreditation Service 2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK
	Minton, Treharne and Davies Limited Issue No: 063 Issue date: 15 December 2020
ISO/IEC 17025:2017	
	Testing performed by the Organisation at the locations specified

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
SOILS	Chemical Tests		
	Determination of: Antimony Arsenic Cadmium Chromium Cobalt Copper Lead Iron Mercury Nickel	Documented In-House Method AES 1005 using OES	A
	Tin Vanadium Zinc		
	Total Cyanide	Documented In-House Method AES 1018 based on "Official, Standardised and Recommended Methods of Analysis" (Soc Anal Chem 1973) (P.455)	A
	Moisture content	Documented In-House Method AES 1023 using Gravimetry	A
	Phenols (Monohydric)	Documented In-House Method AES 1021 based on "Phenols in water and Effluents, 1981", Method B, (MEWAM) adapted to soil testing	A
	pH value (pH range 4-10 only)	Documented In-House Method AES 1035 using Meter & Probe	A
Permanent Joining	Witness and Approval of Procedures	Documented In-House Method MTD PCP WI 8001	А, В
	Witness and Approval of Personnel	Documented In-House Method MTD PCP WI 8001	Α, Β

UKAS UKAS TESTING 0077 Accredited to ISO/IEC 17025:2017	Schedule of Accreditation issued by United Kingdom Accreditation Service 2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK
	Minton, Treharne and Davies Limited Issue No: 063 Issue date: 15 December 2020
	Testing performed by the Organisation at the locations specified

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
AGGREGATES	Chemical Tests	Flexible scope enabling new versions of existing accredited standard test methods and technically equivalent standard methods to be introduced in accordance with documented in- house procedure QP19	
	Water-soluble chloride content	BS EN 1744-1	А
CONCRETE - hardened	<u>Chemical Tests</u>	Flexible scope enabling new versions of existing accredited standard test methods and technically equivalent standard methods to be introduced in accordance with documented in- house procedure QP19	
	Chloride content	BS 1881:Part 124	А
END			

UKAS UKAS UVKAS 0077 Accredited to ISO/IEC 17025:2017	Schedule of Accreditation issued by United Kingdom Accreditation Service 2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK
	Minton, Treharne and Davies Limited Issue No: 063 Issue date: 15 December 2020
	Testing performed by the Organisation at the locations specified

Directive/Regulation	Conformity Assessment procedure/Module/Article	Category of products or individual products	Methods / Procedures Essential requirements: Product specification/ Properties / Standards
Pressure Equipment (Safety) Regulations 2016	Directive: Annex I – 3.1.2 <i>Regulations: Schedule 2</i> <i>paragraph 21.</i>	Categories II III and IV Approval of permanent joining procedures and personnel**	Documented In- house procedure MTD PCP WI 8001

	Schedule of Accreditation issued by United Kingdom Accreditation Service 2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK
UKAS TESTING 0077 Accredited to ISO/IEC 17025:2017	Minton, Treharne and Davies Limited Issue No: 063 Issue date: 15 December 2020
	Testing performed by the Organisation at the locations specified
-	

Directive/Regulation	Conformity Assessment procedure/Module/Article	Category of products or individual products	Methods / Procedures Essential requirements: Product specification/ Properties / Standards
Pressure Equipment (Directive 2014/68/EU) implemented in Northern Ireland by the Pressure Equipment (Safety) Regulation 2016	Directive: Annex I – 3.1.2 <i>Regulations: Schedule 2</i> <i>paragraph 21.</i>	Categories II III and IV Approval of permanent joining procedures and personnel**	Documented In- house procedure MTD PCP WI 8001
appointment of 'bodies	f items marked thus ** are sub s' to carry out conformity asse nts BEIS for information on th	ssment. Reference should be i	made to the relevant