Schedule of Accreditation

issued by

United Kingdom Accreditation Service

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

4277
Accredited to
ISO/IEC 17025:2017

Abbey Forged Products Ltd
trading as Metal Testing UK

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Beeley Wood Works
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Testing performed at the above address only

DETAIL OF ACCREDITATION

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
METALS, ALLOYS and METAL PRODUCTS	<u>Mechanical Tests</u>	
	Tensile test (ambient to 700°C) (Forces 10kN to 250kN)	BS EN ISO 6892-1:2019 BS EN 6892-2:2018 (Method B) ASTM E8/E8M-16a ASTM E21-17 ASTM A370-20
	<u>Impact</u>	
	Charpy (U and V-notches) (-196°C to ambient temperature) Including crystallinity/shear & lateral expansion	BS EN ISO 148-1:2016 ASTM E23-18 ASTM A370-20 ASTM A923-14 (Method B)
	<u>Hardness</u>	
	Brinell (10/3000 HBW)	BS EN ISO 6506-1:2014 ASTM E10-18
	Rockwell (B & C Scales)	BS EN ISO 6508-1:2016 ASTM E18-20
	Vickers (HV10 & HV30)	BS EN ISO 6507-1:2018 ASTM E92-17
	<u>Corrosion</u>	
	Resistance to pitting corrosion	ASTM G48-11(2020) (Method A)
	Inter-granular corrosion	ASTM A262-15 Practice E ASTM G28- 02(2015) Method A BS EN ISO 3651-2:1998 Method A
	Detecting detrimental Intermetallic phases (Duplex stainless steels)	ASTM A923-14 (Method C)

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
METALS, ALLOYS and METAL PRODUCTS (cont'd)	<u>Metallography</u>	
	Average Grain size (comparison method)	ASTM E112-13 BS EN ISO 643:2020
	Inclusion content (Methods A & D)	ASTM E45-18a
	Volume fraction	ASTM E562-19
	Decarburisation depth (microscopic method)	ASTM E1077-14
	Macro examination	ASTM E381-20 ASTM A604/604M-07(2017) API 6A718 2nd Edition API 6CRA 2015 Add1 Err2
	Micro structure assessment	Documented in-house method QAP 023 API 6A718 2nd Edition API 6ACRA 2015 Add3
	Detecting detrimental Intermetallic phases (Duplex stainless steels)	ASTM A923-14 (Method A)
METALS, ALLOYS and METAL PRODUCTS (cont'd)	<u>Chemical Tests</u>	
Carbon, Duplex and Low Alloy Steels, Stainless Steels and Nickel Alloys	Determination of Carbon and Sulphur	Documented in-house methods QAP 042 using Combustion technique with IR detection
Carbon, Duplex and Low Alloy Steels, Stainless Steels and Nickel Alloys	Determination of Oxygen and Nitrogen	Documented in-house method QAP 041 using Inert gas fusion techniques

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
METALS, ALLOYS and METAL PRODUCTS (cont'd)	Chemical Tests	
Carbon, Duplex and Low Alloy Steels, Stainless Steels and Nickel Alloys	Elemental analysis Aluminium Antimony Arsenic Boron Calcium Carbon Chromium Cobalt Copper Iron Lead Manganese Molybdenum Nickel Niobium Phosphorus Silicon Sulphur Tantalum Tin Titanium Tungsten Vanadium Zirconium	Documented in-house method QAP 045 using spark source Optical Emission Spectroscopy
END		