Schedule of Accreditation

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Accredited to ISO/IEC 17025:2017

Metals Technology (Testing) Limited

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6 Finchwell Close
Handsworth
Sheffield
South Yorkshire
S13 9DF

Contact: Mr M Collier
Tel: +44 (0)114-2437271
Fax: +44 (0)114-2437288
E-Mail: office@metalstechnology.co.uk
Website: www.metalstechnology.co.uk

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	Chemical Analysis	
Ferrous and Non-ferrous alloys including:	Elemental Analysis	Documented In-House Methods using direct reading emission spectroscopy (OES)
Stainless Steel	C, Si, Mn, P, S, Cr, Mo, Ni, Cu, Al, As, B, Co, Nb, Pb, Sn, Ti, V, W, N, Ta	OES Procedure 113 Rev 3
Manganese Steel	C, Si, Mn, P, S, Cr, Mo, Ni, Al, Co, Cu, Nb, Ti, V, Sn, N	OES Procedure 113 Rev 3
Tool Steel	C, Si, Mn, P, S, Cr, Mo, Ni, Al, Co, Cu, Ti, V, W, Sn As	OES Procedure 113 Rev 3
Low Alloy Steel	C, Si, Mn, P, S, Cr, Mo, Ni, Cu, Al, As, B, Co, Nb, Sn, Ti, V, W, N, Ca, Zr, Sb, Pb	OES Procedure 113 Rev 3
Free Cutting Steel	C, Si, Mn, P, S, Cr, Mo, Ni, Cu, Al, Co, V, W, N	OES Procedure 113 Rev 3
Cast Irons	C, Si, Mn, P, S, Cr, Mo, Ni, Cu, Al, As, B, Bi, Ca, Ce, Co, Mg, Nb, Pb, Sb, Se, Sn, Ti, V, W, Zn, Zr	OES Procedure 113 Rev 3
Chrome Hard Alloyed Irons	C, Si, Mn, P, S, Cr, Mo, Ni, Al, Co, Cu, Ti, V	OES Procedure 113 Rev 3
Ni-Resist Alloyed Irons	C, Si, Mn, P, S, Cr, Mo, Ni, Cu, Nb, Mg, Ce	OES Procedure 113 Rev 3
Nickel Based Alloys	C, Si, Mn, P, S, Cr, Fe, Mo, V, Cu, W, Co, Nb, Al, Ti, Zr, B, Ni	OES Procedure 113 Rev 3

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
METALS, ALLOYS and METAL PRODUCTS (cont'd)	<u>Elemental Analysis</u>	
Cobalt Alloys	C, Si, Mn, P, S, Cr, Mo, Ni, Al, Cu, Fe, Nb, W, Co	OES Procedure 113 Rev 3
Copper Based Alloys	Sn, Zn, Fe, Ni, Al ,Si, As, Mn, Bi, Sb, P, Cr, S, Mg, Pb, Co, Ag, C, Cu	OES Procedure 113 Rev 3
Aluminium Alloys	Cu, Mg, Si, Fe, Mn, Ni, Zn, Pb, Sn, Ti, Cr, Zr, Al	OES Procedure 113 Rev 3
Ferrous and Non-ferrous metals and alloys	<u>Mechanical Tests</u>	
	Tensile (ambient temperature) (forces 1 kN to 500 kN)	BS EN ISO 6892-1: 2019 ASTM E8/E8M-24 ASTM A370-24
	Tensile (temperatures up to 650°C) (forces 10 kN to 500 kN)	BS EN ISO 6892-2:2018 ASTM E21-20
	Impact: Charpy 'V' & "U" notch (-196°C and -80°C to ambient) Lateral expansion and % Shear	BS EN ISO 148-1:2016 ASTM E23-24 ASTM A370-24 ASTM A923-23 Method B
	Izod	BS 131:Part 1:1961(Incorporating Amendments Nos. 1 & 2)
	Bend	BS EN ISO 7438:2020

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
METALS, ALLOYS and METAL PRODUCTS (cont'd)	Mechanical Tests (cont'd)	
	Hardness:	
Ferrous and Non-ferrous metals and alloys (cont'd)	Brinell HBW (10/3000)	BS EN ISO 6506-1:2014 ASTM E10-23 ASTM A370-24
	Rockwell (B & C)	BS EN ISO 6508-1:2023 ASTM E18-24 ASTM A370-24
	Vickers (HV10 & HV30)	BS EN ISO 6507-1:2023
	Metallurgical Tests	
	Grain size (Comparison & Linear Intercept Methods)	ASTM E112-24 BS EN ISO 643:2020 ASTM E1181-02(2023) ASTM E930-18
	Decarburisation depth by microscopical methods	ASTM E1077-14(2021)
	Inclusion content	ASTM E45-18a (23) ISO 4967:2013
	Macro-etch examination	ASTM E381-22 ASTM A604/A604M-07(2022) API 6ACRA 1st Edition (Add 3)
	Sulphur print	ASTM E1180-08(2021)
	Sodium Hydroxide Etch Test	ASTM A923-23 Method A
	Volume fraction	ASTM E562-19e1
	Corrosion Tests	
Stainless Steels	Pitting and crevice corrosion resistance	ASTM G48-11(2020)e1 (Methods A & B)
	Intracrystalline corrosion	ASTM A262-15(2021) Methods A, B , C & E

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
METALS, ALLOYS and METAL PRODUCTS (cont'd)	Corrosion Tests (cont'd)	
Stainless Steels (cont'd)	Detecting Detrimental Intermetallic Phases (Duplex stainless steels)	ASTM A923-23, Method C
	Intercrystalline corrosion	BS EN ISO 3651-1:1998 BS EN ISO 3651-2:1998 Method A, B & C
Nickel Alloys	Intercrystalline corrosion	BS EN ISO 9400:1996 Method A, B, C and D ASTM G28-22 Method A
FERROUS and NON-FERROUS CASTINGS, FORGINGS, PLATE, WELDMENTS	Mechanical and Metallurgical Tests	
	Tests designated in specified welding codes as detailed below: Bend, Hardness, Impact, Tensile, Macro-examination	BS EN ISO 17637:2016 BS EN ISO 17639:2022 BS EN ISO 4136:2022 BS EN ISO 5173:2023 BS EN ISO 5178:2019 BS EN ISO 9015-1:2011 BS EN ISO 9016:2022 BS 4872-1:1982 BS 4872-2:1976 BS EN ISO 9606-1:2017 BS EN ISO 15614-1:2017+A1:2019 ASME IX:2023
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