

CERTIFICATE OF ACCREDITATION

No. S-060

dated 06.07.2023

The Slovak National Accreditation Service issues a Certificate of Accreditation to an accredited body pursuant to Section 26 par.6 of Act No. 53/2023 Coll. on Accreditation of Conformity Assessment Bodies (hereinafter referred to as the "Accreditation Act").

INSPEKT, s.r.o.

Továrenská 210, 935 28 Tlmače

ID Number: 31 438 491

Organizational unit performing the activity of the Accredited Body:

Testing laboratory

Workplace of the Accredited Body:

Továrenská 210, 935 28 Tlmače

Identification number of the Accredited Body: 025/S-060

Area of accreditation: Testing laboratory

The testing laboratory demonstrated its competence to perform the accredited activity fulfilling the accreditation requirements of **ISO/IEC 17025: 2017** when performing metallographic and chemical tests of metal materials, chemical tests of solid fuels and non-destructive tests of metal materials within the accreditation scope delineated in the Annex of this Certificate of Accreditation. The Annex shall form an integral part of the Certificate of Accreditation.

Number and date of issue of the accreditation decision: No. 025/10853/2023/1 dated 16.06.2023.

Validity of the accreditation decision:

The accreditation decision No. 025/10853/2023/1 dated 16.06.2023 is valid from 06.07.2023 to 05.09.2024.

The validity of this Accreditation Certificate expires upon the expiry of the accreditation decision, the decision on withdrawal of the accreditation pursuant to Section 31 or the expiry of the accreditation pursuant to Section 32 of the Accreditation Act.




Štefan Král
director

Scope of Accreditation

Accredited body: INSPEKT, s.r.o.

Továrenská 210, 935 28 Tlmače

Organizational unit performing the activity of the accredited body:

Skúšobné laboratórium

Place of performance of the accredited body:

Továrenská 210, 935 28 Tlmače

Identification number of the accredited body: 025/S-060

Laboratory with fixed scope

Item	Object		Method applied		Other specification (purpose, modification / validation, opinions / interpretations, etc.)
	Object / Matrix / Environment	Property / Parameter / Indicator / Analyte	Principle / Kind / Type	Identification	
1.	iron based materials – sample of round cross-section	base material ultimate strength R_m yield point R_e yield point $R_{p0,2}$ ductility A contraction Z	tensile test	EN ISO 6892-1 EN ISO 6892-2 ASTM – A370	EN 10 164
	iron based materials – sample of axb cross-section	base material ultimate strength R_m yield point R_e yield point $R_{p0,2}$ ductility A			
	iron based materials – sample of axb cross-section (segment of tube)	base material ultimate strength R_m yield point R_e yield point $R_{p0,2}$ ductility A			
	iron based materials – sample of round cross-section	welds ultimate strength R_m yield point R_e yield point $R_{p0,2}$ ductility A contraction Z		EN ISO 6892-1 EN ISO 6892-2 ASME CODE I-IX.	EN ISO 5178 EN ISO 4136 EN 13 445-4 EN ISO 15 614 EN 12952-5,6 AD HP 2/1
	iron based materials – sample of axb cross-section	welds ultimate strength R_m yield point R_e yield point $R_{p0,2}$ ductility A			
	iron based materials – sample of axb cross-section (segment of tube)	welds ultimate strength R_m yield point R_e yield point $R_{p0,2}$ ductility A			
2.	iron based materials	hardness	hardness test - Brinell - Vickers - Rockwell	EN ISO 6506-1 EN ISO 6507-1 EN ISO 6508-1 ASTM – A370 ASTM – E92	EN ISO 9015-1 EN 12952-5,6 EN ISO 15 614 EN 13 445-4
		base material welds			

Section of Mechanical Tests



Item	Object		Method applied		Other specification y, purpose, modification / validation, opinions / interpretations, etc.)	
	Object / Matrix / Environment	Property / Parameter / Indicator / Analyte	Principle / Kind / Type	Identification		
3.	iron based materials a) U notch KU ₃ b) U notch KU ₂ c) V notch KV	impact toughness base material welds	impact bending test	EN ISO 148-1	EN ISO 9016 EN 13 445-4 EN ISO 15 614 EN 12952-5,6 AD HP 2/1	
4.	iron based materials	fracture base material welds	fracture test (qualitative test)	EN ISO 7438 ASTM – A370 EN ISO 7438 EN ISO 9017 ASME CODE I-IX.	EN ISO 5173 EN 13 445-4 EN ISO 15 614 EN 287-1 EN 12952-5,6 AD HP 2/1	Section of Mechanical Tests
5.	iron based materials – tubes	material damage, cracking	flattening test, drifting test, ring drifting test, ring tensile test (qualitative test)	EN ISO 8492 EN ISO 8493 EN ISO 8495 ASTM – A370		
6.	iron based materials	content of carbon sulphur oxygen	IR-absorption	EN ISO 9556 (I-Q č. 101050/06) EN 24935 (I-Q č. 101051/06) EN 10 276-2 (I-Q č. 101052/06)		
7.	iron based materials	content of vanadium tungsten cobalt titan aluminium tin phosphor sulphur niobium carbon manganese silicon copper nickel chromium molybdenum	OES	Manual SPECTRO Stationary Metal Analyzers (I-Q No. 101064/10)		Section of Chemical Laboratory



Item	Object		Method applied		Other specification y, purpose, modification / validation, opinions / interpretations, etc.)
	Object / Matrix / Environment	Property / Parameter / Indicator / Analyte	Principle / Kind / Type	Identification	
8.	iron based materials	content of manganese silicon copper nickel chromium molybdenum vanadium tungsten cobalt titan aluminium tin phosphor niobium	ICP-AES	Spectroflame Modula operation manual (I-Q No. 101048/03)	
9.	iron based materials	content of silicon	gravimetric	EN ISO 439 (I-Q No.101067/14)	
10.	iron based materials	content of chromium	volumetric	EN 24937 (I-Q No. 101043/14)	
11.	iron based materials	content of phosphor	spectropho- tometric	EN 10184 (I-Q No. 101042/14)	
12.	iron based materials	content of nitrogen	thermal conductivity	EN ISO 15351 (I-Q No. 101044/14)	
13.	solid fuels	content of coarse water residual water analytical water total water	gravimetric	STN 441377 EN ISO 18134-1 EN ISO 18134-3 STN 48 0058 (I-Q č. 101059/09)	Section of Chemical Laboratory
		ash		ISO 1171 EN ISO 18122 (I-Q č. 101060/09)	
		total sulphur		STN 441379 (I-Q č. 101061/09)	
		volatile matter		ISO 5071-1 ISO 562 EN ISO 18123 (I-Q č. 101063/09)	
14.	solid fuels	gross calorific value and net calorific value	calorimetric	ISO 1928 EN ISO 18125 (I-Q No. 101062/09)	
15.	iron based materials – semi-finished products, weld seams	weld size	measurement of weld size (qualitative test)	EN 12952-5 VdTÜV 451-68/1	Section of Mechanical Tests
		macrostructure and microstructure	evaluation of structure (qualitative test)	EN ISO 17639 ASME CODE I-IX. EN ISO 6520-1 EN ISO 5817 EN 12952-5, 12952-6 EN ISO 15614, 14555 AD 2000 HP 2/1, HP 5/2	
16.	iron based materials	resistant to intercrystalline corrosion	evaluation of structure (qualitative test)	EN ISO 3651-2	

Item	Object		Method applied		Other specification y, purpose, modification / validation, opinions / interpretations, etc.)	
	Object / Matrix / Environment	Property / Parameter / Indicator / Analyte	Principle / Kind / Type	Identification		
17.	iron and aluminium based materials – welds, base materials	quality, defects, inhomogeneity	radiographic testing RT (qualitative test)	EN 444, 1435 EN 10246-10 EN 12681-1 EN 13068-3 EN ISO 5579 EN ISO 10893-6 EN ISO 17636-1 ASME Code V	EN 286-2, 287-1, 1090-2 EN 1559-2,3, 12062 EN 12517, 12517-1 EN 12732, 12952-6 EN 12953-5, 13445-5 EN 13480-5, 14015 EN 14025, 15085-5 EN 25817 EN ISO 5817, 6520-1 EN ISO 9606-1 EN ISO 10675-1,2 EN ISO 15614-1,8 EN ISO 17635 STN 051305 DIN 1690-2 ASME Code I., VIII., IX. ASME B31.1 AD HP 5/3 the tests are carried out in the laboratory, in the mobile laboratory and on the spot at the client	Section of Defectoscopy
18.	iron based materials – welds, base materials	quality, defects, inhomogeneity	ultrasonic testing UT (qualitative test)	EN 583, 1714, 10160 EN 10228-3,4 EN 10246- 6,7,8,9,14,15,16,17 EN 10307, 10308 EN 12680-1,3, 14127 EN ISO 10893- 8,9,10,11 EN ISO 17640 EN ISO 22825 EN ISO 16810, 16811 EN ISO 16823, 16826 EN ISO 16827 STN 015021, 015024 STN 015028, 015042 STN 015043, 051171 STN 051172 ASME Code V. AD HP 5/3 SEL 072 SEP 1915, 1918, 1919 SEP 1920, 1921, 1922	EN 287-1, 1090-2 EN 1559-2,3, 1712 EN 1713, 12062, 12732 EN 12952-6, 12953-5 EN 13445-5, 13480-5 EN 14015, 14025 EN 15085-5, 25817 EN ISO 5817, 6520-1 EN ISO 9606-1, 11666 EN ISO 15614-1,7, 17405 EN ISO 17635, 23279 STN 051173 DIN 1690-2 ASME Code I., VIII., IX. ASME B31.1 the tests are carried out in the laboratory, in the mobile laboratory and on the spot at the client	Section of Defectoscopy

Item	Object		Method applied		Other specification y, purpose, modification / validation, opinions / interpretations, etc.)
	Object / Matrix / Environment	Property / Parameter / Indicator / Analyte	Principle / Kind / Type	Identification	
19.	iron and aluminium based materials – welds, base materials	quality, defects, inhomogeneity	penetrant testing PT (qualitative test)	EN 571-1, 1371-1,2 EN 10228-2 EN 10246-11 EN ISO 3452-1,5,6 EN ISO 10893-4 STN 015016 ASME Code V.	EN 1090-2, 1289 EN 1559-2,3, 12062 EN 12732, 12952-6 EN 12953-5, 13445-5 EN 13480-5, 14015 EN 15085-5, 25817 EN ISO 5817, 6520-1 EN ISO 15614-1,7,8 EN ISO 17635, 23277 DIN 1690-2 ASME Code I., VIII., IX. ASME B31.1 AD HP 5/3 the tests are carried out in the laboratory, in the mobile laboratory and on the spot at the client
20.	iron based materials – welds, base materials	quality, defects, inhomogeneity	magnetic particle testing MT (qualitative test)	EN 1290, 1369 EN 10228-1 EN 10246-12 EN ISO 9934-1 EN ISO 10893-5 EN ISO 17638 STN 015015 ASME Code V.	EN 1090-2, 1291 EN 1559-2,3, 12062 EN 12732, 12952-6 EN 12953-5, 13445-5 EN 13480-5, 14015 EN 15085-5, 25817 EN ISO 5817, 6520-1 EN ISO 15614-1,7 EN ISO 17635, 23278 DIN 1690-2 ASME Code I., VIII., IX. ASME B31.1 AD HP 5/3 the tests are carried out in the laboratory, in the mobile laboratory and on the spot at the client
21.	iron and aluminium based materials – welds, base materials	quality, defects, inhomogeneity	visual testing VT (qualitative test)	EN 970, 13018 EN ISO 17637 ASME Code V.	EN 287-1, 1090-2, 12062 EN 12732, 12952-6 EN 12953-5, 13445-5 EN 13480-5, 14015 EN 14025, 15085-5 EN 25817 EN ISO 5817, 6520-1 EN ISO 9606-1 EN ISO 15614-1,7,8 EN ISO 17635 ASME Code I., VIII., IX. ASME B31.1 AD HP 5/3 the tests are carried out in the laboratory, in the mobile laboratory and on the spot at the client
