

The Appendix is an integral part of
Certificate of Accreditation No: 650/2024 of 04/12/2024

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

ENVIFORM a.s.
CAB number 1371, LABORATORIES CENTRE
Závodní 814, Staré Město, 739 61 Třinec

Testing laboratory locations:

1. 1. Sampling Laboratory	Závodní 814, Staré Město, 739 61 Třinec
2. 2. Emission Measurement Laboratory	Závodní 814, Staré Město, 739 61 Třinec
3. 3. Working and Living Environment Laboratory	Závodní 814, Staré Město, 739 61 Třinec
4. 4.A Quantometric Laboratory	Průmyslová 1041, Staré Město, 739 61 Třinec
5. 4.B Quantometric Laboratory	Průmyslová 1000 - budova KKO u jižní brány, Staré Město, 739 61 Třinec
6. 5.A Chemical and Physical Analysis Laboratory	Závodní 814, Staré Město, 739 61 Třinec
7. 5.B Chemical and Physical Analysis Laboratory	Průmyslová 1041, Staré Město, 739 61 Třinec

The laboratory is qualified to carry out independent sampling.

Detailed information on activities within the scope of accreditation (determined analytes, tested subject, subject of sampling, source literature) is given in the section "Specification of the scope of accreditation".

1. 1. Sampling Laboratory

Tests:

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
1*	Determination of temperature	SPL-Lv-01 (ČSN 75 7342)	Drinking, surface, ground, waste and bathing water and drinking water	-
2*	Determination of total and free chlorine (spectrophotometric method) by HACH set and calculation of bound chlorine	SPL-Lv-02 (HACH manual)	Drinking water and bathing water	-
3*	Determination of electrical conductivity	SPL-Lv-03 (ČSN EN 27888)	Drinking, surface, ground and waste water	-
4*	Determination of pH by potentiometry	SPL-Lv-04 (ČSN ISO 10523)	Drinking, surface, ground, waste and bathing water	-
5*	Determination of ozone by spectrophotometry with HACH set	SPL-Lv-05 (HACH manual)	Drinking, bathing, ground and surface water	-

¹ asterisk at the ordinal number identifies the tests, which the laboratory is qualified to carry out outside the permanent laboratory premises

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³ the laboratory does not apply a flexible approach to the scope of accreditation



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Specification of the scope of accreditation:

Ordinal test number	Detailed information on activities within the scope of accreditation (tested subject)
1 - 5	Drinking water – includes not only drinking water but also hot water
1, 3, 4	Surface water – natural and artificial water reservoirs, water streams
1, 2, 4, 5	Bathing water – artificial water reservoirs (swimming and bathing pools, pools for sucklings and toddlers, sauna cooling pools) and natural bathing places and other surface water for bathing
1, 3, 4	Waste water - waste water, industrial water, cooling water, circuit water

2. 2. Emission Measurement Laboratory

Tests:

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
1	Determination of the mass concentration of TZL (solid pollutants) by gravimetric method	SPL-Le-01 (ČSN EN 13284-1)	Emissions	-
2*	Determination of the velocity and volume flow rate of gas streams in ducts	SPL-Le-02 (ČSN ISO 10780; ČSN EN ISO 16911-1)	Emissions	-
3*	Determination of water vapour in ducts by condensation method and capacitance detector	SPL-Le-05 (ČSN EN 14790)	Emissions	-
4*	Determination of mass concentration of sulphur dioxide, carbon monoxide and nitrogen oxides by automatic analyser – NDIR method	SPL-Le-06 (ČSN ISO 7935; ČSN EN 15058; ČSN ISO 10849)	Emissions	-
5	Determination of the mass concentration of gases and vapours ⁴ by calculation from measured values (SPL-Le-07 (ČSN EN 1911; ČSN P CEN/TS 17340; ČSN EN 14791)	Emissions	-
6*	Determination of the mass concentration of nitrogen oxides - chemiluminescence method	SPL-Le-08 (ČSN EN 14792)	Emissions	-
7*	Determination of mass concentration of total organic compounds expressed as TOC by automatic analyser - flame ionization detection method	SPL-Le-09 (ČSN EN 12619)	Emissions	-



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Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
8*	Determination of the volume concentration of oxygen by automatic analyzer – paramagnetic method	SPL-Le-10 (ČSN EN 14789)	Emissions	-
9*	Determination of mass concentration of carbon dioxide by automatic analyser - NDIR method	SPL-Le-10A (ISO 12039)	Emissions	-
10	Determination of the mass concentration of persistent organic compounds ⁴ by calculation from measured values	SPL-Le-11 (ČSN EN 1948-1; ČSN EN 1948-4+A1)	Emissions	-
11	Determination of the mass concentration of heavy metals ⁴ by calculation from measured values	SPL-Le-12 (ČSN EN 14385; ČSN EN 13211; US EPA 29)	Emissions	-
12*	Quality assurance of automated measuring systems	SPL-Le-14 (ČSN EN 14181, cl. 6.3-6.8 QAL2, cl. 8 AST)	Automated emission measuring systems	-

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³ the laboratory does not apply a flexible approach to the scope of accreditation

⁴ laboratory determination of the analytes in the sample is carried out by an external test provider within the scope of its accreditation

Specification of the scope of accreditation:

Ordinal test number	Detailed information on activities within the scope of accreditation (determined analytes)
5	HCl, HF, SO ₂
10	PCDD/PCDF, PCB, PAH
11	Sb, As, Be, Sn, Cr, Co, Cd, Mn, Cu, Ni, Pb, Se, Te, Tl, V, Zn, Hg



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3. 3. Working and Living Environment Laboratory

Tests:

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
1	Determination of dust concentration by gravimetry	SPL-Lh-01 (Gov. Reg. 361/2007 Coll.; ČSN EN 481; ČSN EN 482; ČSN EN 689+AC)	Working environment	-
2	Determination of chemical substances ⁴ by calculation from measured values	SPL-Lh-02 (Gov. Reg. 361/2007 Coll.; ČSN EN 481; ČSN EN 482; ČSN EN 689+AC)	Working environment	-
3*	Measurement of noise	SPL-Lh-03 (ČSN EN ISO 9612, MoH Bulletin, Part 4, 2013)	Working environment	-
4*	Measurement of noise	SPL-Lh-04 (ČSN ISO 1996-1; ČSN ISO 1996-2; MoH Bulletin, Part 14, 2013))	Non-working environment	-
5*	Measurement of vibration	SPL-Lh-05 (ČSN EN ISO 5349-1; ČSN EN ISO 5349-2; ČSN ISO 2631-1; ČSN ISO 2631-2; MoH Bulletin, Part 4, 2013)	Working environment	-
6*	Measurement of lighting	SPL-Lh-06 (ČSN 36 0011-1; ČSN 36 0011-2; ČSN 36 0011-3; ČSN 36 0011-4; ČSN 73 0580-1; ČSN 36 0020; ČSN EN 12464-1; ČSN EN 12464-2)	Workplace and non-workplace environment	-
7*	Measurement of microclimatic conditions	SPL-Lh-07 (ČSN EN ISO 7726; ČSN EN ISO 7730; MoH Bulletin, Part 8, 2013)	Workplace and non-workplace environment	-

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⁴ laboratory determination of the analytes in the sample is carried out by an external test provider within the scope of its accreditation

Specification of the scope of accreditation:

Ordinal test number	Detailed information on activities within the scope of accreditation (determined analytes)
2	Chemical substances according to GR 361/2007 Coll., Annex 2, Part A
7	t_a (°C) – air temperature, t_g (°C) – resulting temperature of spherical thermometer, r_h (%) – relative air humidity, v_a (m.s ⁻¹) – air flow velocity

Specification of the scope of accreditation:

Ordinal test number	Detailed information on activities within the scope of accreditation (source literature)
3, 5	MoE CR Bulletin 2013, part 4: Guideline for the measurement and evaluation of noise and vibrations at workplace and vibrations in protected indoor areas of buildings
4	MoE CR Bulletin 2023, part 14: Guideline for the measurement and evaluation of noise in non-working environment
7	MoE CR Bulletin 2013, part 8: Guideline for the measurement and evaluation of microclimatic conditions of working environment and indoor areas of buildings

4. 4.A Quantometric Laboratory

Tests:

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
1	Determination of ⁶⁰ Co mass activity by scintillation gamma spectrometry	SPL-Lq-01 (IAEA-TECDOC-855; SKF 11H 1551822, Issue 4; Regulation No. 422/2016 Coll.; Act no. 263/2016 Coll.)	Steel, cast iron	-
2	Determination of oxygen and hydrogen content by method of IR absorption after melting in inert gas	SPL-Lq-02 (ASTM E 1019; ČSN EN 10276-2; ČSN 42 0540; SKF 11H 1551218, Issue 5; ČSN 42 0529)	Steel, cast iron	-
3	Determination of nitrogen content – thermal conductometric method after melting in inert gas	SPL-Lq-03 (ASTM E 1019; ČSN EN ISO 15351; ČSN EN ISO 10720)	Steel, cast iron	-



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Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
4	Determination of total carbon and sulphur content by method of infrared detection after combustion in induction furnace	SPL-Lq-04 (ASTM E 1019; ČSN EN ISO 15349-2; ČSN EN ISO 15350; ČSN ISO 9556; ČSN ISO 4935; ČSN 42 0541)	Steel, cast iron, iron, ferroalloys	-
5	Determination of content of elements (C, Mn, Si, P, S, Cu, Cr, Ni, Al, Al_metallic form, Mo, W, V, Ti, Co, As, Sn, B, Ca, Nb, Pb, Sb, Zr, Zn, Bi, Ta, Ce, Mg, N) by optical emission vacuum spectrometry	SPL-Lq-05 (ASTM E 415; ASTM E 1086; ASTM E 1999; Thermo Fisher Scientific and OBLF user manual)	Steel, cast iron, iron	-
6	Determination of content of elements (C, Mn, Si, P, S, Al, Cu, Cr, Ni, Mo, W, V, Ti, Co, As, Sn, Nb, Pb, Sb, Zr, Zn, Bi, Fe) by X-ray fluorescent spectrometry	SPL-Lq-06-3A (ASTM E 572; ČSN EN 15063-1; ČSN EN 15063-2; HŽ 42 0594; Thermo Fisher Scientific and OBLF user manual)	Metallic materials	-
7	Determination of the content of elements (Fe, Si, Al, Mn, Ca, Mg, P, S, Ti, Na, K, Cr, Zn, F) by X-ray fluorescence spectrometry and calculation of their oxides, carbonates and fluorides (Fe_2O_3 , SiO_2 , Al_2O_3 , MnO , CaO , CaCO_3 , MgO , MgCO_3 , P_2O_5 , TiO_2 , Na_2O , K_2O , Cr_2O_3 , CaF_2) from measured values	SPL-Lq-06-3B (ISO 9516-1; HŽ 42 0593; ČSN EN ISO 12677; HŽ 72 2019; ASTM C 1271; Thermo Fisher Scientific user manual)	Bulk materials	-

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Specification of the scope of accreditation:

Ordinal test number	Detailed information on activities within the scope of accreditation (tested subject)
4	Ferroalloys - ferrosilicon, ferromanganese, ferrosilicon manganese, ferro sulphur, ferrochromium, ferroboron, ferrotitanium, ferrotungsten, ferrovanadium, ferromolybdenum, ferrosiliconzirconium, ferrosiliconcalcium



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Ordinal test number	Detailed information on activities within the scope of accreditation (tested subject)
6	Metallic materials - cast iron, pig iron
7	Bulk materials – charge materials with iron matrix (containing 30 – 70 % of iron – e.g. iron ores, agglomerated ores, iron pellets, iron concentrates, agglomerates, metallurgical waste with iron matrix (e.g. blast-furnace dust, sludge), slag and materials with non-ferrous matrix similar to slag (e.g. blast-furnace slag, steel-furnace slag), refractory material (e.g. pelt, clay, fire clay), slag-forming materials (e.g. limestone, dolomite, magnesite)

5. 4.B Quantometric Laboratory

Tests:

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
1	Determination of content of elements (C, Mn, Si, P, S, Cu, Cr, Ni, Al, Al_metallic form, Mo, W, V, Ti, Co, As, Sn, B, Ca, Nb, Pb, Sb, Zr, Zn, Bi, Mg, N) by optical emission vacuum spectrometry	SPL-Lq-10 (ASTM E 415; Thermo Fisher Scientific and OBLF user manual)	Steel	-

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6. 5.A Chemical and Physical Analysis Laboratory

Tests:

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
1	Determination of water content by gravimetry	SPL-Lk-11 ČSN 44 1377; ČSN ISO 579; ČSN ISO 687; ČSN EN ISO 18134-1; ČSN EN ISO 18134-2; ČSN EN ISO 18134-3; ČSN P CEN/TS 15414-1; ČSN P CEN/TS 15414-2; ČSN EN ISO 21660-3; ČSN ISO 3087; ČSN ISO 7764:1993; ČSN EN 459-2; ČSN EN 14346:2007, method A)	Solid fuels, bulk materials	-
2	Determination of ash content by gravimetry	SPL-Lk-12 (ČSN ISO 1171; ČSN EN ISO 18122; ČSN EN ISO 21656)	Solid fuels	-
3	Determination of the content of volatile combustible matter by gravimetry	SPL-Lk-13(ČSN ISO 562; ČSN ISO 5071; ČSN EN ISO 18123; ČSN EN ISO 22167)	Solid fuels	-
4	Determination of total sulphur and carbon content by IR detection method	SPL-Lk-14 (ČSN ISO 19579; ČSN EN ISO 16948; ČSN EN ISO 16994; ČSN EN ISO 21663; ČSN ISO 29541; ČSN 72 2030-10:1992; ČSN 72 2041-19:1992)	Solid fuels, bulk materials	-
5	Determination of gross calorific value (Q_s) by the bomb calorimetric method, calculation of net calorific value (Q_i) and emission factor from measured values	SPL-Lk-15 (ČSN ISO 1928; ČSN EN ISO 18125; ČSN EN ISO 21654)	Solid fuels	-



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Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
6	Determination of basic elements (C, H, N, S) using an analyzer with TCD detection	SPL-Lk-16(ČSN ISO 29541; ČSN EN ISO 16948; ČSN EN ISO 16994; ČSN EN ISO 21663; ELEMENTAR user manual)	Solid fuels	-
7	Determination of CRI and CSR index by gravimetry	SPL-Lk-17 (ISO 18894; ČSN ISO 18894)	Coke	-
8	Determination of the composition of heating gases (CH ₄ , H ₂ , N ₂ , O ₂ , CO ₂ , CO and hydrocarbons C ₂ -C ₆) by gas chromatography with TCD, FID detection and calculation of their gross calorific value and net calorific value	SPL-Lk-18 (ČSN EN ISO 6974; ČSN EN ISO 6976)	Heating gases	-
9	Determination of chemical composition of benzole by gas chromatography (FID)	SPL-Lk-19 (ČSN 66 2108:1984)	Raw coke oven benzole	-
10	Determination of hydrocarbons C ₁₀ – C ₄₀ by gas chromatography with FID detection	SPL-Lk-20-3A (ČSN EN ISO 9377-2)	Surface, waste and ground water	-
11	Determination of Hg by single-purpose atomic absorption spectrometer	SPL-Lk-23-3A (ČSN 75 7440)	Surface, waste and ground water	-
12	Determination of Hg by single-purpose atomic absorption spectrometer	SPL-Lk-23-3C (ČSN 75 7440)	Bulk materials	-
13	Determination of the content of elements (Al, Pb, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Ni, V, Zn) by inductively coupled plasma optical emission spectrometry	SPL-Lk-21-3A (ČSN EN ISO 11885)	Surface, waste and ground water	-
14	Determination of metal content (Na, K) by flame atomic spectrometry and calculation of oxides from measured values	SPL-Lk-22-3A (ČSN ISO 9964-1; ČSN ISO 9964-2)	Surface, waste and ground water	-
15	Determination of metal content (Co, Cr, Cu, Mn, Mg, Ni, Fe, Zn) by inductively coupled plasma optical emission spectrometry	SPL-Lk-21-3B (ČSN EN 14242)	Aluminium and its alloys	-



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Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
16	Determination of metal content (Al, Ca, Cd, Cr, Co, Cu, Fe, Mg, Mn, Ni, Sn, Ti, V) by optical emission spectrometry with inductively coupled plasma and calculation of their oxides from measured values	SPL-Lk-21-3C (ČSN EN ISO 10058-3; ČSN EN ISO 21587-3; ČSN EN ISO 21079-3; ČSN EN ISO 26845; ČSN EN ISO 20565-3)	Bulk materials	-
17	Determination of metal content (Pb, Na, K and Zn) by flame atomic spectrometry and calculation of oxides from measured values	SPL-Lk-22-3C (ČSN ISO 7969; ČSN EN ISO 10058-3; ČSN 72 0119; ČSN 72 0120; ČSN EN ISO 26845; ČSN EN ISO 20565-3; ČSN EN ISO 21587-3; ČSN EN ISO 21079-3)	Bulk materials	-
18	Determination of total phosphorus (P _c) by spectrophotometry and phosphate (PO ₄ ³⁻) by calculation from measured values	SPL-Lk-29 (ČSN EN ISO 6878, chap. 7)	Surface, waste and ground water	-
19	Determination of N-NH ₄ ⁺ by spectrophotometry and ammonium ions and total inorganic nitrogen by calculation from measured values	SPL-Lk-30 (ČSN ISO 7150-1)	Surface, waste and ground water	-
20	Determination of dissolved solids (RL105) and dissolved inorganic salts (RAS) by gravimetry	SPL-Lk-31-3A (ČSN 75 7346; ČSN 75 7347)	Surface, waste and ground water	-
21	Determination of suspended solids by gravimetry	SPL-Lk-31-3B (ČSN EN 872)	Surface, waste and ground water	-
22	Determination of COD _C by spectrophotometry - HACH analytical commercial set	SPL-Lk-32 (ČSN ISO 15705)	Surface, waste and ground water	-
23	Determination of univalent phenols by spectrophotometry	SPL-Lk-33 (ČSN ISO 6439, method A)	Surface, waste and ground water	-
24	Determination of N-NO ₂ ⁻ by spectrophotometry and nitrite by calculation from measured values	SPL-Lk-34 (ČSN EN 26777)	Surface, waste and ground water	-
25	Determination of N-NO ₃ ⁻ by spectrophotometry and nitrate by calculation from measured values	SPL-Lk-35 (ČSN ISO 7890-3)	Surface, waste and ground water	-



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Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
26	Determination of chlorides by titration	SPL-Lk-36 (ČSN ISO 9297)	Surface, waste and ground water	-
27	Determination of total and dissolved iron by spectrophotometry	SPL-Lk-37 (ČSN ISO 6332)	Surface, waste and ground water	-
28	Determination of sulphate by gravimetry	SPL-Lk-38 (TNV 75 7476)	Surface, waste and ground water	-
29	Determination of extractives (EL) by FTIR method	SPL-Lk-39-3A (ČSN 75 7506)	Surface, waste and ground water	-
30	Determination of nonpolar extractives (NEL) by FTIR method	SPL-Lk-39-3B (ČSN 75 7505:1998)	Surface, waste and ground water	-
31	Determination of electrical conductivity	SPL-Lk-40 (ČSN EN 27888)	Surface, waste and ground water	-
32	Determination of pH by potentiometry	SPL-Lk-41 (ČSN ISO 10523)	Surface, waste and ground water	-
33	Determination of calcium, the sum of calcium and magnesium by titration and magnesium by calculation from measured values	SPL-Lk-44 (ČSN ISO 6058; ČSN ISO 6059)	Drinking, surface, waste and ground water	-
34	Determination of fluoride, chloride, nitrite, nitrate, phosphate and sulphate by ion chromatography method	SPL-Lk-45 (ČSN EN ISO 10304-1)	Drinking, surface, waste and ground water	-
35	Determination of Pb and Zn by flame atomic spectrometry	SPL-Lk-22-3B (ČSN ISO 5194; ČSN ISO 4192)	Aluminium and its alloys	-

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Specification of the scope of accreditation:

Ordinal test number	Detailed information on activities within the scope of accreditation (determined analytes)
9	n-hexane, n-heptane, n-octane, n- nonane, benzene, toluene, o-xylenes p- xylenes, m- xylenes, ethylbenzene, propylbenzene, cyclohexane, styrene, thiophene, pyridine, indene, naphthalene, 1,2-methylnaphthalenes, biphenyl, acenaphthene



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Ordinal test number	Detailed information on activities within the scope of accreditation (tested subject)
10 - 13, 17 - 33	Waste water - waste water, industrial water, cooling water, circuit water
1, 4, 15, 16	Bulk materials – charge materials with iron matrix (containing 30 – 70 % of iron – e.g. iron ores, agglomerated ores, iron pellets, iron concentrates, iron, ore mixtures, agglomerates, metallurgical waste with iron matrix (e.g. iron dust, blast-furnace dust, sludge, scale), slag and materials with non-ferrous matrix similar to slag (e.g. blast-furnace slag, steel-furnace slag, slag aggregates), refractory material (e.g. corundum, sand, chrome magnesite, gunite materials), slag-forming materials (e.g. lime, limestone, dolomite, magnesite, casting powders)
1 - 6	Solid fuels – Solid fuels (solid carbon substances releasing a lot of heat during combustion - e.g. anthracite, black coal, brown coal, lignite coal, turf, wood), coke, solid biofuels

7. 5.B Chemical and Physical Analysis Laboratory

Tests:

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
1	Determination of total, metallic iron and FeO by titration and Fe ₂ O ₃ by calculation from measured values	SPL-Lk-25 (ČSN ISO 2597:1993; ČSN 72 2041-10:1992; ČSN 72 2041-12:1992; ČSN 72 0101; ČSN 720110-3; ČSN 72 0111)	Bulk materials	-
2	Determination of the loss on ignition by gravimetry	SPL-Lk-26 (ČSN 72 1216; ČSN 72 0103; ČSN 44 1855; ČSN EN 459-2)	Bulk materials	-
3	Determination of SiO ₂ by gravimetry	SPL-Lk-27 (ČSN 72 2030-2:1992; ČSN 72 2041-2:1992; ČSN 72 2041-3:1992; ČSN 72 0101; ČSN 72 0105-1; ČSN 72 0105-2; ČSN EN ISO 10058-1; ČSN EN ISO 20565-1; ČSN EN ISO 21587-1; ČSN 72 1216)	Bulk materials	-



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Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
4	Determination of fluorides by potentiometry	SPL-Lk-28 (ČSN 72 2041-13:1992)	Bulk materials	-
5	Determination of sulphates by gravimetry and sulphites, sulphides by calculation from measured values	SPL-Lk-46 (ČSN 72 0117; TNV 757476)	Bulk materials	-
6	Determination of chlorides by titration	SPL-Lk-47 (ČSN ISO 9297)	Bulk materials	-
7	Determination of Al ₂ O ₃ by titration and Al by calculation from measured values	SPL-Lk-48 (ČSN ISO 6830; ČSN 72 0101; ČSN 72 0109-1; ČSN EN ISO 21587-2; ČSN 72 2030-3:1992)	Bulk materials	-
8	Determination of Cr ₂ O ₃ by titration and Cr by calculation from measured values	SPL-Lk-49 (ČSN 44 1606)	Bulk materials	-
9	Determination of CaO by titration and Ca by calculation from measured values	SPL-Lk-50 (ČSN 72 0101; ČSN 72 0113-1; ČSN 72 0113-2; ČSN EN ISO 10058-2; ČSN EN 459-2; ČSN 72 1216; ČSN 72 2030-5:1992)	Bulk materials	-
10	Determination of MgO by titration and Mg by calculation from measured values	SPL-Lk-51 (ČSN 72 0101; ČSN 72 0114-1; ČSN 72 0114-2; ČSN EN ISO 10058-2; ČSN EN 459-2; ČSN 72 2030-6:1992)	Bulk materials	-
11	Determination of P by titration and P ₂ O ₅ by calculation from measured values	SPL-Lk-52 (ČSN 44 1805)	Bulk materials	-
12	Determination of Si by gravimetry	SPL-Lk-53 (ČSN ISO 797)	Aluminium and its alloys	-

¹ asterisk at the ordinal number identifies the tests, which the laboratory is qualified to carry out outside the permanent laboratory premises

² if the document identifying the test procedure is dated, only these specific procedures are used. If the document identifying the test procedure is not dated, the latest valid edition of the specified procedure is used (including any changes)

³ the laboratory does not apply a flexible approach to the scope of accreditation



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Specification of the scope of accreditation:

Ordinal test number	Detailed information on activities within the scope of accreditation (tested subject)
1 - 11	Bulk materials – charge materials with iron matrix (containing 30 – 70 % of iron – e.g. iron ores, agglomerated ores, iron pellets, iron concentrates, iron, ore mixtures, agglomerates, metallurgical waste with iron matrix (e.g. iron dust, blast-furnace dust, sludge, scale), slag and materials with non-ferrous matrix similar to slag (e.g. blast-furnace slag, steel-furnace slag, slag aggregates), refractory material (e.g. corundum, sand, chrome magnesite, gunite materials), slag-forming materials (e.g. lime, limestone, dolomite, magnesite, casting powders)

1. 1. Sampling Laboratory

Sampling:

Ordinal number	Sampling procedure name	Sampling procedure identification ¹	Subject of sampling
1	Surface water sampling (manual sampling)	SPO-Lv-01 (ČSN EN ISO 5667-1; ČSN EN ISO 5667-3; ČSN ISO 5667-4; ČSN EN ISO 5667-6; ČSN EN ISO 5667-14)	Surface water
2	Waste water sampling (manual sampling, automatic sampler)	SPO-Lv-02 (ČSN EN ISO 5667-1; ČSN EN ISO 5667-3; ČSN ISO 5667-10; ČSN EN ISO 5667-14)	Waste water
3	Ground water sampling (manual sampling, sampling by a sampling pump)	SPO-Lv-03 (ČSN EN ISO 5667-1; ČSN EN ISO 5667-3; ČSN ISO 5667-11; ČSN EN ISO 5667-14)	Ground water
4	Drinking water sampling	SPO-Lv-04 (ČSN EN ISO 5667-1; ČSN EN ISO 5667-3; ČSN ISO 5667-5; ČSN EN ISO 5667-14; ČSN EN ISO 19458)	Drinking water, hot water
5	Collection of waste and solid materials	SPO-Lv-05 (ČSN EN 14899; Guideline for waste sampling, Ministry of Environment Bulletin, 2008, Part 4)	Waste and solid materials



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Ordinal number	Sampling procedure name	Sampling procedure identification ¹	Subject of sampling
6	Sludge sampling	SPO-Lv-06 (ČSN EN 14899; ČSN ISO 5667-12 ČSN EN ISO 5667-13; ČSN EN ISO 5667-15)	Sludge, sediments and processed biowaste
7	Bathing water sampling	SPO-Lv-07 (ČSN EN ISO 5667-1; ČSN EN ISO 5667-3; ČSN ISO 5667-4; ČSN EN ISO 5667-6; ČSN EN ISO 5667-14; ČSN EN ISO 19458; MoH Regulation No. 238/2011 Coll.)	Bathing water

¹ if the document identifying the sampling procedure is dated, only these specific procedures are used. If the document identifying the sampling procedure is not dated, the latest edition of the specified procedure is used (including any changes)

Specification of the scope of accreditation:

Ordinal test number	Detailed information on activities within the scope of accreditation (subject of sampling)
1	Surface water – natural and artificial water reservoirs, water streams
2	Waste water - waste water, industrial water, cooling water, circuit water
5	Solid materials – slags, linings, concrete, railway ballast, rolling mill scale
7	Bathing water – artificial water reservoirs (swimming and bathing pools, pools for sucklings and toddlers, sauna cooling pools) and natural bathing places and other surface water for bathing

2. Emission Measurement Laboratory

Sampling:

Ordinal number	Sampling procedure name	Sampling procedure identification ¹	Subject of sampling
1	Sampling of persistent organic compounds (PCDD/PCDF, PCB, PAH) by filtration condensation method – automatic or manual isokinetic control	SPO-Le-11 (ČSN EN 1948-1; ČSN EN 1948-4+A1)	Emissions



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Ordinal number	Sampling procedure name	Sampling procedure identification ¹	Subject of sampling
2	Sampling of heavy metals (Sb, As, Be, Sn, Cd, Cr, Co, Cu, Mn, Ni, Pb, Se, Te, Tl, V, Zn, Hg) – automatic or manual isokinetic control	SPO-Le-12 (ČSN EN 14385; ČSN EN 13211; ČSN EN 13284-1; US EPA 29)	Emissions
3	Sampling of TZL – automatic or manual isokinetic control	SPO-Le-01 (ČSN EN 13284-1)	Emissions
4	Sampling of gases and vapours by absorption in a liquid (HCl, HF, SO ₂)	SPO-Le-07 (ČSN EN 1911; ČSN P CEN/TS 17340; ČSN EN 14791)	Emissions

¹ if the document identifying the sampling procedure is dated, only these specific procedures are used. If the document identifying the sampling procedure is not dated, the latest edition of the specified procedure is used (including any changes)

3. Working and Living Environment Laboratory

Sampling:

Ordinal number	Sampling procedure name	Sampling procedure identification ¹	Subject of sampling
1	Sampling of dust, aerosol and mineral fibres by catching on a filter	SPO-Lh-01 (Gov. Reg. 361/2007 Coll.; ČSN EN 481; ČSN EN 482; ČSN EN 689+AC)	Workplace air
2	Sampling of gases and vapours by catching on a solid sorbent	SPO-Lh-02 (Gov. Reg. 361/2007 Coll.; ČSN EN 482; ČSN EN 689+AC; ČSN EN ISO 16017-1)	Workplace air

¹ if the document identifying the sampling procedure is dated, only these specific procedures are used. If the document identifying the sampling procedure is not dated, the latest edition of the specified procedure is used (including any changes)

Explanations and abbreviations:

- Lv Sampling Laboratory
- Le Emission Measurement Laboratory
- Lh Working and Living Environment Laboratory
- Lq Quantometric Laboratory



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Lk	Chemical and Physical Analysis Laboratory
SPL	Standard Laboratory Procedure of the LABORATORIES CENTRE
SPO	Standard Sampling Procedure of the LABORATORIES CENTRE
MoE	Ministry of Environment
MoH	Ministry of Health
TZL	Solid Pollutants
NDIR	Nondispersive Infrared Spectrometry
TOC	Total Organic Carbon
VOC	Volatile Organic Compounds
PCDD	Polychlorinated Dibenzodioxins
PCDF	Polychlorinated Dibenzofurans
PCB	Polychlorinated Biphenyls
PAH	Polycyclic Aromatic Hydrocarbons
HCl	Inorganic compounds of hydrogen chloride
HF	Inorganic compounds of hydrogen fluoride
SO ₂	Sulphur dioxide
QAL2	Calibration and verification of automated measuring systems
AST	Annual verification of automated measuring systems
GR	Government Regulation
IM	Iron Metallurgy
SKF	Technical instructions for testing of samples of steel for the production of SKF bearing
IAEA	International Atomic Energy Agency
ASTM	American Society for Testing and Materials
CRI	Coke Reactivity Index
CSR	Coke strength after reaction with CO ₂
IR	Infrared Spectrometry
TCD	Thermal Conductivity Detector
FID	Flame Ionization Detector
FTIR	Fourier Transformation Infrared Spectrometry
COD	Chemical Oxygen Demand
Emission	waste gas containing pollutants released in a controlled manner or leaking into atmosphere from air pollution sources

"This document is an appendix to the certificate of accreditation. In case of any discrepancies between the English and Czech versions, the Czech version shall prevail, both for the certificate appendix and the certificate itself. "

