EA MLA Signatory
Český institut pro akreditaci, o.p.s.
Olšanská 54/3, 130 00 Praha 3

issues

according to section 16 of Act No. 22/1997 Coll., on technical requirements for products, as amended

CERTIFICATE OF ACCREDITATION

No. 307/2022

Technické služby ochrany ovzduší Praha a.s.
with registered office Urbánkova 3367, 143 00 Praha 4, Company Registration No. 25079140

to the Testing Laboratory No. **1461**
Testing Laboratory for the Measurement of Pollutants

Scope of accreditation:

Measurement of pollutants and odours in emission, occupational environment and air, measurement of reference values, thermodynamic quantities and certification of quality of automatic measuring and sampling systems to the extent as specified in the appendix to this Certificate.

This Certificate of Accreditation is a proof of Accreditation issued on the basis of assessment of fulfillment of the accreditation criteria in accordance with

ČSN EN ISO/IEC 17025:2018

In its activities performed within the scope and for the period of validity of this Certificate, the Body is entitled to refer to this Certificate, provided that the accreditation is not suspended and the Body meets the specified accreditation requirements in accordance with the relevant regulations applicable to the activity of an accredited Conformity Assessment Body.

This Certificate of Accreditation replaces, to the full extent, Certificate No.: 199/2021 of 30. 3. 2021, or any administrative acts building upon it.

The Certificate of Accreditation is valid until: **28. 6. 2023**

Prague: 21. 6. 2022

Český institut pro akreditaci, o.p.s.
NÁRODNÍ AKREDITAČNÍ ORGÁN
-3-

Lukáš Burda
Director of the Department
of Testing and Calibration Laboratories
Czech Accreditation Institute
Public Service Company

The Appendix is an integral part of
Certificate of Accreditation No. 307/2022 of 21/06/2022

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

Technické služby ochrany ovzduší Praha a.s.,
Testing Laboratory for the Measurement of Pollutants
Jenečská 146/44, 161 00 Praha 6

The laboratory is qualified to provide expert opinions and to interpret test results.

Tests:

Ordinal number[1]	Test procedure/ method name	Test procedure/ method identification[2]	Tested object
1	Determination of mass concentration of solid pollutants in emissions, including PM10 and PM 2.5 fractions, by gravimetry	IP 100 (ISO 9096, ČSN EN 13284-1, ČSN EN ISO 23210)	Emission
2*	Determination of mass concentration of gaseous components in emissions by NDIR method (NO and NO_2) (SO_2) (CO) (CO_2) (NO,NO_2,SO_2,CO_2,CO,O_2)	IP 200a (ISO 10396, ČSN EN 15259, ČSN ISO 10849, ČSN ISO 7935, ČSN P CEN/TS17021, ČSN EN 15058, ISO 12039, ISO 12039, ČSN P CEN/TS 17405, ISO 11042-1 [3])	Emissions
3*	Determination of mass concentration of gaseous components in emissions by chemiluminescence method (NO and NO_2)	IP 200b (ISO 10396, ČSN EN 15259, ČSN EN 14792, ISO 11042-1[3])	Emissions
4*	Determination of mass concentration of gaseous components in emissions by FID method (TOC)	IP 200c (ISO 10396, ČSN EN 15259, ČSN EN 12619, ISO 11042-1[3])	Emissions
5*	Determination of volume concentration of gaseous components in emissions by paramagnetic method (O_2)	IP 200d (ISO 10396, ČSN EN 15259, ČSN EN 14789, ISO 12039, ISO 11042-1[3])	Emissions

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Ordinal number[1]	Test procedure/ method name	Test procedure/ method identification[2]	Tested object
6*	Determination of mass and volume concentration of gaseous components in emissions by electrochemical method (NO,NO_2,CO,O_2)	IP 200e (ČSN EN 50379-1, ed.2, ČSN EN 50379-2, ed.2, ISO 11042-1[3])	Emissions
7*	Determination of volume concentration of CO_2 by balance calculation from element analysis and amount of burned fuel	IP 200f (OTN ŽP 2008)	Emissions
8*	Determination of the velocity and volume flow rate	IP 300a (ČSN ISO 10780, ČSN EN ISO 16911-1	Emissions
9*	Determination of volume flowrate by balance calculation from element analysis and amount of burned fuel	IP 300b (OTN ŽP 2008)	Emissions
10*	Determination of water vapour in ducts by condensation-absorption, condensation and electrical capacitance method	IP 300c (ČSN EN 14790)	Emissions
11*	Determination of the mass concentration of gases and vapours taken into liquid by the calculation from measured values [5] (SO_2) (HCl) (HF) (Ammonia) (Sulfane) (Cl_2)	IP 500 (ČSN EN 14791, ISO 7934, ČSN EN 1911, ČSN P CEN/TS 17340 ISO 15713, ČSN EN ISO 21877 ČSN 834712-1, ČSN 834751-3,	Emissions

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Ordinal number[1]	Test procedure/ method name	Test procedure/ method identification[2]	Tested object
	(HCN) (total reduced sulphur - TRS)	EPA OTM29, EPA Met. 16A)	
12*	Determination of the mass concentration of metals by the calculation from measured values [5)] (As, Cd, Cr, Co, Cu, Mn, Ni, Pb, Sb, Tl, V) (Hg) (Cr^{6+}) (Be, Se, Zn, Sn, Te)	IP 600 (ČSN EN 14385, ČSN EN 13211, EMEP p. 3. 12, EPA Met. 0061, EPA Met. 29)	Emissions
13*	Determination of mass concentration of persistent organic compounds by the calculation from measured values [5)] (PCDD/PCDF, PCB) (PAH)	IP 700 (ČSN EN 1948-3 ČSN EN 1948-4+A1, ISO 11338)	Emissions
14*	Determination of mass concentration of volatile organic compounds (VOC) by capture on solid sorbent by calculation from measured values [5)]	IP 800 (ČSN P CEN/TS 13649, ČSN EN ISO 16017-1, EPA Met. 0011)	Emissions
15	Determination of concentration of odour substances by dynamic olfactometry	IP 1000 (ČSN EN 13725)	Emissions
16*	Demonstration of quality of automated measuring systems	IP 1100 (ČSN EN 14181, p.6 QAL2, p.8 AST)	Automated emission measuring systems

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Ordinal number[1]	Test procedure/ method name	Test procedure/ method identification[2]	Tested object
17*	Determination of mass concentration of airborne dust TSD, PM10 fraction and PM2.5 fraction by calculation from measured values [5)]	IP 2100 (ČSN EN ISO 13137, ČSN EN ISO 16000-1, ČSN EN 481 ČSN ISO 7708, Govenrment Regulation No. 361/2007 Coll., Annex No. 3 ČHMÚ 1997 MP 11 ČSN EN 12341)	Outdoor and indoor air, occupational environment#, immission

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 edition of the specified procedure is used (including any changes)

3 the standard applies to gas turbines only

4 occupational environment except the measurement for work categorisation purposes

5 the laboratory determination of an analyte in the sample is subcontracted to an accredited testing laboratory

Sampling:

Ordinal number	Sampling procedure name	Sampling procedure identification[1]	Sampled object
1	Sampling of solid pollutants in emissions (Isokinetic sampling with automatic or manual isokinetic control)	IP 100, chapter 7 (ISO 9096, ČSN EN 13284-1)	Emissions
2	Sampling of gases and vapours by absorption of liquids (non-isokinetic and isokinetic sampling with automatic or manual isokinetic control) (SO_2) (HCl)	IP 500, chapter 7 (ČSN EN 14791, ISO 7934, ČSN EN 1911,	Emissions

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Ordinal number	Sampling procedure name	Sampling procedure identification[1]	Sampled object
	(HF) (Ammonia) (Sulfane) (Cl_2) (HCN) (HCOOH, CH_3COOH) (total reduced sulphur - TRS)	ČSN 834752-2, ISO 15713, ČSN 834728-2, ČSN 834712-2, ČSN 834751:1988, EPA CTM 33, STN 834735, EPA Met. 16A)	
3	Sampling of metals by condensation-absorption method (isokinetic sampling with automatic or manual isokinetic control) (As ,Cd, Cr, Co, Cu, Mn, Ni, Pb, Sb, Tl, V) (Hg) (Cr^{6+}) (Be, Se, Zn, Te, Sn)	IP 600, chapter 7 (ČSN EN 14385, ČSN EN 13211, EMEP p. 3.12, EPA Met. 0061, EPA Met.29)	Emissions
4	Sampling of persistent organic compounds by dilution method (Isokinetic sampling with automatic or manual isokinetic control) (PCDD/PCDF, PCB) (PAH)	IP 700, chapter 7 (ČSN EN 1948-1, ČSN EN 1948–4+A1, ISO 11338-1)	Emissions
5	Sampling of volatile organic compounds (VOC) by capture on a solid sorbent	IP 800, chapter 7 (ČSN P CEN/TS 13649, ČSN EN ISO 16017-1, EPA Met. 0011)	Emissions, immission
6	Sampling of odour substances	IP 1000, chapter 7 (ČSN EN 13725)	Emissions

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Ordinal number	Sampling procedure name	Sampling procedure identification[1]	Sampled object
7	Sampling for the determination of mass concentration of airborne dust TSD, PM10 fraction and PM2.5 fraction	IP 2100, chapter 6 (ČSN EN ISO 13137, ČSN EN ISO 16000-1, ČSN EN 481, ČSN ISO 7708, Government Regulation No. 361/2007 Coll., Annex No. 3, ČHMÚ 1997 MP 11, ČSN EN 12341)	Outdoor and indoor air, occupational environment[4], immission

[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)

[4] occupational environment except the measurement for work categorisation purposes

Explanations and abbreviations:

IP	internal regulation
NDIR	Nondispersive Infrared Spectrometry
FID	Flame Ionization Detection
TSD	Total Suspended Dust
VOC	Volatile Organic Compounds
TOC	Total Organic Carbon
PCDD/PCDF	Polychlorinated Dibenzodioxins/Polychlorinated Dibenzofurans
PCB	Polychlorinated Biphenyls
PAH	Polycyclic Aromatic Hydrocarbons
EMEP	Sampling and Chemical Analysis Manual (European Monitoring and Evaluation Programme)
Emission	waste gas containing pollutants, which is released in a controlled way or leaks into atmosphere from air pollution sources
	air
STN	Slovak Technical Standard
ČSN	Czech Technical Standard
EPA	U.S. Environmental protection agency
DIN	Deutsches Institut für Normung

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OTN ŽP	Branch technical standard of MoE SR
ISO	International Organization for Standardization
EN	European Standards (CEN - European Committee for Standardization)
TESO	Registered trademark of Technické služby ochrany ovzduší