Testing (Fixed scope) fieldwork

No.	Reference documents	Quantity	Description of test	Measuring range	Status
1.	SIST EN 14789:2017	Volume fraction of Oxygen (O_2)	P-AMS Extractive sampling with removal of water vapour, analyses paramagnetic	O_2: 0,02-100 % (paramagnetic magnetopneumatic) O_2: 0,1-25 % (paramagnetic magnetodynamic)	accredited
	SIST ISO 12039:2020 in connection to SIST ISO 10396:2012		P-AMS Extractive sampling without or with removal of water vapour, analyses ZrO_2 Extractive sampling with removal of water vapour, analyses paramagnetic, electrochemical cell	O_2: 1-1000 µL/L (ZrO_2) O_2: 0,01-100 % (ZrO_2) O_2: 0,5-25 % (electrochemical cell) O_2: 0,02-100 % (paramagnetic magnetopneumatic) O_2: 0,1-25 % (paramagnetic magnetodynamic)	
2.	SIST-TS CEN/TS 17405:2020	Volume fraction of Carbon dioxide (CO_2)	P-AMS Extractive sampling with removal of water vapour, analyses NDIR	CO_2: 0,2-50 % (NDIR)	accredited
	SIST ISO 12039:2020 in connection to SIST ISO 10396:2012		P-AMS Extractive sampling with removal of water vapour, analyses NDIR	CO_2: 0,2-50 % (NDIR)	
3.	SIST EN 15058:2017	Volume fraction of Carbon monoxide (CO)	P-AMS Extractive sampling with removal of water vapour, analyses NDIR	CO: 1-2500 µL/L (NDIR)	accredited
	SIST ISO 12039:2020 in connection to SIST ISO 10396:2012		P-AMS Extractive sampling with removal of water vapour, analyses NDIR	CO: 1-2500 µL/L (NDIR) CO: 0,2-50 % (NDIR)	
4.	SIST ISO 10849:1996 in connection to SIST ISO 10396:2012	Volume fraction of Nitrogen monoxide (NO)	P-AMS Extractive sampling with removal of water vapour, analyses NDIR	NO: 4-2000 µL/L (NDIR)	accredited
	SIST ISO 10849:1996 in connection to SIST ISO 10396:2012 (alternative method to SIST EN 14792:2017)	Volume fraction of Nitrogen oxides (NO_X)	P-AMS Extractive sampling with removal of water vapour with NO_X converter, analyses NDIR	NO_X: 4-2000 µL/L (NO_X converter, NDIR)	
5.	SIST ISO 7935:1996 in connection to SIST ISO 10396:2012	Volume fraction of Sulphur dioxide (SO_2)	P-AMS Extractive sampling with removal of water vapour, analyses NDIR	SO_2: 2-1000 µL/L (NDIR)	accredited
	SIST-TS CEN/TS 17021:2017		P-AMS Extractive sampling with removal of water vapour, analyses NDIR	SO_2: 2-1000 µL/L (NDIR)	
6.	DP02:2022 in-house method based on SIST ISO 12039:2020 in connection to SIST ISO 10396:2012	Volume fraction of Methane (CH_4)	P-AMS Extractive sampling with removal of water vapour, analyses NDIR	CH_4: 0,4-100 %	accredited
7.	SIST EN 12619:2013	Mass concentration of Total gaseous and vaporous Organic carbon (TOC)	P-AMS Extractive sampling without removal of water vapour, analyses FID	TOC: 0,1-1000 mg/m^3 (FID)	accredited
8.	SIST EN ISO 25140:2010	Mass concentration of Methane (CH_4)	P-AMS Extractive sampling without removal of water vapour, analyses FID	CH_4: 0,1-200 mg/m^3 (FID)	accredited

No.	Reference documents	Quantity	Description of test	Measuring range	Status
9.	DP09:2022 in-house method based on SIST ISO 12039:2020 in connection to SIST ISO 10396:2012	Volume fractions of gases in landfil gas or biogas: Methane (CH_4) Carbon dioxide (CO_2) Oxygen (O_2) Hydrogen sulphide (H_2S) Hydrogen (H_2)	P-AMS Extractive sampling without removal of water vapour, analyses IR, electrochemical cell	CH_4: 0,5-100 % (IR) CO_2: 0,5-100 % (IR) O_2: 1,0-25 % (electrochemical cell) H_2S: 4-200 µL/L (electrochemical cell) H_2: 20-1000 µL/L (electrochemical cell)	accredited
10.	SIST EN 14790:2017	Volume fraction / Mass concentration of Water vapour (H_2O)	Ab/adsorption and gravimetric determination	H_2O: 2-40 % H_2O: 15-250 g/m^3	accredited
11.	DP06:2023 in-house method based on SIST EN 13284-1:2018	Temperature and Pressure of gas	Temperarure measurement with resistence thermometer or thermocouple, direct or indirect pressure measurement	t: 243-873 K (–30-600 ºC) p: 800-1200 hPa	accredited
12.	SIST EN 16911-1:2014	Gas velocity and Volume flow rate	Measurement of gas velocity with differential pressure probe or vane anemometer	v: 4-55 m/s (differential pressure probe) v: 0,5-60 m/s (vane anemometer)	accredited
	SIST ISO 10780:1996		Measurement of gas velocity with differential pressure probe	v: 5-50 m/s	
13.	SIST-TS CEN/TS 17337:2019 (alternative method SIST EN 14790:2017)	Volume fraction of Water vapour (H_2O)	P-AMS Extractive sampling without removal of water vapour, analysis FTIR	H_2O: 0,0-40 %	accredited
14.	SIST-TS CEN/TS 17337:2019 (alternative method SIST EN 15058:2017)	Volume fraction of Carbon monoxide (CO)	P-AMS Extractive sampling without removal of water vapour, analysis FTIR	CO: 0,1-2000 µL/L	accredited
15.	SIST-TS CEN/TS 17337:2019 (alternative method SIST-TS CEN/TS 17405:2020)	Volume fraction of Carbon dioxide (CO_2)	P-AMS Extractive sampling without removal of water vapour, analysis FTIR	CO_2: 0,0-30 %	accredited
16.	SIST-TS CEN/TS 17337:2019 (alternative method SIST EN 14792:2017)	Volume fractions of: Nitrogen oxide (NO) Nitrogen dioxide (NO_2)	P-AMS Extractive sampling without removal of water vapour, analysis FTIR	NO: 0,0-2000 µL/L NO_2: 0,4-200 µL/L	accredited
17.	SIST-TS CEN/TS 17337:2019 (alternative method SIST EN 14791:2017)	Volume fraction of Sulphur dioxide (SO_2)	P-AMS Extractive sampling without removal of water vapour, analysis FTIR	SO_2: 0,0-2000 µL/L	accredited
18.	SIST-TS CEN/TS 17337:2019 (alternative method SIST-TS CEN/TS 17021:2017)	Volume fraction of Sulphur dioxide (SO_2)	P-AMS Extractive sampling without removal of water vapour, analysis FTIR	SO_2: 0,0-2000 µL/L	accredited
19.	SIST-TS CEN/TS 17337:2019 (alternative method SIST EN 1911:2011)	Volume fraction of Hydrogen chloride (HCl)	P-AMS Extractive sampling without removal of water vapour, analysis FTIR	HCl: 0,0-50 µL/L	accredited
20.	SIST-TS CEN/TS 17337:2019 (alternative method SIST-TS CEN/TS 17340:2020)	Volume fraction of Hydrogen fluoride (HF)	P-AMS Extractive sampling without removal of water vapour, analysis FTIR	HF: 0,0-50 µL/L	accredited
21.	SIST-TS CEN/TS 17337:2019 (alternative method SIST ISO 17179:2019)	Volume fraction of Ammonia (NH_3)	P-AMS Extractive sampling without removal of water vapour, analysis FTIR	NH_3: 0,0-500 µL/L	accredited

No.	Reference documents	Quantity	Description of test	Measuring range	Status
22.	SIST-TS CEN/TS 17337:2019 (alternative method SIST EN ISO 21877:2019)	Volume fraction of Ammonia (NH_3)	P-AMS Extractive sampling without removal of water vapour, analysis FTIR	NH_3: 0,0-500 µL/L	accredited
23.	SIST-TS CEN/TS 17337:2019 (alternative method VDI 3682 Part 2:2000)	Volume fraction of Formaldehyde (CH_2O)	P-AMS Extractive sampling without removal of water vapour, analysis FTIR	CH_2O: 0,0-50 µL/L	accredited
24.	SIST-TS CEN/TS 17337:2019 (alternative method SIST EN ISO 21258:2010)	Volume fraction of dinitrogen oxide (N_2O)	P-AMS Extractive sampling without removal of water vapour, analysis FTIR	N_2O: 0,0-100 µL/L	accredited

Testing (Fixed scope) fieldwork and then in the laboratory

No.	Reference documents	Quantity	Description of test	Measuring range	Status
25.	SIST EN 13284-1:2018 and SIST ISO 9096:2018	Mass concentration of Total dust	Sampling on a filter, gravimetric determination	PM: 0,1-1000 mg/m^3	accredited
26.	SIST EN ISO 21877:2019 except chapters 7.3 and 9	Mass concentration of Ammonia (NH_3) (except analysis)	Absorption in H_2SO_4 solution and calculation	NH_3: 1-1000 mg/m^3	accredited
	VDI 3496 Part 1:1982 except chapters 4.2 and 5			NH_3: 1-1000 mg/m^3	
27.	SIST EN 1911:2011 except chapters 6 and 8.2.3	Mass concentration of gaseous Hydrogen Chloride (HCl) (except analysis)	Absorption in water and calculation	HCl: 0,2-100 mg/m^3	accredited
28.	SIST-TS CEN/TS 17340:2020 except chapters 8 and 9.2.3	Mass concentration of gaseous Fluorides (HF) (except analysis)	Absorption in water or NaOH and calculation	HF: 0,1-20 mg/m^3	accredited
	SIST ISO 15713:2009 except chapters 5.3, 5.4 and 8		Absorption in NaOH solution and calculation	HF: 0,02-50 mg/m^3	
29.	SIST EN 14791:2017 except chapters 7.3 and 9	Mass concentration of Sulphur oxides (SO_X) (except analysis)	Absorption in H_2O_2 solution and calculation	SO_X: 0,5-10000 mg/m^3	accredited
30.	VDI 3862 Part 2:2000 except chapters 5.2 and 6	Mass concentration of Formaldehyde (CH_2O) (except analysis)	Absorption in DNPH solution and calculation	CH_2O: 1-100 mg/m^3	accredited
31.	DP10:2022 in-house method	Calculation of Mass flow rates of the emitted quantity of the substance	Calculation		accredited

Testing (Flexible scope – possibility od introducing additional parameters) fieldwork

No.	Reference documents	Quantity	Description of test	Measuring range	Status
32.	SIST-TS CEN-TS 17337:2019	Volume fractions of substances	P-AMS Extractive sampling without removal of water vapour, analysis FTIR		
		Water vapour (H_2O) Carbon monoxide (CO) Carbon dioxide (CO_2) Nitrogen oxide (NO) Nitrogen dioxide (NO_2) Dinitrogen monoxide (N_2O) Sulphur dioxide (SO_2) Hydrogen chloride (HCl) Hydrogen fluoride (HF) Ammonia (NH_3) Formaldehyde (CH_2O)		H_2O: 0,0-40 % CO: 0,1-2000 µL/L CO_2: 0,0-30 % NO: 0,0-2000 µL/L NO_2: 0,4-200 µL/L N_2O: 0,0-100 µL/L SO_2: 0,0-2000 µL/L HCl: 0,0-50 µL/L HF: 0,0-50 µL/L NH_3: 0,0-500 µL/L CH_2O: 0,0-50 µL/L	accredited
		Methane (CH_4) Ethane (C_2H_6) Ethene (C_2H_4) Propane (C_3H_8) Hexane (C_6H_{14})		CH_4: 0,0-1000 µL/L C_2H_6: 0,0-100 µL/L C_2H_4: 0,0-100 µL/L C_3H_8: 0,0-100 µL/L C_6H_{14}: 0,0-100 µL/L	not accredited

Testing (Flexible scope – flexible measuring range) fieldwork

No.	Reference documents	Quantity	Quantity	Measuring range	Status
33.	SIST-TS CEN/TS 17337:2019	Volume fractions of Ammonia (NH_3) Carbon dioxide (CO_2) Carbon monoxide (CO)	Extractive sampling without removal of water vapour, analysis FTIR	 NH_3: 0,0-1000 µL/L CO_2: 0,0-80 % CO: 0,0-80 %	accredited