

Fuel parameters used for calculation in madur's gas analysers

#	Fuel	unit	CO _{2MAX} [%]	HV [MJ/unit]	A ₁	B	V _{DF} [m ³ /unit]	V _{AIR} [m ³ /unit]	T _D [°C]
1	Light oil	kg	15.4	42.70	0.5000	0.007	10.53	11.20	48.05
2	Natural gas	m ³	11.7	35.90	0.3700	0.009	8.56	9.54	56.05
3	Town gas	m ³	13.1	16.10	0.3500	0.011	36.10	3.90	60.05
4	Coke-oven gas	m ³	10.2	17.40	0.2900	0.011	22.30	24.36	64.35
5	Liquid gas and LPG/air mixture	m ³	14.0	93.20	0.4200	0.008	22.30	24.36	55.05
6	Natural gas with fan	m ³	12.1	35.90	0.4600	0.000	8.56	9.54	---
7	Town gas with fan	m ³	10.0	16.10	0.3800	0.000	3.61	3.90	---
8	Propane with fan	m ³	13.7	93.20	0.5000	0.000	22.30	24.36	---
9	Propane	m ³	13.7	93.20	0.4750	0.000	22.30	24.36	---
10	Butane with fan	m ³	14.1	123.80	0.5000	0.000	29.69	32.31	---
11	Butane	m ³	14.1	123.80	0.4750	0.000	29.69	32.31	---
12	Biogas with fan	m ³	11.7	35.90	0.7800	0.000	8.54	9.56	---
13	Biogas	m ³	11.7	35.90	0.7100	0.000	8.54	9.56	---
14	Bio-Diesel	kg	15.7	41.80	0.4567	0.005	10.44	11.15	---
15	Extra light oil	kg	15.3	41.80	0.5900	0.000	10.53	11.20	47.05
16	Heavy oil	kg	15.9	41.00	0.6100	0.000	10.08	10.73	---
17	Coal-tar	kg	18.0	37.70	0.6500	0.000	9.32	9.66	---
18	Mineral coal 31.5	kg	18.8	31.50	0.6830	0.000	7.92	8.11	---
19	Mineral coal 30.3	kg	18.5	30.03	0.6720	0.000	7.70	7.91	44.35
20	Lignite	kg	19.1	8.20	1.1130	0.000	4.01	4.09	44.35
21	Lignite Hu 9.34	kg	19.1	9.30	0.9880	0.000	4.01	4.09	---
22	Dry wood	kg	19.4	15.60	0.6500	0.000	3.87	3.90	57.55

unit Fuel's amount unit – m³ (for gaseous ones) or kg (for all others)

CO_{2max} The maximal concentration of CO₂ in dry fumes

HV Heating value – amount of energy emitted during the complete combustion of for one unit of fuel

A₁ Siegert's coefficient used for calculation of stack loss q_A

B Siegert's coefficient used for calculation of stack loss q_A

V_{DF} The volume of dry fumes, when combustion is performed with excess air coefficient λ=1

V_{AIR} The volume of air needed when combustion is performed with excess air coefficient λ=1

T_D Dew point temperature, when combustion is performed with excess air coefficient λ=1