



Energetic independence



 **STUBELJ**

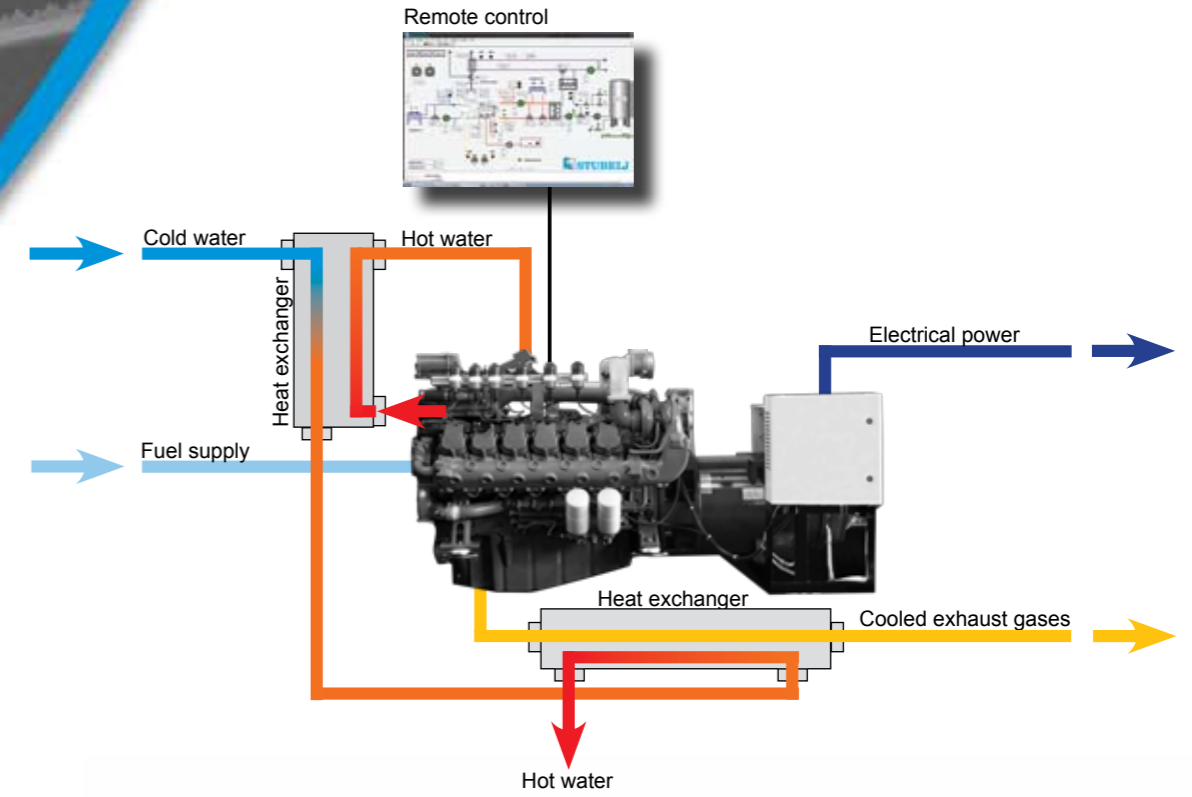
Cogeneration (CHP)

Heat and electricity

Cogeneration (CHP)



Operation of the cogeneration plant



Gas cogeneration plants or gas CHP simultaneously produce electricity and usable heat.

We are specialized in cogeneration / combined heat & power (CHP) units using diesel and gas engines. CHP technology utilizes both electricity and heat generated from a single source. These systems recover heat that would otherwise be wasted in exhaust gases, cooling water and charge air and utilize it to produce usable heat. This can be further used in one or more of the following applications: steam, hot water, heating, desiccant dehumidification or cooling. Through the use of CHP systems, the fuel that would otherwise be used to produce heat or steam in a separate unit is saved.

All of our cogeneration plants are designed and adapted to the needs and requirements of our clients. Each device is tailored specifically to the customer to fully meet his expectations.

Cogeneration can be driven by:

- natural gas,
- bio gas,
- LPG,
- technical gas.

Benefits of CHP units

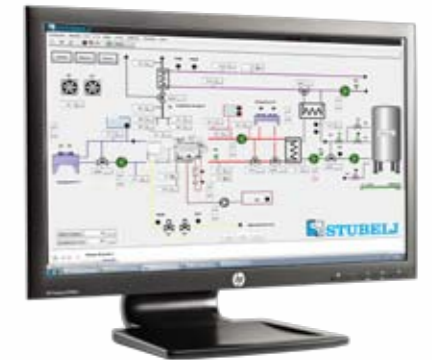
Cogeneration is the most energy efficient way of fuel utilization.

The main advantages are:

- low cost of electricity and heat,
- lower operating costs,
- greater energy efficiency,
- increased reliability of energy supply,
- large primary energy savings,
- production of environmentally friendly energy,
- reduced emissions (CO₂, CO, SO₂ and NO_x)
- ecologic resources fuels (natural gas, liquefied petroleum gas (LPG), biodiesel, biomass).

Additional equipment:

- soundproof enclosure,
- data transfer to central control system,
- monitoring and management of cogeneration plant via the Internet, text messages, e-mails,
- additional exhaust heat recovery.



Remote monitoring from a remote location



C-SPC 70



C-SPC 80

Types of CHP plants

Cogeneration CHP										
Type	Engine	Fuel power (kW)	Mechanical power (kW)	Electrical power (kW)	Thermal power (kW)	Mechanical efficiency	Electrical efficiency	Thermal efficiency	Overall efficiency	Generator efficiency
C-LGE 45 MAN	E 0834 E 312	129	47	43	63	36,4 %	33,5 %	48,8 %	85,2 %	92 %
C-LGE 50 MAN	E 0834 E302	148	54	50	79	36,5 %	33,6 %	53,5 %	90 %	92 %
C-LGE 65 MAN	E 0836 E 312	196	70	64	103	35,7 %	32,8 %	52,6 %	88,3 %	92 %
C-LGE 70 MAN	E 0836 E 302	204	75	69	109	36,7 %	33,8 %	53,3 %	90 %	92 %
C-LGE 82 TD	E TG 85 G5V Nx 86	232	86	82	121	37,1 %	35,2 %	52,2 %	89,3 %	95 %
C-LGE 105 MAN	E 0836 LE 202	282	110	105	138	39 %	37,1 %	49,1 %	88,1 %	95 %
C-LGE 143 MAN	E 2876 E 312	392	150	143	207	38,4 %	36,5 %	52,8 %	91,2 %	95 %
C-LGE 200 MAN	E 2876 LE 302	538	210	200	263	39 %	37,1 %	48,9 %	87,9 %	95 %
C-LGE 240 MAN	E 2842 E 312	667	250	238	363	37,5 %	35,6 %	54,5 %	92 %	95 %
C-LGE 250 MAN	E 2848 LE 322	679	265	252	321	39 %	37,1 %	47,2 %	86,2 %	95 %
C-LGE 310 P	4006-23 TRS1	820	322	307	433	39,3 %	37,5 %	52,8 %	92,1 %	95,4 %
C-LGE 350 MTS	GS6R-PTK	874	363	350	386	41,5 %	40 %	44,2 %	85,7 %	96,5 %
C-LGE 375 P	4006-23 TRS2	978	393	375	461	40,2 %	38,3 %	47,1 %	87,3 %	95,4 %
C-LGE 400 MAN	E 2842 LE 322	1045	420	399	513	40,2 %	38,2 %	49,1 %	89,3 %	95 %
C-LGE 700 MTS	GS12R-PTK	1748	725	700	773	41,5 %	40 %	44,2 %	85,7 %	96,5 %
C-LGE 880 P	4016-61 TRS1	2288	912	880	1160	39,9 %	38,5 %	50,7 %	90,6 %	96,5 %
C-LGE 930 MTS	GS16	2322	964	930	1026	41,5 %	40 %	44,2 %	85,7 %	96,5 %
C-LGE 1005 P	4016-61 TRS2	2584	1042	1006	1271	40,3 %	38,9 %	49,2 %	89,5 %	96,5 %
C-LGE 1500 MTS	GS16R2	3711	1563	1500	1848	42,1 %	40,4 %	49,8 %	91,9 %	96 %

Maintenance and service

Each cogeneration unit needs scheduled maintenance services for smooth, long-lasting and efficient operation. We offer various maintenance packages depending on device performance, 24-hour remote monitoring and automated reporting of alarms. An experienced team of service engineers is available to you throughout the year to cater high-quality and ecological work done in accordance with ISO 9001 and ISO 14001 standards.

