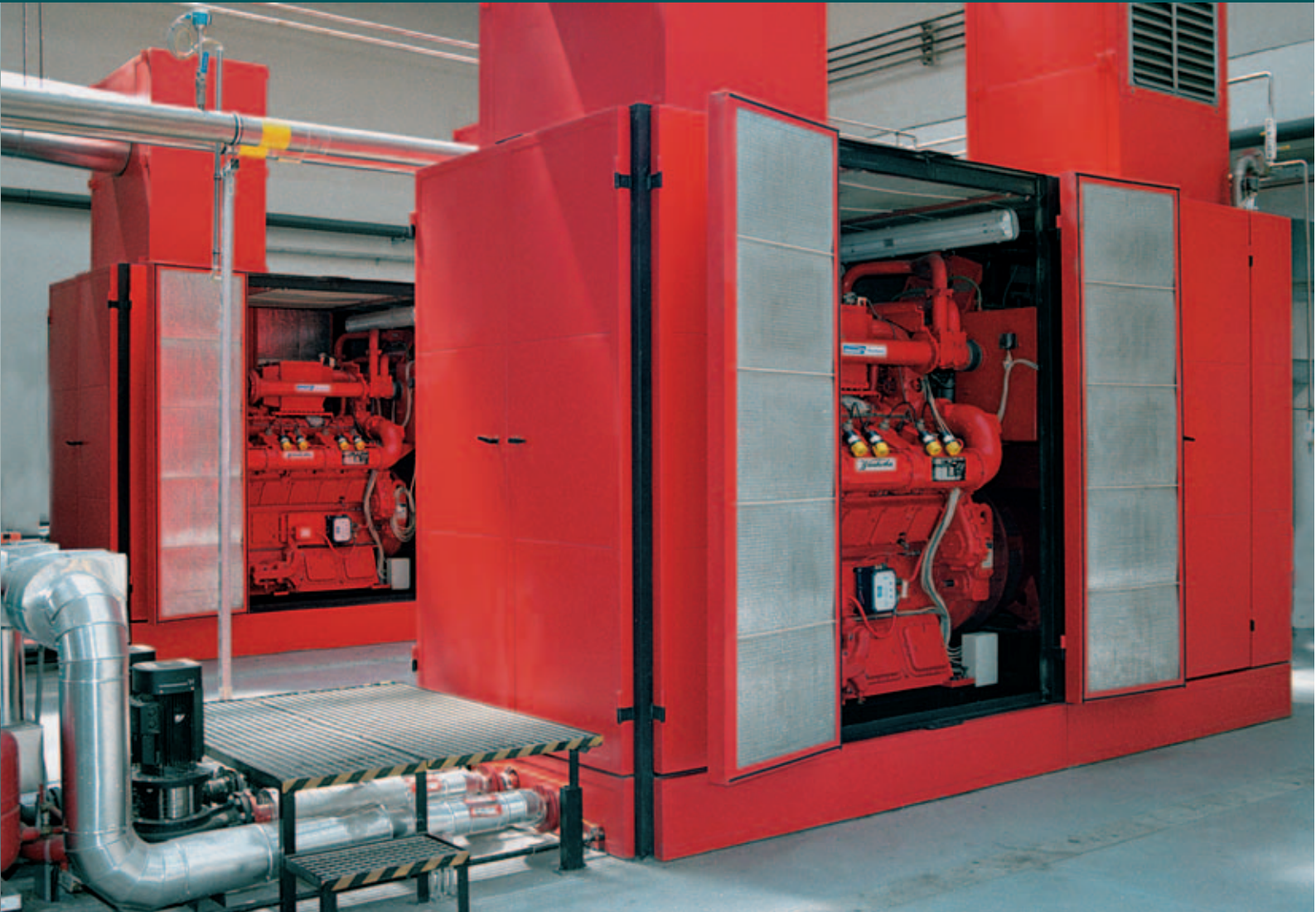


COGENERATION

GAS ENGINES



RELIABILITY ►► LIFETIME ►► WARRANTY



BIOGAS STATIONS



SEWAGE TREATMENT PLANTS



LANDFILLS



INDUSTRY

motorgas

DID YOU HEAR COGENERATION IS SIMPLE. WHO SAID THIS ? FORGET IT ! ... BUT IT CAN BE COMFORTABLE FOR YOU

comfort for you

economy calculations
complete design
turnkey deliveries
full service
operational evaluations
non-stop service

you will like

automatic operation
HQ engines and components
individual approach
advanced control technology
telecontrol – remote control
and monitoring via internet

you will not be disturbed with

looking after service periods
your own specialist training
making service
spare parts
new and waste oil handling
operation statistics

FLEXIBILITY

THREE DIFFERENT - VERSIONS - CONCEPTS - PROPERTIES - ADVANTAGES

KLASIK

description

individual modules
generator set, heating module,
electrical switchboard

placing

into engine room

advantages

flexible to place
easier service and maintenance



SLOVAK GAS INDUSTRY
BRATISLAVA (SLOVAKIA)

STRATOS

everything in one compact module
generator set, heating equipment,
electrical switchboard, exhaust
silencer, gas regulating train

into engine room

easier to make project works
easier mounting on site



SEWAGE TREATMENT PLANT
ĎESKÁ LÍPA (CZECH REP.)

MOBIL

everything installed into steel
soundproofed movable container
for outdoor mounting

for outdoor use

building is not required
easy to move



LANDFILL
ÚHOLIČKY (CZECH REP.)

FUELS - DIFFERENT GAS CAN BE USED

natural gas

basic fuel
ideal characteristics for burning
in gas engines
best parameters of efficiency,
reliability and lifetime.

biogas

gases which are produced from
organic substances during
the anaerobic digestion process
on the sewage treatment plants,
biogas stations

other fuels

for example
landfill gas
coal mine gas
pyrolysis gas (wood gas)
various combinations of gases –
to be discussed with us

NATURAL GAS

composition	96% CH ₄
calorific value	34 MJ/m ³

BIOGAS

composition	65% CH ₄ , 35% CO ₂
calorific value	23 MJ/m ³

LANDFILL GAS

composition	50% CH ₄ , 50% CO ₂
calorific value	18 MJ/m ³

APPLICATION



landfills

We can burn in engines the gas produced by the process of biological decomposition of the organic substances wasted in landfills. The energy is classified as renewable.

hlavní části technologie

- ▶▶ gas wells
- ▶▶ pipeline system
- ▶▶ pumping device
- ▶▶ cogeneration unit
- ▶▶ transformer station

UHY LANDFILL - POWER OUTPUT 341 KWE



biogas stations and sewage treatment plants

Organic substance from the communal or industrial waste can be used as input for anaerobic digestion process which produces biogas. Agricultural biogas stations use organic waste from farm animals and also more and more crops grown especially to be added into the biological decomposition process. The produced energy is classified as renewable with corresponding government support.

main parts of technology

- homogenizing tank ▶▶ biofermentor ▶▶ separation ▶▶ storage tank
- ▶▶ gasholder ▶▶ (desulphurisation equipment) ▶▶ cogeneration unit



BRNO SEWAGE TREATMENT PLANT - POWER OUTPUT 2 X 520 KWE

RATINGS

NATURAL GAS

most frequent applications

industrial and town heating plants
office buildings
shopping and amusement centres
hospitals
swimming pools

BIOGAS

most frequent applications

industrial and town sewage treatment plants
biogas stations
landfills

other gases

coal mine gas, wood gas

MAN ENGINES - NATURAL GAS

unit type	engine type	electrical output kWe	heating output kWt
MGM 40	MAN E 0834 E302	40	68
MGM 50	MAN E 0834 E302	50	76
MGM 60	MAN E 0836 E302	56	91
MGM 70	MAN E 0836 E302	70	105
MGM 80	MAN E 0836 LE202	81	125
MGM 90	MAN E 0836 LE202	91	133
MGM 105	MAN E 0836 LE202	104	145
MGM 140	MAN E 2876 E312	141	195
MGM 160	MAN E 2876 LE302	160	230
MGM 180	MAN E 2876 LE302	180	255
MGM 200	MAN E 2876 LE302	200	275
MGM 250	MAN E 2848 LE322	250	330
MGM 340	MAN E 2842 LE312	342	459
MGM 380	MAN E 2842 LE312	380	443
MGM 400	MAN E 2842 LE322	400	515

MAN ENGINES - BIOGAS

unit type	engine type	electrical output kWe	heating output kWt
MGM 40	MAN E 0834 E302	36	60
MGM 50	MAN E 0834 E302	45	75
MGM 60	MAN E 0836 E302	51	84
MGM 70	MAN E 0836 E302	64	100
MGM 80	MAN E 0836 LE202	81	125
MGM 90	MAN E 0836 LE202	91	133
MGM 105	MAN E 0836 LE202	104	145
MGM 125	MAN E 2876 TE302	123	185
MGM 160	MAN E 2876 LE302	160	228
MGM 180	MAN E 2876 LE302	171	248
MGM 200	MAN E 2876 LE302	190	250
MGM 250	MAN E 2848 LE322	245	310
MGM 340	MAN E 2842 LE312	305	430
MGM 380	MAN E 2842 LE312	342	401
MGM 400	MAN E 2842 LE322	361	440

WAUKESHA ENGINES - NATURAL GAS

unit type	engine type	electrical output kWe	heating output kWt
MGW 260	WAUKESHA F 18 GLD	257	365
MGW 350	WAUKESHA H 24 GLD	341	485
MGW 520	WAUKESHA L 36 GLD	520	735
MGW 700	WAUKESHA P 48 GLD	698	980
APG 1000	WAUKESHA 16V150LTD	1000	1120
APG 2000	WAUKESHA 12V220GL	2100	2273
APG 3000	WAUKESHA 18V220GL	3200	3463

WAUKESHA ENGINES - BIOGAS

unit type	engine type	electrical output kWe	heating output kWt
MGW 260	WAUKESHA F 18 GLD	257	360
MGW 350	WAUKESHA H 24 GLD	341	480
MGW 520	WAUKESHA L 36 GLD	520	725
MGW 700	WAUKESHA P 48 GLD	698	960
APG 1000	WAUKESHA 16V150LTD	on request	
APG 2000	WAUKESHA 12V220GL	on request	
APG 3000	WAUKESHA 18V220GL	on request	

possibilities to improve

trigeneration = electricity + heat + absorp.cooling
stand – by functions when public grid is failure

renewable energy sources

government support for renewable fuels

for detail technical parameters and dimensions visit please our website www.motorgas.cz

