

# Biogas CHP Container Units

\* up to 1,560kW<sub>el.</sub> incl. „all-in-one“ facilities for CHP: gas cooler, analysis, booster, flare, control system

\*\* up to 366kW<sub>el.</sub> incl. complete „all in one“ facilities for CHP and biogas plant



above: The HAASE „Energy Center“ container unit also encloses gas cooler, analysis, booster, flare, and the CHP control system.



above: The HAASE „Biogas Center“ container unit furthermore encloses all components for the distribution of heat and substrate as well as the control system for the CHP and the complete biogas plant.

Model	Output			Efficiency ratio			Dimensions L x W x H (m) Container
	electr. kW	therm. kW	primary kW	electr. %	therm. %	total %	
HET-GBC 170**	170	210	450	37.8	46.7	84.5	6 x 2.5 x 2.6
HET-GBC 190**	190	225	493	38.5	55.6	84.1	6 x 2.5 x 2.6
HET-GBC 255**	255	299	657	38.8	45.5	84.3	6 x 2.5 x 2.6
HET-GBC 366**	366	435	946	38.7	45.9	84.6	6 x 2.5 x 2.6
HET-GBC 400*	400	376	941	42.5	39.9	82.4	12 x 3.0 x 2.8
HET-GBC 600*	600	575	1413	42.5	40.7	83.2	12 x 3.0 x 2.8
HET-GBC 800*	800	768	1882	42.6	40.8	83.4	12 x 3.0 x 2.8
HET-GBC 1200*	1200	1186	2858	42.0	41.5	83.5	12 x 3.0 x 2.8
HET-GBC 1560*	1560	1575	3745	41.7	42.1	83.8	13.1 x 3.1 x 3.0
HET-GBC 2000	2000	1970	4762	42.0	41.4	83.4	13.1 x 3.1 x 3.0

## HAASE Energietechnik AG

Gadelander Strasse 172

D-24531 Neumuenster, Germany

Phone +49 (4321) 878-0

Fax +49 (4321) 878-29

eMail: info@haase-energietechnik.de

www.haase-energietechnik.de

Certified acc. to § 19 I WHG  
and DIN EN ISO 9001 : 2000

Biogas CHP container units are fully fitted and ready for operation. They only need to be connected on site.

All output ratings according to DIN ISO 3046/1. Different ambient temperature and higher location may cause adjustment to output.

Thermal output includes heat from engine cooling water and exhaust heat from cooling down to 180°C. Tolerance on thermal output is +/- 8%.

Electric output rated at cos phi = 1.0

Output ratings apply to biogas (65% CH<sub>4</sub>, remaining CO<sub>2</sub>) and landfill gas (50% CH<sub>4</sub>, 27% CO<sub>2</sub>, remaining N<sub>2</sub>). Engine manufacturer's emission limits to be observed. Gas purification may be necessary.

Limit for nitrogen oxides NO<sub>x</sub> is 500mg/m<sup>3</sup> for all engine models, acc. to TA-Luft guidelines.

The container dimensions of HAASE CHP units are ultralarge in height and width to enable comfortable operation and service.