

Technical data sheet of offer
Biogas flare system
Type: HTC 3,3
High Temperature Combustion

Flow rate at a	min.	250 m ³ /h	max.	500 m ³ /h	
Gas flow pressure of:	min.	5 mbar _g	max.	40 mbar _g	safety shut down: <5 mbar _g
Heating value:	min.	4.8 kWh/m ³	max.	6,5 kWh/m ³	
Firing capacity:	min.	800 kW	max.	3250 kW	

Combustion conditions: ≥1000°C exhaust gas temperature, concealed combustion inside a thermal insulated combustion chamber with 0.3 sec. retention time and a destruction quality >>99,9%, emissionlevel: NOx <150mg/m³

Burner type: C-deg-Injection burner with several, back fire protected nozzles
Safety engineering: in dependence of EN, DIN, TR, ATEX, UVV and DVGW regulations

Dimensions:

Number of Burner circles:	1
Gas connection to gas fitting line:	DN 100
Total height ex foundation:	~ 9000 mm
Combustion chamber height:	~ 6000 mm
Combustion chamber (outer diameter):	~ 1300 mm
Weight:	~ 4500 kg

Materials (AISI):

Chamber:	<input type="checkbox"/> 321	<input type="checkbox"/> 304	<input checked="" type="checkbox"/> St. galv.
Insulation:	<input type="checkbox"/> bolted	<input checked="" type="checkbox"/> glued	<input type="checkbox"/> clipped
Console:	<input type="checkbox"/> 316 TI	<input type="checkbox"/> 304	<input checked="" type="checkbox"/> St. galv.
Burner:	<input checked="" type="checkbox"/> 316 TI	<input type="checkbox"/> 304	<input type="checkbox"/> 1.4828
Piping:	<input checked="" type="checkbox"/> 316 TI	<input type="checkbox"/> 304	<input type="checkbox"/> St. galv.
Gas fittings:	EN, DVGW, IBEXU certified		

Scope of supply:

- 1 Flare unit consisting of: Burner, heat insulated combustion pipe and console
- 1 Thermocouple for regulation of combustion air (option: with 4 – 20mA output signal for external registration)
- 1 Ignition unit consisting of:
 - o EN-legislated burner control unit
 - o Ignition transformer (7,5kV, 100% duty ratio) and ignition electrode
 - o UV-sensor for flame monitoring
 - o Ignition burner with gas fitting line
- 1 Gas fitting line incl. internal piping, consisting of:
 - o Manual butterfly valve, Pressure switches, manometer
 - o Quick shut valve
 - o Deflagration flame arrester with German ATEX certification
- Option o Heated and insulated weather enclosure Extra charge:
- Option o Explosionproof design of gas fittings (Cat3) Extra charge: on demand
- 1 Control cabinet, consisting of:
 - o Switch board, in painted Steel Plastic stainless steel
 - o Start/Stop via remote signal and manual
 - o Status and fault display, operation status on BCU
 - o Operation and failure signal via potential free contacts, Reset-Button
- 1 set of heavy loads anchors
- 1 set of Documentation in English consisting of:
 - o Operating and maintenance instructions, Wiring diagram, certificates, EC conformity statement

Sum ex works without options (without Tax, customs duties etc.):

Notes: Estimated Transport costs to Limerick: 5.000EUR, Supervisor for installation (1 day on site, tools, crane etc. hotel, transfer from/to airport by client): 2.800EUR, Commissioning (1 day on site, tools, hotel, transfer from/to airport by client): 3.600EUR

Kiel, 10.02.2010
 C-deg environmental engineering GmbH

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