## ClinX HEAT 150

The externally fired micro gas turbine (EFGT for short) can be connected to any heat source that meets the minimum requirements. The hot process gas (approx. 950 °C) is fed into a high-temperature heat exchanger. In the parallel process, a micro gas turbine operates in which filtered ambient air is compressed by a compressor. This air is then passed through the high-temperature heat exchanger using the counterflow principle. The heated air then flows back to the microturbine, where a turbine expands and cools the air. The turbine exhaust air is fed to a mixing box and thus to the process gas. The overall efficiency of the system can be increased by recirculating the warm air.

Technical Data *		
Electric gross capacity [kW]	150	
Electric net capacity [kW]	130	
Electric on-site power [kW]	< 20	
Process heat source Input system [kW]	> 750 kW; > 1.3 kg/s; > 950°C	
Flow / return temperature [°C]	90/70 or 80/60 **	
Reference temperature flue gas [°C]	150	

System output depending on the heat source *		
Power of the heat source [kW]	750	
Thermally usable output [kW]	392	
Gross electrical efficiency [%]	19,9	
Net electrical efficiency [%]	17,3	
Thermal efficiency [%]	52,1	
Overall efficiency [%]	72,0	

Dimensions and technical connections	
Dimensions	40' Container **
Foundation load	″4 0 t
Connection to heating system	min. DN65
Voltage / Frequency	400 VAC / 50 Hz
Communication	2 Mbit/s internet connection

## Fuel

At least 750 kW\_th continuous Temperature ~ 950 °C Total dust content < 10 mg/m³

## Core elements of the micro gas turbine





1. Compressor



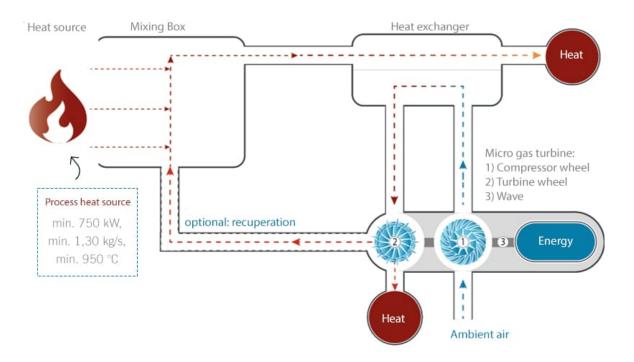


3. Air bearing

4. Powerhead

- \* Under the following conditions:
  - Ambient temperature: 15 °C.
  - Humidity: 80%.
  - Altitude above sea level: sea level zero
  - $\bullet \quad \textit{Complete recuperation of the turbine exhaust air.}$
- \*\* Customizable.

## Technical changes reserved.



<sup>\*\*\*</sup> In accordance with TA-Lärm.