

UTILISING HIGH TEMPERATURES AND CONDENSING TECHNOLOGY IN ONE BIOGAS CHP UNIT



BEEKEN VOR ORT ENERGIE

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The Elektro Hagl biogas CHP unit with an electrical output of 370 kW was equipped with a Bomat exhaust gas heat exchanger. The heat exchanger cascade, consisting of two O3-KK-1064-HT-4-9-6 heat exchangers from the modular Profitherm series, has a high temperature (HT) circuit and a low temperature (LT) circuit on the water side. The HT and LT circuits transfer heat to the heating network for flow and return temperature raising respectively. This allows the LT circuit to utilise the condensing effect.

Heat source:	Elektro Hagl BHKW - MAN 250 kWel
Fuel:	<input type="radio"/> Fuel oil <input type="radio"/> Natural gas <input type="radio"/> Sewer gas <input checked="" type="radio"/> Biogas
Exhaust gas heat exchanger:	Cascade of two O3-KK-1064-HT-4-9-6 units (year of manufacture: 2020)
Exhaust gas temperature:	approx. 480°C (upstream of HE) ➔ approx. 77°C (downstream of HE)
Coolant temperature (LT):	approx. 60°C (upstream of HE) ➔ approx. 68°C (downstream of HE)
Coolant temperature (HT):	approx. 90°C (upstream of HE) ➔ approx. 92°C (downstream of HE)
Heat recovery per year:	approx. 1,400,000 kWh
CO₂ reduction per year:	approx. 280,000 kg

➔ Estimated payback period **less than 3 YEARS.**



 Mehr Erfolg mit effizienter Energie



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