

BIOGAS/SEWER GAS

**EXHAUST GAS HEAT RECOVERY
IN A BIOGAS CHP UNIT****ABWASSERGESELLSCHAFT MAGDEBURG MBH**

Magdeburg/Gerwisch sewage treatment plant, Lostauer Str. 24, 39175 Gerwisch, Germany

At the Magdeburg/Gerwisch sewage treatment plant, the residual heat in the exhaust gas is utilised in two sewer gas fired Buderus boilers by means of BOMAT condensing exhaust gas heat exchangers.

The BOMAT O3-KK-1064-MT-4-9-6 exhaust gas heat exchangers from the modular Profitherm series are each equipped with two charging units and installed in the bypass on the exhaust gas side. The extracted heat is fed into a buffer cylinder.

Heat source:	2x Buderus GE 515 - 401 kW
Fuel:	<input type="radio"/> Fuel oil <input type="radio"/> Natural gas <input checked="" type="radio"/> Sewer gas <input type="radio"/> Biogas
Exhaust gas heat exchanger:	2x O3-KK-1064-MT-4-9-6 (year of manufacture: 2023)
Exhaust gas temperature:	approx. 170°C (upstream of HE) ➔ approx. 65°C (downstream of HE)
Coolant temperature:	approx. 50°C (upstr. of HE) ➔ approx. 55°C (downstr. of HE)
Heat recovery per year:	approx. 60,000 kWh
CO₂ reduction per year:	approx. 12,000 kg

➔ Estimated payback period **approx. 5 YEARS.**

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