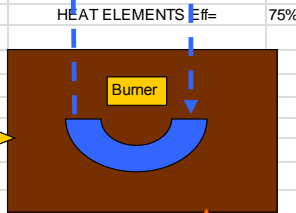


HEAT INPUT BY HOT WATER
 TotHeat Req'd for all digest/ (Eff of HeatExch) 2.42E+06 kJ/h
 TotHeat Req'd / dig / (H/E Eff)= 2.42E+06 kJ/h/dig

IF DIGESTER HEATING IS DONE BY BURNING DIGESTER GAS		
number of heating units	4	
Each heating unit cap=	1.00E+06	kJ/h/heating unit
De-rated for dig. gas (65%)=	6.50E+05	kJ/h/heating unit
Heat Provided =	2.60E+06	kJ/h
% extra capacity available=	34.3%	
Digester gas needed for heat units	151	m3/h
Digester gas needed for heat units	3,617	m3/d
% gas used for dig.heating	123%	
Theoretical	112	m3/h
Practical	151	m3/h



Gas left for electricity	-28	m3/h
electricity produced	-72	kWh/h
electricity produced	-0.072	megawatt

Heat Supply Required		kg of Fuel Oil Req'd/h	Fuel Cost USD/yr
727,568	kJ/h	18.9	78,298
202	kW		

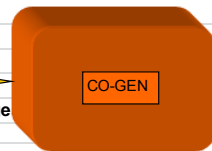
IF DIGESTER HEATING IS DONE BY BURNING DIGESTER GAS

Total gas generated= 123 m3/h

Heating Value of the Dig Gas	
2,821,158	kJ/h
784	kW
Co-Gen Eff=	40%

WASTE HEAT 60%
 1,692,695 kJ/h
 470 kW

IF GAS IS USED TO GENERATE ELECTRICITY IN THE CO-GEN UNIT & Waste Heat Used to Heat the Digester



Electricity Produced 313 kW
 Electricity Cost= 164,288 Euro/yr