

EJEMPLO PLANTA DE TRATAMIENTO EFLUENTES MUNICIPALES 100,000 habitantes

flow	37850 m3/day	10.00 mgd	surface rate (gpd/sq.ft.)	800		
Ssin	235 mg/L	0.0235 %SS	two (2) primary clarifiers, <i>each</i>	89.2 ft diameter	27.20 m	
% settleable	60 %	141 mg/L	will sink	19895.0 ft lb torque		
		94 mg/L	will go through to bioreactors			
			underflow SS	as %	underflow flow to digester	
lb/day solids to anaerobic digester		11745.3 lb/day	52000 mg/L	5.2 %	102.6 m3/day	
% volatile	70 %	8221.7 lb/day				
% destroyed	60 %	4933.0 lb/day destroyed				
					electrical power	recoverable
					kW	(engine water & exhaust gas)
gas flow at 12 cu.ft. per lb solids destroyed		2466.5 cu.ft./h	41.1 CFM		1479907.8	138.9
gas flow at 15 cu.ft. per lb solids destroyed		3083.1 cu.ft./h	51.4 CFM		1849884.75	173.6
gas flow at 18 cu.ft. per lb solids destroyed		3699.8 cu.ft./h	61.7 CFM		2219861.7	208.4
					btu/h at 600 btu per cu.ft.	
total digester volume at 0.08 lb/day VS per cu.ft.						32% to electricity
total V =	102771 cu.ft.					40% reclaimable
using identical tanks for first and second stage		volume V =	51386 cu.ft. <i>per digester</i>			28% no luck
			1455.1 m3			
			384435 U.S. gallon			
		sludge turnover	20 minutes	pumping capacity	19221.8 U.S. GPM	
sludge feed temperature	55 °F	12.8 °C				
digester temperature	95 °F	35.0 °C				
sludge feed solids	6 %					
heat required for sludge	326258.3 btu/h					
1st stage digester loss	133602.8 btu/h at	2600 btu/h per 1,000 cu.ft.				
plus	133602.8 btu/h	100 % additional for uninsulated roof/wall/bottom				
	593463.9 btu/h					
		sludge heat / total heat	55.0 %			

www.LodosActivados.com

www.VirtualGuild.Net

www.pretratamiento.com

www.balestie.com