SorpOrkuStuðullinn SOS
(the Waste Energy Coefficient WEC)

Áfangabrennsla með orkunýtingu *(intermittent incineration with heat recovery):*

Framleiðslugeta *(possible recovery of heat):*

Forsendur *(prerequisites):*			
Magn af sorpi á kg af olíu (quantity of waste per kg of oil)	*N =*	*10*	*kg*
Verg orka í sorpi (gross energy in waste)	*Q =*	*4.0*	*kWh/kg*
Verg orka í 1 kg af olíu (gross energy in 1 kg of oil fuel)	*O =*	*11.0*	*kWh/kg*
Orkunýting (rate of recovery)	*P =*	*45.0%*	*%*

Jafna *(equation):* ***H = (NxQ + O)xP/N***

Verg orka frá úrgangi (gross energy from waste)	*NxQ =*	*40.0*	*kWh/kg*
Orka frá eftirbrennslu (energy from afterburner)	*O =*	*11.0*	*kWh/kg*
Nýting (rate of recovery)	*P =*	*45.0%*	*%*
Endurunnin orka *(recovered heat):*	***H =***	***2.30***	***kWh/kg***

Sorporkustuðulinn SOS *(the waste energy coefficient WEC):*

Forsendur *(prerequisites):*			
Leiðni-, geislunar- og reyktöp			
(losses through convection, radiation and exhaust)	*L =*	*30.0%*	*af H (of H)*
Töp vegna endurhitunar brennsluhólfa			
(losses due to reheting of combustion chambers)	*R =*	*25.0%*	*af H (of H)*
Meðalvegalengd fyrir aðflutning á einu tonni - fram & tilbaka			
(average distance for transport of one mton - return trip)	*W =*	*60*	*km*
Olíueyðsla við aðflutning á úrgangi			
(oil consumption for fetching waste)	*F =*	*0.045*	*kg/tonnkm*
Samanlögð nafnafköst á rafdrifnum búnaði			
(total nominal power of electrically powered equipment)	*E =*	*60*	*kW*
Nafnafköst stöðvarinnar			
(nominal capacity of the facility)	*C =*	*10*	*tonn/24klst*

Jafna *(equation):* ***SOS = WEC = HH - Ox1000/N - HxLx1000 - HxRx1000 - WxFx11 - Ex24x0,667/C***

Endurunnin orka *(recovered heat)*	*HH =*	***2,295***	***kWh/tonn***
Eytt í vinnsluna *(used in the process):*			
Orka til eftirbrennslu (energy for thermo reactor)	*OO =*	*1,100*	*kWh/tonn*
Töp L á búnaði (losses L on equipment)	*LL =*	*688.5*	*kWh/tonn*
Töp R; kólnun & endurhitun (losses R; cooling & reheating)	*RR =*	*573.8*	*kWh/tonn*
Eldsneyti til aðflutninga (fuel for transport)	*FF =*	*30*	*kWh/tonn*
Raforkuneysla (electric power consumption)	*EE =*	*96*	*kWh/tonn*
	Samtals *(total):*	***2,488***	***kWh/tonn***
Eftir stendur *(the remainder):*		***-193***	***kWh/tonn***

Sorporkustuðullinn SOS *(the waste energy coefficient WEC):* ***-8.4 %***