fasil™ by dynea

Operational Costs Comparison - Expressed in 100% CH2O

Raw materials & Energy	Unit Cost [€]	fasil™ per metric ton	fasil™ €/ton 100 % CH2O	Metal Oxide Process per metric ton	Metal Oxide Process €/ton 100 % CH2O
Methanol (ton)	300	1195 - 1210 kg	361,5	1149 - 1154 kg	345,0
Process water (m^3)	0,79	1,2	1,0	1,1	0,9
Boiler feed water (m^3)	0,79	2,2	1,7	1,9	1,5
Electrical energy (kWh)	0,10	86,5	8,6	189,2	18,9
Cooling water (m^3)	0,10	67,6	6,8	135,1	13,5
Instrument compressed air (Nm^3)	0,02	36,8	0,7	36,8	0,7
Catalyst cost [€]			0,4		8,4
Oxidiser catalyst and HTF (Metaloxide Process Only)		0	0		1,8
Excess Steam value (€/ton)	25	-2162	-54,1	-1892	-47,3
Total costs € / ton			**326,7**		**343,4**

Operational Costs Comparison - Expressed in 100% CH2O **16,8** € per ton 100% CH2O in favor of Silver Catalyst fasil™ Process

The methanol price is volatile but on average 300 Euro/ton is historically a good figure to use for feasibility studies. Below you can see the operational/manufacturing cost as a function of the methanol price.