

IO EXTRACTOR OPERATING COSTS

Operating Costs		
Maintenance	Purchase Price	\$349,000
	Feedstock Processing Rate (lbm/hr)	20
	Annual Usage (hrs)	4,000
	Annual Feedstock Throughput (lbm)	80,000
	Annual Servicing Cost (parts)	\$9,302
	Mol Sieve Replacement (Quarterly @ \$450)	\$1,800
	Solvent Pump Rebuild (per 1,000hrs @ \$449)	\$1,796
	Quick Connect O-Rings (per 300hrs @ \$10)	\$133
	Sanitary Gaskets (annual)	\$295
	Sanitary Clamp Hardware (annual)	\$165
Labor	Quick Connect (per 2yrs @ \$225)	\$113
	Misc Repair Parts	\$5,000
	Annual Service and Repair Labor (hr)	100
Utilities	Service and Repair Labor Rate (\$/hr)	\$30
	Operator Labor per Operation Time (hr/hr)	0.25
	Operator Labor Rate (\$/hr)	\$25
Consumables	Electricity Cost (\$/kWhr)	0.177
	Average Electrical Energy Usage (kW)	11.55
	Solvent per Feedstock (lbm/lbm)	0.2
	Solvent Cost (\$/lbm)	\$3.45
	Filter Bags (lbm/bag)	100
	Filter Bag Cost	\$19.50
	Filter Bag Seals (lbm/bag seal)	1000
	Filter Bag Seals Cost	\$5.00
	Secondary Filters (lbm/filter)	2000
	Secondary Filter Cost	\$248

All operating costs are estimates only and should be modified based on the operating conditions of each equipment installation.

Total Cost	
Maintenance	\$0.15
Labor	\$0.31
Utilities	\$0.10
Consumables	\$1.01
Total Cost	\$1.58

Maintenance Cost	
Parts	\$0.12
Labor	\$0.04
Total Maintenance	\$0.15
Labor Cost	
Operator Labor	\$0.31
Utilities Cost	
Electricity Cost	\$0.10
Consumables Cost	
Solvent	\$0.69
Filter Bags	\$0.20
Filter Bag Seals	\$0.01
Secondary Filters	\$0.12
Total Consumables	\$1.01

