

Cost Benefit Analysis : Alpha TocoPherol & BioDiesel



EVEREST VACUUM
Innovative Engineering Solutions



Matrix Fine Sciences Pvt. Ltd.
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Process Brief:

- 1) Product : Alpha Tocopherol & Biodiesel
- 2) Process : Distillation Under Vacuum.
- 3) Pumping : 10,400m³/hr.
- 4) Vacuum : 0.5 TORR.
- 5) Vacuum System : SuperVac (10400.4680.1670.300)
- 6) Old System : 4 Stage Steam Jet Ejector

SI.N	Description	WET	DRY
1	Power/Steam (Cost)	36,00,000.00	14,28,000.00
2	Utility (Cost)	8,76,000.00	1,03,200.00
3	Solvent Recovery (Saving)	0.00	3,00,000.00
4	N2/Air Utility (Cost)	0.00	3,600.00
5	Maintenance (Cost)	1,20,000.00	1,43,100.00
6	Total (Cost+Saving)	45,96,000.00	16,77,900.00
Total Direct Saving (Wet - Dry)			29,18,100.00
% Utility Cost Spend (DRY to WET)			36.51%
% Saving Utility Cost Spend (DRY to WET)			63.49%

PRODUCTIVITY:		
TIME SAVING	18 Hrs/Batch	16 Hrs/Batch
QUALITY	Improved Product Quality	
SOLVENT RECOVERY	0	3,00,000

Operational Cost Comparison

