Cost Benefit Analysis: Food/Beverage Drying





SI.N	Description	WET	SEMI-DRY
1	Power/Steam (Cost)	22,50,000.00	7,28,000.00
2	Utility (Cost)	82,000.00	67,000.00
3	Solvent Recovery (Saving)	0.00	0.00
4	N2/Air Utility (Cost)	0.00	0.00
5	Maintenance (Cost)	1,20,000.00	43,100.00
6	Total (Cost+Saving)	24,52,000.00	8,38,100.00
Total Direct Saving (Wet - Dry)			16,13,900.00
% Utility Cost Spend (DRY to WET)			34.18%
% Saving Utility Cost Spend (DRY to WET)			65.82%

- Cycle Time from 145 min to 125 mins.
- Product Yield/Recovery Improved
- Product Quality Improved, more consistent heating.

Process Brief:

) Product : Malt Drying (Bournvita/Horlicks)) Process : Low Temperature Tray Oven Drying

3) Pumping : 3500 m3/hr.4) Vacuum : 25 TORR.

5) Vacuum System : Semi-Dry Vacuum System6) Old System : Steam Ejector + WRP

Operational Cost Comparison Trend line for WET VACUUM SYSTEM SEMI-DRY Trend line for SUPERVAC DRY SYSTEM 25,00,000.00 20,00,000.00 15,00,000.00 10,00,000.00 5,00,000.00 0.00 Power/Steam M21 Air Utility (Cost) **COST HEADS** 27