

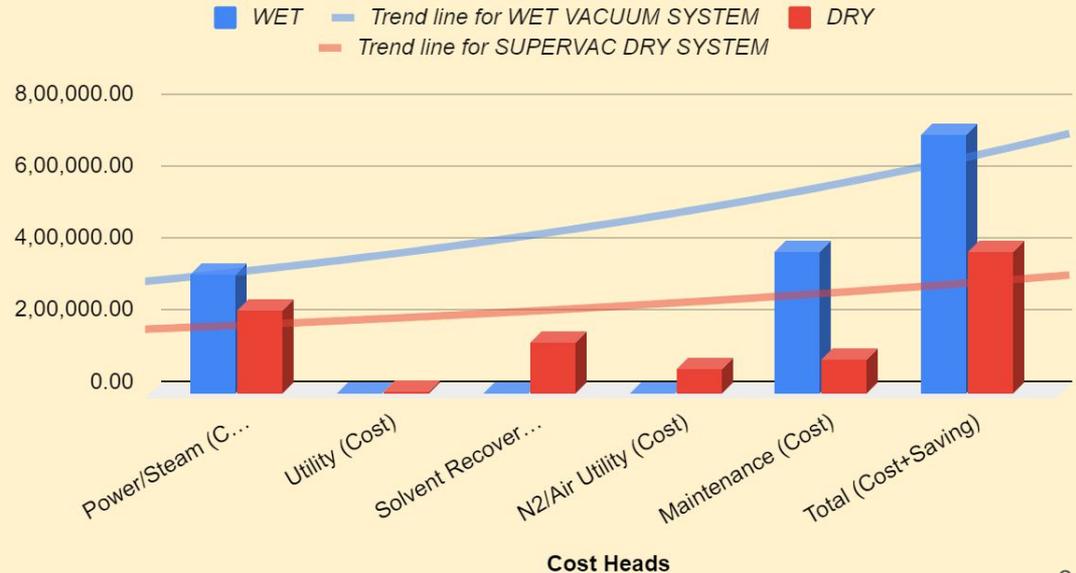
# Cost Benefit Analysis : Curcumin (Oleoresin)



## Process Brief:

- 1) Product : Curcumin (Oleoresin)
- 2) Process : Extraction of Hexane & Ethyl Acetate from Curcumin
- 3) Pumping : 300 m3/hr.
- 4) Vacuum : 5 TORR.
- 5) Vacuum System : Dry Screw Vacuum Pump - 300 m3/hr
- 6) Old System : Rotary Oil Vane Vacuum Pump - 300 m3/hr

## Operational Cost Comparison



Sl.N	Description	SEMI-DRY	DRY
1	Power/Steam (Cost)	3,30,000.00	2,31,000.00
2	Utility (Cost)	0	3,300
3	Solvent Recovery (Saving)	0	1,37,500.00
4	N2/Air Utility (Cost)	0	66,000.00
5	Maintenance (Cost)	3,90,000.00	93,100.00
6	Total (Cost+Saving)	7,20,000.00	3,93,400.00
<b>Total Direct Saving (Wet - Dry)</b>			<b>4,64,100.00</b>
% Utility Cost Spend (DRY to WET)			54.64%
% Saving Utility Cost Spend (DRY to WET)			<b>45.36%</b>

PRODUCTIVITY:		
TIME SAVING	12 Hrs/Batch	10 Hrs/Batch
QUALITY	96% Product Purity	98% Product Purity
SOLVENT RECOVERY	0	<b>1,37,500.00</b>