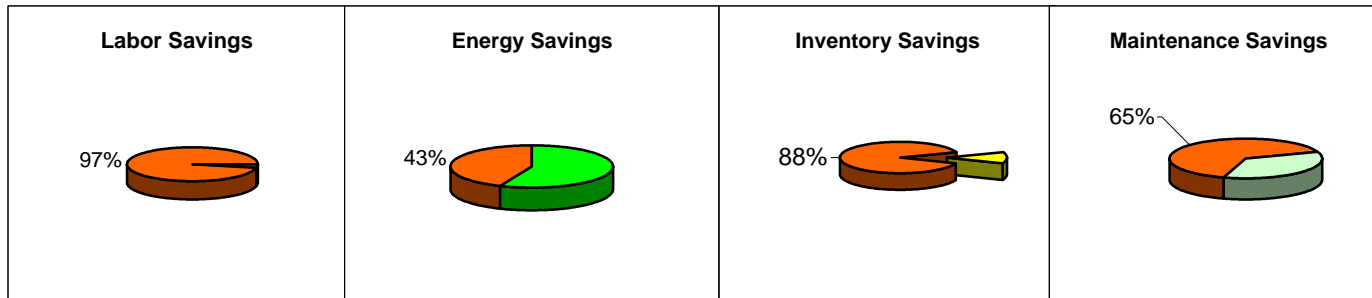


**Cleancast for wheels - annual and per wheel operating costs**

150 Wheels/hr (wheels 60 lbs each)			Conventional				Cleancast			
900000			Unit cost	Total Cost/yr	Per Wheel	Qty/yr	Unit cost	Total Cost/yr	Per Wheel	Total Savings
Item	Unit	Qty/yr	Unit cost	Total Cost/yr	Per Wheel	Qty/yr	Unit cost	Total Cost/yr	Per Wheel	Total Savings
Labor	People	7.5	30,000	\$225,000	\$0.25	0.25	30,000	\$7,500	\$0.01	\$217,500
Energy	MM BTU	23022	7.0	\$161,154	\$0.18	13008	7.0	\$91,056	\$0.10	\$70,098
Process Inventory	Pounds	103680	0.2	\$20,736	\$0.02	12000	0.2	\$2,400	\$0.00	\$18,336
Maintenance & lost time				\$212,550	\$0.24			\$75,000	\$0.08	\$137,550
<b>Total</b>				<b>\$619,440</b>	<b>\$0.69</b>			<b>\$175,956</b>	<b>\$0.20</b>	<b>\$443,484</b>



**Notes**

1. Labor (at \$30K per year per person) for cleancast is negligible since fully automatic, conventional uses 2.5 people per shift - load, unload, 1/2 forklift operator.
2. For Cleancast using linear flow, energy includes raising both chains and wheels from 800F to 1000F.
3. Process inventory based on 24 racks of wheels for conventional at \$2 per pound versus 200 wheels in cleancast process
4. Maintenance assumed \$50K per year for cleancast.
5. Lost time 1 hr per day for conventional unit is about \$93,750 lost per year at \$2.50 per wheel. Rack replacement every two years is \$37,800 per year.
6. Forklift maintenance added at \$6K per year for conventional unit.