



Labeling/Container Decoration - Total Applied Costs

Consideration Factors	Units	Explanation
General Labeling Line Inputs		
Annual volume	bottles/yr	Number of bottles running on line per year
Manufacturing line speed	bottles/min	Manufacturing line speed (filling speeds)
Labeling line speed	bottles/min	Line speed of label equipment
Number of days per year equipment runs	numeral	Number of days per year equipment runs
Number of hours per day equipment runs	numeral	Number of hours per day equipment runs
Decorating Efficiency		
Cleaning minutes Downtime due to label technology		
Set-up / changeover time	minutes	Downtime due to label technology
Shift shutdown	minutes	Downtime due to label technology
Shift startup	minutes	Downtime due to label technology
Unplanned downtime	minutes	Typical unplanned downtime
Line time	\$/hr	Cost to run the line
Material Cost Inputs		
Label cost per thousand	\$/1000	Converted label costs per thousand
Label size per container	sq inch	Label size in square inches or square meters per container
Glue	\$/1000	Cost of glue per thousand
Liner disposal cost	\$/ton	Cost to dispose of liner
Container cost	\$/1000	Container costs per thousand
Ingredient cost	\$/1000	Ingredient costs per thousand
Label Application Inputs		
Machine cost	\$	Cost to purchase and install labeling machine
Depreciation	years	Depreciation schedule for capital investment
Change parts per year	\$	Cost to purchase change parts for specific technology
Number of SKUs	numeral	Number of label shapes being used in application
Tooling and conversion cost	\$	Label tooling/setup/conversion costs
Total labor costs	\$/hr	Cost of labor for labeling line
Maintenance and aggregate rebuilds	\$	Annual maintenance costs for labeling line
Scrap		
Scrap rate	%	Label set up scrap
Scrap rate attributable to labeling	%	Scrap cost for filled containers (operating scrap)
Other Costs		
Other capital costs	\$	Other capital needs (i.e dryers, shrink tunnels)
Safety Stock	%	Percent safety stock
Inventory carrying costs	%	Avg. inventory carrying cost %