



Current process

Proposed Process

ONE Erdman Dura High Speed Line

<b>Dual Sided Manual Lines</b>	<b>Vertical High Speed Automated</b>
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PRODUCTION REQUIREMENT - 2550 RECTANGLES/DAY



REFERENCE/MULTIPLIERS

Total units per day	#	2,550	2,550
Work Days/year	#	250	250
Total Units/Year	#	637,500	637,500

LABOR

<i>Double-Sided Dura Manual - (1 Glass Loaders, 2 Applicators, 2 Grid Insertion/Topping, 2 off-loading, 2 gas filling / 4th corner patch)</i>		<b>9.0</b>	
<i>HSPPL - (1 loading glass, 1 inserting grids, 1 off-loading, 1 supervisor/helper)</i>			<b>4.0</b>
<b>First Shift</b>			
Men Required Per Shift	<b>Each</b>	9.0	4.0
Hours worked Straight time	<b>hrs</b>	8.0	8.0
Hours worked overtime	<b>hrs</b>	0.0	0.0
Wage rate per Hour ( Straight time )	<b>\$</b>	\$21.00	\$21.00
Wage rate per Hour ( Overtime )	<b>\$</b>	\$0.00	\$0.00
<b>Labor Cost - First Shift</b>	<b>\$</b>	\$1,512	\$672
<b>Second Shift</b>			
Men Required Per Shift	<b>Each</b>	9.0	4.0
Hours worked Straight time	<b>hrs</b>	8.0	8.0
Hours worked overtime	<b>hrs</b>	0.0	0.0
Wage rate per Hour ( Straight time )	<b>\$</b>	\$21.00	\$21.00
Wage rate per Hour ( Overtime )	<b>\$</b>	\$27.50	\$27.50
<b>Labor Cost - First Shift</b>	<b>\$</b>	\$1,512	\$672
<b>Total Daily Labor Cost</b>		<b>\$3,024</b>	<b>\$1,344</b>
<b>Annual Labor Cost</b>		<b>\$756,000</b>	<b>\$336,000</b>

WARRANTY COSTS

Expected Percent Field Failure Rate due to Spacer System	Percent	1.00%	0.25%
Annual failed units based on expected failure rate ( above )	annually	6,375	1,594
Failed Unit Cost for IG Under Warranty	\$ per Unit	\$150	\$150
<b>Annual Warranty Costs</b>		<b>\$956,250</b>	<b>\$239,063</b>

RELATED OVERHEAD COSTS

Electricity cost and bulb replacement @ .1 per kwh	\$ per Year	\$70,000	\$14,000
Estimated Maintenance Costs of IG lines per year	\$ per Year	\$20,000	\$12,000
Touch Point Handling Scrap % (0.10% per Touch Points - 7 vs. 3)	Percent	0.70%	0.30%
Annual Touch Point Scrap Units	Units	4,463	1,913
Average Cost of Scraped Units - (Single Flat Glass to Finished IG)	\$	\$12.00	\$12.00
<b>Annual Cost of Internal Scrap Units.</b>		<b>\$53,550</b>	<b>\$22,950</b>
<b>Total Annual Cost - Labor/Warranty/Overhead</b>		<b>\$1,765,800</b>	<b>\$598,013</b>
<b>Annual Savings</b>			<b>\$1,167,788</b>

EQUIPMENT/CAPITAL COSTS

Cost of Equipment (Erdman Verticle High-Speed Dura Line)	\$	\$0	\$1,200,000
Estimated Useful Life of Equipment	# of Years	10	10

<b>Monthly Savings</b>	<b>\$97,315.63</b>
<b>ROI in Months</b>	<b>12.3</b>

NOTES

EQUIPMENT INCLUDED REFLECTS 1 ERDMAN HIGH SPEED DURA VERTICAL LINE.  
 EXAMPLE WAS AGREED UPON WITH AN EXISTING CUSTOMER FOR USE TO DETERMINE RETURN ON INVESTMENT.  
 THIS MAY NOT BE TYPICAL. PLEASE DISCUSS WITH ERDMAN REPRESENTATIVE TO DETERMINE YOUR OWN ROI CALCULATIONS.  
 NOT FACTORED IN ARE THE SAFETY IMPROVEMENTS AND RELATED COSTS OF INJURY