

Rev.
SME 3-26-79

ESTIMATE # _____
ESTIMATED SAVINGS & RETURN ON INVESTMENT

ENGINEER: E.L. Morris

DATE: Jan 13 1982

Heian Hong Stock Machining (Shaping and Secondary Machining Only)

Forecast Year: 1 Dollars
Quantity Forecast

Current Process
1984
187,000

Human Machinery

OPERATING COSTS

	\$	\$	\$	\$
Purchased Parts				
Raw Material				
Standard Labor	132,420	38,440		
Labor Variance @ Calc.	27,010	14,280		
Industrial Relations @ 47.0%	76,270	25,260		
Supplies	2,200	720		
Tool Replacement	4,920	1,220		
Cutter Grind	1,750	710		
Tool Maintenance	2,360	2,400		
Maintenance	2,390	13,080		
Energy		Stand Out		
Equipment Depreciation @ 7.5%		16,350		
Supervision	17,470	3,920		
Floor Space @ 4.25 / sq ft	10,510	3,190		
<u>Sub Totals</u>	<u>\$ 279,000</u>	<u>A \$ 126,720</u>	<u>\$</u>	<u>A \$</u>
<u>Gross Savings Before Admin. Exp.</u>		<u>\$ 152,280</u>	<u>\$</u>	<u>\$</u>
<u>Admin. Exp. @ 4.3% Gross Savings</u>		<u>B \$ 6,550</u>	<u>\$</u>	<u>B \$</u>
<u>Sub Totals</u>	<u>\$ 279,000</u>	<u>A+B \$ 133,270</u>	<u>\$</u>	<u>A+B \$</u>

SAVINGS IN OPERATING COST

	\$ 145,730	\$
Less: Income Tax @ 48.5 %	(\$ 70,680)	(\$
Plus: Amortization of Investment Tax Credit	\$ 2,180	\$
<u>NET SAVINGS</u>	<u>\$ 77,230</u>	<u>\$</u>

INVESTMENT

Project Expenditures	\$ 218,000	\$
Manufacturing & Working Facilities	\$	\$
Net Change in Working Capital	(\$ 48,360)	\$
<u>Total Capital Required for this Project</u>	<u>\$ 169,700</u>	<u>\$</u>

RETURN ON INVESTMENT - THIS PROJECT

	46.0 %	
Net Savings - After Amortization of Operation Charges	\$ 76,680	\$
Project Operation Charges	\$ 15,000	\$
Less: Administration Expense @ 4.3 % & Income Taxes @ 48.5 % (Factor .5072)	(\$ 76,100)	(\$
<u>Total Capital Required Including Research & Development & Other Charges</u>	<u>\$ 177,090</u>	<u>\$</u>

RETURN ON TOTAL CAPITAL REQUIRED

	43.0 %	
Equipment to be Released		
Increased Space Requirements (Decrease)		
Production Capacity		
Forecast Earnings	20	21

27 June 65 - Wed

67.3

Rev.
DEC 3-26-79

ESTIMATE # _____
ESTIMATED SAVINGS & RETURN ON INVESTMENT

ENGINEER: _____
DATE: _____

COMPARE
SAVINGS INCREMENTS
ON EACH PROPOSAL

Forecast Year _____
Quantity Forecast _____

OPERATING COSTS

	\$	\$	\$	\$
Purchased Parts				
Raw Material	4.7			
Standard Labor	136.0	94.0		
Labor Variances @ Calc	13.5	12.7		
Industrial Relations @ 47.9 %	66.1	51.1		
Supplies	3.3	2.1		
Tool Replacement	4.3	(1.0)		
Cutter Grind	19.3	(1.3)		
Tool Maintenance	1.5	-		
Maintenance	(29.6)	(9.7)		
Energy				
Equipment Depreciation @ 7.5 %	(56.3)	(16.4)		
Supervision	17.6	13.5		
	8.9	7.3		

Sub Totals	\$ 189.6	A \$ 152.3	\$	A \$
Gross Savings Before Admin. Exp.		\$ 37.3		\$
Admin. Exp. @ 4.3% Gross Savings		B \$ 1.6		B \$
Sub Totals	\$ 189.6	A+B \$ 153.9	\$	A+B \$

SAVINGS IN OPERATING COST

	\$ 35.7	\$
Less: Income Tax @ 48.5 %	(\$ 17.3)	(\$
Plus: Amortization of Investment Tax Credit	\$ 5.3	\$
NET SAVINGS	\$ 23.7	\$

INVESTMENT

Project Expenditures	\$ 532.0	\$
Manufacturing & Working Facilities	\$	\$
Net Change in Working Capital	\$ (12.4)	\$
Total Capital Required for this Project	\$ 519.6	\$

RETURN ON INVESTMENT - THIS PROJECT

	5.0 %	
Net Savings - After Amortization of Operation Charges	\$	\$
Project Operation Charges	\$	\$
Less: Administration Expense @ 4.3 % & Income Taxes @ 48.5 % (Factor .5072)	(\$)	(\$
Total Capital Required Including Research & Development & Other Charges	\$	\$

RETURN ON TOTAL CAPITAL REQUIRED

Equipment to be Released		-
Increased Space Requirements (Decrease)		-
Production Capacity		
Forecast Earnings		