

Income & Expense Statement Yearly Plastic Bottle Maufacturing Division

Replace Equipment Analysis

		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9
REVENUE										
Sales		5,500,000	5,775,000	6,063,750	6,366,938	6,685,284	7,019,549	7,370,526	7,739,052	8,126,005
	Total Revenue	5,500,000	5,775,000	6,063,750	6,366,938	6,685,284	7,019,549	7,370,526	7,739,052	8,126,005
EXPENSES										
Labor		1,100,000	1,155,000	1,212,750	1,273,388	1,337,057	1,403,910	1,474,105	1,547,810	1,625,201
Materials		1,100,000	1,155,000	1,212,750	1,273,388	1,337,057	1,403,910	1,474,105	1,547,810	1,625,201
Repairs & Mainten	ance	536,000	562,800	590,940	620,487	651,511	684,087	718,291	754,206	791,916
Utilities		335,000	351,750	369,338	387,804	407,195	427,554	448,932	471,379	494,948
Insurance		65,000	68,900	73,034	77,416	82,061	86,985	92,204	97,736	103,600
Sales		550,000	577,500	606,375	636,694	668,528	701,955	737,053	773,905	812,601
	Total Expenses	3,686,000	3,870,950	4,065,187	4,269,176	4,483,409	4,708,401	4,944,690	5,192,847	5,453,467
	Net Income	1,814,000	1,904,050	1,998,563	2,097,762	2,201,875	2,311,149	2,425,836	2,546,205	2,672,539



Plastic Bottle Maufacturing Division Replace Equipment Analysis September 29, 2009 Investit Decisions Replace Example with Revenue & Expenses

REVENUE

Sales

Total Revenue

EXPENSES

Labor Materials Repairs & Maintenance Utilities Insurance Sales **Total Expenses**

Net Income



Operating Cash Flow Yearly Plastic Bottle Maufacturing Division

Replace Equipment Analysis

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9
CASH FLOW BEFORE TAX									
Revenue	5,500,000	5,775,000	6,063,750	6,366,938	6,685,284	7,019,549	7,370,526	7,739,052	8,126,005
Expenses	3,686,000	3,870,950	4,065,187	4,269,176	4,483,409	4,708,401	4,944,690	5,192,847	5,453,467
Net Income	1,814,000	1,904,050	1,998,563	2,097,762	2,201,875	2,311,149	2,425,836	2,546,205	2,672,539
Less: Principle Payments	644,572	705,037	771,174	843,516	922,644	1,009,194	1,103,863	-	-
Interest payments	513,842	453,377	387,239	314,898	235,770	149,220	54,550	-	-
Working Capital Additions	90,000	-	-	-	-	-	-	-	(90,000)
CASH FLOW BEFORE TAX	565,586	745,636	840,149	939,348	1,043,461	1,152,735	1,267,422	2,546,205	2,762,539
Less: Income Tax at 35.00%	(94,945)	(435,121)	(109,506)	142,953	344,530	413,068	486,343	719,368	935,388
CASH FLOW AFTER TAX	660,531	1,180,758	949,655	796,395	698,932	739,667	781,079	1,826,837	1,827,150
INCOME TAX CALCULATIONS									
Net Income	1,814,000	1,904,050	1,998,563	2,097,762	2,201,875	2,311,149	2,425,836	2,546,205	2,672,539
Less: Interest Payments	513,842	453,377	387,239	314,898	235,770	149,220	54,550	-	-
Depreciation & Amortization	1,571,429	2,693,877	1,924,198	1,374,427	981,734	981,734	981,734	490,867	-
Taxable Income	(271,271)	(1,243,204)	(312,874)	408,437	984,371	1,180,195	1,389,552	2,055,338	2,672,539
Income Tax at 35.00%	(94,945)	(435,121)	(109,506)	142,953	344,530	413,068	486,343	719,368	935,388



Working Capital Yearly Plastic Bottle Maufacturing Division Replace Equipment Analysis

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9
Working Capital Balance. Beginning of Year Additions to Working Capital Balance. End of Year	- 90,000 90,000	90,000 - 90,000	90,000 (90,000) -						
Working Capital Summary Balance. Beginning of Year Additions to Working Capital Balance. End of Year	- 90,000 90,000	90,000 - 90,000	90,000 (90,000) -						



Net Cash Flow (Before Tax) Plastic Bottle Maufacturing Division Replace Equipment Analysis

September 29, 2009 Investit Decisions Replace Example with Revenue & Expenses

			Working Capital			Financing			Operating Cash Flow	Sale Proceeds	Net Cash Flow	
Year	Investment	A	dditions	Reductions		Borrow	Paid Back	_	(Before Tax)	(Before Tax)	(Before Tax)
Year 1 Jan-Year 1 Dec	\$ (11,578,479)	\$	(90,000)	-	\$	6,000,000			\$ 565,586	-	\$	(5,102,893)
Year 2 Jan-Year 2 Dec	-		-	-		-		-	745,636	-		745,636
Year 3 Jan-Year 3 Dec	-		-	-		-		-	840,149	-		840,149
Year 4 Jan-Year 4 Dec	-		-	-		-		-	939,348	-		939,348
Year 5 Jan-Year 5 Dec	-		-	-		-		-	1,043,461	-		1,043,461
Year 6 Jan-Year 6 Dec	-		-	-		-		-	1,152,735	-		1,152,735
Year 7 Jan-Year 7 Dec	-		-	-		-		-	1,267,422	-		1,267,422
Year 8 Jan-Year 8 Dec	-		-	-		-		-	2,546,205	-		2,546,205
Year 9 Jan-Year 9 Dec	-		-	90,000		-		-	2,762,539	1,000,000		3,852,539
										Total	\$	7,284,604

Note

The first year investment has been reduced by the Salvage Value of \$800,000 before tax and increased by the \$1,378,479 Loan Repayment.

Financial Returns (Before Tax)

Internal Rate of Return (IRR)	14.62%
Net Present Value (NPV) at 13.00%	\$ 473,360
Modified Internal Rate of Return (MIRR)	10.39%
Short Term Financing Rate (Before Tax)	8.000%
Short Term Reinvestment Rate (Before Tax)	2.500%
Annual Equivalency at 13.00%	\$ 92,243
Benefit to Cost Ratio at 13.00%	0.97
Payback Period	6.30 years.
Discounted Payback Period at 13.00%	8.63 years.



Net Cash Flow (After Tax) Plastic Bottle Maufacturing Division Replace Equipment Analysis

September 29, 2009 Investit Decisions Replace Example with Revenue & Expenses

									Operating	Sale		Net
			Working	Capital	Financing				Cash Flow	Proceeds	i.	Cash Flow
Year	Investment	A	dditions	Reductions		Borrow	Paid Back	_	(After Tax)	(After Tax)		(After Tax)
Year 1 Jan-Year 1 Dec	\$ (11,638,479)	\$	(90,000)	-	\$	6,000,000		- \$	660,531	-	\$	(5,067,948)
Year 2 Jan-Year 2 Dec	-		-	-		-		-	1,180,758	-		1,180,758
Year 3 Jan-Year 3 Dec	-		-	-		-		-	949,655	-		949,655
Year 4 Jan-Year 4 Dec	-		-	-		-		-	796,395	-		796,395
Year 5 Jan-Year 5 Dec	-		-	-		-		-	698,932	-		698,932
Year 6 Jan-Year 6 Dec	-		-	-		-		-	739,667	-		739,667
Year 7 Jan-Year 7 Dec	-		-	-		-		-	781,079	-		781,079
Year 8 Jan-Year 8 Dec	-		-	-		-		-	1,826,837	-		1,826,837
Year 9 Jan-Year 9 Dec	-		-	90,000		-		-	1,827,150	650,000		2,567,150
										Total	\$	4,472,525

Note

The first year investment has been reduced by the Salvage Value of \$ 740,000 after tax and increased by the \$ 1,378,479 Loan Repayment.

Financial Returns (After Tax)

Internal Rate of Return (IRR)	11.10%
Net Present Value (NPV) at 8.45%	\$ 759,691
Modified Internal Rate of Return (MIRR)	7.23%
Short Term Financing Rate (After Tax)	5.200%
Short Term Reinvestment Rate (After Tax)	1.625%
Annual Equivalency at 8.45%	\$ 123,897
Payback Period	6.90 years.
Discounted Payback Period at 8.45%	8.39 years.



Cash Flow on Disposition Plastic Bottle Maufacturing Division September 29, 2009 Investit Decisions

Replace Equipment Analysis Replace Example with Revenue & Expenses

Cash Flow on Disposition (Before Tax) Salvage Value \$ 1,000,000 Less: Selling Expenses Legal Fees **Removal Costs** Cash Flow on Disposition (Before Tax) 1,000,000 Cash Flow on Disposition (After Tax) Net Salvage Value 1,000,000 Less: Capital Gains Tax 1,000,000 Net Salvage Value Less Cost Basis 11,000,000 **Capital Gains** x 35.00% -Recaptured Depreciation Tax Less: Tax Value of Investments on Sale 1,000,000 Less Adjusted Basis **Recaptured Depreciation** 1,000,000 x 35.00% 350,000 650,000 Cash Flow on Disposition (After Tax)

	COMPANY	Revenue Calculations. Yearly Plastic Bottle Maufacturing Division Replace Equipment Analysis					September 29, 2009 Investit Decisions Replace Example with Revenue & Expenses			
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9
REVENUE Sales		5,500,000	5,775,000	6,063,750	6,366,938	6,685,284	7,019,549	7,370,526	7,739,052	8,126,005
	Total	5,500,000	5,775,000	6,063,750	6,366,938	6,685,284	7,019,549	7,370,526	7,739,052	8,126,005



Expense Calculations Yearly Plastic Bottle Maufacturing Division

Replace Equipment Analysis

		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9
Labor										
Sales	_	5,500,000	5,775,000	6,063,750	6,366,938	6,685,284	7,019,549	7,370,526	7,739,052	8,126,005
	Total	5,500,000	5,775,000	6,063,750	6,366,938	6,685,284	7,019,549	7,370,526	7,739,052	8,126,005
Percentage	_	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%
Labor	_	1,100,000	1,155,000	1,212,750	1,273,388	1,337,057	1,403,910	1,474,105	1,547,810	1,625,201
Materials										
Sales	_	5,500,000	5,775,000	6,063,750	6,366,938	6,685,284	7,019,549	7,370,526	7,739,052	8,126,005
	Total	5,500,000	5,775,000	6,063,750	6,366,938	6,685,284	7,019,549	7,370,526	7,739,052	8,126,005
Percentage	_	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%
Materials		1,100,000	1,155,000	1,212,750	1,273,388	1,337,057	1,403,910	1,474,105	1,547,810	1,625,201
D										
Repairs & Maintenance		536,000	562,800	590,940	620,487	651,511	684,087	718,291	754,206	791,916
Utilities		335,000	351,750	369,338	387,804	407,195	427,554	448,932	471,379	494,948
Insurance		65,000	68,900	73,034	77,416	82,061	86,985	92,204	97,736	103,600
Sales										
Sales		5,500,000	5,775,000	6,063,750	6,366,938	6,685,284	7,019,549	7,370,526	7,739,052	8,126,005
	Total	5,500,000	5,775,000	6,063,750	6,366,938	6,685,284	7,019,549	7,370,526	7,739,052	8,126,005
Percentage		10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Sales	_	550,000	577,500	606,375	636,694	668,528	701,955	737,053	773,905	812,601
	Total	3,686,000	3,870,950	4,065,187	4,269,176	4,483,409	4,708,401	4,944,690	5,192,847	5,453,467



Input Data Summary Plastic Bottle Maufacturing Division Replace Equipment Analysis

Decision Replace

Note: For information on Revenue, Expenses and Working Capital inputs and projections see the Revenue, Expense and projections description reports and the Working Capital report.

Project Information

Analysis Period	9 years
Starting date	January Year 1

Investor Information

Marginal Tax Rate	35.00%
Capital Gain Tax Rate	35.00%
Recaptured Deprec. Tax Rate	35.00%
Desired Return on Investment (Dis	scount Rate)
Before Tax:	13.00%
After Tax:	8.45%
Short Term Reinvestment Rates	
Before Tax:	2.500%
After Tax:	1.625%
Short Term Financing Rates	
Before Tax:	8.000%
After Tax:	5.200%



Investment information

Salvage Value (Before Tax)	\$ 800,000
Salvage Value (After Tax)	\$ 740,000
Financing Repaid	\$ 1,378,479

Total Invested in Year 1 is \$ 11,000,000

				Recovery Period
	Investment Type	Date	Amount	Years
New Equipment	Personal Property. 200% Declining Bal.	Jan, Year 1	\$ 11,000,000	7.00

Input Data Summary

Plastic Bottle Maufacturing Division

Replace Equipment Analysis

Financing

Equipmen	t Loan					
Starts:		January Year 1				
Type:		Standard Mortgage				
Amount:		\$ 6,000,000				
Interest Ra	ate:	Fixed				
Payment F	Frequency:	Monthly				
Compound	ding Frequency:	Monthly				
Addit. Payments/Borrowing:		No				
Rounding		Up to Nearest Cent				
No of Terms:		1				
		Nominal				
		Annual				
Term	Time Period	Interest Rate	Amortization			
1	7 yrs & 0 mos	9.000%	7 yrs & 0 mos			



SALVAGE VALUE

Disposition Costs Selling Expenses Legal Fees Removal Costs

0% of the Salvage Value 0% of the Salvage Value Input Data Summary Plastic Bottle Maufacturing Division Replace Equipment Analysis

	Capital	Salvage	% of Capital	
	Investment	Value	Investment	
New Equipment	\$ 11,000,000	\$ 1,000,000	9.09%	



EXPENSES PROJECTIONS

Labor

Entry Choice:	% of Revenue(s)
Sales	
Year 1	20.00% of Revenue(s)
	Constant per year for next 8 years

Materials

Entry Choice: % of	Revenue(s)
Sales	
Year 1	20.00% of Revenue(s)
	Constant per year for next 8 years

Repairs & Maintenance

Entry Choice: \$ per	Year
Year 1	\$536,000 per Year
	Compounding at 5.00% per year for next 8 years

Utilities

Entry Choice: \$ per	Year
Year 1	\$335,000 per Year
	Compounding at 5.00% per year for next 8 years

Insurance

Entry Choice: \$ per	Year
Year 1	\$65,000 per Year
	Compounding at 6.00% per year for next 8 years

Sales

Entry Choice:	: % of Revenue(s)
Sales	
Year 1	10.00% of Revenue(s)
	Constant per year for next 8 years

REVENUE PROJECTIONS

Sales

Entry Choice: \$ per	Year
Year 1	\$5,500,000 per Year
	Compounding at 5.00% per year for next 8 years



Depreciation SchedulesSeptember 29, 2009Plastic Bottle Maufacturing DivisionInvestit DecisionsReplace Equipment AnalysisReplace Example with Revenue & Expenses

New Equipment

Starting Date:Year 1 JanuaryDepreciation Method:Personal Property. 200% Declining Bal.Recovery Period:7.0 Year(s)First Year Convention:50.0%Last Year Convention:50.0%Amount\$ 11,000,000

		Cost	Adjusted			Ur	ndepreciated
Period		Basis	Cost Basis	D	epreciation		Balance
Yr. 1 Jan-Yr. 1 Dec	\$	11,000,000	\$ 11,000,000	\$	1,571,429	\$	9,428,571
Yr. 2 Jan-Yr. 2 Dec			9,428,571		2,693,877		6,734,694
Yr. 3 Jan-Yr. 3 Dec			6,734,694		1,924,198		4,810,496
Yr. 4 Jan-Yr. 4 Dec			4,810,496		1,374,427		3,436,069
Yr. 5 Jan-Yr. 5 Dec			3,436,069		981,734		2,454,335
Yr. 6 Jan-Yr. 6 Dec			2,454,335		981,734		1,472,601
Yr. 7 Jan-Yr. 7 Dec			1,472,601		981,734		490,867
Yr. 8 Jan-Yr. 8 Dec			490,867		490,867		-
To	tal \$	11,000,000		\$	11,000,000		



Equipment Loan	
Amount:	\$ 6,000,000
Туре:	Standard Mortgage
Analysis Start Date:	January Year 1
Mortgage Commences:	January Year 1
Payment Frequency:	Monthly
Payment Rounded:	Up to Nearest Cent
Compounding Frequency:	Monthly
Interest Rate:	Fixed
Additional Payment or Borrowing:	No

	Term	Start Date of Time Period		Nominal Annual	Amortization		
		(Balloon) Term	Years	Months	Interest Rate	Years	Months
	1	Year 1 Jan	7	0	9.000 %	7	0

	Outstanding	End of Year	Mortgage
	Balance	Accrued Interest	Payout
Payout at end of Analysis Period: Dec Year 9 Payout at end of last Term: Dec Year 7	-	-	-

		Interest	Principal	Additional Payment or	Outstanding
Time Period	Payment	Payment	Payment	(Borrowing)	Balance
Year 1 Jan-Year 1 Dec	1,158,413.64	513,841.81	644,571.83	-	5,355,428.17
Year 2 Jan-Year 2 Dec	1,158,413.64	453,376.53	705,037.11	-	4,650,391.06
Year 3 Jan-Year 3 Dec	1,158,413.64	387,239.17	771,174.47	-	3,879,216.59
Year 4 Jan-Year 4 Dec	1,158,413.64	314,897.70	843,515.94	-	3,035,700.65
Year 5 Jan-Year 5 Dec	1,158,413.64	235,770.07	922,643.57	-	2,113,057.08
Year 6 Jan-Year 6 Dec	1,158,413.64	149,219.73	1,009,193.91	-	1,103,863.17
Year 7 Jan-Year 7 Dec	1,158,413.58	54,550.41	1,103,863.17	-	-
	8,108,895.42	2,108,895.42	6,000,000.00	-	