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PROPSPIN

TEST REPORT

The package has been developed in accordance with the Terms of Reference and the systems analysis prepared by the financial analyst, Mr. Ortolani, under the supervision of the IPO Milan.

The package is expected to be an easy-to-use, comprehensive program providing the user with the essential financial statements and key values/ratios to allow for effective economic and financial analysis of an investment project, particularly for the execution of pre-feasibility studies. PROPSPIN has been developed in such a way that the user can proceed in using it without significant consultation of the User Manual or previous familiarity with UNIDO's methodology.

The package is basically divided in two sub-systems: the **Data Entry** and the **Compute/Reporting** sub-system.

The **Data Entry** sub-system allows to collect the most significant elements of an investment project, namely:

1. the investment outlay, by investment category and by year;
2. the loans and grants distribution;
3. the production programme, by product and by year;
4. the production costs, by material, utilities and labour, by year;
5. the working capital requirements.

The **Compute/Reporting** sub-system allows to compute and prepare a number of output tables providing projections of the project's performance over the years, together with a number of indicators, namely:

1. the net income statement;
2. the investment table;
3. the cash flow;
4. the cash flow for calculation of the IRR and NPV of the project;
5. the cash flow for calculation of the IRR and NPV of equity;
6. yearly and summary indicators.

A textile investment project reported in the Manual for the Preparation of Industrial Feasibility Studies as a case study has been utilized to carry out a comprehensive test of the programme. The related input and output tables have been attached to the test report. Project data available have been used without further checking, in line with the objective of testing the functionality of the package rather than the validity of the project. Accordingly, no evaluation of the project is provided.

Input data have been entered, according to a planning horizon of 15 years.

In line with the layout reported in the Manual, aggregated figures for Production programme, raw materials, labour and factory and administrative overheads have been utilised. Minor adjustments have been introduced to adapt input data available to the input data entry structure of the package

The total investment amounts to 9460 thousands USD essentially concentrated over the first 2 years, with a 1000 USD machinery investment in year 8.

The investment is to be covered through 3500 thousands USD of equity, of which 700 thousands are contributed by the foreign partner, and a combination of local and foreign loans contracted between year 1 and 3, with a maximum duration of 5 years, for a total cumulative amount of 6000 thousand USD.

Production, aggregated under one single project, starts in year 3 with 55000 conventional units, and reaches full capacity, corresponding to 100000 conventional units, at year 6.

Input materials, distinguished in raw materials A and B and factory supplies, have been entered, assuming a 1:1 consumption ratio for each conventional unit of production.

The labour table was used to record the work force distribution, envisaging an initial number of 549 employee in year 3, growing to 100 at full capacity, assuming an annual cost of 1250 USD per employee.

Administrative, Marketing, Factory, Maintenance, Spare parts and Fixed Royalties Overheads have been entered in the Distribution of Overheads Table, whereas Days of Coverage have been inputted in the Working Capital Requirements Table. A weighed average value of 58 days of coverage has been utilised for Raw Materials/Intermediate Inputs, mediating the individual values reported on the Manual for Raw Materials A and B and Factory Supplies.

The following assumptions have been adopted for the calculations:

1. loans are drawn down on January 1, with yearly repayments. This implies that, for a loan drawn down in year 1 without grace, first interest and principal repayments are reported, as cash flows, in year 2, as the related cash disbursement will take place on January 1 of year 2. The first payment of interests will be recorded in the Net Income Statement in year 1, during which they have matured;
2. pay back terms remain constant over the repayment years;
3. first depreciation is accounted in the same year of acquisition of asset, as acquisition is assumed at the beginning of the year;
4. depreciation of assets is started only when production starts;
5. working capital requirements are accounted in the same year as needed;
6. no income statement is produced for years before start of production, even though operating expenses are incurred.

The income statement reports growing sales figures, from 6875 thousands USD in year three, till 12500 in year 6, yielding an operating profit of 2696 at full capacity.

Production costs are distinguished between direct and indirect costs and are calculated correctly. Total Production Costs in year 6, including Depreciation Charges, Interest Expenses and Other Costs, amount to 10066.

The cashflow table is based on inflows of outflows of cash. Equity, Loans and Sales are compared with Assets, Operating Expenses, Financial Expenses, Income Tax Expenses and Working Capital requirements. From a minimal 29 Financial Surplus in year 1, Cumulative Cash Balance grows steadily over the years, covering the only year with a Financial Deficit, equal to 684, recorded in year 8.

On such a basis IRR and NPV for the project and for the equity are calculated. In the first case, the Net Cashflow is discounted utilising a 12% rate, yielding a Net Present

Value for the project of 3554 thousands, including a 30% salvage value of the investment, and an Internal Rate of Return of 17.7. As far as the return on equity is concerned, the discounting of the Net Cashflow yields a Net Present Value of 4045 thousands and an Internal rate of Return of 24.32. Payback period is 7 years without discounting, and 10 years with discounting. All others indicators, the yearly and the summary ones are calculated correctly. The Acid Test and Current ratio lose meaning in the last years, on account of a very large cumulated retained profit balance.

Changes to the planning horizon, the amortization rates, working capital requirements and loans terms have been applied, in order to test the programme, whereas analysis of correlation and consistency between input data and results has been performed. No malfunctions have been detected. Moreover, additional tests carried out on widely disaggregated input data confirmed the results of the test in subject.

Special contributions to the development of the test were provided by a number of financial analysts, namely Ms. Lara Lam of Canada, Mr. Castrone of Italy, and Mr. Gyss of France.

Milan, 28 August 1995

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United Nations Industrial Development Organization

P R O P S P I N

Project:MANUAL CASE STUDY

Date:30-08-95 Time:10:37:46

Project Nr.	TEST/MANUAL	Date	15-06-95
Title	MANUAL CASE STUDY	Place	Milan
Location	Milan	Prepared by	
Sponsor	IPO MILAN	Run number	

Base year	1991	Planning horizon	15 years	Salvage value	30 %
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CURRENCIES

Accounting currency USD

Local ITA
Foreign USD

CONVERSION RATES

Local to accounting 1600.0
Foreign to accounting 1.0

Income tax rate (%) 50
Rate of discount (%) 12

Loss carry forward 0 years
Income tax deferral 4 years

SUMMARY

LOCAL INVESTMENT LAYOUT (VALUE/1000)

Item	Total	Year1	Year2	Year3	Year4	Year5
Land	20	20	0	0	0	0
Site Preparation	50	50	0	0	0	0
Design & Engineering	1000	1000	0	0	0	0
Buildings	1800	0	1800	0	0	0
Service Facilities	800	0	500	0	0	0
Transport Equipment	0	0	0	0	0	0
Plant Mach. & Equipment	1300	500	500	0	0	0
Infrastructure	0	0	0	0	0	0
Preprod. Capital Expendit	260	250	10	0	0	0
Research & Development	0	0	0	0	0	0
Technology & Trademarks	550	430	120	0	0	0
Contingencies	0	0	0	0	0	0
Stock	0	0	0	0	0	0
TOTAL INVESTMENT	5780	2250	2930	0	0	0

Item	Year6	Year7	Year8	Year9	Year10
Land	0	0	0	0	0
Site Preparation	0	0	0	0	0
Design & Engineering	0	0	0	0	0
Buildings	0	0	0	0	0
Service Facilities	0	0	300	0	0
Transport Equipment	0	0	0	0	0
Plant Mach. & Equipment	0	0	300	0	0
Infrastructure	0	0	0	0	0
Preprod. Capital Expendit	0	0	0	0	0
Research & Development	0	0	0	0	0
Technology & Trademarks	0	0	0	0	0
Contingencies	0	0	0	0	0
Stock	0	0	0	0	0
TOTAL INVESTMENT	0	0	600	0	0

Item	Year11	Year12	Year13	Year14	Year15
Land	0	0	0	0	0
Site Preparation	0	0	0	0	0
Design & Engineering	0	0	0	0	0
Buildings	0	0	0	0	0
Service Facilities	0	0	0	0	0
Transport Equipment	0	0	0	0	0
Plant Mach. & Equipment	0	0	0	0	0
Infrastructure	0	0	0	0	0
Preprod. Capital Expendit	0	0	0	0	0
Research & Development	0	0	0	0	0
Technology & Trademarks	0	0	0	0	0
Contingencies	0	0	0	0	0
Stock	0	0	0	0	0
TOTAL INVESTMENT	0	0	0	0	0

FOREIGN INVESTMENT LAYOUT (VALUE/1000)

Item	Total	Year1	Year2	Year3	Year4	Year5
Land	0	0	0	0	0	0
Site Preparation	10	0	10	0	0	0
Design & Engineering	0	0	0	0	0	0
Buildings	100	0	100	0	0	0
Service Facilities	200	0	0	0	0	0
Transport Equipment	0	0	0	0	0	0
Plant Mach. & Equipment	2700	1000	1500	0	0	0
Infrastructure	0	0	0	0	0	0
Preprod. Capital Expendit	48	41	7	0	0	0
Research & Development	0	0	0	0	0	0
Technology & Trademarks	180	0	180	0	0	0
Contingencies	0	0	0	0	0	0
Stock	442	0	400	21	21	0
TOTAL INVESTMENT	3680	1041	2197	21	21	0

Item	Year6	Year7	Year8	Year9	Year10
Land	0	0	0	0	0
Site Preparation	0	0	0	0	0
Design & Engineering	0	0	0	0	0
Buildings	0	0	0	0	0
Service Facilities	0	0	200	0	0
Transport Equipment	0	0	0	0	0
Plant Mach. & Equipment	0	0	200	0	0
Infrastructure	0	0	0	0	0
Preprod. Capital Expendit	0	0	0	0	0
Research & Development	0	0	0	0	0
Technology & Trademarks	0	0	0	0	0
Contingencies	0	0	0	0	0
Stock	0	0	0	0	0
TOTAL INVESTMENT	0	0	400	0	0

Item	Year11	Year12	Year13	Year14	Year15
Land	0	0	0	0	0
Site Preparation	0	0	0	0	0
Design & Engineering	0	0	0	0	0
Buildings	0	0	0	0	0
Service Facilities	0	0	0	0	0
Transport Equipment	0	0	0	0	0
Plant Mach. & Equipment	0	0	0	0	0
Infrastructure	0	0	0	0	0
Preprod. Capital Expendit	0	0	0	0	0
Research & Development	0	0	0	0	0
Technology & Trademarks	0	0	0	0	0
Contingencies	0	0	0	0	0
Stock	0	0	0	0	0
TOTAL INVESTMENT	0	0	0	0	0

LOCAL+FOREIGN INVESTMENT LAYOUT (VALUE/1000)

Item	Total	Year1	Year2	Year3	Year4	Year5
Land	20	20	0	0	0	0
Site Preparation	60	50	10	0	0	0
Design & Engineering	1000	1000	0	0	0	0
Buildings	1900	0	1900	0	0	0
Service Facilities	1000	0	500	0	0	0
Transport Equipment	0	0	0	0	0	0
Plant Mach. & Equipment	4000	1500	2000	0	0	0
Infrastructure	0	0	0	0	0	0
Preprod. Capital Expendit	308	291	17	0	0	0
Research & Development	0	0	0	0	0	0
Technology & Trademarks	730	430	300	0	0	0
Contingencies	0	0	0	0	0	0
Stock	442	0	400	21	21	0
TOTAL INVESTMENT	9460	3291	5127	21	21	0

Item	Year6	Year7	Year8	Year9	Year10
Land	0	0	0	0	0
Site Preparation	0	0	0	0	0
Design & Engineering	0	0	0	0	0
Buildings	0	0	0	0	0
Service Facilities	0	0	500	0	0
Transport Equipment	0	0	0	0	0
Plant Mach. & Equipment	0	0	500	0	0
Infrastructure	0	0	0	0	0
Preprod. Capital Expendit	0	0	0	0	0
Research & Development	0	0	0	0	0
Technology & Trademarks	0	0	0	0	0
Contingencies	0	0	0	0	0
Stock	0	0	0	0	0
TOTAL INVESTMENT	0	0	1000	0	0

Item	Year11	Year12	Year13	Year14	Year15
Land	0	0	0	0	0
Site Preparation	0	0	0	0	0
Design & Engineering	0	0	0	0	0
Buildings	0	0	0	0	0
Service Facilities	0	0	0	0	0
Transport Equipment	0	0	0	0	0
Plant Mach. & Equipment	0	0	0	0	0
Infrastructure	0	0	0	0	0
Preprod. Capital Expendit	0	0	0	0	0
Research & Development	0	0	0	0	0
Technology & Trademarks	0	0	0	0	0
Contingencies	0	0	0	0	0
Stock	0	0	0	0	0
TOTAL INVESTMENT	0	0	0	0	0

AMORTIZATION RATES

Item	% Rate
Land	0
Site Preparation	10
Design & Engineering	5
Buildings	10
Service Facilities	10
Transport Equipment	10
Plant Mach. & Equipment	10
Infrastructure	10
Preprod. Capital Expendit	10
Research & Development	10
Technology & Trademarks	10
Contingencies	50

WORKING CAPITAL REQUIREMENTS

Item	DAYS
Cash in Hand	15
Accounts Receivable	30
Raw Materials/Intermediate Inputs	58
In Process	9
Finished Products	15
Spares	180
Utilities	120
Accounts Payable	15

EQUITY AND GRANTS DISTRIBUTION (VALUE/1000)

Item	L/C	Total	Year1	Year2	Year3	Year4	Year5
Partner # 1 LOCAL	L	2800	2250	550	0	0	0
Partner # 2 FOREIGN	F	700	350	350	0	0	0
Partner # 3							
Partner # 4							
Partner # 5							
TOTAL EQUITY		3500	2600	900	0	0	0
Local Grants		0	0	0	0	0	0
Foreign Grants		0	0	0	0	0	0
TOT. EQUITY+GRANTS		3500	2600	900	0	0	0
% of dividends		0	0	0	0	0	36

Item	L/C	Year6	Year7	Year8	Year9	Year10
Partner # 1 LOCAL	L	0	0	0	0	0
Partner # 2 FOREIGN	F	0	0	0	0	0
Partner # 3						
Partner # 4						
Partner # 5						
TOTAL EQUITY		0	0	0	0	0
Local Grants		0	0	0	0	0
Foreign Grants		0	0	0	0	0
TOT. EQUITY+GRANTS		0	0	0	0	0
% of dividends		26	50	50	49	49

Item	L/C	Year11	Year12	Year13	Year14	Year15
Partner # 1 LOCAL	L	0	0	0	0	0
Partner # 2 FOREIGN	F	0	0	0	0	0
Partner # 3						
Partner # 4						
Partner # 5						
TOTAL EQUITY		0	0	0	0	0
Local Grants		0	0	0	0	0
Foreign Grants		0	0	0	0	0
TOT. EQUITY+GRANTS		0	0	0	0	0
% of dividends		49	49	38	38	38

LOANS AND EXPORT CREDITS

	AMOUNT	INTEREST RATE	TERMS (YEARS)	GRACE YEARS	INTEREST?	YEAR OF RECEPTION
Local LOAN 1	2800	10.00	5	2	Y	2
Local LOAN 2	200	10.00	5	1	Y	3
Local LOAN 3	300	12.00	1	0	Y	3
Foreign LOAN 1	720	8.00	5	2	Y	1
Foreign LOAN 2	1880	8.00	5	1	Y	2
Foreign LOAN 3	100	12.00	1	1	Y	3
Export CREDIT	0	0.00	0	0	Y	0

PRODUCTION PROGRAMME/INPUT MATERIALS

1 PRODUCT NAME:PRODUCTS - Unit:UNIT

YEAR OF PRODUCTION	YEARLY CAPACITY	EXPORT PERCENTAGE	EXPORT PRICE	LOCAL PRICE
YEAR 1	0.0	0	0.00	0.00
YEAR 2	0.0	0	0.00	0.00
YEAR 3	55000.0	100	125.00	0.00
YEAR 4	75000.0	100	125.00	0.00
YEAR 5	90000.0	100	125.00	0.00
YEAR 6	100000.0	100	125.00	0.00
YEAR 7	100000.0	100	125.00	0.00
YEAR 8	100000.0	100	125.00	0.00
YEAR 9	100000.0	100	125.00	0.00
YEAR 10	100000.0	100	125.00	0.00
YEAR 11	100000.0	100	125.00	0.00
YEAR 12	100000.0	100	125.00	0.00
YEAR 13	100000.0	100	125.00	0.00
YEAR 14	100000.0	100	125.00	0.00
YEAR 15	100000.0	100	125.00	0.00

MATERIAL NAME	UNIT	CONSUMPTION PER UNIT	LOCAL COST	FOREIGN COST	% IMPORTED
MATERIAL A	UNI	1.000	0.00	23.00	100
MATERIAL B	UNI	1.000	21.50	0.00	0
FACTORY SUPPLY	UNI	1.000	4.50	0.00	0

CONSUMPTION OF UTILITIES

	WATER	ELECTRICITY	DIESEL	OTHERS
Price per unit	0.00	0.00	0.00	0.00
% Imported	0.00	0.00	0.00	0.00
Consumption Year 1	0.00	0.00	0.00	0.00
Year 2	0.00	0.00	0.00	0.00
Year 3	0.00	0.00	0.00	0.00
Year 4	0.00	0.00	0.00	0.00
Year 5	0.00	0.00	0.00	0.00
Year 6	0.00	0.00	0.00	0.00
Year 7	0.00	0.00	0.00	0.00
Year 8	0.00	0.00	0.00	0.00
Year 9	0.00	0.00	0.00	0.00
Year 10	0.00	0.00	0.00	0.00
Year 11	0.00	0.00	0.00	0.00
Year 12	0.00	0.00	0.00	0.00
Year 13	0.00	0.00	0.00	0.00
Year 14	0.00	0.00	0.00	0.00
Year 15	0.00	0.00	0.00	0.00

NUMBER OF PERSONS ENGAGED

	UNSKILLED	SKILLED	CLERICAL ADMINISTRAT.	MANAGERS	EXPATRIATES
Annual Cost per employee	1250	0	0	0	0
Persons engaged Year 1	0	0	0	0	0
Year 2	0	0	0	0	0
Year 3	549	0	0	0	0
Year 4	749	0	0	0	0
Year 5	900	0	0	0	0
Year 6	1000	0	0	0	0
Year 7	1000	0	0	0	0
Year 8	1000	0	0	0	0
Year 9	1000	0	0	0	0
Year 10	1000	0	0	0	0
Year 11	1000	0	0	0	0
Year 12	1000	0	0	0	0
Year 13	1000	0	0	0	0
Year 14	1000	0	0	0	0
Year 15	1000	0	0	0	0

DISTRIBUTION OF OVERHEADS

	TAXES LEVIES	TRAINING OVERHEAD	ADMIN. OVERHEAD	RENTS	FIXED ROYALT.	ROYALT. & SALES	MARKETING OVERHEAD	SPARE PARTS	MAINTEN	FACTORY OVERHEAD
% Foreign	0	0	0	0	0	0	0	0	0	0
Year 1	0	0	0	0	0	0	0	0	0	0
Year 2	0	0	0	0	0	0	0	0	0	0
Year 3	0	0	500	0	30	0	333	250	193	1320
Year 4	0	0	500	0	30	0	362	250	263	1320
Year 5	0	0	500	0	30	0	385	250	315	1320
Year 6	0	0	500	0	30	0	400	250	350	1320
Year 7	0	0	500	0	30	0	400	250	350	1320
Year 8	0	0	500	0	30	0	400	250	350	1320
Year 9	0	0	500	0	30	0	400	250	350	1320
Year 10	0	0	500	0	30	0	400	250	350	1320
Year 11	0	0	500	0	30	0	400	250	350	1320
Year 12	0	0	500	0	30	0	400	250	350	1320
Year 13	0	0	500	0	30	0	400	250	350	1320
Year 14	0	0	500	0	30	0	400	250	350	1320
Year 15	0	0	500	0	30	0	400	250	350	1320

NET INCOME STATEMENT TABLE in thousands

Item	Year6	Year7	Year8	Year9	Year10
TOTAL SALES	12500	12500	12500	12500	12500
Direct Costs	6750	6750	6750	6750	6750
Raw Materials	4900	4900	4900	4900	4900
Direct Labour	1250	1250	1250	1250	1250
Utilities	0	0	0	0	0
Spare Parts	250	250	250	250	250
Maintenance	350	350	350	350	350
Royalties as % of Sales	0	0	0	0	0
GROSS MARGIN	5750	5750	5750	5750	5750
Indirect Costs	1850	1850	1850	1850	1850
Labour	0	0	0	0	0
Factory Overheads	1320	1320	1320	1320	1320
Training	0	0	0	0	0
Rents	0	0	0	0	0
Lump Sum Royalties	30	30	30	30	30
Administrative Overheads	500	500	500	500	500
Depreciation	803	803	903	903	903
Other Costs	400	400	400	400	400
Marketing Overheads	400	400	400	400	400
Indirect Taxes & Levies	0	0	0	0	0
OPERATING PROFIT (LOSS)	2696	2696	2596	2596	2596
Interest Expenses	263	161	60	0	0
INCOME (LOSS) BEFORE TAX	2433	2534	2536	2596	2596
Income Tax	0	1267	1268	1298	1298
NET PROFIT (LOSS)	2433	1267	1268	1298	1298

UNDISTRIBUTED PROFITS

Accumulated Fiscal Loss	0	0	0	0	0
Dividends	632	633	634	636	636
Undistributed Profit	1800	633	634	662	662
Accumulated Undistrib. Profit	3183	3817	4451	5113	5775

TOTAL PRODUCTION COSTS

Direct Costs	6750	6750	6750	6750	6750
Indirect Costs	1850	1850	1850	1850	1850
OPERATING COSTS	8600	8600	8600	8600	8600
Depreciation	803	803	903	903	903
Other Costs	400	400	400	400	400
Interest Expenses	263	161	60	0	0
TOTAL PRODUCTION COSTS	10066	9965	9963	9903	9903

NET INCOME STATEMENT TABLE in thousands

Item	Year1	Year2	Year3	Year4	Year5
TOTAL SALES	0	0	6875	9375	11250
Direct Costs	0	0	3824	5124	6100
Raw Materials	0	0	2695	3675	4410
Direct Labour	0	0	686	936	1125
Utilities	0	0	0	0	0
Spare Parts	0	0	250	250	250
Maintenance	0	0	193	263	315
Royalties as % of Sales	0	0	0	0	0
GROSS MARGIN	0	0	3050	4250	5150
Indirect Costs	0	0	1850	1850	1850
Labour	0	0	0	0	0
Factory Overheads	0	0	1320	1320	1320
Training	0	0	0	0	0
Rents	0	0	0	0	0
Lump Sum Royalties	0	0	30	30	30
Administrative Overheads	0	0	500	500	500
Depreciation	0	0	803	803	803
Other Costs	0	0	333	362	385
Marketing Overheads	0	0	333	362	385
Indirect Taxes & Levies	0	0	0	0	0
OPERATING PROFIT (LOSS)	0	0	64	1235	2111
Interest Expenses	0	0	556	478	364
INCOME (LOSS) BEFORE TAX	0	0	(491)	756	1746
Income Tax	0	0	0	0	0
NET PROFIT (LOSS)	0	0	(491)	756	1746

UNDISTRIBUTED PROFITS

Accumulated Fiscal Loss	0	0	0	0	0
Dividends	0	0	0	0	628
Undistributed Profit	0	0	0	265	1117
Accumulated Undistrib. Profit	0	0	0	265	1383

TOTAL PRODUCTION COSTS

Direct Costs	0	0	3824	5124	6100
Indirect Costs	0	0	1850	1850	1850
OPERATING COSTS	0	0	5674	6974	7950
Depreciation	0	0	803	803	803
Other Costs	0	0	333	362	385
Interest Expenses	0	0	556	478	364
TOTAL PRODUCTION COSTS	0	0	7366	8618	9503

TOTAL INVESTMENT TABLE in thousands

Item	Year1	Year2	Year3	Year4	Year5
TOTAL FIXED INVESTMENT	3291	4727	0	0	0
Land	20	0	0	0	0
Site Preparation	50	10	0	0	0
Design & Engineering	1000	0	0	0	0
Buildings	0	1900	0	0	0
Services Facilities	0	500	0	0	0
Transport Equipment	0	0	0	0	0
Plant Machinery	1500	2000	0	0	0
Infrastructure	0	0	0	0	0
Preproduction Capital Exp	291	17	0	0	0
Research and Development	0	0	0	0	0
Technology & Trademarks	430	300	0	0	0
Contingencies	0	0	0	0	0
Total Working Capital	0	400	1570	1939	2195
Stock	0	400	21	21	0
Cash on Hand	0	0	124	137	147
Accounts Receivable	0	0	500	611	694
Raw Materials	0	0	434	592	710
Product in Process	0	0	129	161	186
Finished Products	0	0	236	290	331
Utilities on Hand	0	0	0	0	0
Spares	0	0	125	125	125
Accounts Payable	0	0	215	269	310
NET WORKING CAPITAL	0	400	1355	1669	1884
INCREASE IN WORKING CAPITAL	0	400	955	314	215
TOTAL INVESTMENT	3291	5127	955	314	215

NET INCOME STATEMENT TABLE in thousands

Item	Year11	Year12	Year13	Year14	Year15
TOTAL SALES	12500	12500	12500	12500	12500
Direct Costs	6750	6750	6750	6750	6750
Raw Materials	4900	4900	4900	4900	4900
Direct Labour	1250	1250	1250	1250	1250
Utilities	0	0	0	0	0
Spare Parts	250	250	250	250	250
Maintenance	350	350	350	350	350
Royalties as % of Sales	0	0	0	0	0
GROSS MARGIN	5750	5750	5750	5750	5750
Indirect Costs	1850	1850	1850	1850	1850
Labour	0	0	0	0	0
Factory Overheads	1320	1320	1320	1320	1320
Training	0	0	0	0	0
Rents	0	0	0	0	0
Lump Sum Royalties	30	30	30	30	30
Administrative Overheads	500	500	500	500	500
Depreciation	903	903	150	150	150
Other Costs	400	400	400	400	400
Marketing Overheads	400	400	400	400	400
Indirect Taxes & Levies	0	0	0	0	0
OPERATING PROFIT (LOSS)	2596	2596	3349	3349	3349
Interest Expenses	0	0	0	0	0
INCOME (LOSS) BEFORE TAX	2596	2596	3349	3349	3349
Income Tax	1298	1298	1674	1674	1674
NET PROFIT (LOSS)	1298	1298	1674	1674	1674

UNDISTRIBUTED PROFITS

Accumulated Fiscal Loss	0	0	0	0	0
Dividends	636	636	636	636	636
Undistributed Profit	662	662	1038	1038	1038
Accumulated Undistrib. Profit	6438	7100	8138	9176	10214

TOTAL PRODUCTION COSTS

Direct Costs	6750	6750	6750	6750	6750
Indirect Costs	1850	1850	1850	1850	1850
OPERATING COSTS	8600	8600	8600	8600	8600
Depreciation	903	903	150	150	150
Other Costs	400	400	400	400	400
Interest Expenses	0	0	0	0	0
TOTAL PRODUCTION COSTS	9903	9903	9150	9150	9150

TOTAL INVESTMENT TABLE in thousands

Item	Year6	Year7	Year8	Year9	Year10
TOTAL FIXED INVESTMENT	0	0	1000	0	0
Land	0	0	0	0	0
Site Preparation	0	0	0	0	0
Design & Engineering	0	0	0	0	0
Buildings	0	0	0	0	0
Services Facilities	0	0	500	0	0
Transport Equipment	0	0	0	0	0
Plant Machinery	0	0	500	0	0
Infrastructure	0	0	0	0	0
Preproduction Capital Exp	0	0	0	0	0
Research and Development	0	0	0	0	0
Technology & Trademarks	0	0	0	0	0
Contingencies	0	0	0	0	0
Total Working Capital	2379	2379	2379	2379	2379
Stock	0	0	0	0	0
Cash on Hand	154	154	154	154	154
Accounts Receivable	750	750	750	750	750
Raw Materials	789	789	789	789	789
Product in Process	202	202	202	202	202
Finished Products	358	358	358	358	358
Utilities on Hand	0	0	0	0	0
Spares	125	125	125	125	125
Accounts Payable	337	337	337	337	337
NET WORKING CAPITAL	2041	2041	2041	2041	2041
INCREASE IN WORKING CAPITAL	157	0	0	0	0
TOTAL INVESTMENT	157	0	1000	0	0

TOTAL INVESTMENT TABLE in thousands

Item	Year11	Year12	Year13	Year14	Year15
TOTAL FIXED INVESTMENT	0	0	0	0	0
Land	0	0	0	0	0
Site Preparation	0	0	0	0	0
Design & Engineering	0	0	0	0	0
Buildings	0	0	0	0	0
Services Facilities	0	0	0	0	0
Transport Equipment	0	0	0	0	0
Plant Machinery	0	0	0	0	0
Infrastructure	0	0	0	0	0
Preproduction Capital Exp	0	0	0	0	0
Research and Development	0	0	0	0	0
Technology & Trademarks	0	0	0	0	0
Contingencies	0	0	0	0	0
Total Working Capital	2379	2379	2379	2379	2379
Stock	0	0	0	0	0
Cash on Hand	154	154	154	154	154
Accounts Receivable	750	750	750	750	750
Raw Materials	789	789	789	789	789
Product in Process	202	202	202	202	202
Finished Products	358	358	358	358	358
Utilities on Hand	0	0	0	0	0
Spare	125	125	125	125	125
Accounts Payable	337	337	337	337	337
NET WORKING CAPITAL	2041	2041	2041	2041	2041
INCREASE IN WORKING CAPITAL	0	0	0	0	0
TOTAL INVESTMENT	0	0	0	0	0

CASH FLOW FOR FINANCIAL PLANNING in thousands

Item	Year1	Year2	Year3	Year4	Year5
SOURCE OF CASH	3320	5580	7690	9429	11290
Sales	0	0	6875	9375	11250
Variat. in Accounts Payab	0	0	215	54	40
Equity	2600	900	0	0	0
Local Loan 1	0	2800	0	0	0
Local Loan 2	0	0	200	0	0
Local Loan 3	0	0	300	0	0
Foreign Loan 1	720	0	0	0	0
Foreign Loan 2	0	1880	0	0	0
Foreign Loan 3	0	0	100	0	0
Export Credit	0	0	0	0	0
Overdraft	0	0	0	0	0
Grants	0	0	0	0	0
USE OF CASH	3291	5184	7665	9080	10917
Assets	3291	4727	0	0	0
Variat. in Current Assets	0	400	1170	368	255
Operating Costs	0	0	5674	6974	7950
Other Costs	0	0	333	362	385
Debt service	0	57	488	1376	1698
of which Principal	0	0	0	820	1220
of which Interest	0	57	488	556	478
Income Tax	0	0	0	0	0
Dividends	0	0	0	0	628
FINANCIAL SURPLUS (Deficit)	29	396	25	349	373
CUMULATIVE CASH INFLOW	29	29	425	450	799
CUMULATIVE CASH BALANCE	29	425	450	799	1172

CASH FLOW FOR FINANCIAL PLANNING in thousands

Item	Year6	Year7	Year8	Year9	Year10
SOURCE OF CASH	12527	12500	12500	12500	12500
Sales	12500	12500	12500	12500	12500
Variat. in Accounts Payab	27	0	0	0	0
Equity	0	0	0	0	0
Local Loan 1	0	0	0	0	0
Local Loan 2	0	0	0	0	0
Local Loan 3	0	0	0	0	0
Foreign Loan 1	0	0	0	0	0
Foreign Loan 2	0	0	0	0	0
Foreign Loan 3	0	0	0	0	0
Export Credit	0	0	0	0	0
Overdraft	0	0	0	0	0
Grants	0	0	0	0	0
USE OF CASH	11301	12284	13184	11594	10934
Assets	0	0	1000	0	0
Variat. in Current Assets	164	0	0	0	0
Operating Costs	8600	8600	8600	8600	8600
Other Costs	400	400	400	400	400
Debt service	1484	1383	1281	660	0
of which Principal	1120	1120	1120	600	0
of which Interest	364	263	161	60	0
Income Tax	0	1267	1268	1298	1298
Dividends	632	633	634	636	636
FINANCIAL SURPLUS (Deficit)	1226	216	(684)	906	1566
CUMULATIVE CASH INFLOW	1172	2398	2614	1930	2836
CUMULATIVE CASH BALANCE	2398	2614	1930	2836	4402

CASH FLOW FOR FINANCIAL PLANNING in thousands

Item	Year11	Year12	Year13	Year14	Year15
SOURCE OF CASH	12500	12500	12500	12500	12500
Sales	12500	12500	12500	12500	12500
Variat. in Accounts Payab	0	0	0	0	0
Equity	0	0	0	0	0
Local Loan 1	0	0	0	0	0
Local Loan 2	0	0	0	0	0
Local Loan 3	0	0	0	0	0
Foreign Loan 1	0	0	0	0	0
Foreign Loan 2	0	0	0	0	0
Foreign Loan 3	0	0	0	0	0
Export Credit	0	0	0	0	0
Overdraft	0	0	0	0	0
Grants	0	0	0	0	0
USE OF CASH	10934	10934	11310	11310	11310
Assets	0	0	0	0	0
Variat. in Current Assets	0	0	0	0	0
Operating Costs	8600	8600	8600	8600	8600
Other Costs	400	400	400	400	400
Debt service	0	0	0	0	0
of which Principal	0	0	0	0	0
of which Interest	0	0	0	0	0
Income Tax	1298	1298	1674	1674	1674
Dividends	636	636	636	636	636
FINANCIAL SURPLUS (Deficit)	1566	1566	1190	1190	1190
CUMULATIVE CASH INFLOW	4402	5968	7534	8724	9914
CUMULATIVE CASH BALANCE	5968	7534	8724	9914	11104

CASH FLOW FOR I.R.R. AND N.P.V. OF PROJECT in thousands

Item	Year1	Year2	Year3	Year4	Year5
CASH INFLOW	0	0	6875	9375	11250
Sales	0	0	6875	9375	11250
Salvage Value	0	0	0	0	0
CASH OUTFLOW	3291	5127	6962	7650	8550
Assets	3291	4727	0	0	0
Var. in Net Working Capit	0	400	955	314	215
Operating Costs	0	0	5674	6974	7950
Other Costs	0	0	333	362	385
Income Tax	0	0	0	0	0
NET CASHFLOW	(3291)	(5127)	(87)	1724	2699
Discounted CashFlow	(3291)	(4577)	(69)	1227	1715
Cumulative Discounted CashFlow	(3291)	(7868)	(7938)	(6711)	(4995)

Item	Year6	Year7	Year8	Year9	Year10
CASH INFLOW	12500	12500	12500	12500	12500
Sales	12500	12500	12500	12500	12500
Salvage Value	0	0	0	0	0
CASH OUTFLOW	9157	10267	11268	10298	10298
Assets	0	0	1000	0	0
Var. in Net Working Capit	157	0	0	0	0
Operating Costs	8600	8600	8600	8600	8600
Other Costs	400	400	400	400	400
Income Tax	0	1267	1268	1298	1298
NET CASHFLOW	3342	2232	1231	2201	2201
Discounted CashFlow	1896	1131	557	889	793
Cumulative Discounted CashFlow	(3098)	(1967)	(1410)	(520)	273

Item	Year11	Year12	Year13	Year14	Year15
CASH INFLOW	12500	12500	12500	12500	15817
Sales	12500	12500	12500	12500	12500
Salvage Value	0	0	0	0	3317
CASH OUTFLOW	10298	10298	10674	10674	10674
Assets	0	0	0	0	0
Var. in Net Working Capit	0	0	0	0	0
Operating Costs	8600	8600	8600	8600	8600
Other Costs	400	400	400	400	400
Income Tax	1298	1298	1674	1674	1674
NET CASHFLOW	2201	2201	1825	1825	5143
Discounted CashFlow	708	632	468	418	1052
Cumulative Discounted CashFlow	981	1614	2083	2501	3554

Net present value = 3554

Internal rate of return = 17.70

CASH FLOW FOR I.R.R. AND N.P.V. OF EQUITY in thousands

Item	Year1	Year2	Year3	Year4	Year5
CASH INFLOW	29	396	25	349	1001
<i>Cash Surplus (Deficit)</i>	29	396	25	349	373
<i>Dividends paid</i>	0	0	0	0	628
<i>Salvage Value</i>	0	0	0	0	0
CASH OUTFLOW	2600	900	0	0	0
<i>Assets Financed by Equity</i>	2600	900	0	0	0
NET CASHFLOW	(2571)	(504)	25	349	1001
Discounted CashFlow	(2571)	(450)	19	248	636
Cumulative Discounted CashFlow	(2571)	(3021)	(3001)	(2752)	(2115)

Item	Year6	Year7	Year8	Year9	Year10
CASH INFLOW	1858	849	(49)	1542	2202
<i>Cash Surplus (Deficit)</i>	1226	216	(684)	906	1566
<i>Dividends paid</i>	632	633	634	636	636
<i>Salvage Value</i>	0	0	0	0	0
CASH OUTFLOW	0	0	0	0	0
<i>Assets Financed by Equity</i>	0	0	0	0	0
NET CASHFLOW	1858	849	(49)	1542	2202
Discounted CashFlow	1054	430	(22)	622	794
Cumulative Discounted CashFlow	(1061)	(630)	(653)	(30)	763

Item	Year11	Year12	Year13	Year14	Year15
CASH INFLOW	2202	2202	1826	1826	5144
<i>Cash Surplus (Deficit)</i>	1566	1566	1190	1190	1190
<i>Dividends paid</i>	636	636	636	636	636
<i>Salvage Value</i>	0	0	0	0	3317
CASH OUTFLOW	0	0	0	0	0
<i>Assets Financed by Equity</i>	0	0	0	0	0
NET CASHFLOW	2202	2202	1826	1826	5144
Discounted CashFlow	709	633	468	418	1052
Cumulative Discounted CashFlow	1472	2105	2574	2993	4045

Net present value = 4045

Internal rate of return = 24.32

YEARLY INDICATORS

Item	Year1	Year2	Year3	Year4	Year5
Return on Investment (%)	0.00	0.00	0.78	14.79	27.06
Return on Equity (%)	0.00	0.00	(14.05)	20.10	35.77
Percent of Export Sales (%)	0.00	0.00	100.00	100.00	100.00
CashFlow/Sales	0.00	0.00	(0.01)	0.18	0.24
Debt Service Cover Ratio	0.00	(89.01)	(0.18)	1.25	1.59
Acid Test	0.00	0.00	1.04	1.04	1.41
Current Ratio	0.00	0.00	1.27	1.23	1.64

Item	Year6	Year7	Year8	Year9	Year10
Return on Investment (%)	37.54	42.26	40.09	46.59	55.60
Return on Equity (%)	36.41	17.32	15.95	15.07	14.00
Percent of Export Sales (%)	100.00	100.00	100.00	100.00	100.00
CashFlow/Sales	0.27	0.18	0.10	0.18	0.18
Debt Service Cover Ratio	2.25	1.61	0.96	3.34	0.00
Acid Test	2.27	2.41	3.02	11.08	15.72
Current Ratio	2.51	2.66	3.41	12.14	16.78

Item	Year11	Year12	Year13	Year14	Year15
Return on Investment (%)	68.94	90.70	123.49	130.76	138.95
Return on Equity (%)	13.06	12.25	14.39	13.21	12.21
Percent of Export Sales (%)	100.00	100.00	100.00	100.00	100.00
CashFlow/Sales	0.18	0.18	0.15	0.15	0.41
Debt Service Cover Ratio	0.00	0.00	0.00	0.00	0.00
Acid Test	20.36	25.00	28.53	32.05	35.58
Current Ratio	21.42	26.06	29.59	33.12	36.64

SUMMARY INDICATORS

Net Present Value of the Project	3554.00
I.R.R. of the Project	17.70
Net Present Value of the Equity	4045.00
I.R.R. of the Equity	24.32
Sales/Investment	1.24
Investment/Employees	10.06
Break Even Point	49.60
Investment Pay-back (undiscounted)	7.00
Investment Pay-back (discounted)	10.00