TNB02: Market Research Report

TOPSIM - General Management

Standard Scenario 8 Periods v15.3

Company 5

MARKET 1: CLASSIC

	Price	Deviation Price	Technolog	y Ecology	Advertisin	g Sales Employees	Customer Satis- faction	Awareness	Sales	Revenue Market	Market Share
	EUR	%	Index	Index	mEUR	Employees	Index	Index	Units	mEUR	%
C1	3,099	0.36	102.45	105.37	6.50	100.00	74.92	57.59	39,000	120.86	17.66
C2	3,150	2.01	102.59	105.37	7.00	110.00	72.22	59.47	45,740	144.08	21.05
C3	2,910	-5.76	102.66	104.77	7.00	120.00	79.58	57.22	48,696	141.71	20.70
C4	3,000	-2.84	102.45	104.39	6.00	105.00	80.30	56.47	46,000	138.00	20.16
C5	3,280	6.22	103.01	104.77	7.50	115.00	68.71	57.89	42,656	139.91	20.44
Ø / Sum	3,088		102.63	104.93	6.80	110.00	75.15	57.73	222,092	684.56	

OTHER MARKETS

	Bulk Buyer Classic	Requests for Bids Classic
	Units	Offer in EUR
C1	0	0.00
C2	0	0.00
C3	4,000	0.00
C4	5,000	0.00
C5	0	0.00

1. Production Lines

	Aquisition Period	Aquisition Value	Remaining Running Time	Depreciation	Net Book Value	Other Fixed Costs	Residual Earnings
		mEUR	Periods	mEUR / Period	mEUR	mEUR	% from Book Value
Type A Line Nr. 1	-8	12.50	0	1.25	0.00	1.50	20.0
Type A Line Nr. 2	-7	15.00	1	1.50	1.50	1.00	20.0
Type A Line Nr. 3	-6	20.00	2	2.00	4.00	0.50	20.0
Type A Line Nr. 4	-5	20.00	3	2.00	6.00	0.25	20.0
Total		67.50		6.75	11.50	3.25	

	Normal Capacity		Maintenance	Rationalization	Available Capacity	Environmental Index
	Units	mEUR	Factor	Factor	Units	Index
Type A Line Nr. 1	8,000	1.00	0.95	1.04	7,901	83.0
Type A Line Nr. 2	9,000	1.00	0.95	1.04	8,889	90.0
Type A Line Nr. 3	11,500	1.00	0.95	1.04	11,358	95.0
Type A Line Nr. 4	13,500	1.00	0.95	1.04	13,334	98.0
Total / Average	42,000	4.00			41,483	91.5

	Machine Type	Index
Rationalization Index	Type A	1.04
Rationalization Index	Туре В	1.00
Rationalization Index	Type C	1.00

2. Production Staff

	Current Period	Previous Period
Workforce	850	852
- Absenteeism	33	47
= Available Staff	817	805
New Employees (%)	4.69	5.86
Process Optimization (mEUR)	0.00	0.00
Training Expenses per Employee (EUR)	1,250	1,000
Staff Motivation (Index)	58.8	56.5
Adaptation Index	1.01	1.00
x Process Optimization Index	1.00	1.00
x Staff Qualification Index	1.01	1.00
x Factor Motivation	1.01	1.00
= Productivity Index I	1.03	1.00

		Classic
Cumulated Production up to Previous Period		40,000
Productivity Index II		1.00
		Classic
Basic Productivity (Units / Period)		50.00
× Productivity Index I		1.03
× Productivity Index II		1.00
= Productivity (Units / Period)		51.56
3. Utilization Production		
STAFF		
	Classic	Total
Available Staff (without Overtime)		817
Available Staff (Including Overtime)	898.70	
Productivity (Units / Period)	51.56	
Planned Production Quantity	42,000	
Actual Production Quantity	42,000	
Deployed Staff (Including Overtime)	814.51	
Utilization of Staff (%)		99.7
PRODUCTION LINES		
	Classic	Total
Available Production Capacity (without Overtime)		41,483
Available Production Capacity (Including Overtime)	45,631	
Production Line Capacity Needed per Finished Product	1.00	
Planned Production Quantity	42,000	
Actual Production Quantity	42,000	
Used Production Capacity	42,000	
Utilization of Production Lines (%)		101.2
4. Environmental Index		
Environmental Ratings of Production Lines	(Index)	91.5
Cumulated Investment in Environmental Equipment	(mEUR)	3.50
Improvement of Environmental Ratios	(Points)	3.2
Environmental Damage Indicator for the Company	(Index)	94.7
Environmental Tax	(mEUR)	1.06

TNB4: Research & Development

TOPSIM - General Management

Standard Scenario 8 Periods v15.3

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TECHNOLOGY

		Investments (mEUR)	Index
	Period	Cumulated	
COPY Classic Gen. 1	1.94	3.48	103.01
ECOLOGY			
		Investments (mEUR)	Index
	Period	Cumulated	
COPY Classic Gen. 1	2.70	5.20	104.77
VALUE ANALYSIS			
		Investments (mEUR)	Index
	Period	Cumulated	
COPY Classic Gen. 1	1.00	2.00	1.02

0.98

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INPUT MATERIALS/PARTS COPY CLASSIC

Total

	Quantity		Inventory
	Units	EUR/Units	mEUR
Initial Inventory	15,000	527.27	7.91
+ Quantity from Supplier	37,000	550.00	20.35
+ Express Delivery	0	780.00	0.00
- Quantity Used in Production	41,176	543.44	22.38
= Final Inventory	10,824	543.44	5.88
FINISHED PRODUCTS COPY CLASSIC	Quantity	EUDAL :	Inventory
	<u> </u>		
	Units	EUR/Units	mEUR
Initial Inventory	5,000	2,046.86	10.23
+ Quantity produced	42,000	2,014.21	84.60
- Quantity distr buted	42,656	2,017.68	86.07
= Final Inventory	4,344	2,017.68	8.76
STORAGE COSTS			
			mEUR
Input Materials/Parts COPY Classic		_	0.54
Finished Products COPY Classic			0.43

	Purchasing	Administration	Production	R&D	Sales	Total
Initial Workforce	18	208	852	35	100	1,213
+ Hires	4	13	40	9	23	89
- Dismissals	0	0	0	0	0	0
- Attrition	1	7	42	1	8	59
= Final Workforce	21	214	850	43	115	1,243
Wages/Salaries (mEUR) (*)	0.65	6.21	26.35	1.94	4.72	39.86
Recruitment/Dismissals/Training (mEUR)	0.05	0.16	1.56	0.11	0.29	2.18
Non-Salary Staff Costs (mEUR) (*)	0.27	2.61	11.07	0.81	1.98	16.74
Pension Reserves (mEUR) (*)	0.03	0.31	1.32	0.10	0.24	1.99
Total Staffing Costs (mEUR)	1.01	9.29	40.30	2.96	7.22	60.76
Additional Dismissal Costs (mEUR)	0.00	0.00	0.00	0.00	0.00	0.00
Training (Production) (mEUR)			1.06			
Non-Salary Staff Costs in % of Salaries						42.00
(*) Without Overtime Costs						

TNB7: Cost Type Accounting

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	Total	Overhead	Direct Costs
	- <u> </u>		Classic
Material Costs			
Input Materials / Parts	22.38	0.00	22.38
Factory Materials	1.93	0.00	1.93
Staffing Costs			
Wages / Salaries (*)	39.86	14.61	25.25
Recruitment / Dismissals / Training	2.18	2.18	0.00
Additional Dismissal Costs	0.00	0.00	0.00
Non-Salary Staff Costs	16.74	6.13	10.60
Pension Reserves	1.99	0.73	1.26
Depreciation			
Buildings	0.25	0.25	0.00
Production Lines	6.75	6.75	0.00
Environ. Techn.	0.35	0.35	0.00
Finished Products	0.00	0.00	0.00
Other Costs			
Other Fixed Costs	3.25	3.25	0.00
Maintenance / Rationalization	6.20	6.20	0.00
Process Optimization	0.00	0.00	0.00
Environmental Tax	1.06	1.06	0.00
Rework / Scrap	1.65	0.00	1.65
Storage Costs	0.98	0.98	0.00
Advertising / Market Research / CI	9.80	2.30	7.50
Other Costs R&D	3.70	0.00	3.70
Transport Costs	1.07	0.00	1.07
Total	120.12	44.78	75.34
(*) with Overtime Costs			

TNB8: Cost Center Accounting

TOPSIM - General Management

Standard Scenario 8 Periods v15.3

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	Total	Purchasing	Production	R&D	Sales	Administration
Material Costs				· · · · · · · · · · · · · · · · · · ·		
Input Materials / Parts	0.00	0.00	0.00	0.00	0.00	0.00
Factory Materials	0.00	0.00	0.00	0.00	0.00	0.00
Staffing Costs						
Wages / Salaries (*)	14.61	0.65	1.10	1.94	4.72	6.21
Recruitment / Dismissals / Training	2.18	0.05	1.56	0.11	0.29	0.16
Additional Dismissal Costs	0.00	0.00	0.00	0.00	0.00	0.00
Non-Salary Staff Costs	6.13	0.27	0.46	0.81	1.98	2.61
Pension Reserves	0.73	0.03	0.06	0.10	0.24	0.31
Depreciation						
Buildings	0.25	0.01	0.18	0.01	0.01	0.04
Production Lines	6.75	0.00	6.75	0.00	0.00	0.00
Environ. Techn.	0.35	0.00	0.35	0.00	0.00	0.00
Finished Products	0.00	0.00	0.00	0.00	0.00	0.00
Other Costs						
Other Fixed Costs	3.25	0.00	3.25	0.00	0.00	0.00
Maintenance / Rationalization	6.20	0.00	5.20	0.00	0.00	1.00
Process Optimization	0.00	0.00	0.00	0.00	0.00	0.00
Environmental Tax	1.06	0.00	1.06	0.00	0.00	0.00
Rework / Scrap	0.00	0.00	0.00	0.00	0.00	0.00
Storage Costs	0.98	0.54	0.00	0.00	0.43	0.00
Advertising / Market Research / CI	2.30	0.00	0.00	0.00	2.30	0.00
Other Costs R&D	0.00	0.00	0.00	0.00	0.00	0.00
Transport Costs	0.00	0.00	0.00	0.00	0.00	0.00
Total Costs	44.78	1.56	19.96	2.97	9.97	10.32

(*) with Overtime Costs

Company 5

TOTAL (MEUR)

Cost Center	Allocation	Total	Classic
+ Purchasing	Direct Costs	24.31	24.31
+ Purchasing	Overhead	1.56	1.56
+ Production	Direct Costs	38.76	38.76
+ Production	Overhead	19.96	19.96
= Cost of Goods Manufactured		84.60	84.60
+/- Increase/Decrease in Finished Goods Inventory		1.47	1.47
= Cost of Sales		86.07	86.07
+ R&D	Direct Costs	3.70	3.70
+ R&D	Overhead	2.97	2.97
+ Sales	Direct Costs	8.57	8.57
+ Sales	Overhead	9.97	9.97
+ Administration	Direct Costs	0.00	0.00
+ Administration	Overhead	10.32	10.32
= Cost of Goods Sold		121.59	121.59

PER UNIT (EUR)

Cost Center	Allocation	Classic
+ Purchasing	Direct Costs	578.78
+ Purchasing	Overhead	37.16
+ Production	Direct Costs	922.95
+ Production	Overhead	475.32
= Cost of Goods Manufactured (*)		2,014.21
= Cost of Sales (**)		2,017.68
+ R&D	Direct Costs	86.74
+ R&D	Overhead	69.61
+ Sales	Direct Costs	200.83
+ Sales	Overhead	233.62
+ Administration	Direct Costs	0.00
+ Administration	Overhead	242.00
= Cost of Goods Sold (**)		2,850.49

 $(\mbox{\ensuremath{^{\star}}})$ The Cost of Goods Manufactured is set in proportion to the quantity produced.

 $^{(\}ensuremath{^{\star\star}})$ The Cost of Sales is set in proportion to the quantity sold.

Company 5

COPY CLASSIC - CONTRIBUTION MARGIN TOTAL (MEUR)

		Market 1	Bulk Buyer	Requests for Bids	Market 2	Special Market	Total
	Sales Revenue	139.91	0.00	0.00	0.00	0.00	139.91
-	Direct Material Costs	24.67	0.00	0.00	0.00	0.00	24.67
-	Direct Production Costs	39.26	0.00	0.00	0.00	0.00	39.26
-	Transport Costs	1.07	0.00	0.00	0.00	0.00	1.07
=	Contribution Margin I	74.92	0.00	0.00	0.00	0.00	74.92
-	Fixed Material Costs	1.59	0.00	0.00	0.00	0.00	1.59
-	Fixed Production Costs	20.54	0.00	0.00	0.00	0.00	20.54
=	Contribution Margin II	52.78	0.00	0.00	0.00	0.00	52.78
-	Advertising Costs	7.50	0.00	0.00	0.00	0.00	7.50
=	Contribution Margin III	45.28	0.00	0.00	0.00	0.00	45.28
-	Development Costs	3.70	0.00	0.00	0.00	0.00	3.70
=	Contribution Margin IV	41.58	0.00	0.00	0.00	0.00	41.58
-	Research Costs						2.97
-	Sales Costs						9.97
-	Administration Costs						10.32
=	Contribution Margin V						18.32

COPY CLASSIC - CONTRIBUTION MARGIN ACCOUNTING PER UNIT (EUR)

		Market 1	Bulk Buyer	Requests for Bids	Market 2	Special Market	ø-Value
	Price	3,280.00	0.00	0.00	0.00	0.00	3,280.00
-	Direct Material Costs	578.44	0.00	0.00	0.00	0.00	578.44
-	Direct Production Costs	920.28	0.00	0.00	0.00	0.00	920.28
-	Transport Costs	25.00	0.00	0.00	0.00	0.00	25.00
=	Contribution Margin I	1,756.28	0.00	0.00	0.00	0.00	1,756.28
-	Fixed Material Costs	37.33	0.00	0.00	0.00	0.00	37.33
-	Fixed Production Costs	481.63	0.00	0.00	0.00	0.00	481.63
=	Contribution Margin II	1,237.32	0.00	0.00	0.00	0.00	1,237.32
-	Advertising Costs	175.83	0.00	0.00	0.00	0.00	175.83
=	Contribution Margin III	1,061.49	0.00	0.00	0.00	0.00	1,061.49
-	Development Costs	86.74	0.00	0.00	0.00	0.00	86.74
=	Contribution Margin IV	974.75	0.00	0.00	0.00	0.00	974.75
-	Research Costs						69.61
-	Sales Costs						233.62
-	Administration Costs						242.00
=	Contribution Margin V						429.51

TNB11: Profit and Loss Statement

TOPSIM - General Management

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Total Cost Accounting		Cost of Sales Accounting	
	mEUR		mEUR
Sales Revenue	139.91	Sales Revenue	139.91
+ Other Income	0.00	+ Other Income	0.00
+ Increase / Decrease of the Stock of Finished Products	-1.47	- Cost of Goods Sold	86.07
- Material Expenses	24.31	- R&D	6.67
- Personnel Costs	-	- Sales	18.53
- Wages / Salaries	39.86	- Administration	10.32
- Hires / Dismissals	1.11	- Other Expenses	0.00
- Pension Reserves	1.99		
- Other Staffing Costs	17.80		
- Depreciation	7.35		
- Other Expenses	27.70		
= Operating Income	18.32	= Operating Income	18.32
+ Investment Income			mEUR 0.00
+ Investment Income			0.00
- Interests for Short- and Long-term Loans			2.31
- Interests for Overdraft Loan			0.00
= Financial Result			-2.31
= Earnings before Tax			16.01
- Income Tax			7.21
= Net Income/ Net Loss			8.81
Appropriation of Net Income			
			mEUR
Income/Loss carried forward			6.27
- Dividend Payment Current Period			1.00
= Cumulated Incomes/Losses brought for	ward		5.27
+ Net Income/ Net Loss			8.81
= Income/Loss carried forward			14.08

	mEUR
Initial Cash Balance	0.85
CASH INFLOWS	
	mEUR
Cash Inflows from Sales Current Period	
Cash Inflows from Sales Previous Period	25.80
Sale of Securities	0.00
Interest Income	0.00
Other Income / Capital Increase	0.00
Disinvestment of Production Lines	0.00
Short-Term and Long-Term Loans	33.00
Special Market Proceeds	0.00
Overdraft Loans	0.00
Total Cash Inflows	170.73
CASH OUTFLOWS	
	mEUR
Purchase: Input / Operating Materials, Finished Products	22.28
Subcontracting	0.00
Personnel Costs (without pension reserves)	58.77
Other Expenses	27.70
Short-Term & Overdraft Loan Repayment	27.00
Interest Costs Short-Term & Long-Term Loans	2.31
Purchase of Production Lines	0.00
Purchase of Securities	0.00
Purchase of Environmental Equipment	2.00
Dividend Payment	1.00
Charge-Off	0.00
Income Tax	7.21
Interest Payment for Overdraft Loans	0.00
Total Cash Outflows	148.27
Final Cash Balance	23.32
Payment Conditions	
•	% in the actual period
Customers Products (Cash Inflows)	80.0
Supplier Input Materials COPY Classic (Cash Outflows)	100.0

TOPSIM - General Management

Standard Scenario 8 Periods v15.3

	mEUR
Net Income/ Net Loss	8.81
+ Depreciation on Fixed Assets	7.35
+ Increase in Pension Reserves	1.99
Traditional Cash-Flow	18.15
+ Increase (-) / Reduction (+) Inventories of Materials	2.03
+ Increase (-) / Reduction (+) Inventories of Finished Products	1.47
+ Increase (-) / Reduction (+) Inventories of Accounts Receivable	-2.18
A. Operating Cash-Flow	19.46
+ Investments in Production Lines	-2.00
B. Cash-Flow from Investment Activities	-2.00
+ Capital Increases	0.00
+ Payment Dividends from Prev. Period	-1.00
+ Increase (-) / Reduction (+) of Securities	0.00
+ Increase (+) / Reduction (-) of Bank Liabilities	6.00
C. Cash-Flow from Financing Activities	5.00
D. Change in Cash Position (A+B+C)	22.46
Free Cash-Flow (A+B)	17.46

Assets (mEUR)			Liabilities (mEUR)		
	Current Period	Previous Period		Current Period	Previous Period
Fixed Assets		27.35	Equity		31.27
Property and Buildings	7.50	7.75	Share Capital	15.00	15.00
Machines and Production Facilities		19.60	Capital Reserves	2.50	2.50
Current Assets	65.95	44.80	Retained Earnings	7.50	7.50
Input Materials		7.91	Profit / Loss Carried Forward		2.00
Finished Products		10.23	Net Income / Loss	8.81	4.27
Trade Receivables	27.98	25.80			
Securities	0.00	0.00	Pension Reserves		13.87
Cash Balance		0.85	Liabilities	33.00	27.00
			Long-term Loans > 5 Periods	0.00	0.00
			Short-Term Loans < 1 Period	33.00	27.00
			Overdraft Loans	0.00	0.00
Balance Sheet Total		72.15	Balance Sheet Total		72.15