# **Pre-Feasibility Study**

## ELECTRICAL FITTINGS MANUFACTURING UNIT



# **Small and Medium Enterprises Development Authority**

# Ministry of Industries & Production Government of Pakistan

www.smeda.org.pk

#### **HEAD OFFICE**

4th Floor, Building No. 3, Aiwan-e-Iqbal Complex, Egerton Road, Lahore
Tel: (92 42) 111 111 456, Fax: (92 42) 36304926-7 helpdesk@smeda.org.pk

REGIONAL OFFICE	REGIONAL OFFICE	REGIONAL OFFICE	REGIONAL OFFICE
PUNJAB	SINDH	KPK	BALOCHISTAN
3 <sup>rd</sup> Floor, Building No. 3,	5 <sup>TH</sup> Floor, Bahria	Ground Floor	Bungalow No. 15-A
Aiwan-e-Iqbal Complex,	Complex II, M.T. Khan Road,	State Life Building	Chaman Housing Scheme
Egerton Road Lahore,	Karachi.	The Mall, Peshawar.	Airport Road, Quetta.
Tel: (042) 111-111-456	Tel: (021) 111-111-456	Tel: (091) 9213046-47	Tel: (081) 831623, 831702
Fax: (042) 36304926-7	Fax: (021) 5610572	Fax: (091) 286908	Fax: (081) 831922
helpdesk.punjab@smeda.org.pk	helpdesk-khi@smeda.org.pk	helpdesk-pew@smeda.org.pk	helpdesk-qta@smeda.org.pk

#### December 2017

# **TABLE OF CONTENTS**

DISC	CLAIMER	3
EXE	CUTIVE SUMMARY	4
-		
CRIT		
GEC	GRAPHICAL POTENTIAL FOR INVESTMENT	8
POT	ENTIAL TARGET MARKETS / CITIES	8
PRO	JECT COST SUMMARY	8
9.1	PROJECT ECONOMICS	9
9.2		
9.3	PROJECT COST	9
9.4	SPACE REQUIREMENT	10
9.5		
9.6		
9.7		
-		
USE	FUL WEB LINKS	14
2 ANN	EXURE	15
12.1	INCOME STATEMENT	15
12.2		
12.3	Cash Flow Statement	17
<b>KEY</b>		
13 1	OPERATING COST ASSUMPTIONS	18
	EXE INTE PUR 5.1 5.2 CRI 7 9.1 9.3 9.4 9.5 9.7 9.8 9.11 12.2 3 KEY 13.3 KEY 13.3 13.3	5.2 INSTALLED AND OPERATIONAL CAPACITIES  CRITICAL FACTORS  GEOGRAPHICAL POTENTIAL FOR INVESTMENT  POTENTIAL TARGET MARKETS / CITIES  PROJECT COST SUMMARY  9.1 PROJECT ECONOMICS  9.2 PROJECT FINANCING  9.3 PROJECT COST  9.4 SPACE REQUIREMENT  9.5 MACHINERY & EQUIPMENT  9.6 FURNITURE & FIXTURES REQUIREMENT  9.7 OFFICE EQUIPMENT REQUIREMENT  9.8 VEHICLES  9.9 HUMAN RESOURCE REQUIREMENT  9.10 RAW MATERIAL REQUIREMENT  9.11 REVENUE GENERATION  9.12 UTILITIES AND OTHER COSTS  10 CONTACT DETAILS OF GOVT. INSTITUTIONS / EXPERTS  11 INCOME STATEMENT  12.1 INCOME STATEMENT  12.2 BALANCE SHEET  12.3 CASH FLOW STATEMENT  13.1 OPERATING COST ASSUMPTIONS  13.1 OPERATING COST ASSUMPTIONS  13.1 OPERATING COST ASSUMPTIONS



## 1 DISCLAIMER

This information memorandum is to introduce the subject matter and provide a general idea and information on the said matter. Although, the material included in this document is based on data / information gathered from various reliable sources; however, it is based upon certain assumptions, which may differ from case to case. The information has been provided on as is where is basis without any warranties or assertions as to the correctness or soundness thereof. Although, due care and diligence has been taken to compile this document, the contained information may vary due to any change in any of the concerned factors, and the actual results may differ substantially from the presented information. SMEDA, its employees or agents do not assume any liability for any financial or other loss resulting from this memorandum in consequence of undertaking this activity. The contained information does not preclude any further professional advice. The prospective user of this memorandum is encouraged to carry out additional diligence and gather any information which is necessary for making an informed decision, including taking professional advice from a qualified consultant / technical expert before taking any decision to act upon the information.

For more information on services offered by SMEDA, please contact our website: <a href="https://www.smeda.org.pk">www.smeda.org.pk</a>

## **Document Control**

Document No.	PREF-NO 33
Revision	No. 2
Prepared by	SMEDA-Punjab
Revision Date	December 2017
For information	janjua@smeda.org.pk

## 2 EXECUTIVE SUMMARY

This document provides details regarding setting up Electrical Fittings Manufacturing Unit. The unit will be capable of producing on average 408 dozen of electric fittings per day. The market for electric fittings and accessories primarily consists of households, offices and other commercial buildings. The demand of electric fittings accessories are continuously arising due to the construction of new residential societies and commercial buildings.

The proposed Electrical Fittings Manufacturing business involves a total investment of about Rs. 5.61 million. This includes capital investment of Rs. 3.31 million and Rs. 2.30 million as initial working capital. The project is financed through 50% debt and 50% equity. The Net Present Value (NPV) of the project is around Rs. 5.72 million with an Internal Rate of Return (IRR) of 32% and a payback period of 4.14 years.

The project will provide employment opportunities to 7 people. Apart from this, additional labor on daily wages, will also be engaged during production. Higher return on investment and a steady growth of business is expected with the entrepreneur having some prior experience or education in the related field of business. The legal business status of this project is proposed as 'Sole Proprietorship'.

## 3 INTRODUCTION TO SMEDA

The Small and Medium Enterprises Development Authority (SMEDA) was established in October 1998 with an objective to provide fresh impetus to the economy through development of Small and Medium Enterprises (SMEs).

With a mission "to assist in employment generation and value addition to the national income, through development of the SME sector, by helping increase the number, scale and competitiveness of SMEs", SMEDA has carried out 'sectoral research' to identify policy, access to finance, business development services, strategic initiatives and institutional collaboration and networking initiatives.

Preparation and dissemination of prefeasibility studies in key areas of investment has been a successful hallmark of SME facilitation by SMEDA.

Concurrent to the prefeasibility studies, a broad spectrum of business development services is also offered to the SMEs by SMEDA. These services include identification of experts and consultants and delivery of need based capacity building programs of different types in addition to business guidance through help desk services.



## 4 PURPOSE OF THE DOCUMENT

The objective of the pre-feasibility study is primarily to facilitate potential entrepreneurs in project identification for investment. The project pre-feasibility may form the basis of an important investment decision and in order to serve this objective, the document / study covers various aspects of project concept development, start-up, and production, marketing, finance and business management.

The purpose of this document is to facilitate potential investors in **Electrical Fittings Manufacturing Unit** by providing them with a general understanding of the business with the intention of supporting potential investors in crucial investment decisions.

The need to come up with pre-feasibility reports for undocumented or minimally documented sectors attains greater imminence as the research that precedes such reports reveal certain thumb rules; best practices developed by existing enterprises by trial and error, and certain industrial norms that become a guiding source regarding various aspects of business set-up and it's successful management.

Apart from carefully studying the whole document one must consider critical aspects provided later, which form basis of any investment decision.

## 5 BRIEF DESCRIPTION OF PROJECT & PRODUCT

Electric fittings industry consists of the units manufacturing of all kinds of electrical accessories such as Switch, Socket, Power Plug, Bell Push, Holders, Fan Dimmers, etc. The market for electric fittings and accessories primarily consists of households, offices and other commercial buildings. The market demand is generally divided into two segments. One is electric fittings accessories, required by the newly construction houses, offices and other commercial buildings. The other one is the replacement market that requires continuous up keep of already installed electric fittings. This segment of the market is much larger than the first one and offers substantial sales potential in Pakistan.

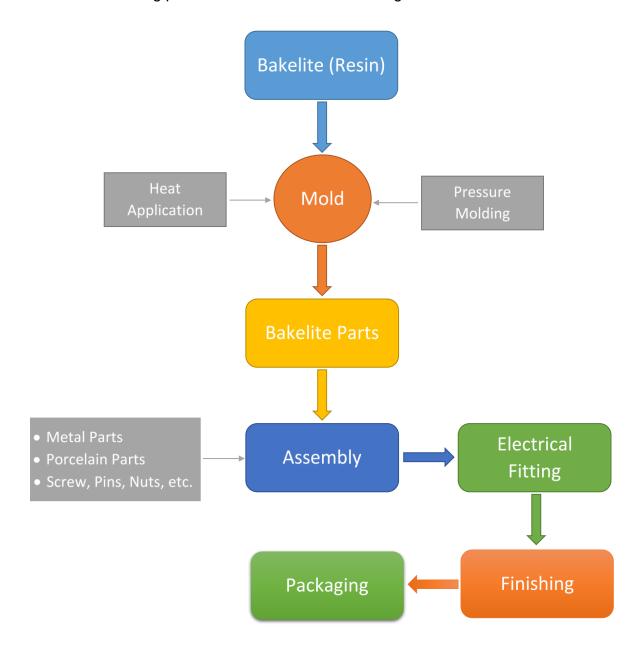
Currently, the manufacturing of electric fittings is highly concentrated in the unorganized sector with only a couple of big recognized brands. The manufacturing is predominately concentrated in three cities namely Sargodha, Lahore and Karachi.



December 2017

## 5.1 Production Process Flow

The manufacturing process for all the electrical fittings is more or less the same.



A measured quantity of Bakelite resin is poured into the mold / dye fixed on a hydraulic press. The press has arrangements of two gas burners, one placed below the mould and other on top. Once the Bakelite powder is poured into the mould, burners are switched on and the press is locked manually. Each product takes specific amount of time to take the desired shape and strength. A small miscalculation on this stage can lead to disfigured or products with less than desired strength. Once the products take its final shape, the press is lifted and the

6

finished product is taken out, either manually or through an inbuilt mechanism in the mould.

At this stage, different metal parts including pipes and pins are attached to the main body of the products. Moreover, most electrical fitting products are composed of more than two components. Therefore different parts are also attached at this stage with the help of screws and nuts. Now the product is ready for final finishing to chop off any lose raw material and packaging.

## 5.2 Installed And Operational Capacities

The proposed manufacturing unit will have capacity to produce 122,400 dozen of different electrical fittings in a year. However, in year 1 the unit will operate at 75% of its installed capacity and produce 91,800 dozen of electrical fittings. The product wise installed and operational capacity of the unit is provided in table below;

Installed **Operational Description Production** Capacity @ 75% -Year 1 (Dozen) Capacity (Dozen)\* 3 Pin Shoe 7.200 5,400 **Button Holder** 18,000 13,500 Holder 7,200 5,400 **Key Holder** 14,400 10,800 7.200 Piano Light 5,400 Piano Socket 7,200 5,400 Piano Switch 7.200 5.400 18,000 Single Adapter 13,500 21,600 16,200 Special Holder **Teddy Switch** 14,400 10,800 Total 122,400 91,800

**Table 1: Installed and Operational Capacity** 

## 6 CRITICAL FACTORS

The following significant factors may be taken into account while making investment decision:

- ⇒ Technical know-how and relevant experience of entrepreneur.
- ⇒ Availability of skilled labor having technical expertise.



<sup>\*</sup> Based on 300 operational days

- ⇒ Ability to generate work orders through industrial networking, direct marketing and negotiating long term contracts.
- ⇒ Selection of appropriate machinery, technology and human resources would be required to run project successfully.
- ⇒ Stringent supervision of the production process at every level; utilization of job costing and job card with technical specifications sheet.
- ⇒ Higher return on investment and a steady growth of business is closely associated with regular training and capacity building of the entrepreneur and employees.
- ⇒ The most important factor for the success of the project would be the quality products and customer satisfaction in order to get a comparative advantage.

## 7 GEOGRAPHICAL POTENTIAL FOR INVESTMENT

For the success of the project, it is important to find a location preferably in an industrial cluster where utilities especially electricity and other infrastructure are conveniently available. Presently, Gujrat, Gujranwala, Lahore, Karachi are the centers of Electric Fittings manufacturing in Pakistan.

Therefore, these industrial clusters are most suitable locations to house the proposed project. Establishing the unit in stated cities would have an advantage of being close to large buyers, which may lead to consistent orders and referrals. Additionally, these cities have adequate availability of skilled labor, raw material and other support infrastructure.

## 8 POTENTIAL TARGET MARKETS / CITIES

Major target market for proposed unit includes houses, offices and other commercial buildings as the demand for electric fittings are always there, either, new constructions or maintenance market of the metropolitan and other big cities. These are the major target markets for the proposed unit due to continual growth and rise of both commercial and domestic buildings.

## 9 PROJECT COST SUMMARY

A detailed financial model has been developed to analyze the commercial viability of this Electrical Fittings Manufacturing Unit. Various costs and revenue related assumptions along with results of the analysis are outlined in this section.



The projected Income Statement, Cash Flow Statement and Balance Sheet are also attached as annexure.

## 9.1 Project Economics

All the figures in this financial model have been calculated for estimated sales of Rs. 20.51 million in the year one. The capacity utilization during year one is worked out at 75% with 5% increase in subsequent years up to the maximum capacity utilization of 95%.

The following table shows internal rate of return, payback period and net present value of the proposed venture

**Table 2: Project Economics** 

Description	Details
Internal Rate of Return (IRR)	32%
Payback Period (Yrs.)	4.14
Net Present Value (Rs.)	5,717,041

## 9.2 Project Financing

Following table provides details of the equity required and variables related to bank loan;

**Table 3: Project Financing** 

Description	Details
Total Equity (50%)	Rs. 2,803,933
Bank Loan (50%)	Rs. 2,803,933
Markup to the Borrower (%age / annum)	12%
Tenure of the Loan (Years)	05 Years

## 9.3 Project Cost

Following fixed and working capital requirements have been identified for operations of the proposed business.

**Table 4: Project Cost** 

Description	Amount Rs.
Capital Cost	
Machinery & equipment	1,978,500



Furniture & fixtures	897,500
Office vehicles	217,350
Office equipment	54,000
Pre-operating costs	158,000
Total Capital Costs	3,305,350
Working Capital	
Raw material inventory*	1,103,744
Upfront building rent	720,000
Cash	478,772
Total Working Capital	2,302,516
Total Investment	5,607,866

<sup>\* 1</sup> month inventory is taken in Initial Working Capital.

## 9.4 Space Requirement

Approximately 3,000 square feet area will be acquired on rent in any commercial / industrial area. The rent for the facility is proposed as Rs. 60,000 per month. The rented facility should have electricity and water connection.

## 9.5 Machinery & Equipment

Machinery and equipment for the proposed project are stated below:

**Table 5: Machinery & Equipment Requirement** 

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Hydraulic Presses	2	150,000	300,000
Cutting Presses	2	22,000	44,000
Bending Presses	2	22,000	44,000
Drill Machines	1	20,000	20,000
Molding, Cutting & Bending Dyes			349,500
Leathe Machines	1	160,000	160,000
Shaper	1	100,000	100,000
Drill Machines	1	35,000	35,000
Milling Machine	1	65,000	65,000
Grinder	1	6,000	6,000
Instruments	-	5,000	5,000
Generator - 25 kVA	1	850,000	850,000
Total			1,978,500



## 9.6 Furniture & Fixtures Requirement

Details of the furniture and fixture required for the project are given below:

**Table 6: Furniture & Fixtures Requirement** 

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Misc. Furniture			200,000
LED	30	250	7,500
Exhaust Fan	5	3,000	15,000
Ceiling Fan	5	3,000	15,000
Air conditioner	1	60,000	60,000
Building Renovation Cost	3,000	200	600,000
Total Furniture & Fixtures			897,500

## 9.7 Office Equipment Requirement

Following office equipment will be required for the said unit;

**Table 7: Office Equipment Requirement** 

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Computer with UPS	1	30,000	30,000
Computer printer (s)	1	20,000	20,000
Telephones	2	2,000	4,000
Total Office Equipment			54,000

#### 9.8 Vehicles

3 bikes will be purchased for travelling and other business operations. The cost of bikes is estimated at Rs. 217,350.

## 9.9 Human Resource Requirement

The below table provides details of human resource required to run the unit smoothly. Salaries of all employees are estimated to increase at 10% annually.

**Table 8: Human Resource Requirment (Year 1)** 

Description	No. of Employees	Monthly Salary per person (Rs.)
Manager Production	1	35,000
Production in-charge	1	25,000
Moulder	1	18,000
Sales man	2	25,000



Purchaser	1	20,000
Accountant	1	25,000
Total	7	

## 9.10 Raw Material Requirement

Raw Material like Nut, Pipe, Pin, Bush, Vasher, Point, Screw, Powder, Spring, Metal Strips, Packing, etc. will be used in manufacturing of the electrical fittings. The detail of Cost of Electrical Fittings produced for the year 1 is given in table below;

**Table 9: Raw Material Requirement** 

Description	Operational Capacity @ 75% - Year 1 (Dozen)	Cost per Dozen*	Total Cost (Rs.)
3 Pin Shoe (15 a)	5,400	231	1,249,110
Button Holder	13,500	162	2,193,723
Holder	5,400	165	890,770
Key Holder	10,800	192	2,073,456
Piano Light	5,400	95	515,268
Piano Socket	5,400	84	454,176
Piano Switch	5,400	158	853,308
Single Adapter	13,500	90	1,209,038
Special Holder	16,200	158	2,563,218
Teddy Switch (5 a)	10,800	115	1,242,864
Total	91,800		13,244,930

<sup>\*</sup> Cutting, Molding, Material and Labor Cost included.

## 9.11 Revenue Generation

Sales revenue during the first year of operations are estimated as under;

Table 10: Revenue Generation - Year 1

Description	Operational Capacity @ 75% - Year 1 (Dozen)	Sale Price per Dozen (Rs.)	Revenue (Rs.)
3 Pin Shoe	5,400	425	2,295,000
Button Holder	13,500	299	4,033,350
Holder	5,400	318	1,718,100
Key Holder	10,800	285	3,078,000
Piano Light	5,400	188	1,012,500
Piano Socket	5,400	127	684,000
Piano Switch	5,400	198	1,066,500



Total	91,800		20,505,150
Teddy Switch	10,800	197	2,122,200
Special Holder	16,200	238	3,847,500
Single Adapter	13,500	48	648,000

## 9.12 Utilities and Other Costs

An essential cost to be borne by the project is the direct electricity expenses, including generator expenses, which are estimated to be around Rs. 2.10 million in year one, with 10% increase in subsequent years. Furthermore, promotional expense being essential for marketing of the proposed unit is estimated as 1% of revenues.

# 10 CONTACT DETAILS OF RAW MATERIAL SUPPLIER / CONSULTANT

Consultant / Raw Material Supplier	Contact
Ch. Fazal Elahi Al Fazal Electric trader Azam Market, Eid Ghah Sargodha	0300-6010149
Mr. Khalid Billah Muaz Backlite Block 23, Eid Gah Road, Azam Market, Sargodha	0483-710731 0300-9603125
Sh. Naeem Vohra Zain Trader Saeed Bagh Fatima Jinah Road, Sargodha	0300-9601066
Ch. Awais Raheed M R Traders Azam Market, Eid Ghah Road, Sargodha	0321-6013396



# 11 USEFUL WEB LINKS

Small & Medium Enterprises Development Authority (SMEDA)	www.smeda.org.pk
Government of Pakistan	www.pakistan.gov.pk
Ministry of Industries & Production	www.moip.gov.pk
Government of Punjab	www.punjab.gov.pk
Government of Sindh	www.sindh.gov.pk
Government of Khyber Pakhtunkhwa	www.khyberpakhtunkhwa.g ov.pk
Government of Baluchistan	www.balochistan.gov.pk
Government of Gilgit Baltistan	www.gilgitbaltistan.gov.pk
Government of Azad Jammu Kashmir	www.ajk.gov.pk
Trade Development Authority of Pakistan (TDAP)	www.tdap.gov.pk
Security Commission of Pakistan (SECP)	www.secp.gov.pk
Federation of Pakistan Chambers of Commerce and Industry (FPCCI)	www.fpcci.com.pk
State Bank of Pakistan (SBP)	www.sbp.org.pk
Punjab Small Industries Corporation	www.psic.gop.pk
Sindh Small Industries Corporation	www.ssic.gos.pk
Punjab Vocational Training Council (PVTC)	www.pvtc.gop.pk
Technical Education and Vocational Training Authority (TEVTA)	www.tevta.org
Gujranwala Tools Dies and Molds Center (GTDMC)	www.gtdmc.org.pk
Pakistan Industrial and Technical Assistance (PITAC)	www.pitac.gov.pk
Punjab Industrial Estate	www.pie.com.pk



# **12 ANNEXURE**

## 12.1 Income Statement

Calculations									5	SMEDA
Income Statement										
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Revenue	20,505,150	24,059,376	28,119,396	32,750,826	38,027,347	41,830,082	46,013,090	50,614,399	55,675,839	61,243,423
Cost of sales	20,303,130	24,039,370	26,119,390	32,730,820	36,027,347	41,030,002	40,013,090	30,014,399	33,073,639	01,243,423
Cost of goods sold 1	13,244,930	15,540,718	18,163,214	21,154,802	24,563,076	27,019,384	29,721,322	32,693,454	35,962,800	39,559,080
Operating costs 1 (direct labor)	936,000	1,027,130	1,127,133	1,236,872	1,357,296	1,489,444	1,634,459	1,793,592	1,968,219	2,159,847
Operating costs 3 (direct electricity)	840,608	924,669	1,017,136	1,118,850	1,230,735	1,353,808	1,489,189	1,638,108	1,801,919	1,982,111
Electricity Cost (Generator)	1,161,000	1,362,240	1,592,118	1,854,349	2,153,105	2,368,416	2,605,258	2,865,783	3,152,362	3,467,598
Operating costs 5 (direct gas)	430.403	505,006	590,225	687,439	798.193	2,308,410 878,012	965,814	1,062,395	1,168,634	1,285,498
Total cost of sales	16,612,941	19,359,763	22,489,827	26,052,313	30,102,406	33,109,065	36,416,041	40,053,333	44,053,933	48,454,133
Gross Profit	3,892,209		5,629,569	6,698,513	7,924,942	8,721,017	9,597,049			12,789,290
GIOSS FIORI	3,692,209	4,699,613	3,029,309	0,098,313	7,924,942	6,721,017	9,397,049	10,561,067	11,621,906	12,789,290
General administration & selling expenses										
Administration expense	1,140,000	1,250,992	1,372,790	1,506,447	1.653.117	1,814,067	1,990,687	2,184,503	2,397,189	2,630,583
Building rental expense	720,000	792,000	871,200	958,320	1,054,152	1,159,567	1,275,524	1,403,076	1,543,384	1,697,722
Electricity expense	93,401	102,741	113,015	124,317	136,748	1,139,367	1,273,324	1,403,076	200,213	220,235
Communications expense (phone, fax, mail, internet, etc.)	79,800	87,569	96,095	105,451	115,718	126,985	139,348	152,915	167,803	184,141
Office expenses (stationary, entertainment, janitorial services, e	114,000	125,099	137,279	150,645	165,312	181,407	199,069	218,450	239,719	263,058
Promotional expense	205,052	184,546	166,092	149,483	134,534	121,081	199,009	98,075	88,268	79,441
	,	27,500	30,250		36,603	40,263	44,289	48,718	53,590	58,949
Professional fees (legal, audit, consultants, etc.) Depreciation expense	25,000	27,500 317,619	30,230	33,275	,	40,263 325,731	,	,	334,470	338,046
•	314,735	15,800	15,800	321,253 15,800	323,375 15,800	15,800	328,346 15,800	331,248	15,800	
Amortization of pre-operating costs	15,800							15,800		15,800
Subtotal	2,707,787	2,903,867	3,121,863	3,364,991	3,635,359	3,935,323	4,267,501	4,634,799	5,040,437	5,487,975
Operating Income	1,184,421	1,795,746	2,507,706	3,333,522	4,289,582	4,785,694	5,329,548	5,926,268	6,581,470	7,301,315
Earnings Before Interest & Taxes	1,184,421	1,795,746	2,507,706	3,333,522	4,289,582	4,785,694	5,329,548	5,926,268	6,581,470	7,301,315
Interest expense on long term debt (Debt facility : Bank 1)	313,040	257,817	195,591	125,473	46,462	-	-	-	-	-
Subtotal	313,040	257,817	195,591	125,473	46,462	-	-	-	-	-
Earnings Before Tax	871,382	1,537,929	2,312,115	3,208,049	4,243,120	4,785,694	5,329,548	5,926,268	6,581,470	7,301,315
Tax	50,207	152,086	306,923	521,512	792,436	955,208	1,118,364	1,297,380	1,523,014	1,774,959
NET PROFIT/(LOSS) AFTER TAX	821,174	1,385,843	2,005,192	2,686,537	3,450,684	3,830,486	4,211,184	4,628,888	5,058,456	5,526,355



## 12.2 Balance Sheet

Calculations										\$	SMEDA
Balance Sheet											
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Assets											
Current assets											
Cash & Bank	478,772	50,000	55,500	61,605	68,382	75,904	84,253	93,521	103,808	115,227	127,902
Raw material inventory	1,103,744	1,424,566	1,831,457	2,346,420	2,996,900	3,626,249	4,387,761	5,309,191	6,424,121	7,773,187	-
Pre-paid building rent	720,000	792,000	871,200	958,320	1,054,152	1,159,567	1,275,524	1,403,076	1,543,384	1,697,722	-
Total Current Assets	2,302,516	2,266,566	2,758,157	3,366,345	4,119,434	4,861,720	5,747,538	6,805,788	8,071,313	9,586,136	127,902
Fixed assets											
Machinery & equipment	1,978,500	1,809,488	1,625,979	1,442,642	1,259,496	1.076,563	893,865	711,429	529,283	347,459	126,298
Furniture & fixtures	897,500	807,750	718,000	628,250	538,500	448,750	359,000	269,250	179,500	89,750	-
Office vehicles	217,350	195,615	173,880	152,145	130,410	108,675	86,940	65,205	43,470	21,735	_
Office equipment	54,000	48,600	43,200	37,800	32,400	27,000	21,600	16,200	10,800	5,400	_
Total Fixed Assets	3,147,350	2,861,453	2,561,059	2,260,837	1,960,806	1,660,988	1,361,405	1,062,084	763,053	464,344	126,298
Intangible assets											
Pre-operation costs	158,000	142,200	126.400	110.600	94,800	79.000	63.200	47.400	31,600	15,800	_
Total Intangible Assets	158,000	142,200	126,400	110,600	94,800	79,000	63,200	47,400	31,600	15,800	_
TOTAL ASSETS	5,607,866	5,270,219	5,445,616	5,737,782	6,175,040	6,601,708	7,172,143	7,915,272	8,865,966	10,066,280	254,200
Liabilities & Shareholders' Equity											
Current liabilities											
Total Current Liabilities	-	_	-	-	_	_	_	-	_	_	_
Other liabilities											
Long term debt (Debt facility : Bank 1)	2,803,933	2,368,510	1,877,864	1,324,991	702,001	-	-	-	-	-	-
Total Long Term Liabilities	2,803,933	2,368,510	1,877,864	1,324,991	702,001	-	-	-	-	-	-
Shareholders' equity											
Paid-up capital	2,803,933	2,803,933	2,803,933	2,803,933	2,803,933	2,803,933	2,803,933	2,803,933	2,803,933	2,803,933	2,803,933
Retained earnings		97,776	763,820	1,608,858	2,669,106	3,797,775	4,368,210	5,111,339	6,062,033	7,262,347	(2,549,734
Total Equity	2,803,933	2,901,709	3,567,753	4,412,791	5,473,039	6,601,708	7,172,143	7,915,272	8,865,966	10,066,280	254,200
TOTAL CAPITAL AND LIABILITIES	5,607,866	5,270,219	5,445,616	5,737,782	6,175,040	6,601,708	7,172,143	7,915,272	8,865,966	10,066,280	254,200



## 12.3 Cash Flow Statement

Calculations											SMEDA
Cash Flow Statement											
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 1
Operating activities	Tear 0	Icai I	rear 2	Icai 5	Icai 4	Tear 5	Tear 0	rear 7	rear o	rear y	icai i
Net profit		821,174	1,385,843	2,005,192	2,686,537	3,450,684	3,830,486	4,211,184	4,628,888	5.058.456	5,526,355
Add: depreciation expense		314,735	317,619	319.341	321,253	323,375	325,731	328,346	331,248	334,470	338,04
amortization of pre-operating costs		15,800	15,800	15,800	15,800	15,800	15,800	15,800	15,800	15,800	15,800
Raw material inventory	(1,103,744)	(320,822)	(406,892)	(514,963)	(650,480)	(629,349)	(761,512)	(921,430)	(1,114,930)	(1,349,065)	7,773,187
Pre-paid building rent	(720,000)	(72,000)	(79,200)	(87,120)	(95,832)	(105,415)	(115,957)	(127,552)	(140,308)	(154,338)	1,697,722
Cash provided by operations	(1,823,744)	758,888	1,233,170	1,738,251	2,277,278	3,055,096	3,294,548	3,506,348	3,720,699	3,905,322	15,351,11
Financing activities											
Debt facility: Bank 1 - principal repayment		(435,423)	(490,646)	(552,872)	(622,990)	(702,001)	-	-	-	-	-
Additions to Debt facility: Bank 1	2,803,933	-	-	-	-	-	-	-	-	-	-
Issuance of shares	2,803,933	-	-	-	-	-	-	-	-	-	-
Purchase of (treasury) shares											
Cash provided by / (used for) financing activities	5,607,866	(435,423)	(490,646)	(552,872)	(622,990)	(702,001)	-	-	-	-	-
Investing activities											
Capital expenditure	(3,305,350)	(28,838)	(17,225)	(19,119)	(21,223)	(23,557)	(26,148)	(29,025)	(32,217)	(35,761)	_
Acquisitions	. , ,,	,,	, -,	, . ,	. , -,	, -,,	, -,	( ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	. , ,	(,,	
Cash (used for) / provided by investing activities	(3,305,350)	(28,838)	(17,225)	(19,119)	(21,223)	(23,557)	(26,148)	(29,025)	(32,217)	(35,761)	-
NET CASH	478,772	294,627	725,299	1,166,259	1,633,066	2,329,538	3,268,400	3,477,323	3,688,481	3,869,561	15,351,111



## 13 KEY ASSUMPTIONS

## **13.1 Operating Cost Assumptions**

Description	Details
Office Expenses (Stationery, Entertainment etc)	10% of Administration expenses
Communication Expenses	7% of Administration Cost
Promotional Expenses	1% of Revenue
Depreciation Rate	<ul><li>10% on Machinery</li><li>10% on Office Equipment</li><li>10% on Furniture &amp; Fixture</li></ul>
Inflation Growth Rate	10%
Electricity Price Growth Rate	10%
Salaries Growth Rate	10%

## **13.2 Production Cost Assumptions**

Description	Details
Raw Material Cost Growth Rate	10%
Hours Operational Per Day	8 Hours
Days Operational Per Month	25 Days

## **13.3 Revenue Assumptions**

Description	Details
Growth in Sales Price	10%
Days Operational / Year	300
Per Day Production Capacity	408 Dozen
Production Capacity in First Year	75%
Percentage Increase in Production Capacity every G Year	5%
Maximum Production Capacity	95%

## 13.4 Financial Assumptions

Description	Details
Debt	50%
Equity	50%
Interest Rate on Debt	12%
Debt Tenure	5 Years

