

**MURASH INDUSTRIES LIMITED**



**PRODUCTION AND DISTRIBUTION OF BALL PENS  
FIVE YEARS BUSINESS PLAN  
FROM 2020-2024**

**Contact Information;**

**P.O.Box 3578**

**Dar es Salaam**

**OCTOBER, 2020**

### **CORPORATE INFORMATION**

**Registration Number:** 141667939  
**TIN** : 141-667-939  
**Business Activity** : Production and distribution of ball pen within and outside Tanzania

#### **Shareholders:**

<b>Name</b>	<b>Address</b>	<b>shares</b>
Mahamudu Ali Mahamudu	P.O.Box 3578, Dar es salaam	20,000
Said Aden Shire	Pumwa Apartments, 5 <sup>th</sup> Floor, Muratina Road, Nairobi, Kenya	20,000
Ravindra PranilSolank	P.O.Box 3578, Dar es salaam	20,000

#### **Registered Office & Address:**

P.O.Box 3578, Dar es salaam  
Mbagala Zakhem, Block 26, Plot No.312  
Email: murashindustries2020@gmail.com  
Telephone: 0713-961740

## TABLE OF CONTENTS

### Table of Contents

CORPORATE INFORMATION .....	2
1.0 EXECUTIVE SUMMARY .....	5
1.1 Vision, Mission and Core Values .....	6
1.2 Project Location .....	6
1.3 Implementation Period .....	7
1.4 Project Objectives.....	7
1.5. Project components and costs .....	8
2.0 BUSINESS DESCRIPTION .....	9
2.1 Product Description .....	10
3.0 BUSINESS ENVIRONMENT .....	11
4.0 MARKET ANALYSIS.....	13
4.1 Market Size.....	13
4.2 Competition.....	14
4.3 SWOT ANALYSIS .....	14
4.4 Marketing, Distribution and Communication Strategy.....	15
5.0 OPERATIONAL PLAN .....	16
5.1 Manufacturing Processes.....	16
5.2 Long Term Operation Plan.....	18
5.3 Labour Requirements .....	19
5.4 Raw Materials Requirements.....	20
5.5 Production Overheads .....	20
5.6 Total production Cost.....	21
6.0 MANAGEMENT PLAN.....	21
7.0 FINANCIAL PLAN .....	23
7.1 Financial Assumption.....	23
7.2 Sources of Funds.....	24
7.3 Profitability Analysis .....	24
7.3 Operating Expenses.....	24
7.4 The Projected Income Statements.....	24
7.5 Projected Balance Sheet.....	26
7.6 Projected Cash Flows .....	27

7.7 Break-even Analysis .....	27
7.8 Internal Rate of Return (IRR%) .....	28
8.0 ECONOMIC ASPECTS .....	29
8.1 National economic and social Benefits .....	29
9.0 conclusion.....	30
9.1 Recommendation.....	30
ANNEX I: LIST OF MACHINERIES & EQUIPMENTS .....	31
ANNEX II: RAW MATERIALS .....	32

## 1.0 EXECUTIVE SUMMARY

**Murash Industries Limited** is private company limited by shares registered in Tanzania with the main purpose to engage in manufacturing of standard and custom handheld writing instruments, pens, pencils, dry eraser and Hot pots. Currently, the company has embarked on establishing a project aimed at manufacturing of ball pens. This business plan was prepared to establish the viability of the ball pen manufacturing factory in Tanzania and guide the procurement, operational and marketing activities of the project. The plan establishes a strategic framework that provides a focus, direction and most importantly a common language that acts as a guide for all production, marketing/brand activities creating cohesive strategic alignment between the company mission, vision and goals. There is a growing demand in the country as imports of ball pens mainly from China keeps on rising year after year. This project wants to utilise this opportunity by establishing a modern factory utilising locally available inputs to manufacture low cost ball pens that will cater for the rising demand in the country and substantially contribute to the economy and employment creation in the country.

The company requires a total of **USD 500,000** that will be used to purchase equipments, raw materials, and cover some operational costs at the beginning of the project. The financial analysis indicates the feasibility of the project as the company will be able to recover all the invested capital within first two years of operations and start making substantial profits from the third year on wards. The financing of the project is expected to be 10.5% equity financing 89.5% Loan . The project expects to employ at least 39 persons, majority being Tanzanians who shall be directly employed by the project, the project expects to create more than 100 indirect jobs through sales and commissioning agreements with local traders. The production is expected to be done throughout the year leading to a total production of **24,000 cartons** of ball pens per annum.

## **1.1 Vision, Mission and Core Values**

### **Vision**

Our vision is to become the best manufacturer of handheld writing instruments for the local market and beyond national borders.

### **Mission**

Our mission is to focus on manufacturing world-class writing instruments of different kinds with clear differentiated positioning against the multitude of other competitors in the market.

### **Core Values**

**Quality** – We strive to perform at an excellent level in everything we do. We are reliable. We are committed to producing and delivering products to the highest standard possible every time.

**Teamwork** - We work together collectively to achieve our common vision and goals.

**Honesty & Integrity** - We are truthful and our actions are consistent with our words. We are honest and direct in all of our communications.

**Respect & Dignity** - We demonstrate respect for and appropriate loyalty towards our customers, colleagues and suppliers.

**Innovation & Improvement** -We drive change and challenge the status quo to exceed our customers' expectation.

**Safety**– We are committed to the safety, wellbeing and security of the business, facilities, people whom we serve and our employees.

## **1.2 Project Location**

The Project is located at Mbagala Zakhem Industrial Area, Block 26, Plot No. 312 in Temeke Municipality, Dar EsSalaam region. The area is accessible by road and has direct access to electricity and water necessary for the factory to operate. The facility

has government approval for the kind of factory we want to establish and it is easily accessible and we are deliberate about that to facilitate easy movement of raw materials and finished products.

### 1.3 Implementation Period

The project is expected to commence on 1<sup>st</sup> October, 2020. The project area has already been rented and prepared for the plant to be installed. The project shall be implemented in two phases. Phase one shall include preliminary stages such as site acquisition, construction, plant installation and procurement of beginning raw materials. These processes will commence in October, 2020 to June, 2021. Phase two shall include activities for project expansion such as construction of a more production facilities, new production machines will be acquired. The activities in phase two shall commence in July, 2021 through to the rest of the project. The installation of machinery and equipment and start of production is described in the following Table.

**Table 1.1: Implementation Schedule**

NO.	ACTIVITIES	PHASE ONE (OCT 2020-FEB, 2021)		PHASE TWO	
		Oct 2020-Dec. 2020	Jan-Feb 2021	March-June 2021	July-Dec 2021
1	Leasing and site preparations and resource Mobilisation				
2	Preparation of project facilities				
4	Installation of machines and equipment; Procurement of raw materials.				
5	Production starts				
6	Procurement of machinery and Installation (Phase 2)				

### 1.4 Project Objectives

We are in the manufacturing line of business of ball pens to cater for the need of both domestic and international markets. We are also in business to make profits and at the same time to give our customers value for their money; we want to give people and businesses who patronize us the opportunity to be part of the success

story of our business and serve the rising demand in the country and nearby markets. Notably the business will focus on the following specific objectives;

- To ensure availability and reliability of high quality ball pens of different types.
- To generate sufficient income through sales to meet the needs of the owner and tax revenues to the government.
- To expand to a large ball pens and diversified writing instruments manufacturing factory in Tanzania.
- Conduct research and development in the ball pens manufacturing industry by capitalizing on the use of locally available materials so as to benefit the community at large.
- To employ at least 39 people and improve livelihood to the community and join hands with the government to reduce unemployment level in the country.

### **1.5. Project components and costs**

The project is still at the initial stages; require some investments in terms of fixed assets, labour and materials. The Project has already obtained required documentations to allow its implementations. Some preliminary costs such as paying rent and grounds works where a processing plant shall be installed has started. The details of the requirements are explained in Table 1.2 below.

**Table 1.2: Project Requirements (US\$)**

<b>Type of Investment</b>	<b>Cost/Unit</b>
<b>1.0 Land &amp; Buildings</b>	
Preliminary ground works	5,000
Construction and partitioning	16,595
<b>Total Land &amp; Buildings</b>	<b>21,595</b>
<b>2.0 Plant Machinery</b>	
2.1 Plant and Machinery	92,500
2.1 Installation Cost	5,200
<b>Total Machinery</b>	<b>97,700</b>
<b>3.0 Office Equipments</b>	
3.1 Computer Set	800
3.2 ACs	1,500
3.3 Furniture & Fixtures	1,200
3.4 Printer, Telephone & Fax	500
<b>Total Office Equipment</b>	<b>4,000</b>
<b>4.0 Motor Vehicles</b>	
4.1 Pick-up (1.5 ton)	12,000
4.2 Saloon car	8,000
<b>Total Vehicles</b>	<b>20,000</b>
<b>Total Investment</b>	<b>143,295</b>
<b>4.0 Working Capital</b>	
4.1 Raw Materials	167,705
4.2 Direct labour	158,400
4.3 Production Overheads	30,600
<b>Total working Capital</b>	<b>356,705</b>
<b>Total Project Requirements</b>	<b>500,000</b>

## 2.0 BUSINESS DESCRIPTION

As education became the fundamental necessity of humans from the last one century, people have invested more in education. Pen is one such product that is being manufactured at huge scale and has global market of billion dollars. As of current, there are both local and global brands that manufacture pen and its product and supply it to the rest of the world. It would be very hard to imagine a world without pen and therefore there is constant demand for pen and related products and it is also increasing day by day as more children are following the path of elementary education. While global brands operate at a huge volume, local brands operate at

low volume manufacturing cheap pens in small numbers to cater the local demands.

**Murash Industries Limited** wants to engage in this business through production of standard writing ball pens with anticipation to capture the local market as well as foreign markets.

## **2.1 Product Description**

A ballpoint pen is a writing instrument which features a tip that is automatically refreshed with ink. It consists of a precisely formed metal ball seated in a socket below a reservoir of ink. As the pen is moved along a writing surface, ink is delivered. Even though ballpoint pens were first patented in the late nineteenth century, they only started to reach commercial significance in the early 1950s. Now, ballpoint pens dominate the writing instrument market, selling over one hundred million pens each year worldwide.

This business plan is an outcome of a thorough feasibility undertaken to weigh out pros and cons of manufacturing a pen. The below mentioned steps would guide us in starting our business as explained through the following steps.

**Barrel:** A barrel is the main body of a pen and it is where the ink is generally filled. Present day pens mostly have refills in it therefore the barrel part remains empty in order to accommodate the refill.

**Metal Tip:** A metal tip is the main end of a pen from where the ink flows and which is put on the paper in order to write something. A metal tip should be of quality standard to ensure its smoothness. The metal tip is connected with refill or the barrel to facilitate the flow of ink.

**Plastic Adapter:** It connects the metal tip and the barrel together. This is made of plastic.

**The Cap:** A pen cap is the most common part of any pen. It covers the metal tip in order to ensure non-leakage of ink and to secure the metal tip.

**Ink:** Ink is the fluid which is used in the pen to make the scribes on the metal sheet visible. Ink is very important part of any pen and it is important that it has standards. Ink can be of any color like blue, black, green or red.

### **3.0 BUSINESS ENVIRONMENT**

The business may be affected by factors beyond owner's control, and these need to be taken into account before making any investment decision. The company has considered many opportunities and challenges that may arise out of the expected changes. Thus analysis of business environment key factors is paramount to this plan in order to determine external factors and how they are likely to affect the project.

*Economically;* Tanzania is now experiencing economic growth whereby the purchasing power of people is increasing and people's interactions is increasing as trade grows in the East African Region. The country is highly improving business environment to encourage investors in various sectors where agro-processing in one of the leading sector which attracts the intention of the government in reducing post harvest loss and improve livelihood of local farmers. The burning issue currently is the rate of inflation and continuous fall in domestic currency this would lead to increased cost of production as the price of fuels are rising. Issues like Common Market for the East Community are opening up business performance and later opportunities for exportation which necessitates expansion of production.

*Politically;* the political environment is conducive for the business operations. The current government regime is in support of industries. There have been adequate policies to support the industrial sectors as echoed in the National Development Vision 2025 (VISION 2025) which recognizes the leading role of the industrial sector in the process of transforming Tanzania's economy to a self-sustainable semi-industrial one by 2025. The Sustainable Industrial Development Policy 1996-2020 (SIDP) declared the government's decision to phase the public sector out of productive activities and allow the private sector to become the principal vehicle for economic growth.

*Social-Cultural:* The social aspect focuses on the forces within the society. Family, friends, colleagues, neighbours and the media are social factors. These factors can affect our attitudes, opinions and interests. So, it can impact sales of products and revenues earned. There is no doubt that the society is continually changing. The tastes and preferences are a great example of this change for the Tanzanian culture. Most of Tanzanians currently are willing to pay a premium price for a product that satisfies their expectations. Demographically, the country is increasing in population where currently the country is estimated to have over 55 million people. The increase in population necessitates increase in products and services.

*Technological factors:* Technological factors are variables that are being used for evaluating available alternatives with respect to technological capabilities. Our company consider it as an important tool for improving operations and functions. Technological factors are one of various external environment factors that affect businesses greatly and are also an integral component of the **PESTLE analysis**. In the present scenario, utmost dependence on equipment, technological factors can have more effect on business operation and success globally than ever before. Furthermore, development of technology has also introduced digital marketing strategies through which companies are able to sell their products and services. Even the research and development R&D divisions in companies have changed its way of functioning and more advanced techniques in the development of products and services have been introduced only through technological advancements. *Murash Industries* is constantly looking for development and updates within the technological environment. In this way, we do not only improve our operations but, we will also be well aware of business transformational phase. We will derive groundbreaking strategies to grow exponentially.

#### 4.0 MARKET ANALYSIS

The objective of market assessment is to determine demand level and whether the company shall be able to capture some of the market share. Also, the project shall determine methods of production, market size, pricing methods and competitors' analysis. Key stakeholders in the writing instruments market are focusing on product differentiation by offering innovative, designer writing instruments that have multipurpose use cases. Companies have begun to offer ballpoint pens with a stylus, pens with multiple colour inks, different pen body styles, and pens with customized clips that may have a famous designer's touch or influence. Another major factor is the shift toward biodegradable or recyclable materials. Many manufacturers have invested in recyclable PET pens that are made from recycled PET bottles, and even pens created from biodegradable raw material. These organizations are able to appeal to environmentally-conscious customers, and make their products stand out in the writing instruments market. *Murash Industries* is aware of all the market forces that are surrounding the pen business. We will utilise all reasonable means to ensure that our products meets the global standards and be able to sustain competition.

#### 4.1 Market Size

The market for pen business is promising in Tanzania. Our feasibility field survey indicates that, the market is poised to keep on growing as population grows. Highest demand comes from the schools and colleges where writing instruments like ball pens is paramount to their learning process. From the demand expectations, The Company has the potential to produce about 48,000 boxes (2,000 cartons) per month. The production is expected to be done throughout the year leading to a total production of **24,000 cartons** of ball pens per annum. This amount is expected to generate total revenue of **US\$ 664,800** per annum. Table 4.1 below summarises the expected demand for the business during the first year of the project.

**Table 4.1: Expected Demand of Ballpoint Pens (US\$)**

S/N	Potential Customer	Quantity demanded (boxes)/month	Price per box	Estimated Value/month	Annual Value
1	Wholesalers	20,000	1.00	20,000	240,000
2	Retailers	10,000	1.20	12,000	144,000
3	Direct sales	18,000	1.30	23,400	280,800
	<b>Total</b>	<b>48,000</b>		<b>55,400</b>	<b>664,800</b>

## 4.2 Competition

There is a limited production of ball pens in Tanzania; competition mostly comes from imported ballpoints from India and China. The main importers are, Oppo Ashrafi Investments Ltd, Oppo Agencies and Co Ltd, Hafiza and Sons to mention a few. The company will have to be innovative to be able to withstand this competition.

## 4.3 SWOT ANALYSIS

**Murash Industries Limited** has conducted a thorough SWOT analysis that will help us achieve our business goals and objectives. This is the summary of the SWOT analysis that was conducted. The analysis is carried out to assess the strength that the business can leverage on, and then assess its weaknesses that need to be improved. In this part also potential opportunities are identified and how the business can utilize these opportunities. Lastly, the business has identified potential threats and challenges that are likely to face the business and the workable mitigation plans.

**Strengths:** Part of what is going to count as positives *Murash Industries* is the vast experience and knowledge of our management team; we have people on board and the company intend to hire people who are highly experienced and who understand how to grow business from the scratch to profitability. So also, our distribution network and of course our excellent customer service culture will definitely count as a strong strength for the business.

**Weakness:** A major weakness that may count against us is the fact that we are still at infancy stage of manufacturing plants in the country; and we don't have the financial capacity to engage in the kind of publicity that we intend giving the business.

**Opportunities:** Limited ball pens manufacturing plants in the country opens up a huge opportunity to our business. We only need to position our business to take advantage of the existing market of ballpoint pens and also to create our own new

market. We know that it is going to require hard work, but we are determined to achieve it.

**Challenges/Threats:** We are quite aware that just like any other business, one of the major threats that we are likely going to face is economic downturn and unfavourable government policies. It is a fact that economic downturn affects purchasing power. Another threat that may likely confront us is the likelihood of other companies to start manufacture of ball pens in similar locations where we are. However, we understand on how to position ourselves in the market, at the same time making sure that our products meets the demand requirements.

#### **4.4 Marketing, Distribution and Communication Strategy**

Various methods of marketing mix will be used to cub the existing and potential weaknesses and challenges/threats while utilizing the arising opportunities and leveraging on the key strengths of the company.

**Pricing:** The objectives of price strategy depend on a number of factors such as business economic and marketing objectives. Price setting can be based on cost or market based. With demand and competition orientation concepts, a fair price can be set which customers are willing to pay at the same time covers operational costs with some profit margin. Our products will become competitively priced in relation to the dictates of the market. Due to the introductory nature of our products we intend to implement a penetration pricing strategy which will ensure that potential customers are not frightened away by our prices, up until our products are appreciated and fully operational. In this case our products will be priced a bit cheaper. However this will dictate that our costs are prudently kept so as to ensure our financial goals come to fruition.

**Distribution:** *Murash Industries* has arranged to start operations by looking at the most convenient market segment. The main targeted market is selling the products to identified wholesalers in all selected regions. This helps to save time and cost of establishing shops at the start. After production expansion, distribution shall be done through a hired car distributed monthly and regular follow-up shall be made. While

for other customer segments, online marketing shall be fully applied to contact potential customers and make orders online. However, the company shall mainly focus to engage agents for distribution (wholesaler) in strategic regions such as Dar es Salaam, Mwanza, Dodoma, Kigoma, Mbeya and Arusha. Institutions that are involved in offering education such as schools and colleges will be contacted and dealt with directly.

**Promotion:** A word of mouth has been the major promotion strategy for the business. This strategy is cheap and the product can effectively describe itself as it is clean and self-sufficient. The company shall make use of the trade fair and exhibitions in the country that will help to promote the products. The company will also be printing t-shirts and fliers as a communication strategy and promotional tools. The official website/ blog will be launched and maintained by outsourcing IT technicians. This strategy will help to promote the company in foreign market. The expected marketing expenses amounts to TZS 11,750,000 (US\$ 5,110) per annum as summarized in Table 4.2.

**Table 4.2 Marketing expenses**

S/N	Promotional tool	Qty	Price per unit (Tshs)	Amount per Year (Tshs)
1	T-shirts	1,000	10,000	10,000,000
2	Fliers	500	500	250,000
3	Trade exhibition costs			1,000,000
4	Website			500,000
	<b>Total</b>			<b>11,750,000</b>

## 5.0 OPERATIONAL PLAN

### 5.1 Manufacturing Processes

Ballpoint pens are made to order in mass quantities. While each manufacturer makes them slightly differently, the basic steps include ink compounding, metal component formation, plastic component molding, piece assembly, packaging,

labeling, and shipping. The operational/manufacturing plan shall include the following processes;

### ***Making the ink***

- 1 Large batches of ink are made in a designated area of the manufacturing plant. Here workers, known as compounders, follow formula instructions to make batches of ink. Raw materials are poured into the batch tank and thoroughly mixed. Depending on the formula, these batches can be heated and cooled as necessary to help the raw materials combine more quickly. Some of the larger quantity raw materials are pumped and metered directly into the batch tank. These materials are added simply by pressing a button on computerized controls. These controls also regulate the mixing speeds and the heating and cooling rates. Quality control checks are made during different points of ink batching.

### ***Stamping and forming***

- 2 While the ink is being made, the metal components of the pen are being constructed. The tungsten carbide balls are typically supplied by outside vendors. Other parts of the pen, such as the point and the body, are made using various molds. First, bands of brass are automatically inserted into stamping machines, which cut out thousands of small discs. The brass discs are next softened and poured into a compression chamber, which consists of a steel ram and a spring-backed ejector plunger. The steel ram presses on the metal, causing the plunger to retract and forcing the metal into a die cast mold. This compresses the metal and forms the various pen pieces. When the ram and plunger return to their original positions, the excess metal is then scraped off and recycled. The die is then opened, and the pen piece is ejected.
- 3 The formed pieces are then cleaned and cut. They are immersed in a bath to remove oils used in the molding process. After they emerge from the bath, the parts are then cut to the dimensions of the specific pen. The pen pieces are next polished by rotating brushes and cleaned again to remove any residual oils. The ball can then be inserted into the point cavity.

### ***Molding the housing***

- 4 The plastic components of the pen are constructed simultaneously with the other pen pieces. They can be produced by either extrusion or injection molding. In each approach, the plastic is supplied as granules or powder and is fed into a large hopper. The extrusion process involves a large spiral screw, which forces the material through a heated chamber, making it a thick, flowing mass. It is then forced through a die, cooled, and cut. Pieces such as the pen body and ink reservoir are made by this method.
- 5 For pieces that have more complex shapes, like caps, ends, and mechanical components, injection molding is used. In this process the plastic is heated, converting it into a liquid that can then be forcibly injected into a mold. After it cools, it solidifies and maintains its shape after the die is opened.

### ***Ink filling and assembly***

- 6 After the components are formed, assembly can take place. Typically, the ballpoint is first attached to the ink reservoir. These pieces are then conveyed to injectors, which fill the reservoir with the appropriately colored ink. If a spring is going to be present, it is then placed on the barrel of the reservoir.

### ***Final assembly, packaging, and shipping***

- 7 The point and reservoir are then placed inside the main body of the pen. At this stage, other components such as the cap and ends are incorporated. Other finishing steps, such as adding coatings or decorations or performing a final cleaning, are also done. The finished pens are then packaged according to how they will be sold. Single pens can be put into blister packages with cardboard backings. Groups of pens are packed into bags or boxes. These sales units are then put into boxes, stacked on pallets, and shipped to distributors.

## **5.2 Long Term Operation Plan**

The project is expected to be operated through two main departments; the finance and administration one hand; and operation and marketing on the other. The

Finance and Administration department is responsible for all administrative and personnel issues; while the operation and production department is responsible for field operations and technical aspects of the business and marketing activities. The operations manager is a skilled salaried employee who work day to day to achieve plant preset targets. On the other hand the Finance and Administrative Manager will lead the strategic plans and make sure they correspond to available operational environment. The operational plan is associated with production costs as well as materials required as inputs in the production process.

### 5.3 Labour Requirements

Labour is one of the most important inputs in any industrial enterprise. The proposed plant will require both skilled and unskilled labour who will be Tanzanians. Table 5.1 indicates labour required amounts to US\$ 13,200 per month that is US\$ 158,400 per year.

**Table 5.1: Labour Requirement (US\$)**

Description	Qty	Local	Unit price \$	Monthly Salary	Annual Salary
		Foreign		\$	\$
Managing Director	1	Local	1,500.00	1,500.00	18,000.00
<b>Operations</b>					
Operations Manager	1	Foreign	1,000.00	1,000.00	12,000.00
Section Operators	10	Local	150.00	1,500.00	18,000.00
Casual labourers	5	Local	100.00	500.00	6,000.00
<b>Maintenance Department</b>					
Maintenance Manager	1	Local	700.00	700.00	8,400.00
Safety & Health Officer	1	Local	500	500.00	6,000.00
Electricians	2	Local	300	600.00	7,200.00
<b>Finance &amp; Administration Department</b>					
Human Resources Manager	1	Local	700.00	700.00	8,400.00
Assistant Personnel Officer	1	Local	500.00	500.00	6,000.00
Procurement Officer	1	Local	500.00	500.00	6,000.00
IT Officer	1	Local	500.00	500.00	6,000.00
Personal Secretary	1	Local	200.00	200.00	2,400.00
Office Attendants	2	Local	150.00	300.00	3,600.00
Drivers	2	Local	200.00	400.00	4,800.00
Security Officer	2	Local	150.00	300.00	3,600.00
<b>Finance Department</b>					
Finance Controller	1	Local	800.00	800.00	9,600.00
Accountant	1	Local	700.00	700.00	8,400.00

Cashiers	1	Local	400.00	400.00	4,800.00
Store keeper	1	Local	300.00	300.00	3,600.00
<b>Marketing Department</b>					
Marketing manager	1	Local	700.00	700.00	8,400.00
Sales Officers	2	Local	300.00	600.00	7,200.00
<b>Total</b>	<b>39</b>			<b>13,200.00</b>	<b>158,400.00</b>

#### 5.4 Raw Materials Requirements

The project requires raw materials that will be sourced both within the country and other countries through imports. A variety of raw materials are used for making the components of a ballpoint pen, including metals, plastics, and other chemicals. When ballpoint pens were first developed, an ordinary steel ball was used. That ball has since been replaced by a textured tungsten carbide ball. This material is superior because it is particularly resistant to deforming. The ball is designed to be a perfect sphere that can literally grip most any writing surface. Its surface is actually composed of over 50,000 polished surfaces and pits. The pits are connected by a series of channels that are continuous throughout the entire sphere. This design allows the ink to be present on both the surface and interior of the ball. The amount required per consignment amounts to USD 63,000. The project intends to procure raw materials every 3 months, thus annual material requirements amounts to USD 252,000.

**Table 5.2: Raw Materials Requirements per Month (US\$)**

Type of raw materials	Price/Consign ment	Amount per year (4 times)
Tips 1 CR pcs	28,000	112,000
Ink 4500 1 CR pcs	20,000	80,000
Adapter 1 CR pcs	3000	12,000
Packaging materials (50 Boxes) 200,000 pcs	8500	34,000
Inner 1000 pcs	3500	14,000
<b>Total Purchases</b>	<b>63,000</b>	<b>252,000</b>

#### 5.5 Production Overheads

Production overheads covers costs such as utilities for water and electricity, postage and telephone, maintenance and other costs directly associated with production.

Table 5.3 shows production overheads amounting to US\$ 2,550 per month that is US\$ 30,600 per year.

**Table 5.3: Production Overheads (US\$)**

Item	Monthly Expenses	Estimated Annual Costs
Postage& Telephone	100	1,200
Electricity bills	300	3,600
Water bills	150	1,800
Maintenance Costs	1,000	12,000
Rent	500	6,000
Others	500	6,000
<b>Total Costs</b>	<b>2,550</b>	<b>30,600</b>

### 5.6 Total production Cost

The estimated total production cost is US\$ 441,000 per annum as shown in Table 5.4 below. The raw materials are purchased 4 times a year, thus materials per consignment amounts to US\$ 63,000, therefore annual costs totals to US\$ 252,000. The costs labour and production overheads are calculated on monthly basis.

**Table 5.4: Total Production Cost (US\$)**

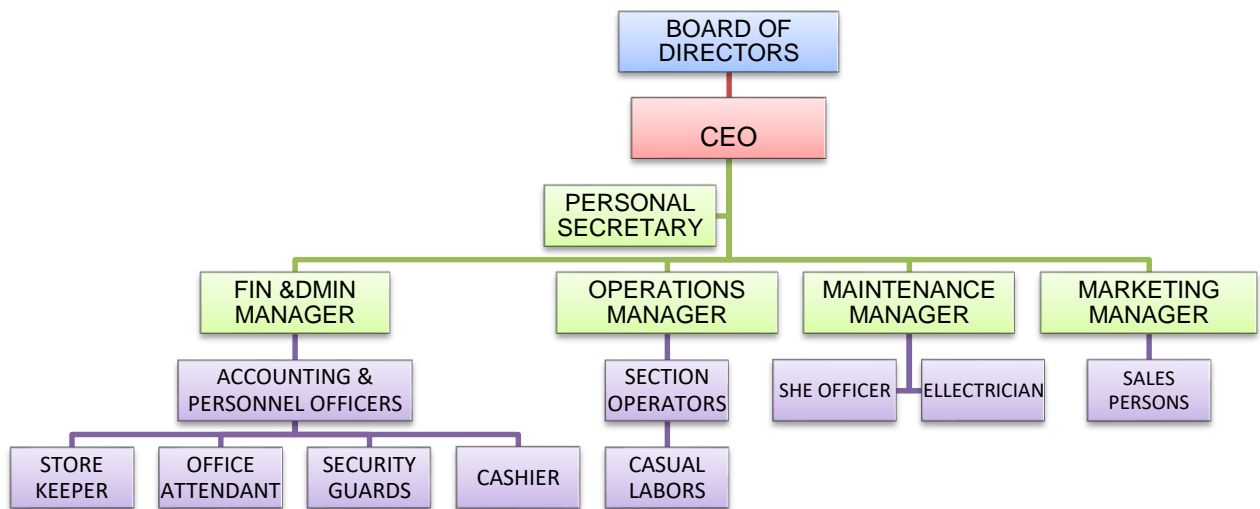
Item	Expenses/Month/Consignment	Estimated Annual Cost
Raw materials	63,000	252,000
Direct labour	13,200	158,400
Production Overheads	2,550	30,600
<b>Total Costs</b>	<b>78,750</b>	<b>441,000</b>

## 6.0 MANAGEMENT PLAN

The management structure of **Murash Industries Limited** will be headed by the CEO who shall be overseeing all company's operations on daily basis. The Operations Manager shall be responsible for day to day production and operations and manage all staff under his/her line. The Finance and Administrative Manager shall be responsible for all administrative duties and finances and supervises all personnel under his/her line; The Marketing Manager shall be responsible for daily

operations, sales and engaging casual workers at different levels when needed. The engineering and maintenance manager shall be responsible for technical issues of the plant. The following figure illustrates the organisation structure of the company.

**Figure 6.1: Organization Chart**



## 7.0 FINANCIAL PLAN

### 7.1 Financial Assumption

Several assumptions were made and considered in the preparation of this financial plan and projection. The assumptions are based on professional judgment, economic trends and current financial market environment. These are as noted below;

- (i) The focus market shall be domestic market through wholesalers, retailers, direct sales and later to other countries through exports;
- (ii) All sales will take place throughout the month and billing will be done at the end of the month;
- (iii) The annual sales is projected to grow by 5% per annum;
- (iv) Depreciation will be charged on straight line method to allocate the cost of each value over its estimated useful life. The rates to be used are as follows;

(a) Buildings	5%
(b) Furniture & Fittings	10%
(c) Equipments	10%
(d) Motor vehicles	20%

The financial assumptions will also include issues on credit sales, payments of interest rates, taxes and other levies. From the beginning, we recognize that payment terms and hence collection days are critical, but not a factor we can influence easily. At least we are planning on the problem, and dealing with it. Interest rates, tax rates, and personnel burden are based on conservative assumptions. Some of the more important underlying assumptions are:

- We assume a strong economy, without major recession.
- We assume, of course, that there are no unforeseen changes in economic policy to make our service immediately obsolete or unwanted.
- We assume an inflation rate of 5% yearly.
- Maintenance costs 5% of Property Plant and Equipment
- Corporate tax is 30% of Net Income

## 7.2 Sources of Funds

The project financing shall come from owners' equity and Foreign Loan from Ruthu Writing Instrument India. The owners have already committed some funds into the project to the tune of used for paying rent and preliminary costs of the project.

## 7.3 Profitability Analysis

The project profitability analysis indicates that the project will be able to generate substantial amounts of profits throughout the project, table 7.1 summarizes the profit analysis for 5 years.

**Table 7.1: Profit Projections (US\$)**

Year	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEARS 5
Sales	664,800	698,040	732,942	769,589	808,069
Total production cost	441,000	463,050	486,203	510,513	536,038
<b>Profit Margin (Loss)</b>	<b>223,800</b>	<b>234,990</b>	<b>246,740</b>	<b>259,076</b>	<b>272,030</b>

## 7.3 Operating Expenses

The following table shows the projected operating costs for five years. All expenses reflect an annual inflation rate of 5% annually.

**Table 7.2 Operating Expenses**

Expenses	Year 1	Year 2	Year 3	Year 4	Year 5
Marketing expenses	5,110	5,200	5,250	5,320	5,500
Bank Charges	522	548	576	604	634
Insurance	8,060	8,463	8,886	9,330	9,797
Office expenses	1,045	1,097	1,152	1,210	1,270
Permits and Licenses	435	457	480	504	529
Vehicle expenses	3,480	3,654	3,837	4,029	4,230
Professional fees	2,608	2,738	2,875	3,019	3,170
Provisional for bad & doubtful debts	3,670	3,854	4,046	4,248	4,461
Depreciations	15,250	16,012	16,813	17,653	18,536
Miscellaneous expenses	2,100	2,205	2,315	2,431	2,553
<b>Total</b>	<b>42,280</b>	<b>44,228</b>	<b>46,230</b>	<b>48,348</b>	<b>50,680</b>

## 7.4 The Projected Income Statements

The Projected income statements for five years indicate that the project shall be able to generate substantial amounts of profits as detailed below.

**Table 7.3 Projected Income Statements for five years**

Description	Year 1	Year 2	Year 3	Year 4	Year 5
	US\$	US\$	US\$	US\$	US\$
Total sales	664,800	698,040	732,942	769,589	808,069
Less Cost of sales:	441,000	463,050	486,203	510,513	536,038
Gross Profit	<b>223,800</b>	<b>234,990</b>	<b>246,740</b>	<b>259,076</b>	<b>272,030</b>
Less Operating Expenses	42,280	44,228	46,230	48,348	50,680
<i>Earnings before Interest and Tax (EBIT)</i>	<i>181,520</i>	<i>190,762</i>	<i>200,510</i>	<i>210,728</i>	<i>221,350</i>
Less Loan interest	0	0	0	0	0
<i>Earnings Before Tax</i>	<i>181,520</i>	<i>190,762</i>	<i>200,510</i>	<i>210,728</i>	<i>221,350</i>
Less TAX 30%	54,456	57,229	60,153	63,218	66,405
<b>Earnings after Tax</b>	<b>127,064</b>	<b>133,533</b>	<b>140,357</b>	<b>147,510</b>	<b>154,945</b>
Dividend 20%	25,413	26,707	28,071	29,502	30,989
<b>Retained Earnings</b>	<b>101,651</b>	<b>106,826</b>	<b>112,286</b>	<b>118,008</b>	<b>123,956</b>

### 7.5 Projected Balance Sheet

The Projected balance sheet for five years indicates the capacity of the project to finance its operations throughout the projected period as shown in Table 7.4.

**Table 7.4 Projected Balance Sheet for Five Years**

DESCRIPTIONS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
	US\$	US\$	US\$	US\$	US\$
<b>NON-CURRENT ASSETS</b>					
Land& Buildings	21,595	20,515	19,489	18,515	17,589
Machinery & Equipments	101,700	91,530	82,377	74,139	66,725
Motor vehicles	<b>20,000</b>	16,000	12,800	10,240	8,192
<b>Total Non-Current Assets</b>	<b>143,295</b>	<b>128,045</b>	<b>114,666</b>	<b>102,894</b>	<b>92,506</b>
Stocks	136,500	158,440	159,284	152,500	153,100
Debtors & Prepayments	128,500	140,950	141,500	145,400	136,700
Cash and Bank balance	125,000	120,096	156,000	135,000	145,000
<b>Total Current Assets</b>	<b>390,000</b>	<b>419,486</b>	<b>456,784</b>	<b>432,900</b>	<b>434,800</b>
<b>TOTAL ASSETS</b>	<b>533,295</b>	<b>547,531</b>	<b>571,450</b>	<b>535,794</b>	<b>527,306</b>
Share Capital	52,500	52,500	52,500	52,500	52,500
Additions	-	-	-	-	-
Retained Earnings	101,651	106,826	112,286	118,008	123,956
<b>Total Equity</b>	<b>154,151</b>	<b>159,326</b>	<b>164,786</b>	<b>170,508</b>	<b>176,456</b>
Bank loan	-	-	-	-	-
Total Non-Current Liability	352,714	359,279	373,706	336,760	320,218
Trade Creditors and Accruals	12,500	14,300	17,600	12,400	13,700
Taxation	13,930	14,626	15,358	16,126	16,932
<b>Total Current Liabilities</b>	<b>379,144</b>	<b>388,205</b>	<b>406,664</b>	<b>365,286</b>	<b>350,850</b>
<b>TOTAL LIABILITY &amp; EQUITY</b>	<b>533,295</b>	<b>547,531</b>	<b>571,450</b>	<b>535,794</b>	<b>527,306</b>

## 7.6 Projected Cash Flows

The projected cash flows for five years indicates that the project shall be able to maintain sufficient cash required to meet all operational needs as shown in Table 7.5.

**Table 7.5 Cash Flow Projections for Five Years**

DESCRIPTIONS	Year 1	Year 2	Year 3	Year 4	Year 5
	<u>US\$</u>	<u>US\$</u>	<u>US\$</u>	<u>US\$</u>	<u>US\$</u>
<b>Cash from operations:</b>					
Profits before tax	181,520	190,762	200,510	210,728	221,350
<b>Adjustments for non-cash items:</b>					
Depreciations	-15,250	-16,012	-16,813	-17,653	-18,536
<b>Change in Working Capital:</b>					
Receivables	-128,500	-129,737	-88,071	-134,441	-98,074
Trade payables & Accruals	12,500	14,300	17,600	12,400	13,700
<b>Total</b>	<b>50,270</b>	<b>59,313</b>	<b>113,226</b>	<b>71,034</b>	<b>118,440</b>
Tax payments	-13,930	-27,518	-38,579	-51,161	-65,437
<b>Total Cash Inflow from Operating Activities</b>	<b>36,340</b>	<b>31,795</b>	<b>74,647</b>	<b>19,873</b>	<b>53,003</b>
<b>Cash from investing activities:</b>					
Purchase of property, plant & equipment	-143,295				
<b>Net Cash Inflow or( Outflow) From Investing &amp; operating Activities</b>	<b>-106,955</b>	<b>31,795</b>	<b>74,647</b>	<b>19,873</b>	<b>53,003</b>
<b>Cash from financing activities:</b>					
Dividends	257,368	-9,992	-10,672	4,278	4,406
Dividends	-25,413	-26,707	-28,071	-45,151	-47,409
<b>Cash &amp; cash equivalent During the year</b>	<b>125,000</b>	<b>-4,904</b>	<b>35,904</b>	<b>-21,000</b>	<b>10,000</b>
<i>Beginning Cash Balance</i>	-	<b>125,000</b>	<b>120,096</b>	<b>156,000</b>	<b>135,000</b>
<i>Ending Cash Balance</i>	<b>125,000</b>	<b>120,096</b>	<b>156,000</b>	<b>135,000</b>	<b>145,000</b>

## 7.7 Break-even Analysis

A **break-even analysis** is a financial tool which helps to determine at what stage a company, or a new service or a product, will be profitable. In other words, it's a financial calculation for determining the number of products or services a company should sell to cover its costs (particularly fixed costs). Break-even analysis (or break-even point) was calculated to determine how much of a good or service need to be

sold in order to cover the total fixed costs. Table 7.6 indicates the break-even analysis.

Obtained as; *Break-even analysis in units = fixed costs / (sales price per unit – variable cost per unit)*

**Table 7.6: Break-Even Analysis**

Description	Unit	Value
Total Sales in year 1	US\$	664,800
Total Volume in Year 1	cartons	24,000
Sales/per unit	US\$	27.7
Fixed cost	US\$	181,365
Variable cost	US\$	441,000
Variable cost/unit	US\$	18.375
<b>Beak-even units</b>	Cartons	71,292.23
<b>Break-even sales</b>	<b>US\$</b>	<b>1,974,794.64</b>

The financial analysis indicates that the break-even point will be reached within the second year and the project will start making substantial profits in the following years. The break-even sale is US\$ 1,974,794.65 which could be realised in the third year of the project.

### 7.8 Internal Rate of Return (IRR %)

The proposed ball pen manufacturing project is expected to have an IRR of **30.27%** over its projected operational period of five years. This IRR is much higher than the cost of the borrowed funds from financial institutions. This implies even with borrowed funds the project is an attractive investment proposition.

**Table 7.7: Internal Rate of Return**

	<b>Outlay</b>	<b>-500,000</b>
	NPBT Yr 1	223,800
	NPBT Yr 2	234,990
	NPBT Yr 3	246,740
	NPBTYr 4	259,076
	NPBTYr 5	272,030
<b>IRR</b>		<b>30.27%</b>

**Table 7.8: Projected results**

<b>Item</b>	<b>Value</b>
Total investment (US\$)	500,000
Payback period	2 year; 10 months
IRR	30.27%
Break-even revenue(US\$)	1,974,794.65

## **8.0 ECONOMIC ASPECTS**

### **8.1 National economic and social Benefits**

The economic and social impact of establishing the proposed project to Tanzania is expected to be positive. This positive impact is expected to be direct and indirect as explained below:

#### **(i) Direct economic impact**

Direct positive economic impact is expected to come from three factors, namely,

- (a) Tax payments to the government
- (b) Foreign currency savings,
- (c) Employment opportunities generation; 39 direct jobs expected to be created (37 locals and 2 Foreigners).
- (d) Technology transfer.

#### **(ii) Indirect economic (job creation)**

In addition to the direct employment opportunities that the proposed project is expected to generate, its operations are expected to boost operations of their distributors and suppliers of goods/services that the project will need to sustain its operations. With the increase in the activities of these suppliers, there is great likelihood that the increase will create additional employment opportunities in their businesses.

### **(iii) Corporate Social Responsibility**

The project is also expected to operate as a responsible corporate citizen by fulfilling some of its corporate responsibilities such as assisting some of the disadvantage communities by way of donations, starting from the communities living near the factory.

## **9.0 conclusion**

The financial analysis in this plan indicates a positive growth and ability of the project to recover initial investments and make substantial profits in the successive years. The objectives indicated in this plan are likely to be met; hence it is feasible undertaking this project. In addition, the community where the project will operate is likely to benefit from employment created through provision of locally made ball pens at a reasonable price and thus create more indirect jobs to all stakeholders engaged in the purchase and sell of ball pens. The project is also expected to benefit the society through social corporate responsibility activities of the company; and most importantly; the government will get taxes from the project and help to contribute to countries economic growth strategies.

## **9.1 Recommendation**

We are highly encouraged to undertake this project, due to the fact that it has proven to have great potentials of meeting the locally available demand and foreign markets as well. The financial analysis also shows a significant contribution of the to the country's economic activities through employment creation and raising tax revenues to the government. Various stakeholders both from the public and private sector are highly requested to support this project at whatever capacity that may make this project a success.

**ANNEX I: LIST OF MACHINERIES & EQUIPMENTS**

**RUTHU WRITING INSTRUMENTS**  
MANUFACTURERS SUPPLIERS & EXPORT OF BALL PEN & COMPONENTS

**MACHINERY LIST**

1.EXTRUDER	- 21500 usd
2.EXTRA JOCKEY	- 2860 usd
3.FILLING MACHINE	- 5000 usd
4.CHAMFERING MACHINE	- 3950 usd
5.ADAPTER FITTING	- 5450 usd
6. CENTRIFUGE MACHINE	- 600 usd
7.CHILLER	- 2150 usd
8.GRANDER	- 1790 usd
9.COOLING LINE	- 2500 usd
10.MOLDING MACHINE	- 28600 usd
11.CAP MOULD	- 11500 usd
12.EXTRA	- 8600 usd
<b><u>TOTAL</u></b>	<b><u>92500 usd</u></b>

EXTRA DIE AND COMPONENTS



## ANNEX II: RAW MATERIALS

# RUTHU WRITING INSTRUMENTS

MANUFACTURERS SUPPLIERS & EXPORT OF BALL PEN & COMPONENTS

### RAW MATERIALS

1.TIPS 1 CR PCS	- 28000 USD
2.INK 4500 KG 1 CR PCS	- 20000 USD
3.ADAPTER 1 CR PCS	- 3000 USD
4.BOX 50 PCS 200000PCS	- 8500 USD
5.INNER 1000PCS 10000 PCS	- 3500 USD

**TOTAL -63000USD**



Karajgam (Rai Faliya), Near Sarigam GIDC, Tal. Umbergam, Dist. Valsad, Gujarat, Pin- 396155  
◆ Mob.: 9769592591 ◆ email id : rolex.writing@gmail.com

Scanned by TapScanner