

**ACTION PLAN FOR DOMESTIC MANUFACTURING OF
ITEMS WHICH ARE HAVING HIGHER IMPORT**

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MINISTRY OF MSME, Govt. of India, New Delhi

NAME OF THE ITEM : LUBRICATORS

PREPARED BY :

**D.MITRA
JOINT DIRECTOR & HOO
MSME DEVELOPMENT INSTITUTE
GUWAHATI - 781021**

CONTENTS OF THE REPORT

Chapter	Contents	Page No.
I	NOMENCLATURE OF THE LUBRICATORS	4
II	COMMERCIAL DETAILS	5-8
	1. HSN code of the product	5
	2. NIC code of the product	5
	3. Clusters already existing on the product	5
	4. Possibility to establish clusters on the product	6
	5. Probable areas or districts where the products manufacturing or project can be established	6
	6. Number of industries registered as MSME is available in the manufacturing of the product	7
	7. Number of industries available in large scale industries	7
	8. Data about the imports of Lubricators for the past three years	8
	9. Data available for the exports well against Lubricators for the past two years	8
	10. Scope for the number of unit's number of years can be established, further	8
	11. The demand in the domestic market	8
	12. Demand of the export market	9
III	TECHNICAL DETAILS	
	1. Sector in which the product is falling	9
	2. End users of the products / sectors	9
	3. Governing Indian specification	10
	4. Governing international specification	10
	5. Flow process chart of the manufacturing	10
	6. Qualitative parameters of the product	11
	7. Details of the product Licenses to be obtained	11
	8. Equipment required for the manufacturing of the product	11
	9. Test facilities required for the product	11
	10. The technology existing in the manufacturing of the Product	11

	TECHNICAL DETAILS	Page No.
	11. Suggested modern technology for implementation or available in the market	12
	12. Raw Material required and availability	12
	13. Covering Raw material standards : Indian / International	13
IV	THE DETAILED BANKABLE PROJECT REPORT OF LUBRICATORS	Page No.
	1. Introduction	13
	2. Product & its Application	13
	3. Desired Qualification for Promoter	13
	4. Basis and Presumptions	14
	5. Implementation Schedule	14-15
	6. Quality Control and Standards	15
	7. Production Capacity	15
	8. Statutory / Government approvals	15
	9. Financial aspects	16-19
	10. Financial Analysis	20-21
	11. Details of Test Facilities available in India	21
	12. Details of Raw materials suppliers	21
	13. Details of the Machinery & Equipment's suppliers	22
V	SCHEMES AND CONSULTANCY SERVICES	
	1. Existing schemes available and their details	22-25
	2. Proposed schemes	25-26
	3. Details of agencies who can provide guidance	26-27

Chapter I

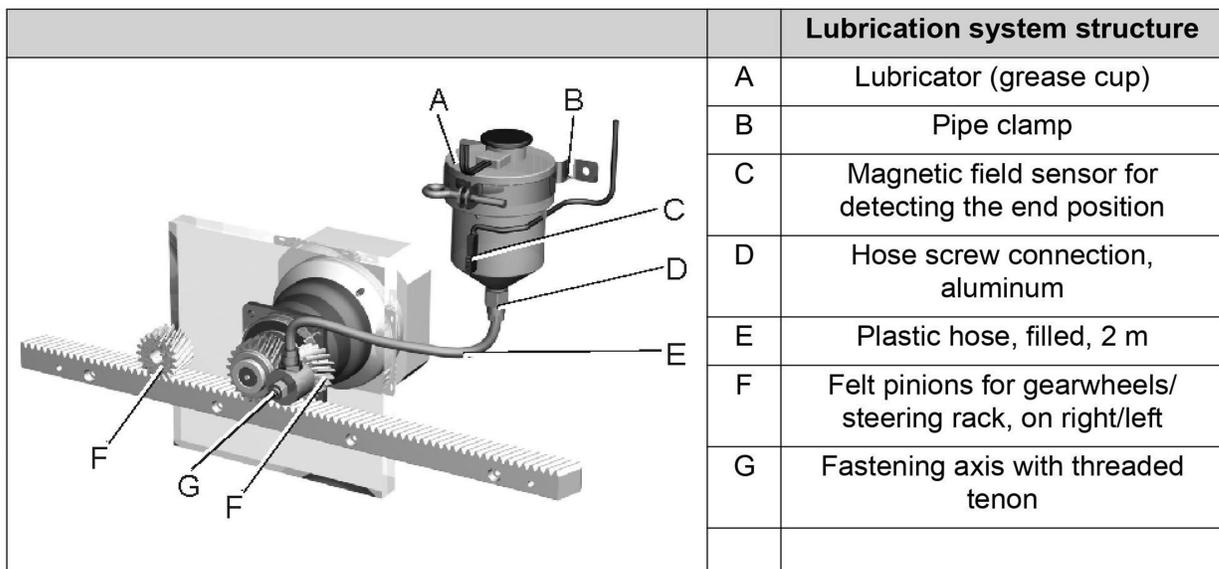
DESCRIPTION OF THE LUBRICATORS

The lubricator is a technical component that was developed to counter wear and tear and friction on machine components by targeted lubrication. A lubricator adds controlled quantities of tool oil into a compressed air system to reduce the friction of moving components. Most air tools, cylinders, valves, air motors, and other air-driven equipment require lubrication to extend their useful life.

There are different types of lubricators like, pneumatic lubricator, single point lubricator, manual lubricator, Automatic electronic lubricator etc. This project report is based on Automatic Lubricator. The fig. shows electronically lubricator controller lubrication device that is driven electro-chemically and supplies lubrication points automatically with lubricant. The grease cup is connected by a plastic hose to a felt pinion/lubrication point. After setting the lubricator, the lubricant is emitted automatically for a specified period while conforming to permitted specifications.

Function principle of the lubricator

When the lubricator is switched on, an electro-chemical reaction is triggered by the closing of contacts. Nitrogen is created as an intermediate product that leads to an increase of pressure in the nitrogen chamber. This pressure is forwarded through a bellows to the piston. The piston displaces the lubricant and the lubrication is initiated. A control light (LED) is located on the top of the lubricator, which flashes in regular intervals during fault-free operation.



1.HSN code of the product

Harmonized System of Nomenclature (HSN Codes) 84678910: HS Classifications of Compressed air grease guns, lubricators and similar appliances.

In the HSN Code 84678910, First two digits (84) represent the chapter number which is Chapter 84- Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof. Next two digits (67) represent the Tools for working in the hand, pneumatic, hydraulic or with self-contained electric or non-electric motor Pneumatic: Next two digits (89) represent the product code of others. Last two digits (10) is for Compressed air grease guns, lubricators and similar appliances. All 8 digits of HSN code is mandatory for export & imports for tax invoice of GST.

2. NIC code of the product

National Industrial Classification 2008 (NIC-2008) Code 28120 is used for of hydraulic and pneumatic components (including hydraulic pumps, hydraulic motors, hydraulic and pneumatic cylinders, hydraulic and pneumatic valves, hydraulic and pneumatic hose and fittings), manufacture of air preparation equipment for use in pneumatic systems, manufacture of fluid power systems, manufacture of hydraulic transmission equipment

3. Clusters already existing on the product, if any.

There is no any cluster presently situated in India. But Lubricator manufacturing industry is scattered in some state of India. The maximum number of Lubricator manufacturing industry are situated in Maharashtra, Gujarat, Karnataka, Andhra Pradesh, and Tamil Nadu.

In state of Maharashtra and Gujarat cities like Mumbai, Thane, Pune, Rajkot, Baroda, have attracted sizable investments and the key industrial hubs.

4. Possibility to establish clusters on the product

The lubricator sector is of strategic importance to the Indian economy and forms the backbone of any production/manufacturing unit. The sector has a multiplier effect on the overall economic growth and facilitates development of a wide range of user industries by providing critical inputs necessary for manufacturing. The lubricator sector offers several opportunities for investment and setting up of clusters.

The National initiative “Make in India program” launched in 2014 to make India a manufacturing hub with the aim to increase the share of manufacturing sector in GDP from 16 % in 2014 to 25 % in 2025. India is considered a preferred destination by global manufacturing companies for setting up production facilities.

Growing stature of India in the global market as a sourcing hub for manufacturing industry and increase in export of lubricants from India to the rest of the world which will lubricator Industry’s growth in the coming years.

India enjoys several advantages for the growth of lubricator industry such as Design Skills (like CAD,CAM), Lower cost of manufacture, Availability of raw materials, Availability of skilled manpower, Presence of support industries (like plastic & machine tools), Growth in end user industries, Proximity to Key Global Markets, Supportive Government policies, etc.

The growing Indian Economy, Increasing demand for lubricants equipment, push to the infrastructure of the country by the government, rising oil, steel, Automobile sector are result in demand for lubricators.

Growing per-capita income and disposable income which is resulting in strong and growing domestic demand for Oil & Gas, Steel, Automobiles, power plant, coal Industry and other manufacturing units.

5. Probable areas or districts where the products manufacturing or project can be established

Potential locations for investment in the Machine Tool sector in India.

1. Mumbai, Pune and Thane in Maharashtra.
2. Rajkot, Baroda and Jamnagar in Gujarat
3. Coimbatore and Chennai in Tamil Nadu
4. Bangalore in Karnataka
5. Vizag in Andhra Pradesh

6. Number of industries registered as MSME is available in the manufacturing of the product.

Total 111 Enterprises registered with 5 digits NIC code 28120- Hydraulic and pneumatic components (including hydraulic pumps, hydraulic motors, hydraulic and pneumatic cylinders, hydraulic and pneumatic valves, hydraulic and pneumatic hose and fittings) in West Bengal.

7. Number of industries available in large scale industries.

No large scale units exclusively, manufacturing of Lubricators are traced. However, some units Of Maharashtra, Gujarat, Karnataka, Andhra Pradesh, and Tamil Nadu state are manufacturing lubricators in India.

No.	Names and Addresses of Enterprises	Product Activities
1.	Bijur Delimon India Private Ltd. Gate No. 448/13, Nighoje, Rajgurunagar(Khed) Pune-410501, Tel- +91 2135 623700	Single point Lubricator and different types of lubricating Equipment's.
2.	Aarna Lube Private Limited F-204, Dheeraj Presidency, M.G.Road, Kandivali-West, Mumbai - 400 067. Mo.- +91 7410006011	Self-Lubricators and lubricating Equipment's.
3.	Shaan Lube Equipment Pvt Ltd 23, Golani Industrial Complex, Waliv Rd, opp. Agarwal Hospital, Vasai East, Vasai-Virar, Maharashtra 401208, Mo.-9887759447	Air oil Lubrication System, Filter, Bearing lubrication system and different types of lube Equipment's
4.	Orient Enterprise Private Ltd. 35-38, Sunshine Industrial Estate, Behind Bhagyodaya Hotel Sarkhej Bavla Highway, Ahmedabad-382210, 8042535814	Single point Lubricator, Lincoln Lubrication system and different Types of Lubricators.
5.	Amit Enterprises D-308, Sumel 11, Namaste Circle, Shahibaug, Delhi Darwaja Road, Ahmedabad-380004, Mo.- 9426078092	Filter, Filter bags, Filter Cartridge Strainers, Hydraulic and Lubrication Oil Filter, Dust Collecting bags etc.
6.	Dopag India Pvt. Ltd 203, 2 nd Floor 9/36, Vaishnavi Sapphire Centre Bangalore- 56022, Karnataka, Mo.- 8750979979	Drum Pumps, Dispensing Valves, Components and accessories of Lubricators,
7.	Cenlub System Shop No.- A-07, A354, 9 th Main Ridge Road, II Stage Peenya Bangalore- 560058, Karnataka, Mo.- 8800511336	Lubrication Distributors, Specialized Lubricators, Timers & Controllers, Tubes, Hose Pipe, Fittings etc.
8.	Dropsa Spicelube Door No 5/26 , vellanki village, Anandapuram Visakhapatnam Andhra Pradesh- 531163, Mo.- 8030459585	Lubricator, Valve, Controller, Sensor & Monitoring Device, Pressure Filter Oil reservoir, Oil Dispenser etc.
9.	Southern Lube Equipment No. 3, Old ESI Road, Ramapuram Ambattur, Chennai- 600053, Tamil Nadu, Mo.- 8048737352	Oil lubrication system and Accessories Oil Filters, Flow Indicators, Filter Elements etc.

8. Data about the imports of this product for the past three years.

Year	2017-18	2018-19	2019-20
Value in Rs. Crores	48.89549	62.494875	63.344268

9. Data available for the exports well against this product for the past two years.

Year	2017-18	2018-19
Value in Rs. Crores	4.534852	3.506705

10. Scope for the number of unit's number of years can be established, further

Indian lubrication device has significant opportunities both in domestic and export markets, so the Lubricator manufacturers need to develop capabilities to cater to this demand.

In the Asia-Pacific region countries such as India, China, Indonesia and Japan are rapidly increasing their infrastructure projects steel Oil & Gas sector which also acts as a major key factor for increasing requirement of lubrication device.

India is the second-largest lubricant consumer in the region, and exports from the sector have registered a consistent increase over the past few years.

11. The demand in the domestic market

India is the second-largest lubricant consumer in the region, and third in the world, after the United States and China. The country is the fourth and sixth largest producer of commercial vehicles and passenger cars, respectively.

In India, with the increasing demand for vehicles, several automakers have started investing heavily in various segments of the industry. Furthermore, the Indian government has been rolling out initiatives to attract FDI in the automotive industry, allowing 100% FDI under the automatic route. The government has also planned to introduce a new Green Urban Transport Scheme with central assistance of about INR 250 billion, to boost the growth of urban transport, along the low-carbon path, with an aim to reduce air pollution substantially.

The aforementioned growth in the automotive industry is expected to boost the demand for lubricants in the country.

12. Demand of the export market

The global market is geographically divided into i) Europe (Germany, U.K., France, Italy, Spain, Russia & Commonwealth of Independent States (CIS), Rest of Europe), ii) The Middle East and Africa (Gulf Cooperation Council (GCC), South Africa, Rest of Middle East & Africa), iii) Asia Pacific (China, India, Japan, ASEAN, Rest of Asia Pacific), iv) South America (Brazil, Mexico, Rest of South America) and v) North America (U.S.A., Canada, Rest of North America).

Amongst these regions, demand of Lubricators in Balkan countries is more Balkan countries cover the following countries: Bosnia and Herzegovina, Bulgaria, Croatia, Greece, Montenegro, Romania, Serbia, and Slovenia.

Chapter III

TECHNICAL DETAILS

1. Sector in which product is falling

Incorrect or inadequate lubrication results in equipment damage that can lead to breakdown. In many cases, single point lubricators are the solution to this problem. Single Point Lubricators filled with LE lubricants, you can deliver the right lubricant, in the right amount, to the right place, at the right time – 24/7. Export Single Point Lubricators filled with LE lubricants help eliminate costly manual lubrication.

2. End users of the products / sectors

The lubricator is a technical component that was developed to counter wear and tear and friction on the machine components by targeted lubrication. Lubricators are indispensable and its impact on the manufacturing/production unit is very profound indeed, provides the actual manufacturing muscle to all industries and determines the manufacturing competitiveness. The manufacturing industry could not exist without targeted lubrication of machines.

The user sectors of Lubricators are manufacturing industries of Steel, Oil & Gas, Automobiles textile industry, , railways, ship building, energy, defence, aerospace, nuclear power, agriculture, fertilizers, multiproduct engineering companies, Machine and Tool industry, industrial valves, power-driven pumps, compressors, Packaging, consumer goods like washing machines, refrigerators, television sets, dish washers, vacuum cleaners, air conditioners, etc.,

3. Governing Indian specification

IS: 4673-1968 standard by Bureau of Indian Standards describes the Week Feed Lubricator.

IS: 14876-2020 standard by Bureau of Indian Standards describes the Compressed Air Lubricators.

IS:14279-1995 standard by Bureau of Indian Standards describes the Barrel transfer pumps for Grease.

4. Governing International specification

SIST ISO 6301-1:1998 Pneumatic fluid power -- Compressed-air lubricators -- Part 1: Main characteristics to be included in supplier's literature and product-marking requirements.

5. Flow process chart of the manufacturing

Steps involved in Manufacturing of Lubricators

Step 1 : Conceptual development and design of Equipment.



Step 2 : Preparing part drawing as per order.



Step 3 : Identify vendor for supply of Materials.



Step 4 : Procurement of semi-finished items such as M.S, S.S, PVC, Brass, bar/ tube and other materials as per requirement of drawings from vendors and standard elements like nut, bearings, valve, Hosepipe, Filter, hardware items etc. to be procured as per specifications.



Step 5 : Machining all machine parts as per drawing.



Step 6 : Assemble of all parts.



Step 7 : Trial run, Testing and Certification.



Step 8 : Painting, Packing and dispatch to customers.

6. Qualitative parameters of the product

The following parameters are expressed as specifications of a lubricator.

Lathe Machine- Accuracy of machine on the work piece.

Sensor- Electronic Sensor for Auto Lubrication.

Valve & Clamp- Manufacturing of Valves, Clamp, oil filter, Hydraulic pipe and fittings,

Container- Shape and Size of Container. Coupling

7. Details of the product Licenses to be obtained

The Government of India is constantly supporting the manufacturing sector in the country and that is benefitting the Lubrication equipment's manufacturer industry as well. Among them one of the key highlights is Lubricators manufacturers are exempt from obtaining an industrial license for developing valves and filters manufacturing.

8. Equipment required for the manufacture of the product

As furnished in the Chapter III (THE DETAILED BANKABLE PROJECT REPORT OF LUBRICATORS) at Page No. 13 (Financial Aspects) I. (Fixed Capital) b. (Machinery and Equipment's required) Page : 16 & 17.

9. Test facilities required for the product

Test of Raw materials like Steel, Aluminium or Brass. Test of Raw material and Dimension test as per IS: 14279-1995 of Barrel transfer pumps, Dimension test for Wick Feed Lubricators is as per IS: 4673-1978

10. Technology existing in the manufacturing of the product

The days of manual lubrication are long gone. After few year an automatic lubricator fitted to a steam engine to supply lubricating oil to the cylinders and, sometimes, the bearings and axle box mountings as well, There are various types of automatic lubricator, which include various designs of displacement, hydrostatic and mechanical lubricators. In the modern-day automatic lubrication systems lubricate and protect the right points on each machine, using the right amount of the right lubricant at the right time. now a days Automatic lubrication systems reduce the risk of machine failure and support improved machine productivity. The mining and quarrying industries must maximize efficiency to extract raw materials from the ground in the most cost-effective way, and this means embracing the most up-to-date methods of production, state-of-the-art products and new technologies, such as automatic lubrication.

11. Suggested modern technology for implementation or available in the market

Technology development is crucial for improving productivity, efficiency and Competitiveness. The Indian lubricators was lagging behind major international lubricators manufacturer from Russia, Japan, Germany and the U.S. Technology up gradation is a continuous process, which helps the companies to attain international levels of competitiveness and to be able to offer contemporary levels of technology recognized in the market.

Indian lubricator industry has expertise to meet technological gap, it lacks the requisite resources. A sound industry and need based R & D infrastructure with adequate financial support would help in reducing this technological gap. The sector needs to upgrade its manufacturing technology and business processes to improve its productivity and also educate itself on the planning process to tackle the delays in delivery either by subcontractors, or by the companies themselves. In order to meet these some suggestions are given below.

1. Use of CAD / CAM in product design and development, manufacture
2. Training in best manufacturing practices and processes
3. Implement lean manufacturing concepts
4. Effective vendor development and supply chain management
5. Cost control measures; bulk purchasing by cluster etc.
6. Energy efficiency management
7. Electronic commerce including technical document exchange etc.

12. Raw materials required and availability

The following raw materials are required for manufacturing Lubricator..

1. Generally raw material used is cast iron, stainless steel, Brass, structural Steel plates.
2. Raw material like plastic, PVC material, polymer.
3. Springs, Fasteners, Hardware and accessories in standard.
4. Primers, Paints, Packaging Materials, etc.

All these components and materials are available easily and can be procured as per standard /design specifications.

13. Covering Raw material standards: Indian / International

Raw material standard as per IS:14279-1995 Barrel transfer pumps for Grease Lubricator covered IS 210 for testing of Gray Iron, IS 1239 Part 1 for Mild Steel Tube, IS 1783 Part 2 For Drum, IS 6528 for Stainless Steel Wire.

Chapter IV

THE DETAILED BANKABLE PROJECT REPORT OF LUBRICATORS

1. Introduction

The lubricator is a technical component that was developed to counter wear and tear and friction on machine components by targeted lubrication. A lubricator adds controlled quantities of tool oil into a compressed air system to reduce the friction of moving components. Most air tools, cylinders, valves, air motors, and other air-driven equipment require lubrication to extend their useful life. Without proper lubrication, bearings seldom survive more than 5-10 percent of their potential service life.

2. Product & its Application:

The high costs of bearing failures continue to plague heavy industrial plants, including steel mills, rolling mills and continuous casting operations. Frequently, these costs are a consequence of the failure to verify that bearings are receiving the proper amounts and types of lube oil or grease via the integration of monitoring capabilities into large, automated lubrication systems.

Without proper lubrication, bearings seldom survive more than 5-10 percent of their potential service life. This is due to multiple factors like corrosion, heat, caustic elements and high shock loads. However, failure to properly lubricate production equipment, particularly at the critical points, can be an even greater cause of bearing failures, resulting in unnecessary downtime and replacement costs.

3. Desired Qualifications for Promoter

Passed ITI, Diploma or Graduate in Engineering, preferably, Mechanical, Electrical trade with some background in machine design, machining, Electrical components assembly and marketing will have good scope to establish a project. Innovation, robust design and good accuracy of machines will surely build a good reputation for the entrepreneurs.

4. Basis and Presumptions

The following are the presumptions made while preparing this project report .

1. Project Cost comprising building rent, Machineries, Accessories, Electrification & plumbing works, salary & wages, raw materials, etc. are assumed and are approximate rate prevailing in the present scenario.
2. Working hours per shift: 8 Hrs.
3. No. of shift per day: 1
4. No. of working days per year: 300
5. Average man and machine utilization: 75 %
6. Rate of interest on Loan: 14 %
7. Depreciation on machineries, accessories, equipment's and furniture is taken as 10 %.
8. Pre-operative expenses include cost of project preparation, Technology, Advertisement, staffs recruitment, etc.
9. Price of the product is very depending on the type /size/precision/applications/other features as desired by customer. Average price is Rs. 20,000/-. The material requirements are Mild Steel, stainless steel, Brass, Aluminum structural Steel plates, plastic, pvc material, polymer, and accessories. Other standard like springs, valves, Hose pipe Fasteners and Hardware items bought as per design.

5. Implementation Schedule

The implementation of the project includes exercises such as procurement of technical know-how, market surveys, project report preparation, site/ rental building selection, finance arrangement, Registration and Clearance from local authority, procurement of machinery, and recruitment of staff, erection / commissioning of machines, trial run and commercial production. In order to efficiently and successfully implement the project,

Some exercises are carried out concurrently. Project implementation will take a take period of 6 months from the date of initiation. Commercial production starts from 7th month. Breakup of activities with relative time for each activity is shown below:

Activity	Period in Months
1. Technical know-how, Market survey, Project preparation & Site Selection	1
2. Arrangement of Finance	1
3. Completion of Registration, Clearance from local authority, etc.	1
4. Placement of order for machinery and procurement.	1
5. Installation, Erection, Power connection & Trial run machines.	1
6. Recruitment of staffs, Commencement and Trial of Production.	1
7. Commercial production and marketing.	1

6. Quality Control and Standards

There is no exclusive standards for Design & Manufacturing of Lubricators. However, May refer IS 4673-1968, IS 14876-2020, IS 14279-1995 standard by Bureau of Indian Standards describes the method of designation for Week Feed Lubricator, Compressed Air Lubricators, Barrel transfer pumps for Grease and Governing International specification SIST ISO 6301-1:1998 Pneumatic fluid power -- Compressed-air lubricators -- Part 1: Main characteristics to be included in supplier's literature and product-marking requirements

7. Production Capacity

Taking account of market demand and various other factors in process, the plant can be Utilized on 3/4th of full capacity to manufacture about 1200 Lubricators of various types in different size per annum.

8. Statutory / Government approvals

Udyam Registration as per MSME Act 2006 shall be done for export, IEC Code to be obtained. Approval for factory plan, safety, etc. is required as per factory inspectorate and ESI, PF, etc. as per labor laws. Before starting the unit will need GST registration for procurement of materials as also for sale of goods. The unit will have to ensure safe environment such as minimum height of shed will be maintained with exhausts fans installed for removing decongestion, proper ventilation, removal of cokes, fumes, etc.

9. Financial aspects

I. Fixed Capital

a. Land and Building

The unit is proposed to start in a rented building. Covered area of the building which includes Machine shop for Cutting, Machining, Welding, Painting, Quality Control, Packaging and Office for Marketing, Accounts & Administration. Rent for building per month Rs. 12,000/-.

b. Machinery and Equipment's required

Sl. No.	Item	Qty.	Amount (Rs.)
1.	Lathe Machine	01 No.	2,50,000/-
2.	Power Hacksaw Metal Cutting Machine 1 HP motor	01 No.	40,000/-
3.	Cut off Machine	01 No.	12,000/-
4.	Hand Drill machine	02 Nos.	6,000/-
5.	Bosch Grinding Machine	02 Nos.	9,000/-
6.	Bench Grinding Machine	01 No.	8,000/-
7.	MIG and ARC Welding Machine	01 No.	60,000/-
8.	Hand Press Machine	01 No.	8,000/-
9.	Riveting Machine	01 No.	1,20,000/-
10.	Compressor with spray gun for painting	01 No.	12,000/-
11.	Weighing Machine	02 Nos.	15,000
12.	Machinery Erection and electrification		30,000/-

Sl. No.	Item	Qty.	Amount (Rs.)
13.	Surface plates, Tool Holders, Clamps, Hand Tools, Vices, Sleeves, Files, Hacksaw frames and blades, Tools & Dies, Jigs & Fixtures, Inspection & measuring instruments, Gauges, etc.	1 Lot	2,50,000/-
14.	Work Tables, Storage Racks, Trolleys Office furniture, Office equipment's, Electrical fittings like fan, tubes, etc.	1 Lot	2,00,000/-
15.	Computer, Printer and Software	1 Set	80,000/-
TOTAL			1,100,000/-

II. Working Capital per Month

a. Manpower Requirement and Salary/month:

Sl. No	Designation	Nos.	Monthly Salary	Amount (Rs.)
1.	Proprietor cum Manager	1	50,000/-	50,000/-
2	Engineer	1	30,000/-	30,000/-
3.	Supervisor	1	25,000/-	25,000/-
4	Accountant-cum-store-keeper	1	18,000/-	18,000/-
5	Skilled workers (Machinist, Welder and Fitter)	2	20,000/-	40,000/-
6	Unskilled workers/Helper	2	10,000/-	20,000/-
7	Office Assistant	1	10,000/-	12,000/-
8	Security	1	15000/-	15000/-
9	Part Time Sweeper	1	5000/-	5000/-
Total expenses on salary		12		2,15,000/-

b.Raw Material Requirements (per month)

The following raw materials are required for manufacturing Lubricators. All these components and materials are available easily and can be procured as per design specifications.

Sl. No	Items	Rate (In Rs.)	Amount in Rs.
1	Mild Steel, Stainless steel, Brass, Aluminum sections, rods/bars, channels, angles, flats, PVC material etc. Average weighing 500 Kg for production of 100 Lubricators / month.	400/- per Kg. (Average Cost)	2,00,000/-
2	Bought out items Filter, Container, valve, Flow meter, washer, motor, Screws, Springs, Fasteners, Hose pipe, accessories, etc. in standard for 100 Lubricators / month..	10,000 per equipment	10,00,000/-
3	Primers, Paints, Packaging Materials, etc for 100 Lubricators / month..	1,000/- per equipment	1,00,000/-
		TOTAL	13,00,000/-

c. Utilities per month

Sl. No.	Description	Amount In (Rs.)
1	Electric Power	10,000/-
2	Water	1000/-
	TOTAL	11,000/-

d. Miscellaneous Expenses per month

Sl. No.	Description	Amount In (Rs.)
1	Building Rent	12000/-
2	Consumables & Stationeries	3000/-
3	Telephone, Internet and Postal	2000/-
4	Transportation charge	8000/-
5	Advertising & publicity	2000/-

Sl. No.	Description	Amount In (Rs.)
6	Insurance	8000/-
7	Other Misc Expenditure	5000/-
TOTAL		40,000/-

Total working capital for three months

Sl. No.	Description	Amount In (Rs.)
1	Salary of Staff & Worker	2,15,000/-
2	Raw Materials per month	13,00,000/-
3	Utilities per month	11,000/-
4	Miscellaneous Expenses per month	40,000/-
Total working capital or Recurring Expenditure per month		1,566,000/-
Total working capital for three months (1,566,000/- x 3)		46,98,000/-

IV. Total Capital Investment

Sl. No.	Description	Amount In (Rs.)
1.	Machinery & Equipment	1,100,000/-
2.	Working capital for 03 Months	46,98,000/-
Total		57,98,000/-

V. Means of Finance

Sl. No.	Means of Financing	Amount (Rs.)
1.	Promoter's Contribution	17,39,400
2.	Bank Loan Finance based on 70% on capital investment	40,58,600/-
Total		57,98,000/-

10. Financial Analysis

a. Cost of Production per annum

Sl. No.	Description	Amount In (Rs.)
1.	Working capital per month x 12	18,792,000/-
2.	Depreciation on Machinery @ 10%	1,10,000/-
3.	Interest on total investment @14%	8,11,720/-
Total		1,97,13,720/-

b. Turnover per Annum

By manufacturing of 1200 Lubricators in a year & selling them @ average price Rs. 20,000/- per piece.	Rs. 2,40,00,000/-
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PROFIT (Per Annum)

$$\begin{aligned}\text{Profit} &= \text{Total Sale} - \text{Cost of Production} \\ &= 2,40,00,000 - 1,97,13,720 \\ &= \text{Rs. } 42,86,280/\end{aligned}$$

PERCENTAGE OF PROFIT ON SALE

$$\begin{aligned}\text{Profit Rate on Sales} &= \frac{\text{Profit} \times 100}{\text{Total Sale}} \\ &= \frac{42,86,280 \times 100}{2,40,00,000} = \text{Rs. } 17.88\%\end{aligned}$$

PERCENTAGE OF RETURN OVER INVESTMENT

$$\begin{aligned}\text{Return over Investment} &= \frac{\text{Profit per Annum} \times 100}{\text{Total Capital Investment}} \\ &= \frac{42,86,280 \times 100}{57,98,000} = \text{Rs. } 73.93\%\end{aligned}$$

BREAK EVEN ANALYSIS

Sl. No.	Fixed Cost per annum	Amount In Rs.
1.	Depreciation on machinery	1,10,000/-
2.	Interest on total investment @14%	8,11,720/-
3.	40% of salary and wages	10,32,000/-
4.	40% of other Miscellaneous expenses & utilities (excluding Building rent and insurance)	1,48,800/-
TOTAL		21,02,520/-

$$\text{Break even Point (B.E.P)} = \frac{\text{Annual Fixed cost} \times 100}{\text{Annual Fixed cost} + \text{Profit}}$$

$$\text{Break even Point} = \frac{21,02,520 \times 100}{21,02,520 + 42,86,280} = 32.90\%$$

11. Details of Test facilities available in India

Test facilities for raw material testing available in discount rate for MSMEs units are available at MSME-TC Kolkata, MSME-TC Delhi, MSME-TC Mumbai, MSME-TC Chennai

12. Details of Raw Materials Suppliers

1. M/s. Lubcon Engineers, 23 / 2, Anand Vihar Colony, Hingne Khurd, Off Sinhagad Road, Pune – 411051, Tel No.- 9373863057
2. M/s. Mayur Corporation, Shop No. A-4, Trade Center, Ground Floor, 125/127, Narayan Dhuru Street, Masjid, Mumbai – 400003, Tel No.- 9033273968
3. M/s. Deep Hydropneumatic and Lubrication, 29, Pesh Industrial Complex, Near Century Enka Colony, Telco Road, Bhosari MIDC, Pune - 411026. Tel No.- 9920595126
4. M/s. Aadarsh Hydropneumatics, K-24/277, Shivshakti Apartment, Near Akbar Nagar, New Vadaj, Ahmedabad – 380013, Tel No.- 9033273968
5. M/s. Tushar Enterprises, Shop No. S - 06, Mangalmurti Industrial Complex, Plot No. T - 80, MIDC, Bhosari, Pune - 411026, Maharashtra, India, Tel No.- +91 80877 44888 / 98601 83968

13. Details of Machineries & Equipment's Supplier

1. M/s. Pathak Machine Tools Pvt. Ltd. Pyara dham NH-6 (Bombay Road)
Prosastha, Andulmouri, Howrah - 711302, India Phone No. : +91-33-26690475
- 2.M/s. Industrial Machinery Stores, 6,T.N.Tower, Assam Trunk Rd, Guwahati, Assam 781001,
Tel No.- 9435040158
- 3.M/s. Technochem Industries, Gat No. 90, Jyotiba Nagar, Near Jyotiba Chowk,
talawade,, Pune- 411 018, Maharashtra, India, Tel No.- 08048783801
4. M/s. Deep Hydropneumatic and Lubrication, 29, Pesh Industrial Complex, Near Century
Enka Colony, Telco Road, Bhosari MIDC, Pune - 411026. Tel No.- 9920595126
5. M/s. Global Computers - Jyoti Complex, 1st Floor, GS Rd, near Hotel Amrit Regency,
Ulubari, Guwahati, Assam 781007, Tel No.- 9435046111

Chapter V

SCHEMES AND CONSULTANCY SERVICES

1. Existing schemes available and their details

a. Udyam Registration

- 1.Any person who intends to establish a micro, small or medium enterprise may file Udyam Registration online in the Udyam Registration portal (<https://udyamregistration.gov.in>), based on self-declaration with no requirement to upload documents, papers, certificates or proof.
2. On registration, an enterprise (referred to as - Udyam in the Udyam Registration portal) will be assigned a permanent identity number to be known as - Udyam Registration Number.
3. An e-certificate, namely, - Udyam Registration Certificate shall be issued on completion of the registration process.
4. Registration is free of cost and paperless.

b. Credit Related Schemes

i. Prime Ministers Employment Generation Programme (PMEGP)

To encourage new entrepreneurs to set up micro-enterprises through credit-linked subsidy support. Margin Money subsidy on Bank Loan ranges from 15% to 35% for projects up to Rs. 25 lakhs in manufacturing and Rs. 10 lakhs in service sector. The maximum cost of projects is Rs.25.00 lakh in the manufacturing sector and Rs.10.00 lakh in the service sector. Scheme applicable for any individual above 18 years of age, SHGs, Charitable trusts, Registered Societies etc.

ii. Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE)

The objective of this scheme is to provide Collateral free loan upto a limit of Rs. 200 lakhs to new as well as existing Micro & Small Enterprises. The corpus of CGTMSE is contributed by Government of India and SIDBI.

iii. Credit Linked Capital Subsidy-Technology Up-gradation Scheme (CLCS -TUS)

The objective of this scheme is to facilitate MSMEs through institutional finance for induction of well-established and proven technologies in the specific sub-sector/products approved under the scheme. Upfront subsidy of 15% on institutional Credit up to Rs.1.0 crore (i.e. subsidy cap of Rs.15.00 lakhs) for identified sectors/ sub sectors/ technologies is provided in the scheme.

c. Infrastructure Support to Develop Clusters - Micro & Small Enterprises Cluster Development Programme (MSE - CDP)

The scheme provides financial assistance for establishment of Common Facility Centres (CFCs)/ establishment / up gradation of Industrial area / Estate/Flatted/Factory Complex; [Infrastructure Development (ID) projects] Marketing Hubs / Exhibition Centres by Associations; Thematic Interventions and Support to State Innovative Cluster Development Programme for enhancing the productivity and competitiveness of Micro and Small Enterprises. For establishment of Common Facility Centers, the Gol grant will be restricted to 70% of the cost of Project of maximum Rs.20.00 crore. Gol grant will be 90% for CFCs in NE & Hill States, Islands territories, Aspirational Districts / LWE affected Districts, Clusters with more than 50% (a) micro / village, (b) women owned, (c) SC/ST units. For Infrastructure Development, the Gol grant will be restricted to 60% of the cost of Project (Rs.10.00 crore for Industrial Estate & Rs.15.00 crore for Flatted Factory Complex). Gol grant will be 80% for Projects in NE & Hilly States, Island territories, Aspirational Districts, industrial areas / estates / Flatted Factory Complex with more than 50% (a) micro / village, (b) women owned (c) SC/ST units.

d. Technology Up-gradation and Competitiveness Enhancing Schemes for MSMEs

i. Design Clinic Scheme: The objective of Design Clinic Scheme is to promote innovations in designing of the product and enhance the value addition of local products and services. There is a provision of financial assistance of Rs.15 lakhs (Gol: Units::75:25) for individual or up to 3 Micro units and Rs.25 lakhs (Gol: Units::75:25) for more than 3 Micro units. For Small & Medium units, it is Rs..25 lakhs (Gol: Units::60:40) for individual or up to 3 Units and Rs.40 lakhs (Gol:Units::60:40) for more than 3 Units.

ii. Lean Manufacturing Competitiveness Scheme (LMCS): The Lean Manufacturing Competitiveness Scheme (LMCS) is an initiative to enhance the Competitiveness of the manufacturing sector by imbibing a culture of continuous improvement in order to increase the overall productivity of MSMEs through application of various Lean Techniques to reduce waste and increase productivity. Financial Assistance for Lean Intervention in MSMEs through Lean Consultants up to Rs.36 lakhs (maximum) per mini cluster of 10 units for a period of 18 months or till completion (Gol:Units::80:20; Rs. 28.8 lakhs: Rs. 7.2 lakhs).

iii. Financial Support to MSMEs in ZED Certification Scheme: The objectives of the scheme include promotion of Zero Defect and Zero Effect (ZED) manufacturing amongst MSMEs so as to promote adaptation of Quality tools/systems and Energy Efficient manufacturing, encourage to constantly up-grade their quality standards in products and processes without impacting the environment.

iv. Building Awareness on Intellectual Property Rights (IPRs): The objective is to enhance awareness of MSMEs about Intellectual Property Rights (IPRs) and to take measure for the protecting their ideas and business strategies through Awareness Programmes/Seminars, Workshops, Reimbursement for registration of IP, International Co-operation & setting-up IP facilitation centre across the country.

v. Entrepreneurial & Management development of MSEs through Incubators: The main objective of the scheme is to promote & support untapped creativity of individual and to promote adoption of latest technologies in manufacturing as well as Knowledge based innovative MSMEs (ventures) that seek the validation of their ideas at the proof of concept level. The scheme also supports engagement with Enablers who will advise such MSMEs in expanding the business by supporting them in design, strategy and execution. The Enablers will play a pivotal role and would be integral part of the business development. Host Institutes (HIs) shall be provided grant of up to Rs. 1.00 Cr. for procurement and installation of relevant plant and machines including hardware and software etc.

e. Procurement and Marketing Support (PMS) to MSMEs

i. The objective is to create awareness and educate the MSMEs about various marketing strategies and enhancing marketability of their products/services. Assistance is available for a) Participation of Individual MSEs in domestic trade fairs/exhibition across the country b) Organizing/Participation in trade fairs/exhibitions (Regional/National/International) by the Ministry/ Office of DC (MSME)/Government organizations c) Capacity building of MSMEs in modern packaging technique d) Development of Marketing Haats e) International/National Workshops/ Seminars f) Vendor Development Programmes g) Awareness Programme.

ii. **Public Procurement Policy** : To provide marketing support to Micro and Small Enterprises (MSEs), Ministry of MSME has notified the Public Procurement Policy for Micro and Small Enterprises (MSEs) : 2012 under the MSMED Act, 2006 which is effective from 1st April 2012 and has become mandatory w. e. f. April 2015.. Amendment to this policy mandates 25% annual procurement from MSEs by Central Ministries /Departments/Central Public Sector Enterprises (CPSEs) including 4% from MSEs owned by SC/ST and 3% from MSEs owned by Women entrepreneurs.

More details about the schemes available at the website :www.dcmsme.gov.in

2. Proposed schemes

a)Focus on MSME Development

1. Promote modernization of MSMEs through interest subvention scheme like Technology Up gradation Fund Scheme, and concessional rates of interest at 6-8%.
2. Incorporate all capital goods sub-sectors under Credit Linked Capital Subsidy Scheme and expand its geographical reach to all regions.
3. Develop and promote supplier clusters, common manufacturing clusters for MSMEs around large manufacturers. Incentivize large industries and corporate for hand holding MSMEs, and help in bringing them up to global standards.
4. Provide MSME tax allowance to corporate and public sector companies to purchase a certain percentage from MSMEs and function as 'Anchor Industry' for them.
5. Include employment generation as a criterion for MSMEs to get qualified for various initiatives under National Capital Goods Policy, apart from the definition given in MSMED Act 2006.

b) Promote Technology and Research & Development: Today in India, R & D work done by the industry is in isolation. R & D is not generally done in consultation with user sector. This needs to be changed and more interaction is necessary with the users to bring about innovative changes and add value to the products. Government Laboratories to focus on developing technologies that have impact on Lubricant equipment manufacturing.

c) Availability of Qualified People: The industry requires knowledge workers in the field and there is acute shortage of these people. School / ITI / Diploma / Engg. colleges curriculum to be modified to suit industrial requirements. One of the key steps to revamp the ITIs is to strengthen industry-academia linkage include a) Industrial visits of at least three weeks for the final year trainees should be made mandatory for all trades. b) Industries should be associated to design need based short term courses in the ITIs. c) Industry should come forward to solve the shortage of raw material problem in ITIs by giving job work to the ITIs.

d) Management Attitude

- i. Continuously upgrade skills through training
- ii. Pay on par with service sector
- iii. Incentives, bonus, family welfare schemes
- iv. Ensuring security in career

3. Details of agencies who can provide guidance

i. Office of Development Commissioner(MSME), Ministry of Micro, Small and Medium Enterprises (MSME), Govt. of India, Maulana Azad Road, Nirman Bhawan, New Delhi – 110108 Tel: 011 -23022220/22221/22211/ 22209 / 22202 Fax : 011 - 23062315 /61726 / 61068 Web : www.dcmsme.gov.in

The Office of Development Commissioner (MSME) functions as an apex body for formulating policies for the development of the sector MSME and is playing a very constructive role for strengthening this vital sector through a network of 32 MSMEDIs, 27 Br. MSMEDIs, 4 MSME Testing Centre, 7 MSME Testing Stations, 18 MSME-Technology Development Centre. To improve the productivity, competitiveness and capacity building of MSMEs, the GOI has formulated /adopted policies and schemes such as MSMED Act, 2006, CPPP for MSEs. MSE-CDP scheme, PMS, CLCSS, Promotion of New Technology Centres under TCSP Scheme, etc.

ii. Indian Institute of Petroleum(IIP), Dehradun – IIP a constituent laboratory of the Council of Scientific and Industrial Research (CSIR), an Autonomous Body under the Ministry of Science and Technology, Government of India. Accredited with ISO 9001:2015 standards, the Institute has been defining new technologies, products and services in the Oil and Gas sector and allied industries since 1960.

iii. Central Mechanical Engineering Research Institute, Durgapur- The Central Mechanical Engineering Research Institute (CMERI) is the apex R&D institute for mechanical engineering under the aegis of the Council of Scientific and Industrial Research (CSIR). Being the only national level research institute in this field, CMERI's mandate is to serve industry and develop mechanical engineering technology so that Indians dependence on foreign collaboration is substantially reduced in strategic and economy sectors.

iv. India Trade Promotion Organisation (ITPO), Pragathi Bhawan, Pragati Maidan, New Delhi - 110002. Tel: 011-23371390/822, ITPO is the nodal agency of the Indian Government, which promotes India's external trade. It provides impetus to trade, investment and technology transfer processes, through promotional tools such as organisation of fairs and exhibitions, buyer-seller meets, product promotion programmes, in India and abroad. It does promotion through overseas department stores, market surveys and information dissemination work too.

V. The Federation of Indian Export Organisations (FIEO) , Opposite Asian Games Village, New Delhi 110002. Tel : 011-26851310/12/14/15 Fax : 011- 26863087 Email : fieo@nda.vsnl.net.in Web : www.fieo.com. FIEO, an apex body of Indian export promotion organizations, represents the Indian entrepreneurs' spirit of enterprise in the global market. It is a partner of the Government of India in promoting India's exports.
