PROJECT PROFILE ON
FOOT OPERATED HANDWASH DISPENSER

1. Product	:	Foot Operated Hand Wash Dispenser
2. NIC Code (2008)	:	27509
3. Production capacity	:	Qty. 12000 Nos per Annum (Value Rs.**96,00,000/-**)
4. Month & year of Preparation	:	June 2020
5. Prepared by	:	MSME-Development Institute Govt. of India, Ministry of MSME, Ayyanthole, Thrissur - 680 003 Phone No: 0487- 2360638, 2360536 & 2360686 www.msmedithrissur.gov.in E.mail:dcdi-thrissur@dcmsme.gov.in

I. INTRODUCTION

Corona Virus (Covid-19) has been declared a Pandemic by WHO and we all are witnessing the changes it has brought into our daily lives. The number of people getting infected is increasing day by day and the best cure to stop the spread of the disease is prevention itself. In the present scenario, washing and sanitization of hands has changed from a basic etiquette to an utmost necessity as cleaning of hands has proven to completely eliminate the virus and keeps us from infecting ourselves and others. Foot Operated Hand Wash Dispenser is very useful because of its hands-free mechanism which helps to sanitize hands without getting in contact with the sanitizing surfaces. It is cost effective, easy to install, low maintenance and thus will help to reduce spread of Corona virus through cross contamination. This device is mainly designed for use in public areas like hospitals, school and big companies where a large number of workers are employed. Bottles of different sizes from 250 ml to 1 litre could be fixed.

2. MARKET

As the lockdown relaxations are being implemented, all establishments like shops, schools, colleges, offices, factories, places of worship, hospitals, shopping malls, apartment complexes, vegetable markets, railway stations, airports, bus stands etc. will witness the inflow of public and installing the Foot Operated Hand wash Dispenser at the entrance of all such establishments will help in eliminating the spread of Corona virus through contact. Considering its features, there is also scope for its installation outsides homes of individuals so that their visitors and they themselves get sanitized before entering. The demand for such equipments is high and will keep on increasing as more and more people will adopt the precautionary route of disease prevention.

3. BASIS & PRESUMPTIONS:

The basis for calculation of production capacity has been taken on a single shift basis on 75% efficiency,
The maximum capacity utilization on single shift basis, for 300 days in a year. During the first year and second year of operations, the capacity utilization is 60% and 80% respectively. The unit is expected to achieve full capacity utilization from the third year onwards.

- The salaries and wages, cost of raw materials, utilities, rent, etc. are based on the prevailing rates in and around Thrissur, Kerala. These cost factors are likely to vary with time and location.
- Interest on term loan and working capital has been taken @ 12% on an average. This rate may vary depending upon the policy of financial institutions/agencies from time to time
- The cost of the raw material, components, machinery and equipment's refer to a particular make/model and the prices are approximate
- The break-even point percentage indicated is of full capacity utilization
- The project preparation cost, etc. Whenever required may be considered under the pre-operative expense
- The minimum essential machinery required for the project has been indicated.

4. IMPLEMENTATION SCHEDULE:

The major activities in the implementation of the project have been listed and the average time for implementation of the project is estimated as 2 months

Sl.No	Name of activity	Period in months (Estimated)
1.	Preparation of project report	1
2.	Registration & other formalities	1
3.	Sanction of loan by financial institution	2
4.	Placement of orders	1
5.	Procurement	1
6.	Electrification & installation	1
7.	Procurement of raw materials	1
8.	Recruitment of technical personnel	1
9.	Trial operation	2nd Month
10.	Commercial operation	2nd Month

Note: Many of the above activities shall be initiated concurrently, Procurement of raw materials may commence from the time the bank sanctions the loan.

5. TECHNICAL ASPECTS & SPECIFICATION:

The functioning of the Foot Operated Hand wash Dispenser is completely mechanical and the components are

a) Big pipe with Diameter of 100 mm
b) Small pipe with Diameter of ½ Inch
c) Ground support plate
d) Readymade L Joints
e) Strong Industrial spring
f) Screws
g) Rope
h) Small plate (20 mm in length and 60 mm in width)

6. PROCESS OF MANUFACTURE

The big pipe with 100 mm diameter is cut in to small 1 m length with heavy pipe cutter. The small pipe with ½ Inch diameter is cut in to small 10 cm length with heavy pipe cutter. The smaller pipe in which readymade L joint will be screwed will be the moving part in the operation and it has to be inserted inside the bigger pipe on which another L joint will be there for supporting the sanitizer. A strong industrial spring has to be connected to the smaller pipe and the bigger pipe through slits made in such a way that the movement is free. The bigger pipe has to be screwed on to the Ground Support Plate. A rope will be attached to the smaller pipe and this will be connected to the foot pedal attached with the ground support plate. A plate will be in screwed near the slits in such a way that the sanitizer bottle could be placed.

7. PRODUCTION CAPACITY PER ANNUM

Sl.No.	Particulars	No. Of Units per annum	Unit Price	Amount in Rs.
1.	Foot Operated Hand wash Dispenser	**12,000**	**800**	**96,00,000/-**

8. POWER REQUIREMENT:

Less than 5 KVA. The project can also start without even industrial connection.

9. POLLUTION CONTROL:

The unit has to adhere the pollution control norms of central and state pollution control boards. The unit does not produce any Hazard as such however special precaution may be taken by applying NOC from pollution control board.

10. ENERGY CONSERVATION

The Energy Conservation Act, 2001 has been enacted which provides for efficient use of energy, its conservation and capacity building. The following steps may help for conservation of electrical energy:

a) Adoption of energy conserving technologies, production aids
b) Periodical maintenance of equipments
c) Proper selection and layout of lighting system
d) Timely switching on-off of the equipments, lights & fans
e) Use of LED lamps etc.

11. FINANCIAL ASPECTS

A)	**Fixed Capital**	
	i) Land and Building	
	Built up Area	100 sq.mts,
	Office, stores	50 sq.mts.
	Rent payable per month	**Rs. 15,000/-**
	ii) Machinery &Equipment's	

Sl.No	**Description**	**Unit (Nos.)**	**Cost (Rs.)**
1	Heavy pipe cutter	4	60,000
2.	Drilling machine	4	40,000
3.	Welding Machine	1	15,000
4.	Hand Operated press	1	10,000
5.	Painting booth with simple spray gun	1	80,000
6.	Hand Grinding Machine	1	5,000
7.	Tools & Accessories	1	20,000
		Total	**2,30,000**
8.	Electrification charges @10% cost of machinery and equipment		23,000

9.	Cost of office furniture/equipment	30,000
10.	Pre-operative expenses deposits and other miscellaneous expenses	20,000
	Total Fixed capital	**3,03,000**

B. WORKING CAPITAL

Recurring expenditure per month

i) Staff & Labour

Sl.No	Designation	No. of Persons	Salary (Rs.)	Total Salary (Rs.)
1.	Manager	1	25,000	25,000
2.	Technical/sales staff	4	18,000	72,000
3.	Semi Skilled worker	4	15,000	60,000
4.	Accountants/Office Assistant	2	20,000	40,000
	Perquisites @ 15%			29,550
			Total	**2,26,550**

ii) Raw material / month(for 1000 units)

Sl.No	Particulars	Ind/Imp	Qty	Rate	Value (Rs,)
1.	Big pipe100 mm-Dia	Ind	350 Nos Each (9 M)	300	1,05,000
2.	Small pipe ½ Inch- Dia	Ind	1000	12.4	12,400
3.	Ground support plate along with foot paddle		1000	150	1,50,000
4.	Readymade L Joints, Strong Industrial spring, Screws, Rope, Welding rods, Small plate(20 mm in length and 60 mm in width), Painting if needed.	Ind	1000	80	80,000
				Total	**3,47,400**

iii) Utilities / month

Sl.No	Particulars	Value (Rs.)
1.	Electric Power	9,000
2,	Water	1,000
	Total	**10,000**

iv) Other contingent expenses per month

Sl.No	Particulars	Value (Rs.)
1.	Rent	15,000
2.	Postage and Stationary	2,000
3.	Telephone/Internet charges	1,500
4.	Repair and maintenance	2,000
5.	Transport and Conveyance	10,000
6.	Advertisement and Publicity	20,000
7.	Insurance	2,000
8.	Miscellaneous expenditure	5,000
	Total	**57,500**

Total Recurring expenses per month	**6,56,450**
Working Capital (for 3 months)	**19,69,350**

Total Capital Investment

Sl.No	Particulars	Amount in Rs.
1.	Total Fixed Capital	3,03,000
2.	Working Capital for three months	18,97,350
	Total Capital Investment	22,00,350

Financial analysis

Cost of production/annum

Sl.No	Particulars	Amount in Rs
1.	Total recurring cost per year	78,77,400
2.	Depreciation on machinery and equipment's @ 10% per year	23,000
3.	Depreciation on furniture/office equipment's @ 20% per year	600
4.	Interest on capital investment @ 12%	2,64,042
	Total	**81,60,042**

Total Turnover per annum

Sl. No	Particulars	Units	Rate	Amount in Rs
1.	Foot operated Hand wash dispenser	12,000	800	96,00,000

Profit per year = **(Turnover – Cost of production)**

= **96,00,000 – 81,65,042**

= **Rs.14,34,958/-**

Percentage of profit on sales = $\frac{\text{Profit per year X 100}}{\text{Total turnover}}$

= $\frac{\text{17, 29,918X100}}{\text{96,00,000}}$

= **14.95%**

Percentage of profit on Capital investment = $\frac{\text{Profit per year X 100}}{\text{Total capital investment}}$

= $\frac{\text{17, 29,918 X 100}}{\text{21, 67,350}}$

= **65.21**

Break Even Analysis

Annual Fixed Cost

Sl. No.	Particulars	Amount in Rs
1.	Rent	1,80,000
2.	Depreciation on machinery and equipment's @ 10% per year	23,000
3.	Depreciation on furniture/office equipment @ 20% per year	600
4.	40% of salaries	10,87,440
5.	40% of other contingent expenses (excluding rent & insurance)	1,94,400
6.	Interest on capital investment	2,64,042
7.	Insurance	24,000
	Total fixed cost	**17,73,482**

Break Even Point = **Fixed Cost X 100**
Fixed cost + Profit

= **17, 73,482 X 100**
(17,73,482+14,34,958)

= **55.28**

Name and Address of Raw material & Machinery supplier

All the type of raw material can be purchased locally an also the machinery used in this project can also be purchased locally.

Sl. No.	Name of Department/organisation	Purpose
1.	MSME-Development Institute, Thrissur	Schemes of Min. of MSME
2.	DIC, Thrissur	PMEGP scheme and other schemes of Govt. of Kerala
3.	www.udyogaadhar.gov.in	For Udyog Aadhar registration
4.	www.gem.gov.in	For gem registration