## PROJECT REPORT

## Of

## PP BLOW MOLDING <br> CONTAINER

## PURPOSE OF THEDOCUMENT

This particular pre-feasibility is regarding PP Blow Molding Container.

The objective of the pre-feasibility report is primarily to facilitate potential entrepreneurs in project identification for investment and in order to serve his objective; the document covers various aspects of the project concept development, start-up, marketing, finance and management.
[We can modify the project capacity and project cost as per your requirement. We can also prepare project report on any subject as per your requirement.]

## PROJECT AT A GLANCE

1 Name of the Entreprenuer
2 Constitution (legal Status)
3 Father / Spouse Name
4 Unit Address

5 Product and By Product

6 Name of the project / business activity proposed:

7 Cost of Project
8 Means of Finance
Term Loan
Own Capital
Working capital
9 Debt Service Coverage Ratio
10 Pay Back Period
11 Project Implementation Period
12 Break Even Point
13 Employment
14 Power Requirement
15 Major Raw materials
16 Estimated Annual Sales Turnover (Max Capacity)
17 Detailed Cost of Project \& Means of Finance COST OF PROJECT

| (Rs. In Lakhs) |  |
| :--- | ---: |
| Particulars | Amount |
| Land | Own/Rented |
| Plant \& Machinery | 30.00 |
| Furniture \& Fixtures | 2.00 |
| Working Capital | 6.67 |
| Total | $\mathbf{3 8 . 6 7}$ |

MEANS OF FINANCE

| Particulars | Amount |
| :--- | ---: |
| Own Contribution | 3.87 |
| Working Capital(Finance) | 6.00 |
| Term Loan | 28.80 |
| Total | $\mathbf{3 8 . 6 7}$ |

## PP BLOW MOLDING CONTAINER

Introduction: PP can be blow molded into containers of different sizes and shapes. Some of the common items that are produced include bottles \& jerry cans. It has various characteristics:

- Light Weight
- Flexibility
- Corrosion and chemical resistance have made these plastic products versatile for storage and handling of water, petroleum products
- Due to its transparency and high strength characteristics, PP bottles are used for detergents, shampoos, motor oil, milk, drugs and cosmetic products.
- Milk bottles are the single biggest PP packaging material. Most milk and water bottles use a natural colored PP resin.


Uses \& Market Potential: The blow molding container are used as fuel tanks in automotive vehicles and can also be used as laundry detergent
bottles. After the development of PP material in copolymer grades, these bottles are cornering the market for packaging liquids such as detergents, cosmetics, lubricants and dairy products, a market whose scope has opened up a multitude of potential applications PP. At present, cartons, pouches and bottles made of HDPE, PP, PET and PE compete for space on retailers' shelves. Glass bottles have lost market share and are now holding their own in just a few traditional segments. The blow molding container has a wide applications and the demand of this product is high and will increase in future.

Raw material: Major raw materials are as follows:

1. Polypropylene(PP Granules)
2. Colourant

Machine Requirement: Major machinery and equipments are as follows:

| Description | Quantity | Rate | Value |
| :--- | :--- | :--- | :--- |
| Automatic Blow mould Extruder <br> Machine 3 Ltr | 1 | 2500000 | 2500000 |
| Mould 3 Ltr | Ls |  | 500000 |
| Total Amount |  |  | $\mathbf{3 0 0 0 0 0 0}$ |

Manufacturing Process: PP granules are fed in to an automatic extrusion blow molding machine and is subjected to heat and pressure in an extruder. The semi-molten plastic in extruder is passed through the nozzle and air is blown into the mould to force the molten plastic against the sides of the mould. The final product is then cooled before removal from the mould. The article is then trimmed to remove flashes.

Area: The industrial setup requires space for Inventory, workshop or manufacturing area, space for power supply utilities and auxiliary like Generator setup. Also some of the area of building is required for office staff facilities, documentation, office furniture, etc. Thus, the approximate total area required for complete industrial setup is 1500 to 2000 Sqft.

Power Requirement: The power consumption required to run all the machinery could be approximated as 30 Hp

Manpower Requirement: There are requirement of skilled machine operators to run the machine set. Experience quality engineers are required for desired quality control. Some helpers are also required to transfer the material from one work station to other. Office staffs are required to maintain the documentation. The approximate manpower required is 10 including 1 Supervisor, 2 Plant operator, 2 unskilled worker, 1 Helper and 1 Security guard. 3 Skilled worker including Accountant, Manager and Sales person.

Bank Term Loan: Rate of Interest is assumed to be at 11\%

Depreciation: Depreciation has been calculated as per the Provisions of Income Tax Act, 1961

## Approvals \& Registration Requirement:

Basic registration required in this project:

- GST Registration
- Udyog Aadhar Registration (Optional)
- Choice of a Brand Name of the product and secure the name with Trademark if require.
- NOC from State Pollution Control Board


## Implementation Schedule:

| S No. | Activity | Time required |
| :--- | :--- | :--- |
| 1. | Acquisition of premises | $1-2$ Months |
| 2. | Procurement \& installation of Plant \& Machinery | $1-2$ Months |
| 3. | Arrangement of Finance | $1.5-2$ Months |
| 4. | Requirement of required Manpower | 1 Month |
| 5. | Commercial Trial Runs | 1 Month |
|  | Total time Required (some activities shall run <br> concurrently) | $5-6$ Months |




PROIECTED CASH FLOW STATEMENT

| O-CCTED |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PARTICULARS | I | II | III | IV | v |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| SOURCES OF FUND |  |  |  |  |  |
|  |  |  |  |  |  |
| Own Contribution | 3.87 | - |  |  |  |
| Reserve \& Surplus | 4.33 | 9.79 | 14.26 | 18.26 | 22.86 |
| Depriciation \& Exp. W/off | 4.70 | 4.01 | 3.41 | 2.91 | 2.48 |
| Increase In Cash Credit | 6.00 |  |  |  |  |
| Increase In Term Loan | 28.80 | - | - | - | - |
| Increase in Creditors | 0.78 | 0.11 | 0.07 | 0.07 | 0.07 |
|  |  |  |  |  |  |
| TOTAL: | 48.48 | 13.91 | 17.75 | 21.24 | 25.41 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| APPLICATION OF FUND |  |  |  |  |  |
|  |  |  |  |  |  |
| Increase in Fixed Assets | 32.00 | - | - | - | - |
| Increase in Stock | 4.83 | 0.76 | 0.71 | 0.75 | 0.79 |
| Increase in Debtors | 3.53 | 0.78 | 0.65 | 0.70 | 0.74 |
| Repayment of Term Loan | 3.20 | 6.40 | 6.40 | 6.40 | 6.40 |
| Taxation | - | 0.98 | 2.14 | 3.65 | 5.71 |
| Drawings | 4.00 | 4.50 | 7.50 | 9.50 | 11.50 |
| TOTAL: | 47.56 | 13.41 | 17.41 | 21.00 | 25.15 |
|  |  |  |  |  |  |
| Opening Cash \& Bank Balance | - | 0.92 | 1.41 | 1.75 | 2.00 |
|  |  |  |  |  |  |
| Add: Surplus | 0.92 | 0.49 | 0.34 | 0.24 | 0.26 |
|  |  |  |  |  |  |
| Closing Cash \& Bank Balance | 0.92 | 1.41 | 1.75 | 2.00 | 2.26 |


| COMPUTATION OF MAKING OF PP BLOW MOLDING CONTAINER |  |  |  |
| :--- | :--- | ---: | ---: |
|  |  |  |  |
| Item to be Manufactured PP Blow molding container(3 Ltr.) |  |  |  |
| Manufacturing Capacity per day |  | 3,000 | No.s |
|  |  |  |  |
| No. of Working Hour |  | 8 |  |
|  |  | 25 |  |
| No of Working Days per month |  | 300 |  |
|  |  | $9,00,000$ | No.s |
| No. of Working Day per annum |  | $9,00,000$ | No.s |
|  |  | Capacity | PP BLOW |
| Total Production per Annum |  | Utilisation |  |
| Total Production per Annum |  |  |  |
| Year |  | $55 \%$ | $4,95,000.00$ |
|  |  | $60 \%$ | $5,40,000.00$ |
|  |  | $65 \%$ | $5,85,000.00$ |
| I |  | $70 \%$ | $6,30,000.00$ |
| II |  | $75 \%$ | $6,75,000.00$ |
| III |  |  |  |
| IV |  |  |  |
| V |  |  |  |
|  |  |  |  |

COMPUTATION OF RAW MATERIAL

| Item Name |  | Quantity of <br> Raw Material | Unit | Unit Rate of | Total CostPer <br> Annum (100\%) |
| :--- | :--- | :--- | :--- | :---: | :---: |
| PP Granules |  | 80.00 | MT | $70,000.00$ | $56,00,000.00$ |
| Colourant |  | Lusmum |  |  | $5,00,000.00$ |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Total |  |  |  |  |  |
|  |  |  |  | $\mathbf{6 1 , 0 0 , 0 0 0 . 0 0}$ |  |
| Total Raw material in Rs lacs |  |  |  |  |  |


| Raw Material Consumed | Capacity |  | Amount (Rs.) |  |  |
| :--- | ---: | ---: | ---: | :--- | :--- |
|  | Utilisation |  |  |  |  |
|  |  |  |  |  |  |
| I | $55 \%$ |  | 33.55 |  |  |
| II | $60 \%$ |  | 38.43 | $5 \%$ Increase in Cost |  |
| III | $65 \%$ |  | 41.63 | $5 \%$ Increase in Cost |  |
| IV | $70 \%$ |  | 44.84 | $5 \%$ Increase in Cost |  |
| V | $75 \%$ |  | 48.04 | $5 \%$ Increase in Cost |  |
|  |  |  |  |  |  |


| COMPUTATION OF SALE |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Particulars | I | II | III | IV | V |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Op Stock | - | 24,750.00 | 27,000.00 | 29,250.00 | 31,500.00 |
|  |  |  |  |  |  |
| Production | 4,95,000.00 | 5,40,000.00 | 5,85,000.00 | 6,30,000.00 | 6,75,000.00 |
|  |  |  |  |  |  |
|  | 4,95,000.00 | 5,64,750.00 | 6,12,000.00 | 6,59,250.00 | 7,06,500.00 |
| Less : Closing Stock(15 Days) | 24,750.00 | 27,000.00 | 29,250.00 | 31,500.00 | 33,750.00 |
|  |  |  |  |  |  |
| Net Sale | 4,70,250.00 | 5,37,750.00 | 5,82,750.00 | 6,27,750.00 | 6,72,750.00 |
|  |  |  |  |  |  |
| Sale Price per Pc | 15.00 | 16.00 | 17.00 | 18.00 | 19.00 |
|  |  |  |  |  |  |
| Sale (in Lacs) | 70.54 | 86.04 | 99.07 | 113.00 | 127.82 |


| COMPUTATION OF CLOSING STOCK \& WORKING CAPITAL |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PARTICULARS | I | II | III | IV | v |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Finished Goods |  |  |  |  |  |
| (15 Days requirement) | 3.16 | 3.67 | 4.23 | 4.82 | 5.45 |
| Raw Material |  |  |  |  |  |
| (15 Days requirement) | 1.68 | 1.92 | 2.08 | 2.24 | 2.40 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Closing Stock | 4.83 | 5.59 | 6.31 | 7.06 | 7.85 |


| COMPUTATION OF WORKING CAPITAL REQUIREMENT |  |  |  |
| :---: | :---: | :---: | :---: |
| Particulars | Amount | $\operatorname{Margin}(10 \%)$ | Net |
|  |  |  | Amount |
| Stock in Hand | 4.83 |  |  |
| Less: |  |  |  |
| Sundry Creditors | 0.78 |  |  |
| Paid Stock | 4.05 | 0.41 | 3.65 |
|  |  |  |  |
| Sundry Debtors | 3.53 | 0.35 | 3.17 |
| Working Capital Requirement |  |  | 6.82 |
|  |  |  |  |
| Margin |  |  | 0.76 |
|  |  |  |  |
| MPBF |  |  | 6.82 |
| Working Capital Demand |  |  | 6.00 |


| BREAK UP OF LABOUR |  |  |  |  |
| :--- | :--- | :--- | :--- | ---: |
|  |  |  |  |  |
| Particulars |  | Wages | No of | Total |
|  |  | Per Month | Employees | Salary |
| Supervisor |  | $25,000.00$ | 1 | $25,000.00$ |
| Plant Operator |  | $22,000.00$ | 2 | $44,000.00$ |
| Unskilled Worker |  | $16,000.00$ | 2 | $32,000.00$ |
| Helper |  | $10,000.00$ | 1 | $10,000.00$ |
| Security Guard |  | $6,000.00$ | 1 | $6,000.00$ |
|  |  |  |  |  |
|  |  |  |  | $1,17,000.00$ |
| Add: $5 \%$ Fringe Benefit |  |  |  | $5,850.00$ |
| Total Labour Cost Per Month |  |  |  | $1,22,850.00$ |
| Total Labour Cost for the year ( In Rs. Lakhs) |  |  | 14.74 |  |


| BREAK UP OF SALARY |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
| Particulars |  | Salary | No of | Total |
|  |  | Per Month | Employees | Salary |
| Manager |  | $25,000.00$ | 1 | $12,000.00$ |
| Accountant cum store keeper |  | $22,000.00$ | 1 | $22,000.00$ |
| Sales |  | $18,000.00$ | 1 | $18,000.00$ |
| Total Salary Per Month |  |  |  | $52,000.00$ |
|  |  |  |  |  |
| Add: $5 \%$ Fringe Benefit |  |  |  | $2,600.00$ |
| Total Salary for the month |  |  |  | $54,600.00$ |
|  |  |  |  |  |
| Total Salary for the year (In Rs. Lakhs) |  |  |  | 6.55 |


| COMPUTATION OF DEPRECIATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Description | Land | Plant \& Machinery | Furniture | TOTAL |
|  |  |  |  |  |
|  |  |  |  |  |
| Rate of Depreciation |  | 15.00\% | 10.00\% |  |
| Opening Balance | Leased | - | - | - |
| Addition | - | 30.00 | 2.00 | 32.00 |
|  | - | 30.00 | 2.00 | 32.00 |
|  |  | - | - |  |
| TOTAL |  | 30.00 | 2.00 | 32.00 |
| Less: Depreciation | - | 4.50 | 0.20 | 4.70 |
| WDV at end of Ist year | - | 25.50 | 1.80 | 27.30 |
| Additions During The Year | - | - | - | - |
|  | - | 25.50 | 1.80 | 27.30 |
| Less: Depreciation | - | 3.83 | 0.18 | 4.01 |
| WDV at end of IInd Year | - | 21.68 | 1.62 | 23.30 |
| Additions During The Year | - | - | - | - |
|  | - | 21.68 | 1.62 | 23.30 |
| Less: Depreciation | - | 3.25 | 0.16 | 3.41 |
| WDV at end of IIIrd year | - | 18.42 | 1.46 | 19.88 |
| Additions During The Year | - | - | - | - |
|  | - | 18.42 | 1.46 | 19.88 |
| Less: Depreciation | - | 2.76 | 0.15 | 2.91 |
| WDV at end of IV year | - | 15.66 | 1.31 | 16.97 |
| Additions During The Year | - | - | - | - |
|  | - | 15.66 | 1.31 | 16.97 |
| Less: Depreciation | - | 2.35 | 0.13 | 2.48 |
| WDV at end of Vth year | - | 13.31 | 1.18 | 14.49 |


| REPAYMENT SCHEDULE OF TERM LOAN |  |  |  |  |  | 11.0\% |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Particulars | Amount | Addition | Total | Interest | Repayment | Cl Balance |
| I | Opening Balance |  |  |  |  |  |  |
|  | Ist Quarter | - | 28.80 | 28.80 | 0.79 | - | 28.80 |
|  | Iind Quarter | 28.80 | - | 28.80 | 0.79 | - | 28.80 |
|  | IIIrd Quarter | 28.80 | - | 28.80 | 0.79 | 1.60 | 27.20 |
|  | Ivth Quarter | 27.20 | - | 27.20 | 0.75 | 1.60 | 25.60 |
|  |  |  |  |  | 3.12 | 3.20 |  |
| II | Opening Balance |  |  |  |  |  |  |
|  | Ist Quarter | 25.60 | - | 25.60 | 0.70 | 1.60 | 24.00 |
|  | Iind Quarter | 24.00 | - | 24.00 | 0.66 | 1.60 | 22.40 |
|  | IIIrd Quarter | 22.40 | - | 22.40 | 0.62 | 1.60 | 20.80 |
|  | Ivth Quarter | 20.80 |  | 20.80 | 0.57 | 1.60 | 19.20 |
|  |  |  |  |  | 2.55 | 6.40 |  |
| III | Opening Balance |  |  |  |  |  |  |
|  | Ist Quarter | 19.20 | - | 19.20 | 0.53 | 1.60 | 17.60 |
|  | Iind Quarter | 17.60 | - | 17.60 | 0.48 | 1.60 | 16.00 |
|  | IIIrd Quarter | 16.00 | - | 16.00 | 0.44 | 1.60 | 14.40 |
|  | Ivth Quarter | 14.40 |  | 14.40 | 0.40 | 1.60 | 12.80 |
|  |  |  |  |  | 1.85 | 6.40 |  |
| IV | Opening Balance |  |  |  |  |  |  |
|  | Ist Quarter | 12.80 | - | 12.80 | 0.35 | 1.60 | 11.20 |
|  | Iind Quarter | 11.20 | - | 11.20 | 0.31 | 1.60 | 9.60 |
|  | IIIrd Quarter | 9.60 | - | 9.60 | 0.26 | 1.60 | 8.00 |
|  | Ivth Quarter | 8.00 |  | 8.00 | 0.22 | 1.60 | 6.40 |
|  |  |  |  |  | 1.14 | 6.40 |  |
| V | Opening Balance |  |  |  |  |  |  |
|  | Ist Quarter | 6.40 | - | 6.40 | 0.18 | 1.60 | 4.80 |
|  | Iind Quarter | 4.80 | - | 4.80 | 0.13 | 1.60 | 3.20 |
|  | IIIrd Quarter | 3.20 | - | 3.20 | 0.09 | 1.60 | 1.60 |
|  | Ivth Quarter | 1.60 |  | 1.60 | 0.04 | 1.60 | 0.00 |
|  |  |  |  |  | 0.44 | 6.40 |  |


| Door to Door Period | 60 | Months |
| :--- | ---: | :--- |
| Moratorium Period | 6 | Months |
| Repayment Period | 54 | Months |



| COMPUTATION OF ELECTRICITY |  |  |  |
| :---: | :---: | :---: | :---: |
| (A) POWER CONNECTION |  |  |  |
|  |  |  |  |
| Total Working Hour per day | Hours | 8 |  |
| Electric Load Required | HP | 30 |  |
| Load Factor |  | 0.7460 |  |
| Electricity Charges | per unit | 7.50 |  |
| Total Working Days |  | 300 |  |
| Electricity Charges |  |  | 4,02,840.00 |
|  |  |  |  |
| Add : Minimim Charges (@10\%) |  |  |  |
|  |  |  |  |
|  |  |  |  |
| (B) DG set |  |  |  |
| No. of Working Days |  | 300 | days |
| No of Working Hours |  | 0.3 | Hour per day |
| Total no of Hour |  | 90 |  |
| Diesel Consumption per Hour |  | 8 |  |
| Total Consumption of Diesel |  | 720 |  |
| Cost of Diesel |  | 65.00 | Rs. / Ltr |
| Total cost of Diesel |  | 0.47 |  |
| Add : Lube Cost @15\% |  | 0.07 |  |
| Total |  | 0.54 |  |
|  |  |  |  |
| Total cost of Power \& Fuel at 100\% |  |  | 4.57 |
|  |  |  |  |
| Year | Capacity |  | Amount |
|  |  |  | (in Lacs) |
|  |  |  |  |
| I | 55\% |  | 2.51 |
| II | 60\% |  | 2.74 |
| III | 65\% |  | 2.97 |
| IV | 70\% |  | 3.20 |
| V | 75\% |  | 3.42 |

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