## PROJECT REPORT

## Of

## RUBBER BALLOONS

## PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding Rubber Balloons.

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 REPORT

## ON

## RUBBER BALLOONS



Introduction: Rubber balloons are thin gauge rubber products produced from suitable latex compound. It is considered as cheapest of all toys and hence it is extremely popular in all segments of population. Toy balloons have no formal specification. Toy Rubber Balloons are perhaps the most popular toy of children. As it is made primarily with Natural Rubber latex it is a resource-based industry

Market: Toy Rubber balloons are not only the most popular toy of children; it is also used in Birth-day celebrations, decoration of shops \& restaurants. It is also used for target -practice and decorations to show festivities. Thus from demand aspect also Toy Rubber Balloons have good scope.

Installed Capacity: Operating single shift of 8 hours per day for 300 working days per annum the unit shall have an installed capacity to produce 1,80,000 packets of 100 balloons each per annum.

Suggested Capacity: The minimum economic capacity of a unit manufacturing balloons is 1 million pcs. Per annum based on 30 days working schedule in a year.

Raw Materials: 97.32 percent of Rubber balloon comprise of Ammonia reduced Latex. Casein, Potasium hydroxide, Sulphur, Zinc oxide, colour pigments and chemicals like vulcanax SP, Vulkacit LDA forms the remaining 2.68 percent of raw materials. Rubberchemicals are available from ICI (India) Pvt. Ltd. Gesent House, Bollard Estate, Mumbai-1 and Munsanto chemicals of Indian (P)Ltd; Vakefield House, Sprott Road, Mumbai Latex is available locally.

## Process of Manufacture:

Although rubber can be made synthetically, natural latex is preferred for its great elasticity. It can be stretched to seven or eight times its original length and still return to its former shape. Synthetic rubber has not proven to be as elastic and resilient as natural latex.

Raw, natural latex is a white or yellowish opaque liquid, similar in appearance to milk.
Latex must be mixed with additives before it can be used in industrial processes. Certain chemicals are mixed in to achieve a desired thickness, rate of drying, and other properties. Other chemicals (collectively known as antidegradants) are added to slow the oxidation and decomposition of the rubber. To give it color, pigments are mixed into the latex. The pigments may be fine metal oxide powders or organic dyes.

## Process Flow



By blowing air and reacting the latex with formaldehyde the Ammonia content of Latex is reduced to about 0.1 percent. In this latex casein, Polassium hydroxide, Vulkanox SP, Sulphur, Vulkacit LDA, Zinc Oxide, Colour pigments, etc. are added. Moulds or formers are dipped in this latex compound. Formed balloons are vulcanized is a hot-air-oven. Balloons are then slupped off formers. Balloons are then packed in polythene bags manually for sales.

## QUALITY CONTROL

The balloon manufacturing environment must be strictly controlled in order to achieve high quality and consistency. Throughout the manufacturing process, computerbased instrumentation records and controls air humidity, air temperature, latex tank temperature, the temperature in the ovens, dryers, and other parameters.
The latex and other chemicals used in the process must be carefully formulated for specific properties, and carefully maintained. For example, the latex must have certain viscosity and speed of drying. The tanks in which it is held must have devices to keep the latex circulating to avoid forming a "skin," and to prevent ingredients from settling.

## BYPRODUCTS/WASTE

It is in the manufacturers' best interests to waste as little rubber as possible because the cost of latex is high compared to the selling price of individual balloons. Balloon makers also reclaim much of the coagulant that ends up in the leaching solution. Unfortunately, what is not reclaimed ends up as liquid waste in the environment. The amount of chemical waste that can be released by a factory is regulated by government laws. Balloons also result in some waste after they are manufactured because they are invariably thrown away after they deflate or pop. However, because latex is natural, it eventually breaks down into other substances.

Toy balloons can be a source of joy, but they can also be unexpectedly hazardous. Young children have been known to die from accidentally choking on balloons


| PROJECTED BALANCE SHEET |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PARTICULARS | IST Year | IIND YEAR | IIIRD YEAR | IVTHYEAR | vthyear |
| SOURCES OF FUND |  |  |  |  |  |
| Capital Account | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 |
| Retained Profit | 9.13 | 20.60 | 33.18 | 48.07 | 65.19 |
| Term Loan | 9.75 | 7.31 | 4.87 | 2.44 | 0.12 |
| Cash Credit | 5.47 | 5.47 | 5.47 | 5.47 | 5.47 |
| Sundry Creditors | 2.41 | 2.81 | 3.21 | 3.61 | 4.02 |
| Provisions \& Other Liab | 0.36 | 0.40 | 0.44 | 0.48 | 0.53 |
| TOTAL: | 28.80 | 38.28 | 48.86 | 61.76 | 77.01 |
| APPLICATION OF FUND |  |  |  |  |  |
| Fixed Assets (Gross) | 10.23 | 10.23 | 10.23 | 10.23 | 10.23 |
| Gross Dep. | 1.17 | 2.26 | 3.20 | 4.04 | 4.77 |
| Net Fixed Assets | 9.06 | 7.97 | 7.03 | 6.19 | 5.46 |
| Current Assets |  |  |  |  |  |
| Sundry Debtors | 2.19 | 2.79 | 3.20 | 3.60 | 4.01 |
| Stock in Hand | 6.30 | 7.35 | 8.40 | 9.45 | 10.50 |
| Cash and Bank | 8.76 | 17.41 | 27.22 | 39.19 | 53.38 |
| Deposits \& Advances | 2.50 | 2.75 | 3.03 | 3.33 | 3.66 |
| TOTAL: | 28.80 | 38.28 | 48.86 | 61.76 | 77.01 |
|  | - | - | - | - | - |


| PROJECTED PROFITABILITY STATEMENT |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PARTICULARS | IST Year | IIND YEAR | IIIRD YEAR | IVTH YEAR | VTH YEAR |
| A) SALES |  |  |  |  |  |
| Gross Sale | 43.74 | 55.89 | 63.99 | 72.09 | 80.19 |
| Total (A) | 43.74 | 55.89 | 63.99 | 72.09 | 80.19 |
| B) COST OF SALES |  |  |  |  |  |
| Raw Mateiral Consumed | 24.09 | 28.11 | 32.12 | 36.14 | 40.15 |
| Elecricity Expenses | 0.43 | 0.50 | 0.57 | 0.64 | 0.72 |
| Repair \& Maintenance | - | 0.56 | 0.64 | 0.72 | 0.80 |
| Labour \& Wages | 4.75 | 5.23 | 5.75 | 6.32 | 6.96 |
| Depriciation | 1.17 | 1.08 | 0.95 | 0.83 | 0.73 |
| Consumables, packaging and Othe |  |  |  |  |  |
| Expenses | 2.19 | 2.79 | 3.20 | 3.60 | 4.01 |
| Cost of Production | 32.63 | 38.27 | 43.23 | 48.26 | 53.36 |
| Add: Opening Stock/WIP | - | 3.89 | 4.54 | 5.18 | 5.83 |
| Less: Closing Stock/WIP | 3.89 | 4.54 | 5.18 | 5.83 | 6.48 |
| Cost of Sales (B) | 28.74 | 37.62 | 42.58 | 47.61 | 52.72 |
| C) GROSS PROFIT (A-B) | 15.00 | 18.27 | 21.41 | 24.48 | 27.47 |
|  | 34\% | 33\% | 33\% | 34\% | 34\% |
| D) Bank Interest (Term Loan ) | 0.84 | 1.02 | 0.74 | 0.46 | 0.18 |
| Bank Interest ( C.C. Limit) | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 |
| E) Salary to Staff | 2.51 | 2.76 | 3.03 | 3.34 | 3.67 |
| F) Selling \& Adm Expenses Exp. | 0.87 | 1.12 | 1.28 | 1.44 | 1.60 |
| TOTAL (D+E) | 4.85 | 5.52 | 5.68 | 5.86 | 6.08 |
| H) NET PROFIT | 10.15 | 12.75 | 15.73 | 18.61 | 21.39 |
| I) Taxation | 1.01 | 1.27 | 3.15 | 3.72 | 4.28 |
| J) PROFIT (After Tax) | 9.13 | 11.47 | 12.58 | 14.89 | 17.11 |


| PARTICULARS | IST YEAR | IIND YEAR | IIIRD YEAR | IVTH YEAR | VTH YEAR |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SOURCES OF FUND |  |  |  |  |  |
| Share Capital | 1.69 | - |  |  |  |
| Reserve \& Surplus | 10.15 | 12.75 | 15.73 | 18.61 | 21.39 |
| Depriciation \& Exp. W/off | 1.17 | 1.08 | 0.95 | 0.83 | 0.73 |
| Increase in Cash Credit | 5.47 | - | - | - | - |
| Increase In Term Loan | 9.75 | - | - | - | - |
| Increase in Creditors | 2.41 | 0.40 | 0.40 | 0.40 | 0.40 |
| Increase in Provisions | 0.36 | 0.04 | 0.04 | 0.04 | 0.05 |
| TOTAL: | 30.99 | 14.27 | 17.12 | 19.89 | 22.57 |

## APPLICATION OF FUND

| Increase in Fixed Assets | 10.23 | - | - | - | - |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Increase in Stock | 6.30 | 1.05 | 1.05 | 1.05 | 1.05 |
| Increase in Debtors | 2.19 | 0.61 | 0.41 | 0.41 | 0.41 |
| Increase in Deposits \& Adv | 2.50 | 0.25 | 0.28 | 0.30 | 0.33 |
| Repayment of Term Loan | - | 2.44 | 2.44 | 2.44 | 2.32 |
| Taxation | 1.01 | 1.27 | 3.15 | 3.72 | 4.28 |
| TOTAL: | 22.23 | 5.62 | 7.31 | 7.92 | 8.38 |
| Opening Cash \& Bank Balance | - | 8.76 | 17.41 | 27.22 | 39.19 |
| Add : Surplus | 8.76 | 8.65 | 9.81 | 11.97 | 14.19 |
| Closing Cash \& Bank Balance | 8.76 | 17.41 | 27.22 | 39.19 | 53.38 |

## COMPUTATION OF MANUFACTURING OF Rubber Balloon

Items to be Manufactured Rubber Balloons

| Manufacturing Capacity per day | 600 | Packets |
| :---: | :---: | :---: |
| No. of Working Hour | 8 |  |
| No of Working Days per month | 25 |  |
| No. of Working Day per annum | 300 |  |
| Total Production per Annum | 180,000 | Packets |
| Year | Capacity | Packets |
|  | Utilisation |  |
| IST YEAR | 60\% | 108,000.00 |
| IIND YEAR | 70\% | 126,000.00 |
| IIIRD YEAR | 80\% | 144,000.00 |
| IVTH YEAR | 90\% | 162,000.00 |
| VTH YEAR | 100\% | 180,000.00 |
|  |  |  |

1 Packet with 100 Balloons

## COMPUTATION OF RAW MATERIAL

| Item Name | Quantity of Raw <br> Material | Recovery | Unit Rate of | Total CostPer Annum (100\%) |
| :---: | :---: | :---: | :---: | :---: |
| 60\% DRC Natural Rubber latex |  |  |  | 3,000,000.00 |
| Vulkanex SP |  |  |  | 135,000.00 |
| Casein |  |  |  | 175,000.00 |
| Potasium hydroxide |  |  |  | 145,000.00 |
| Sulphur |  |  |  | 174,000.00 |
| Vulkacit LDA |  |  |  | 95,000.00 |
| Zinc Oxide |  |  |  | 100,000.00 |
| Pigments |  |  |  | 100,000.00 |
| Polythene bags \& cartoons |  |  |  | 91,000.00 |
| Total |  |  |  | 4,015,000.00 |
| Total Raw material in Rs lacs |  |  |  | 40.15 |


| Raw Material Consumed | Capacity <br> Utilisation | Amount (Rs.) |
| :--- | ---: | ---: |
|  |  |  |
| IST YEAR | $60 \%$ | 24.09 |
| IIND YEAR | $70 \%$ | 28.11 |
| IIIRD YEAR | $80 \%$ | 32.12 |
| IVTH YEAR | $90 \%$ | 36.14 |
| VTH YEAR | $100 \%$ | 40.15 |



## BREAK UP OF LABOUR

| Particulars |  | Wages | No of | Total |
| :--- | :--- | ---: | ---: | ---: |
|  |  | Per Month | Employees | Salary |
|  |  |  |  |  |
| Skilled Worker |  | $8,000.00$ | 3 | $24,000.00$ |
| Unskilled Worker |  | $6,000.00$ | 2 | $12,000.00$ |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  | $36,000.00$ |
| Add: 10\% Fringe Benefit |  |  |  | $3,600.00$ |
| Total Labour Cost Per Month |  |  |  | $39,600.00$ |
| Total Labour Cost for the year (In Rs. Lakhs) |  | 5 | 4.75 |  |

## BREAK UP OF SALARY

| Particulars |  | Salary | No of | Total |
| :--- | :--- | ---: | ---: | ---: |
|  |  | Per Month | Employees | Salary |
| Manager |  | self |  |  |
| Accountant cum store keeper |  | $9,000.00$ | 1 | $9,000.00$ |
| Sales |  | $10,000.00$ |  | 1 |
| Total Salary Per Month |  |  |  | $19,000.00$ |
|  |  |  |  |  |
| Add: 10\% Fringe Benefit |  |  |  | $1,900.00$ |
| Total Salary for the month |  |  |  | $20,900.00$ |
|  |  |  |  |  |
| Total Salary for the year (In Rs. Lakhs) |  |  | 2.51 |  |

## COMPUTATION OF DEPRECIATION

| Description | Land | Building/shed | Plant \& Machinery | Furniture | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Rate of Depreciation |  | 10.00\% | 15.00\% | 10.00\% |  |
| Opening Balance | Leased | - | - | - | - |
| Addition | - | 4.80 | 4.20 | 1.23 | 10.23 |
|  | - | 4.80 | 4.20 | 1.23 | 10.23 |
| Less : Depreciation | - | 0.48 | 0.63 | 0.06 | 1.17 |
| WDV at end of Ist year | - | 4.32 | 3.57 | 1.17 | 9.06 |
| Additions During The Year | - | - | - | - | - |
|  | - | 4.32 | 3.57 | 1.17 | 9.06 |
| Less : Depreciation | - | 0.43 | 0.54 | 0.12 | 1.08 |
| WDV at end of IInd Year | - | 3.89 | 3.03 | 1.05 | 7.97 |
| Additions During The Year | - | - | - | - | - |
|  | - | 3.89 | 3.03 | 1.05 | 7.97 |
| Less : Depreciation | - | 0.39 | 0.46 | 0.11 | 0.95 |
| WDV at end of IIIrd year | - | 3.50 | 2.58 | 0.95 | 7.03 |
| Additions During The Year | - | - | - | - | - |
|  | - | 3.50 | 2.58 | 0.95 | 7.03 |
| Less : Depreciation | - | 0.35 | 0.39 | 0.09 | 0.83 |
| WDV at end of IV year | - | 3.15 | 2.19 | 0.85 | 6.19 |
| Additions During The Year | - | - | - | - | - |
|  | - | 3.15 | 2.19 | 0.85 | 6.19 |
| Less : Depreciation | - | 0.31 | 0.33 | 0.09 | 0.73 |
| WDV at end of Vth year | - | 2.83 | 1.86 | 0.77 | 5.46 |


| REPAYMENT SCHEDULE OF TERM LOAN |  |  |  |  | 11.5\% |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Particulars | Amount | Addition | Total | Interest | Repayment | Cl Balance |
| IST YEAR | Opening Balance |  |  |  |  |  |  |
|  | Ist Quarter | - | 9.75 | 9.75 | - | - | 9.75 |
|  | Iind Quarter | 9.75 | - | 9.75 | 0.28 | - | 9.75 |
|  | IIIrd Quarter | 9.75 | - | 9.75 | 0.28 | - | 9.75 |
|  | Ivth Quarter | 9.75 | - | 9.75 | 0.28 | - | 9.75 |
|  |  |  |  |  | 0.84 | - |  |
| IIND YEAR | Opening Balance |  |  |  |  |  |  |
|  | Ist Quarter | 9.75 | - | 9.75 | 0.28 | 0.61 | 9.14 |
|  | Iind Quarter | 9.14 | - | 9.14 | 0.26 | 0.61 | 8.53 |
|  | IIIrd Quarter | 8.53 | - | 8.53 | 0.25 | 0.61 | 7.92 |
|  | Ivth Quarter | 7.92 |  | 7.92 | 0.23 | 0.61 | 7.31 |
|  |  |  |  |  | 1.02 | 2.44 |  |
| IIIRD YEAR | Opening Balance |  |  |  |  |  |  |
|  | Ist Quarter | 7.31 | - | 7.31 | 0.21 | 0.61 | 6.70 |
|  | Iind Quarter | 6.70 | - | 6.70 | 0.19 | 0.61 | 6.09 |
|  | IIIrd Quarter | 6.09 | - | 6.09 | 0.18 | 0.61 | 5.48 |
|  | Ivth Quarter | 5.48 |  | 5.48 | 0.16 | 0.61 | 4.87 |
|  |  |  |  |  | 0.74 | 2.44 |  |
| IVTH YEAR | Opening Balance |  |  |  |  |  |  |
|  | Ist Quarter | 4.87 | - | 4.87 | 0.14 | 0.61 | 4.26 |
|  | Iind Quarter | 4.26 | - | 4.26 | 0.12 | 0.61 | 3.66 |
|  | IIIrd Quarter | 3.66 | - | 3.66 | 0.11 | 0.61 | 3.05 |
|  | Ivth Quarter | 3.05 |  | 3.05 | 0.09 | 0.61 | 2.44 |
|  |  |  |  |  | 0.46 | 2.44 |  |
| VTH YEAR | Opening Balance |  |  |  |  |  |  |
|  | Ist Quarter | 2.44 | - | 2.44 | 0.07 | 0.61 | 1.83 |
|  | Iind Quarter | 1.83 | - | 1.83 | 0.05 | 0.61 | 1.22 |
|  | IIIrd Quarter | 1.22 | - | 1.22 | 0.04 | 0.55 | 0.67 |
|  | Ivth Quarter | 0.67 |  | 0.67 | 0.02 | 0.55 | 0.12 |
|  |  |  |  |  | 0.18 | 2.32 |  |

## CALCULATION OF D.S.C.R

| PARTICULARS | IST YEAR | IIND YEAR | IIIRD YEAR | IVTH YEAR | VTH YEAR |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| CASH ACCRUALS | 10.30 | 12.56 | 13.53 | 15.72 | 17.84 |
|  |  |  |  |  |  |
| Interest on Term Loan | 0.84 | 1.02 | 0.74 | 0.46 | 0.18 |
|  |  |  |  |  |  |
| Total | 11.14 | 13.57 | 14.27 | 16.18 | 18.02 |
|  |  |  |  |  |  |
| REPAYMENT |  |  |  |  |  |
| Instalment of Term Loan | 2.44 | 2.44 | 2.44 | 2.32 | 2.32 |
| Interest on Term Loan | 0.84 | 1.02 | 0.74 | 0.46 | 0.18 |
|  |  |  |  |  |  |
| Total | 3.28 | 3.45 | 3.17 | 2.77 | 2.50 |
|  |  |  |  |  |  |
| DEBT SERVICE COVERAGE RATIO | 3.40 | 3.93 | 4.50 | 5.83 | 7.22 |
|  |  |  |  |  |  |
| AVERAGE D.S.C.R. |  |  | 4.98 |  |  |

COMPUTATION OF SALE



## BREAK EVEN POINT ANALYSIS

| Year | I | II | III | IV | V |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Net Sales \& Other Income | 43.74 | 55.89 | 63.99 | 72.09 | 80.19 |
| Less : Op. WIP Goods | - | 3.89 | 4.54 | 5.18 | 5.83 |
| Add : Cl. WIP Goods | 3.89 | 4.54 | 5.18 | 5.83 | 6.48 |
| Total Sales | 47.63 | 56.54 | 64.64 | 72.74 | 80.84 |
| Variable \& Semi Variable Exp. |  |  |  |  |  |
| Raw Material \& Tax | 24.09 | 28.11 | 32.12 | 36.14 | 40.15 |
| Electricity Exp/Coal Consumption at 85\% | 0.37 | 0.43 | 0.49 | 0.55 | 0.61 |
| Manufacturing Expenses 80\% | 1.75 | 2.68 | 3.07 | 3.46 | 3.85 |
| Wages \& Salary at 60\% | 4.36 | 4.79 | 5.27 | 5.80 | 6.38 |
| Selling \& adminstrative Expenses 80\% | 0.70 | 0.89 | 1.02 | 1.15 | 1.28 |
| Intt. On Working Capital Loan | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 |
| Total Variable \& Semi Variable Exp | 31.89 | 37.53 | 42.60 | 47.72 | 52.90 |
| Contribution | 15.74 | 19.01 | 22.04 | 25.01 | 27.94 |
| Fixed \& Semi Fixed Expenses |  |  |  |  |  |
| Manufacturing Expenses 20\% | 0.44 | 0.67 | 0.77 | 0.87 | 0.96 |
| Electricity Exp/Coal Consumption at 15\% | 0.06 | 0.08 | 0.09 | 0.10 | 0.11 |
| Wages \& Salary at 40\% | 2.90 | 3.19 | 3.51 | 3.87 | 4.25 |
| Interest on Term Loan | 0.84 | 1.02 | 0.74 | 0.46 | 0.18 |
| Depreciation | 1.17 | 1.08 | 0.95 | 0.83 | 0.73 |
| Selling \& adminstrative Expenses 20\% | 0.17 | 0.22 | 0.26 | 0.29 | 0.32 |
| Total Fixed Expenses | 5.59 | 6.26 | 6.31 | 6.40 | 6.55 |
| Capacity Utilization | 60\% | 70\% | 80\% | 90\% | 100\% |
| OPERATING PROFIT | 10.15 | 12.75 | 15.73 | 18.61 | 21.39 |
| BREAK EVEN POINT | 21\% | 23\% | 23\% | 23\% | 23\% |
| BREAK EVEN SALES | 16.93 | 18.63 | 18.50 | 18.62 | 18.94 |

## DISCLAIMER

The views expressed in this Project Report are advisory in nature. SAMADHAN assume no financial liability to anyone using the content for any purpose. All the materials and content contained in Project report is for educational purpose and reflect the views of the industry which are drawn from various research material sources from internet, experts, suppliers and various other sources. The actual cost of the project or industry will have to be taken on case to case basis considering specific requirement of the project, capacity and type of plant and other specific factors/cost directly related to the implementation of project. It is intended for general guidance only and must not be considered a substitute for a competent legal advice provided by a licensed industry professional. SAMADHAN hereby disclaims any and all liability to any party for any direct, indirect, implied, punitive, special, incidental or other consequential damages arising directly or indirectly from any use of the Project Report Content, which is provided as is, and without warranties.

