## PROJECT REPORT

## Of

## THERMAL PAPER ROLL

## PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding Thermal paper Roll.

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

Product and By Product

6 Name of the project / business activity proposed :

7 Cost of Project
8 Means of Finance
Term Loan
KVIC MARGIN MONEY
Own Capital
Working Capital
Debt Service Coverage Ratio
Pay Back Period
Project Implementation Period
Break Even Point
Employment
Power Requirement
15 Major Raw materials
Estimated Annual Sales Turnover (Max Utilized 6 Capacity)

Detailed Cost of Project \& Means of Finance

COST OF PROJECT

MEANS OF FINANCE
MEANS OF FINANCE

| Particulars | Amount |
| :--- | ---: |
| Own Contribution@10\% | 1.53 |
| Term Loan | 8.78 |
| Working Capital | 5.00 |
| Total |  |
|  | General |
|  | $\mathbf{1 5 . 3 0}$ |

## THERMAL PAPER ROLLS



## INTRODUCTION;

Thermal paper has a specialty coating that allows inkless printing and gives excellent results on printing as it provides reliable, speedy and high definition images. Thermal paper rolls are cost effective as they have lower maintenance costs. Furthermore, thermal printing technology is quieter as compared to its alternatives, which offers a pleasant experience when working with high volumes of printing. Key manufacturers such as Appvion are adopting latest printing technologies such as Techkon SpectroDens for thermal paper rolls to achieve excellent printing results. Attributing to their reliable and durability, thermal paper rolls finds application in various end uses. For instance, retailers use thermal paper rolls for point-of-scale applications such as super stores, grocery store, and ATM banks. In addition, ticket agencies and lottery systems, which require accurate and large volume printouts, also rely on thermal paper rolls.

## THERMAL PAPER ROLLS MARKET: DYNAMICS

The advent of digitalization in developing regions such as India has been driving the need for POS systems and subsequently, escalating the demand for thermal paper rolls in the market. In addition, the rising importance of labelling against the counterfeiting of products has been having a positive impact on the demand for thermal paper rolls. Moreover, thermal paper offers excellent coloring capability at high speeds and a highly durable finish that doesn't fade easily. This feature allows printed bar codes to be used in POS food labelling \& other applications during their manufacturing and shipping, which has been escalating the demand for thermal paper rolls, globally.

On the other hand, the usage of BPA in thermal paper has a negative impact on human health, which may hamper the growth of the thermal paper rolls market in the near future. Therefore, many retailers are adopting digital receipt software programs that work with existing POS systems and they print customer receipts only on request in order to minimize the usage of thermal paper.

## Thermal Paper Rolls Market: Segmentation

On the basis of product type, the global thermal paper market can be segmented as:

- Top coating thermal paper
- Premium \& standard thermal paper

On the basis of printing technology type, the global thermal paper rolls market can be segmented as:

- Direct thermal
- Thermal transfer

On the basis of application, the global thermal paper rolls market can be segmented as:

- POS Systems
- Lottery \& Gaming
- Labels \& Tags
- ATM Receipt
- Others (Handy Terminal)

On the basis of end-use industry, global thermal paper rolls market can be segmented as:

- Transport \& logistics
- Retail
- Pharmaceutical
- Apparel
- Food \& beverages
- Others


## Thermal Paper Rolls Market: Key Developments

Some of the key developments in the global thermal paper rolls market are:

- In 2019, Ricoh Company, Ltd. is planning to expand its manufacturing capabilities in Europe. Ricoh will invest about 3 Billion Yen in Ricoh Industries France S.A.S. to double its coater production capacity, which applies thermal coatings onto paper.
- In 2018, Appvion Operations, Inc. started adopting Techkon Spectro Dens for its thermal paper rolls manufacturing operations as Tech kon Spectro Dens combines the qualities of a highly accurate specto photometer and superior in terms of repeatability, ergonomics, and ease of use.
- In 2016, Oji Holdings Corporation along with Marubeni Corporation acquired the Tele-Paper (M) Sdn Bhd., converting and printing manufacturer of thermal paper rolls and carbonless paper in Malaysia.

The report offers a comprehensive evaluation of the market. It does so via indepth qualitative insights, historical data, and verifiable projections about market size. The projections featured in the report have been derived using proven research methodologies and assumptions. By doing so, the research report serves as a repository of analysis and information for every facet of the market, including but not limited to: Regional markets, technology, types, and applications.

## MACHINE SPECIFICATIONS:

The Slitting Rewinding machine for add cash rolls, fax rolls, ATM Rolls, Thermal Rolls, POS Rolls and other small paper roll converting from big reels. This machine is equipped with easy loading and unloading of rewinding shafts for higher production and lesser downtime. Multi unwind stations can be provided for multiple rolls like Teleprinter rolls Multi-Ply adding machine rolls for billing etc.

## THE MACHINE CONSISTS OF:

## 1. UNWIND

One Unwind station for paper reel (of up to 1000 mm dia) mounted on Mechanical shaft with provision for side regulation of the draw unit for alignment. One Mechanical brake will be provided with dancing roller for tension control.
Pneumatic reel loading system for loading of the paper in to the machine.

## 2. SLITTING CUM TRIMMING UNIT

The unit is provided with 8 sets of Rotary top and bottom cutters along with spacers to slit the web width up to 7 rolls along with trimming at both the edges.

Edge trimming and center slitting is done with male and female cutter made of alloy steel are fitted to give a very fine cut on the web.

Trim disposal system with motorized blower.

## 3. REWINDING UNIT

One Shaft will be inserted into the cores and supported between 2 driven Rollers (Drums). Pneumatically controlled rider roller for perfect rewinding of the reel.

Tape Less Rewinding

## 4. DRIVE

5 HP AC thyristor control drive with PLC controls.

- IMPLEMENTATION SCHEDULE

| Sr. No. | Particulars | Time Period |
| ---: | :--- | :--- |
| 1 | The Time requirement for <br> preparation of Project report | Two months |
| 2 | Time requirement for selection of Site | One month |
| 3 | Time required for registration as <br> Small Scale Unit | One Week |
| 4 | Time required for acquiring the loan <br> Machinery procurement, erection and <br> commissioning | Three Months |

## THERMAL PAPER ROLLS LICENSE \&REGISTRATION

## For Proprietor

Obtain the GST registration.
Additionally, apply for MSME Udyog Aadhaar online registration
Fire/ Pollution Registration as required.
Choice of a Brand Name of the product and secure the name with Trademark if required.

## FINANCIAL ASPECTS

## PROJECTED CASH FLOW STATEMENT

PARTICULARS I II III IV V

## SOURCES OF FUND

| Own Contribution@10\% | 1.53 | - |  |  |  |
| :--- | ---: | :--- | :--- | :--- | :--- |
| Net Profit | 0.98 | 2.11 | 3.88 | 5.44 | 7.72 |
| Depreciation \& Exp. W/off | 1.40 | 1.20 | 1.02 | 0.87 | 0.75 |
| Increase In Cash Credit | 5.00 |  |  |  |  |
| Increase In Term Loan | 8.78 | - | - | - | - |
| Increase in Creditors | 0.84 | 0.13 | 0.14 | 0.15 | 0.17 |
|  | TOTAL : | $\mathbf{1 8 . 5 2}$ | $\mathbf{3 . 4 3}$ | $\mathbf{5 . 0 4}$ | $\mathbf{6 . 4 7}$ |

## APPLICATION OF FUND

| Increase in Fixed Assets | 9.75 | - | - | - |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Increase in Stock | 2.89 | 0.40 | 0.46 | 0.50 | 0.54 |
| Increase in Debtors | 3.52 | 0.70 | 0.67 | 0.72 | 0.77 |
| Repayment of Term Loan | 0.98 | 1.95 | 1.95 | 1.95 | 1.95 |
| Taxation | - | - | - | 0.02 | 0.14 |
| Drawings |  | 1.00 | 2.00 | 3.00 | 5.00 |
| TOTAL: | 17.13 | 4.05 | 5.08 | 6.19 | 8.39 |
| Opening Cash \& Bank Balance | - | 1.39 | 0.77 | 0.73 | 1.01 |
| Add : Surplus | 1.39 | 0.62 | 0.04 | 0.28 | 0.23 |
| Closing Cash \& Bank Balance | 1.39 | 0.77 | 0.73 | 1.01 | 1.25 |


| PROJECTED BALANCE SHEET |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PARTICULARS | 1 | II | III | IV | V |
| SOURCES OF FUND Capital Account |  |  |  |  |  |
| Opening Balance | - | 2.51 | 3.62 | 5.50 | 7.92 |
| Add: Additions | 1.53 | - | - | - | - |
| Add: Net Profit | 0.98 | 2.11 | 3.88 | 5.42 | 7.58 |
| Less: Drawings | - | 1.00 | 2.00 | 3.00 | 5.00 |
| Closing Balance | 2.51 | 3.62 | 5.50 | 7.92 | 10.50 |
| CC Limit | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 |
| Term Loan | 7.80 | 5.85 | 3.90 | 1.95 | - |
| Sundry Creditors | 0.84 | 0.97 | 1.11 | 1.26 | 1.43 |
| TOTAL : | 16.15 | 15.43 | 15.50 | 16.13 | 16.92 |
| APPLICATION OF FUND |  |  |  |  |  |
| Fixed Assets ( Gross) | 9.75 | 9.75 | 9.75 | 9.75 | 9.75 |
| Gross Dep. | 1.40 | 2.60 | 3.62 | 4.49 | 5.24 |
| Net Fixed Assets | 8.35 | 7.15 | 6.13 | 5.26 | 4.51 |
| Current Assets |  |  |  |  |  |
| Sundry Debtors | 3.52 | 4.22 | 4.89 | 5.61 | 6.37 |
| Stock in Hand | 2.89 | 3.29 | 3.76 | 4.25 | 4.80 |
| Cash and Bank | 1.39 | 0.77 | 0.73 | 1.01 | 1.25 |
| TOTAL : | 16.15 | 15.43 | 15.50 | 16.13 | 16.92 |
|  | - |  | - | - | - |


| PROJECTED PROFITABILITY STATEMENT |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PARTICULARS | 1 | II | III | IV | V |
| A) SALES |  |  |  |  |  |
| Gross Sale | 52.74 | 63.23 | 73.30 | 84.09 | 95.60 |
| Total (A) | 52.74 | 63.23 | 73.30 | 84.09 | 95.60 |
| B) COST OF SALES |  |  |  |  |  |
| Raw Mateiral Consumed | 36.00 | 41.58 | 47.63 | 54.18 | 61.26 |
| Electricity Expenses | 1.35 | 1.48 | 1.62 | 1.75 | 1.89 |
| Repair \& Maintenance | 0.26 | 0.32 | 0.37 | 0.42 | 0.48 |
| Labour \& Wages | 7.85 | 8.64 | 9.50 | 10.45 | 11.50 |
| Depreciation | 1.40 | 1.20 | 1.02 | 0.87 | 0.75 |
| Cost of Production | 46.87 | 53.22 | 60.14 | 67.68 | 75.87 |
| Add: Opening Stock /WIP | - | 1.09 | 1.22 | 1.37 | 1.55 |
| Less: Closing Stock /WIP | 1.09 | 1.22 | 1.37 | 1.55 | 1.73 |
| Cost of Sales (B) | 45.77 | 53.09 | 59.98 | 67.51 | 75.69 |
| C) GROSS PROFIT (A-B) | 6.97 | 10.13 | 13.32 | 16.58 | 19.91 |
|  | 13.21\% | 16.03\% | 18.17\% | 19.72\% | 20.83\% |
| D) Bank Interest (Term Loan ) | 0.95 | 0.78 | 0.56 | 0.35 | 0.13 |
| ii) Interest On Working Capital | 0.55 | 0.55 | 0.55 | 0.55 | 0.55 |
| E) Salary to Staff | 2.64 | 2.90 | 3.19 | 3.51 | 3.87 |
| F) Selling \& Adm Expenses Exp. | 1.85 | 3.79 | 5.13 | 6.73 | 7.65 |
| TOTAL (D+E) | 5.99 | 8.02 | 9.44 | 11.14 | 12.20 |
| G) NET PROFIT | 0.98 | 2.11 | 3.88 | 5.44 | 7.72 |
|  | 1.9\% | 3.3\% | 5.3\% | 6.5\% | 8.1\% |
| H) Taxation | - | - | - | 0.02 | 0.14 |
| I) PROFIT (After Tax) | 0.98 | 2.11 | 3.88 | 5.42 | 7.58 |

## COMPUTATION OF PRODUCTION OF THERMAL PAPER ROLL

## Item to be Manufactured THERMAL PAPER ROLLS



| COMPUTATION OF CLOSING STOCK \& WORKING CAPITAL |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PARTICULARS | 1 | II | III | IV | v |
| Finished Goods |  |  |  |  |  |
| (7 Days requirement) | 1.09 | 1.22 | 1.37 | 1.55 | 1.73 |
| Raw Material |  |  |  |  |  |
| (15 Days requirement) | 1.80 | 2.08 | 2.38 | 2.71 | 3.06 |
| Closing Stock | 2.89 | 3.29 | 3.76 | 4.25 | 4.80 |
| COMPUTATION OF WORKING CAPITAL REQUIREMENT |  |  |  |  |  |
| Particulars | Amount | Margin(10\%) | Net |  |  |
|  |  |  | Amount |  |  |
| Stock in Hand | 2.89 |  |  |  |  |
| Less: |  |  |  |  |  |
| Sundry Creditors | 0.84 |  |  |  |  |
| Paid Stock | 2.05 | 0.21 | 1.85 |  |  |
| Sundry Debtors | 3.52 | 0.35 | 3.16 |  |  |
| Working Capital Requirement |  |  | 5.01 |  |  |
| Margin |  |  | 0.56 |  |  |
| MPBF |  |  | 5.01 |  |  |
| Working Capital Demand |  |  | 5.00 |  |  |



## COMPUTATION OF DEPRECIATION




CALCULATION OF D.S.C.R

| PARTICULARS | I | II | III | IV | V |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| CASH ACCRUALS |  |  |  |  |  |
|  | 2.38 | 3.30 | 4.90 | 6.30 | 8.33 |
| Interest on Term Loan | 0.95 | 0.78 | 0.56 | 0.35 | 0.13 |
|  |  |  |  |  |  |
| Total | 3.33 | 4.08 | 5.46 | 6.64 | 8.46 |
|  |  |  |  |  |  |
| REPAYMENT |  |  |  |  |  |
| Repayment of Term Loan | 0.98 | 1.95 | 1.95 | 1.95 | 1.95 |
| Interest on Term Loan | 0.95 | 0.78 | 0.56 | 0.35 | 0.13 |
|  |  |  |  |  |  |
| Total | 1.93 | 2.73 | 2.51 | 2.30 | 2.08 |
| DEBT SERVICE COVERAGE RATIO | $\mathbf{1 . 7 3}$ | $\mathbf{1 . 5 0}$ | $\mathbf{2 . 1 7}$ | $\mathbf{2 . 8 9}$ | $\mathbf{4 . 0 6}$ |
| AVERAGE D.S.C.R. |  |  |  |  |  |

## COMPUTATION OF SALE

| Particulars | I | II | III | IV | V |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Op Stock | - | 4,200.00 | 4,620.00 | 5,040.00 | 5,460.00 |
|  |  |  |  |  |  |
| Production | 180,000.00 | 198,000.00 | 216,000.00 | 234,000.00 | 252,000.00 |
|  |  |  |  |  |  |
|  | 180,000.00 | 202,200.00 | 220,620.00 | 239,040.00 | 257,460.00 |
| Less: Closing Stock(7 Days) | 4,200.00 | 4,620.00 | 5,040.00 | 5,460.00 | 5,880.00 |
|  |  |  |  |  |  |
| Net Sale | 175,800.00 | 197,580.00 | 215,580.00 | 233,580.00 | 251,580.00 |
|  |  |  |  |  |  |
| Sale Price per Rolls | 30.00 | 32.00 | 34.00 | 36.00 | 38.00 |
|  |  |  |  |  |  |
| Sale (in Lacs) | 52.74 | 63.23 | 73.30 | 84.09 | 95.60 |
|  |  |  |  |  |  |



## BREAK EVEN POINT ANALYSIS

| Year | I | II | III | IV | V |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Net Sales \& Other Income | 52.74 | 63.23 | 73.30 | 84.09 | 95.60 |
| Less: Op. WIP Goods | - | 1.09 | 1.22 | 1.37 | 1.55 |
| Add : CI. WIP Goods | 1.09 | 1.22 | 1.37 | 1.55 | 1.73 |
| Total Sales | 53.83 | 63.35 | 73.46 | 84.26 | 95.79 |
| Variable \& Semi Variable Exp. |  |  |  |  |  |
| Raw Material \& Tax | 36.00 | 41.58 | 47.63 | 54.18 | 61.26 |
| Electricity Exp/Coal Consumption at 85\% | 1.15 | 1.26 | 1.38 | 1.49 | 1.60 |
| Wages \& Salary at 60\% | 6.30 | 6.93 | 7.62 | 8.38 | 9.22 |
| Selling \& adminstrative Expenses 80\% | 1.48 | 3.03 | 4.10 | 5.38 | 6.12 |
| ii) Interest On Working Capital | 0.55 | 0.55 | 0.55 | 0.55 | 0.55 |
| Repair \& Maintenance | 0.26 | 0.32 | 0.37 | 0.42 | 0.48 |
| Total Variable \& Semi Variable Exp | 45.73 | 53.67 | 61.64 | 70.40 | 79.23 |
| Contribution | 8.10 | 9.68 | 11.81 | 13.86 | 16.56 |
| Fixed \& Semi Fixed Expenses |  |  |  |  |  |
| Electricity Exp/Coal Consumption at 15\% | 0.20 | 0.22 | 0.24 | 0.26 | 0.28 |
| Wages \& Salary at 40\% | 4.20 | 4.62 | 5.08 | 5.59 | 6.15 |
| Interest on Term Loan | 0.95 | 0.78 | 0.56 | 0.35 | 0.13 |
| Depreciation | 1.40 | 1.20 | 1.02 | 0.87 | 0.75 |
| Selling \& adminstrative Expenses 20\% | 0.37 | 0.76 | 1.03 | 1.35 | 1.53 |
| Total Fixed Expenses | 7.12 | 7.57 | 7.93 | 8.42 | 8.84 |
| Capacity Utilization | 50\% | 55\% | 60\% | 65\% | 70\% |
| OPERATING PROFIT | 0.98 | 2.11 | 3.88 | 5.44 | 7.72 |
| BREAK EVEN POINT | 44\% | 43\% | 40\% | 39\% | 37\% |
| BREAK EVEN SALES | 47.32 | 49.55 | 49.33 | 51.17 | 51.14 |


| FINANCIAL INDICATORS |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PARTICULARS | 1 | II | III | IV | V |
| TURNOVER | 52.74 | 63.23 | 73.30 | 84.09 | 95.60 |
| GROSS PROFIT | 6.97 | 10.13 | 13.32 | 16.58 | 19.91 |
| G.P. RATIO | 13.21\% | 16.03\% | 18.17\% | 19.72\% | 20.83\% |
| NET PROFIT | 0.98 | 2.11 | 3.88 | 5.44 | 7.72 |
| PAT/SALES RATIO | 1.86\% | 3.33\% | 5.29\% | 6.47\% | 8.07\% |
| CURRENT ASSETS | 7.80 | 8.28 | 9.37 | 10.87 | 12.41 |
| CURRENT LIABILITIES | 5.84 | 5.97 | 6.11 | 6.26 | 6.42 |
| CURRENT RATIO | 1.34 | 1.39 | 1.53 | 1.74 | 1.93 |
| TERM LOAN | 7.80 | 5.85 | 3.90 | 1.95 | - |
| TOTAL NET WORTH | 2.51 | 3.62 | 5.50 | 7.92 | 10.50 |
| DEBT/EQUITY | 3.11 | 1.62 | 0.71 | 0.25 | - |
| TOTAL NET WORTH | 2.51 | 3.62 | 5.50 | 7.92 | 10.50 |
| TOTAL OUTSIDE LIABILITIES | 13.64 | 11.82 | 10.01 | 8.21 | 6.42 |
| TOL/TNW | 5.43 | 3.27 | 1.82 | 1.04 | 0.61 |
| PBDIT | 3.88 | 4.63 | 6.01 | 7.22 | 9.15 |
| INTEREST | 1.50 | 1.33 | 1.11 | 0.90 | 0.68 |
| INTEREST COVERAGE RATIO | 2.59 | 3.49 | 5.41 | 8.04 | 13.38 |
| WDV | 8.35 | 7.15 | 6.13 | 5.26 | 4.51 |
| TERM LOAN | 7.80 | 5.85 | 3.90 | 1.95 | - |
| FACR | 1.07 | 1.22 | 1.57 | 2.70 | - |

## PLANT \& MACHINERY

| PARTICULARS | QTY. | RATE | AMOUNT IN RS. |
| :--- | :--- | :--- | ---: | ---: |
| ATM/POS/Thermal Roll Slitting Rewinding Machine | 1 | $850,000.00$ | $850,000.00$ |


| Aith One Color Online Flexo Printing <br> wing |  | $850,000.00$ | $850,000.00$ |
| :--- | :--- | :--- | :--- |

Total Cost 850,000.00

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