

## LIME KILN

### 1. INTRODUCTION

Lime is also called as quick lime or unslaked lime, which is made out of limestone. The lime stone deposits are widely spread throughout the country. The lime is extensively used as a mortar in the construction of buildings by mixing with suitable proportion of sand and burnt clay as aggregate. It is also used for white washing of houses and buildings. Iron & steel plants and laundries use lime as a fluxing agent in considerable quantities. Some of drugs and pharmaceuticals, paper industry, pesticides formulations and other chemical processing industries.

### 2. MARKET

There is a rapid development in the construction of buildings under Rural and Urban Areas Housing Development Programme and industrialisation throughout the country, there is a good demand for the lime products. In view of this, there is a very good scope for setting up new units in this line of manufacture.

### 3. MANUFACTURING PROCESS

Limestone is washed and cleaned for removal of impurities and crushed into smaller lumps. These are calcined at a temperature of about 900 degrees C in a lime kiln. The kiln is loaded with alternative layers of coal and lime stone in suitable proportions for better transformation of heat and calcination of the material. Properly calcined lime is sorted out ash is removed unburnt piece if any is recharged in the furnace. Burnt lime is packed and marketed.

### 4. PRODUCTION CAPACITY PER ANNUM

Capacity 50000 kg  
Selling Price Rs. 10 per kg

### 5. PROJECT COST/CAPITAL INVESTMENT

| S.No | Description   | Amount Rs. |
|------|---|------------|
| 1    | Fixed Capital   | 105000     |
| 2    | Working Capital for <span style="color: red;">1</span> month(s) | 32200      |
| 3    | Preliminary & Preoperative Expns                                | 5000       |
|      | Total Project Cost  | 142200     |

## 6. MEANS OF FINANCE

| S.No | Description           | %age | Amount Rs. |
|------|-----------------------|------|------------|
| 1    | Promoter Contribution | 15%  | 21330      |
| 2    | Subsidy/Soft Loan     | 20%  | 28440      |
| 3    | Term Loan             | 65%  | 92430      |
|      | Total                 |      | 142200     |

## 7. FINANCIAL ASPECTS

## A. FIXED CAPITAL

i. Land and Buildings Rented Rs. 2000 per month

## ii. Machinery and Equipment

| S.No | Description   | Qty. | Rate  | Amount Rs. |
|------|---|------|-------|------------|
| 1    | Swing hammer mill - 2 MT/day capacity<br>with motor, starter, etc       | 1    | 10000 | 10000      |
| 2    | Rotary screen with various mesh sizes<br>with motor, starter, etc       | 1    | 10000 | 10000      |
| 3    | Lime kiln - country type<br>lined inside special bricks - 2 MT/day cap. | 1    | 60000 | 65000      |
| 4    | Erection and installation charges                                       |      |       | 10000      |
| 5    | Almirah, table, chairs, etc   |      |       | 10000      |
|      | Total   |      |       | 105000     |

## B. WORKING CAPITAL

## i. Salaries &amp; Wages (per month)

| S.No | Description             | Nos. | Sal/mon. | Amount Rs. |
|------|-------------------------|------|----------|------------|
| 1    | Supervisor/Entrepreneur | 1    | 2500     | 2500       |
| 2    | Skilled workers         | 2    | 2000     | 4000       |
| 3    | Unskilled workers       | 4    | 1500     | 6000       |
|      | Total                   |      |          | 12500      |

## ii. Raw Material (per month)

| S.No | Description      | Unit | Qty. | Rate | Amount Rs. |
|------|------------------|------|------|------|------------|
| 1    | Limestone        | kgs  | 5000 | 2.50 | 12500      |
| 2    | Packing material | LS   |      |      | 1000       |
|      | Total            |      |      |      | 13500      |

## iii. Utilities (per month)

| S.No | Description        | Unit | Amount Rs. |
|------|--------------------|------|------------|
| 1    | Power              | LS   | 1000       |
| 2    | Coal (fuel) - 1 MT | LS   | 1500       |
| 3    | Water              | LS   | 200        |
|      | Total              |      | 2700       |

## iv. Other Expenses (per month)

| S.No | Description                               | Amount Rs. |
|------|---|------------|
| 1    | Postage, Telephones & Stationery Expenses | 500        |
| 2    | Transportation & Conveyance Expenses      | 500        |
| 3    | Reparis and Maintenance Expenses          | 300        |
| 4    | Miscellaneous Expenses                    | 200        |
|      | Total                                     | 1500       |

## v. Total Working Capital (per month)

| S.No | Description        | Amount Rs. |
|------|--------------------|------------|
| 1    | Rent               | 2000       |
| 2    | Salaries and Wages | 12500      |
| 3    | Raw Material       | 13500      |
| 4    | Utilities          | 2700       |
| 5    | Other Expenses     | 1500       |
|      | Total              | 32200      |

## 8. COST OF PRODUCTION (PER ANNUM)

| S.No | Description           |     |  |  | Amount Rs. |
|------|-----------------------|-----|--|--|------------|
| 1    | Total Working Capital |     |  |  | 386400     |
| 2    | Depreciation @        | 15% |  |  | 15750      |
| 3    | Interest @            | 12% |  |  | 11092      |
|      | Total                 |     |  |  | 413242     |

## 9. TURNOVER (PER YEAR)

| S.No | Description | Unit | Qty.  | Rate Rs. | Amount Rs. |
|------|-------------|------|-------|----------|------------|
| 1    | Quick Lime  | kg   | 50000 | 10       | 500000     |
|      | Total       |      |       |          | 500000     |

## 10 FIXED COST (PER YEAR)

| S.No | Description                      |     |  | Amount Rs. |
|------|----------------------------------|-----|--|------------|
| 1    | Depreciation                     |     |  | 15750      |
| 2    | Interest                         |     |  | 11092      |
| 3    | Rent                             |     |  | 24000      |
| 4    | Salaries & Wages @               | 40% |  | 60000      |
| 5    | Other Expenses incl. Utilities @ | 40% |  | 20160      |
|      | Total                            |     |  | 131002     |

## 11. PROFIT ANALYSIS &amp; RATIOS

|   |                                    |     |       |
|---|------------------------------------|-----|-------|
| 1 | Net Profit                         | Rs. | 86758 |
| 2 | Percentage of Profit on Sales      |     | 17%   |
| 3 | Percentage of Return on Investment |     | 61%   |
| 4 | Break Even Point                   |     | 60%   |