PROJECT PROFILE
ON
SAFETY BOOTS

Product : Safety Boots

Product Code : 29900600

Quality Standard : IS : 10348-1982

Production Capacity (per annum) : 48000 pair

Value - Rs. 2,49,60,000/-

Month & Year of Preparation : March, 2006

Prepared by : Small Industries Service Institute
Okhla, New Delhi-20
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**Introduction**

Manufacturing of safety boots is one of the toughest and important item of footwear industry. The name of the item itself indicates that the product has a specified quality providing extra safety to the foot from its nature of use. Nowadays two types of safety boots are in demand, one type is Hi-Neck size and another is below Neck boots are being manufactured from zug-grain upper leather and double sole with vegetable tanned leather. These types of shoes are in demand from mining, defence, steel plants, heavy industries, and road and dam construction companies etc. Another type of safety boots are little smaller in height being manufactured from zug-grain upper leather or heavy oil pull-up leather or buff calf with sole of PVC or moulded rubber soles. These types of safety boots are in demand from police, home guards, Border Security Force, Navy, NCC and railway etc.

**Market potential**

Safety boots are widely used in all type of defence forces, ammunition factories, railways, mines, heavy industries, and ONGC etc. as stated above. The demand for this type of product is increasing rapidly with growth of industrial activities and increasing in defence forces in the country. There is a good scope for export of Safety boots also to Gulf and other countries. There is no dearth of raw materials and work force required for the manufacturing of Safety boots in the country, hence there is a good scope for setting up more units for the manufacturing of Safety boots any where in the country.

**Basis & Presumption**

The production envisaged is based on the single shift basis of 8 hrs. a day and 25 working days in a month

- Five years period for achieving full capacity utilization.
- Labour on monthly salary basis
- Rate of interest @ 4% per annum
- Margin money @ 25%
- Payback period 8 to 10 years from the loan is sanctioned.
- Land and building rented @ Rs. 15,000/- per month
- Covered area 5000 sq. ft.
Implementation Schedule.

1. Registration & other formalities - 0-3 months
2. Land acquisition and ceiling of quotations - 1-3 months
3. Machinery for purchasing & Installation & power connection - 6-12 months
4. Trial production - 1-3 months

It is anticipated that all the formalities will be completed within 6-8 months of period before starting the commercial production.

Technical Aspects.

Manufacturing Process

As per the design of the approved sample, the patterns of various components are cut. The size of the Safety boots vary from English size 5 to 13 with medium, large and extra large fittings and are made of Derby type of design. Patterns are further used for cutting different components from upper leather, lining leather/cloth, sole/ middle sole and insoles etc. The components of uppers are skived and are closed by stitching on sewing machines. Eyelets are fitted each other. The uppers are fully lined by lining leather, cloth is used below tongue as lining, steel toe-cap is-placed between the toe-cap and full vamp.

The uppers are lasted on lasting jacks with tacks using iron lasts; steel shanks are fixed to the waist portion of insole and middle soles. The leather sole is stitched securbly in the open channel with the middle sole after removing from the iron last. The cut-sole is screwed, the heels are prepared and are attached from inside with heel pins.

The sole and heel edges are trimmed, scoured and finished to match the colour of the boots. The complete boot is then polished, laced and packed.

Quality Control & Standards

Specifications for making Safety boots are covered by Indian Standards specification No. 1S-10348-1982. The specification contains standard for other materials also. Being safety item, boots should be made as per above mentioned Indian standards or any other standard prescribed by the buyer.

Quality control begins right from purchase of raw materials to the finishing of final product. It is advisable to carry out periodically sample tests from the approved laboratory like Central
Leather Research Institute (CLRI Chennai), Footwear Design and Development Institute (FDDI) Govt. Quality Marking Centres, Regional Testing Centre (RTC) New Delhi - being run by the State/Central Govt. departments to ensure quality and to avoid rejection at the final stage.

**Production Capacity (per annum)**

The unit is proposing to manufacture 48000 pairs of safety boots per annum on single shift basis. Value Rs. 2,49,60,000/-

**Motive Power**

3000 k.w.h.

**Pollution Control**

As footwear industry is a non-polluting industry, hence no pollution control measures are required.

**Energy Conservation**

In the proposed industry very little power is required, hence there is no need to adopt specific measures for energy conservation

**A. Financial - Aspects.**

**Fixed Capital**

1. **Land & Building**

   Built up area 5000 sq.ft. (rented per month) Rs. 15,000/- p.m.

II. **Plant, machinery & equipment**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Particulars</th>
<th>Qty. (No)</th>
<th>Value (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Industrial flat bed sewing machine with 0.33 HP motor (Ind)</td>
<td>3</td>
<td>24,000/-</td>
</tr>
<tr>
<td>2.</td>
<td>Industrial heavy duty cylinder bed sewing machine with 0.33 HP motor (Ind)</td>
<td>3</td>
<td>27,000/-</td>
</tr>
<tr>
<td>3.</td>
<td>Hydraulic sewing arm-clicking press with 3 H.P. motor (Ind)</td>
<td>1</td>
<td>1,80,000/-</td>
</tr>
<tr>
<td>4.</td>
<td>Upper leather skiving machine with 0.5 HP motor (Ind)</td>
<td>1</td>
<td>20,000/-</td>
</tr>
<tr>
<td>5.</td>
<td>Sole splitting machine width 18&quot; with 1 HP motor (Ind)</td>
<td>2</td>
<td>24,000/-</td>
</tr>
</tbody>
</table>
6. Heel attaching machine with 0.5 HP motor (Ind) 1 25,000/-
7. Combined finishing machine with 2 HP motor (Ind) 1 20,000/-
8. Punching and eyeleting machine tradle operated (Ind) 2 6,000/-
9. Sole screwing machine with 2 HP motor
   including import duty (Imported) 1 3,50,000/-
10. Outer sole stitching machine with 2 HP motor
    including import duty (imported) 1 12,50,000/-
11. Iron shoe last 500 pairs 1,50,000/-
12. Lasting jacks 10 Nos. 10,000/-
    20,86,000/-
13. Tools and equipments 50,000/-
14. Electrification & installation charges @ 10% of cost of machine & equipment 1,08,600/-
15. Office equipments 70,000/-
    Total cost of m/c & equipment & tools etc. 23,14,600/-
    III. Pre-operative expenses 19,400/-
    TOTAL FIXED CAPITAL 23,34,000/-

B. Working Capital (per month)

1. Staff & Labour (per month)

   Personnel/technical (per month)

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Designation</th>
<th>No.</th>
<th>Salary per month</th>
<th>Total (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Manager/Technical</td>
<td>1</td>
<td>10,000/-</td>
<td>10,000/-</td>
</tr>
<tr>
<td>2.</td>
<td>Supervisor</td>
<td>2</td>
<td>7,000/-</td>
<td>14,000/-</td>
</tr>
<tr>
<td>3.</td>
<td>Accountant</td>
<td>1</td>
<td>5,000/-</td>
<td>5,000/-</td>
</tr>
<tr>
<td>4.</td>
<td>Store-keeper</td>
<td>1</td>
<td>4,000/-</td>
<td>4,000/-</td>
</tr>
<tr>
<td>Sl.No.</td>
<td>Designation</td>
<td>No.</td>
<td>Salary per month</td>
<td>Total (Rs.)</td>
</tr>
<tr>
<td>-------</td>
<td>---------------------------</td>
<td>-----</td>
<td>------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>5.</td>
<td>Skilled worker</td>
<td>7</td>
<td>3,000/-</td>
<td>21,000/-</td>
</tr>
<tr>
<td>6.</td>
<td>Semi-skilled worker</td>
<td>5</td>
<td>2,500/-</td>
<td>12,500/-</td>
</tr>
<tr>
<td>7.</td>
<td>Unskilled worker</td>
<td>4</td>
<td>2,250/-</td>
<td>9,000/-</td>
</tr>
<tr>
<td>8.</td>
<td>Clerk- cum -typist</td>
<td>1</td>
<td>4,000/-</td>
<td>4,000/-</td>
</tr>
<tr>
<td>9.</td>
<td>Peon/watchman</td>
<td>4</td>
<td>2,500/-</td>
<td>10,000/-</td>
</tr>
<tr>
<td>10.</td>
<td>Machine operator</td>
<td>12</td>
<td>3,000/-</td>
<td>36,000/-</td>
</tr>
</tbody>
</table>

**TOTAL** 1,25,500/-

Perquisites, 15% on salary 18,800/-

**Total** 1,44,300/-

### II. Raw material (per month)

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Particular</th>
<th>Qty.</th>
<th>Rate (Rs)</th>
<th>Value Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Zug-grain chrome tanned leather</td>
<td>16000 sq. ft.</td>
<td>45/-</td>
<td>7,20,000/-</td>
</tr>
<tr>
<td>2.</td>
<td>Lining leather pigmented</td>
<td>8000 sq. ft.</td>
<td>20/-</td>
<td>1,60,000/-</td>
</tr>
<tr>
<td>3.</td>
<td>Cloth lining</td>
<td>118 meter</td>
<td>25/- per meter</td>
<td>2,950/-</td>
</tr>
<tr>
<td>4.</td>
<td>Split leather</td>
<td>For 4000 pairs</td>
<td>10/- p. pair</td>
<td>40,000/-</td>
</tr>
<tr>
<td>5.</td>
<td>Vegetable tanned leather for sole and insole</td>
<td>For 4000 pairs</td>
<td>150/- p. pair</td>
<td>6,00,000/-</td>
</tr>
<tr>
<td>6.</td>
<td>Iron shank</td>
<td>For 4000 pairs</td>
<td>2/- p.pair</td>
<td>8,000/-</td>
</tr>
<tr>
<td>7.</td>
<td>Iron toe-cap</td>
<td>For 4000 pairs</td>
<td>4/- p.pair</td>
<td>16,000/-</td>
</tr>
<tr>
<td>8.</td>
<td>Brass screwing wire</td>
<td>98.5 kg.</td>
<td>70/- p.kg.</td>
<td>6,895/-</td>
</tr>
<tr>
<td>9.</td>
<td>Brass rivets</td>
<td>106 kg.</td>
<td>65/- p.kg.</td>
<td>6,890/-</td>
</tr>
<tr>
<td>10.</td>
<td>Eyelets</td>
<td>8000</td>
<td>2/- p.Pair</td>
<td>16,000/-</td>
</tr>
<tr>
<td>11.</td>
<td>Iron tacks</td>
<td>105 kg.</td>
<td>20/- p.kg.</td>
<td>2,100/-</td>
</tr>
<tr>
<td>12.</td>
<td>Heel pins</td>
<td>105 kg.</td>
<td>16/- p. kg.</td>
<td>1,680/-</td>
</tr>
<tr>
<td>13.</td>
<td>Other grinderies</td>
<td>For 4000 pair</td>
<td>10/- p.pair</td>
<td>40,000/-</td>
</tr>
</tbody>
</table>

**TOTAL** 16,20,515/-
III. Utilities (per month)

1. Power Rs. 5,000/-
2. Water Rs. 2,000/-

TOTAL Rs. 7,000/-

IV. Other Contingent Expenditure (per month).

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Item</th>
<th>Amount (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Rent</td>
<td>15,000/-</td>
</tr>
<tr>
<td>2.</td>
<td>Telephone</td>
<td>2,500/-</td>
</tr>
<tr>
<td>3.</td>
<td>Postage, stationery</td>
<td>1,500/-</td>
</tr>
<tr>
<td>4.</td>
<td>Traveling expenses</td>
<td>3,000/-</td>
</tr>
<tr>
<td>5.</td>
<td>Insurance</td>
<td>2,000/-</td>
</tr>
<tr>
<td>6.</td>
<td>Oil and lubricants</td>
<td>1,000/-</td>
</tr>
<tr>
<td>7.</td>
<td>Consumable store</td>
<td>2,000/-</td>
</tr>
<tr>
<td>8.</td>
<td>Repair and maintenance</td>
<td>6,000/-</td>
</tr>
<tr>
<td>9.</td>
<td>Transportation expenses</td>
<td>5,000/-</td>
</tr>
<tr>
<td>10.</td>
<td>Sundry expenses</td>
<td>2,000/-</td>
</tr>
</tbody>
</table>

TOTAL Rs. 40,000/-

V. Total Recurring expenses (per month)

1. Salary & wages Rs. 1,44,300/-
2. Raw material Rs. 16,20,515/-
3. Utilities Rs. 7,000/-
4. Other contingent expenses Rs. 40,000/-

TOTAL Rs. 18,11,815/-

VI. Total working capital for 3 months Rs. 54,35,445/-

(18,11,815 x 3) Say Rs. 54,35,500/-
C. Total Capital Investment

i) Fixed Capital Rs.23,34,000/-

ii) Working capital(3 months) Rs. 54,35,500/-

TOTAL Rs. 77,69,500/-

Say Rs. 77,69,500/-

Financial Analysis

1.) Cost of Production (per annum)

   a) Total recurring expenditure. Rs. 2,17,42,000/-
   b) Depreciation on m/c & equipment @ 10% (on Rs. 1086000) Rs. 1,08,600/-
   c) Depreciation on tools @ 25% Rs. 12,500/-
   d) Depreciation on office equipments @ 20% Rs. 14,000/-
   e) Interest on total investment @ 14% Rs. 10,87,730/-

   TOTAL Rs. 2,29,65,000/-

Say Rs. 2,29,65,000/-

2. Turn Over (Per Year)

<table>
<thead>
<tr>
<th>Item</th>
<th>Qty.</th>
<th>Rate (Rs.)</th>
<th>Value (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety boots</td>
<td>48000 pairs</td>
<td>520/- per pair</td>
<td>2,49,60,000/-</td>
</tr>
</tbody>
</table>

   TOTAL 2,49,60,000/-

3. NET PROFIT (PER YEAR) Rs. 19,95,000/-

4. Net Profit Ratio (on sales) (%)

Net profit x 100
Total turn over

\[
\frac{19,95,000 \times 100}{2,49,60,000} = 7.99\%
\]

(52)
5) Rate of Return on Investment (%)

\[
\text{Net profit} \times 100 \\
\text{Total capital investment}
\]

\[
19,95,000 \times 100 \\
77,69,500
\]

\[= 25.67\%\]

vi) Break Even Point (% of total production envisaged)

\[
\text{BEP} = \frac{\text{FC} \times 100}{\text{FC} + \text{Profit}}
\]

1. Fixed Cost (per annum)

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) Depreciation (Total)</td>
<td>Rs. 1,35,100/-</td>
</tr>
<tr>
<td>ii) Rent</td>
<td>Rs. 1,80,000/-</td>
</tr>
<tr>
<td>iii) Interest</td>
<td>Rs. 10,87,730/-</td>
</tr>
<tr>
<td>iv) 40% of wages for staff &amp; labour</td>
<td>Rs. 6,92,640/-</td>
</tr>
<tr>
<td>v) 40% of other expenses including utilities.</td>
<td>Rs. 1,44,000/-</td>
</tr>
<tr>
<td>vi) Insurance</td>
<td>Rs. 24,000/-</td>
</tr>
<tr>
<td><strong>Total Fixed cost.</strong></td>
<td><strong>Rs. 22,63,470/-</strong></td>
</tr>
</tbody>
</table>

Break Even %

\[
= \frac{22,63,470 \times 100}{22,63,470 + 19,95,000}
\]

\[= \frac{22,63,47000}{42,58,470} = 53\%\]

Addresses of Machinery & equipment suppliers.

1. M/s. Prototype Development & Training Centre
   Sector B-24, Guindy Indl. Estate
   P.O. Ekkadutthangol, Chennai.

   201/A, Byculla Service Indl. Estate,
   Dadoji Konddeo Marg
   Byculla, Mumbai - 400018
3. M/s. Atlanta Trading (P)Ltd.
Atur House, Worli Naka
Mumbai 400018

1/238, Asaf Ali Road
New Delhi -110002

5. M/s. Annapurna Engineering Industry,
F-10/2, M.I.D.C., Shiroli, Kolhapur - 416122

6. M/s. Peeru Sales Corporation
6/38, Galib Pura, Nai ki Mandi, Agra-282010

Addresses for Raw material suppliers

1. M/s. Mirza Tanners, Jajman, Kanpur
2. M/s. Super Tannery, Jajman, Kanpur
3. M/s. Asia Tannery, Jajman, Kanpur (UP)
4. M/s. Zaz Tannery, Jajman, Kanpur
5. M/s. Pioneer Eyelets Mfg. Co., Cross Road, Jogeshwari (East) Mumbai - 60
6. M/s. Pidilite Industries Ltd. Ramkrishna Mandir Road, Off. M. Vasanj Road,
P.N.17411, Andheri (East) Mumbai 400059
8. M/s. Chandra Chemicals (P)Ltd. F-35, CIT Road, Scheme 62, Kolkata-700014
9. M/s. Paulbro Leathers Pvt. Ltd. 11, Leather complex, Kapurthala Road
  Jalandhar (Punjab)
11. M/s. Soccer Tannery Leather complex, Kapurthala Road, Jalandhar (Punjab)
12. M/s. Amson Leather, Leather-complex, -Kapurthala-Road, -Jalandhar- (Punjab)
13. M/s. Leo-leathers, Leather complex, Kapurthala Road, Jalandhar (Punjab)
14. M/s. J.D. Leathers, Leather complex, Kapurthala Road, Jalandhar (Punjab)