

PROJECT PROFILE

Upper Leather From Cow Hides

INTRODUCTION.

Upper Leather from cow hides is manufactured from raw cow hide. It is used for manufacture of different types high class footwear and Leather goods. Shoes, Leather goods made by upper Leather are exported to different countries to fulfil the global market. Upper Leather feels more soft and has attractive look.

MARKET

There are a number of shoe, garments and Leather goods manufacturing units throughout the country who demand upper Leather due to good export market for products made by upper Leather.

BASIS & PRESUMPTIONS

- | | |
|--|---|
| 1. Working Hours. | 8 hours per day single shift basis
25 Working days in a month. |
| 2. To achieve full capacity utilization. | 3 to 5 years. |
| 3 Labour & Wages. | Monthly salary basis. |
| 4 Interst rate for fixed& working capital. | 14% |
| 5. Margin money. | 25% |
| 6 Pay back period of product. | 1 to 3 years |

IMPLEMENTATION SCHEDULE

It will take 20 to 24 months on various reasons like getting suitable work site and other administrative work from government promotional agencies etc.

TECHNICAL ASPECTS

1 Proccs Outline

Raw material: Wet salted hair slip quality cow hide of average weight 11 to 15 Kg each.

Soaking: The hides are washed thoroughly and soaked in a pit containing:

Sodium Sulphide 0.2%
Water 400% - 500%

The following chemicals and water on the raw weight. The hides are kept in the pit overnight next morning checked for proper soaking and then washed in running water, water drained out and soaked weight taken.

Liming (in drum): The following chemicals are taken on soaked weight taken.

Water-300%
Noigen LS - 0.2%
Sodium sulphide conc-5%
slaked Lime-4% to 6%
Salt 3%

Total liming for 18-20 hours drum is run 2-3 minutes every two hours, rinsed in soft water for 10 minutes, fleshed and scudding and kept weight determined.

Deliming: The fleshed pelt as washed in running water in drum for 20 minutes. Water drained out. The following chemicals are taken on pelt weight.

Water - 250%

Ammonium sulphate-1.2-1.7%

Sodium bi-sulphate-0.4-0.6%

Drum run for 30-40 minutes and checked by phenolphthalein and test should show 20-25% red. Drain out the water and wash thoroughly with 2 changes of water for 20 minutes and pelts are scudded.

Pickling: The pelts are pickled with the following chemicals.

Water-30-60%

Salt- 5%

Drum run for 10 minutes and then add

H₂SO₄(1.84 conc)-0.5%

The acid is diluted with water and added in 3 installments at the interval of 10 minutes and after last installment drum run for 45 minutes and then add

Formaldehyde-0.5%

Drum run for 5 minutes and checked pH of pelt with bromophenol blue indicator which should be 2.8 to 3.0%

Chrome tanning: Half of the pickle liquor is drained out and the hide is run for 15 minutes then add

Calcium Carbonate-30%.

Sodium acetate-0.5%

Soda ash- 0.3%

The following chemicals is fed in two installments at the interval of 15 minutes and drum run for 2-2½ hours., pH 3.8-4.0 pile up overnight and next day samming and setting, splitting shaving to 1.3-1.4 mm. The shaved leathers are washed for 10 minutes in warm water 30°-35° c.

Retannage: Basic Chrome crystal(33%)-5%.

(without float) (dissolved 1: 1).

Sodium formate: 1% .

Let the drum run for 10 minutes and add

Cationic fat liquor -2%.

Drum run for 1 hour and then add

Sodium formate-0.5%

Sodium bicarbonate-0.7%(dissolved 1:10).

And drum run 45 minutes and pH should be 4.5-4.8 and then add

Water extract powder-4%.

Tanigan PR(Bayer)-1%.

Chestnut extract powder-1%.

Drum run for 45 minutes and drain and rinse 5 minutes.

Dyeing and fat liquoring:

Acid dye in powder-3%.

Drum run for 25 minutes and then add water -100%.

Drum run for 20 minutes and then add

Sandozol KB-6%

Drum run for 1 hour and add.

Formic acid (diluted 1:10)-0.3%.

Drum run for 20 minutes and then add

Taffuilon 218a-1.1.

Drum run for 20 minutes and then horse up. The leather are sammed, set out, saw dusted, staked, toggled, buffed on grain with 400 grit emery paper and brush off.

2. Quality and Standards

Indian standard specification IS: 8170-1983 will be used in maintaining standards for cow upper leather.

2. As per buyers specification.

3. Production capacity per annum

- (a)Quantity-60,000 cow hides.
(b)Value- Rs. 7,44,90,000

4. Apporximate motive power requirement for each technology.

1. Permanet-36 Nos.
2. Electric motive power-130HP.
- 3.

5 Pollution Control

As recommended by C.L.R.I. provision arranged under fixed capital scheme.

6. Energy conservation

- (a) Common drive system to run the paddles may be adopted.
(b) Through checking of the motors driving systems etc. should be done time to time.

Financial Aspects

(A) Fixed Capital

a)Land and building 2acres @2,50,000per acre	Rs 5,00,000
b) Building (Built-up Area)	
1. Office, stores etc.-120sq.metres @ Rs 3500per Sq. metres	Rs. 4,20,000
2. Working sheds 1000sq.metres&Rs 2000	Rs 20,00,000
3. Well Overhead Tank, water connection etc.	Rs. 1,80,000
Total	Rs.31,00,000
Effluent Treatment Plant (Primary)	Rs. 3,00,000

(II) Machinery and Equipments.

Sr. No	Description	Specification	Qty	Value (Rs.)
1	Wooden paddle including motor starter etc.	8'x7' 10HP motor	2Nos	2,00,000
2.	Tanning drum including motor starter etc.	8'x6' 10HP motor	2Nos	3,60,000
3.	Fleshing machine.	1800mm 15HP motor	1No	2,40,000
4.	Experimental drum.	3'x3'. 5HP	1No	60,000
5.	Double width shaving Machine.	1800mm width.	1No	4,00,000
6.	Double width splitting Machine	1800mm width	1No	5,00,000
7.	Dyeing and Fatliquoring drum.	8'x6' 10HP motor	1No	2,00,000
8.	Stacking Machine.	S/o comb type	1No	1,00,000
9.	Toggle chamber.	10plates	1No	1,00,000
10.	Measuring Machine.	1800mm width	1No	2,00,000
11.	Generator set.	50KVA	1 No	2,00,000

12.	Working Tables,Toggle etc.	---	1NO	50,000
13.	Weighing Scale.	-----	1No	50,000
14	Buffing Machine.	-----	1No	1,00,000
15.	Cost of power connection including transformer.	-----	-----	3,50,000
16.	Testing Equipments	---	-----	50,000
17.	Cost of office equipments including furniture.	-----	-----	1,50,000
18.	Electrification and installation charges .	-----	LS	3,00,000
		Total		36,10,000

III. Pre-operative expenses

40,000.

IV. Total Fixed Capital.

1. Land and Building.	31,00,000.
2. Primary Effluent Plant.	3,00,000
3. Machinery and Equipments.	36,10,000
4. Pre-operative expenses.	40,000

TOTAL

70, 50, 000

B. Working Capital (per month)

(1) Staff and Labour (per month)—

Sl.No	Designation	No	Salary(Rs)	Total(Rs)
1.	General Manager	1	15,000	15,000
2.	Production Manager	1	10,000	10,000
3.	Supervisor	1	8000	8000
4.	Clerk –cum-Account	1	5,000	5,000
5.	Store keeper	1	5,000	5,000
6.	Peon	1	3,000	3,000
7.	Watchman	1	3,000	3,000
8.	Skilled Workers	6	7,000	42000
9.	Semi-skilled Workers	7	5,000	35,000
10.	Machine Operators	5	4,500	22,500
11.	Fitter/Electrician	1	3,500	3,500
12.	Un-Skilled Workers	6	3,000	18,000

Total=1,70,000

Perquisites @15%= 25,500

Total= 1,95,500

(II) Raw Material (Per month)

Sl. No.	Description	Quantity	Rate (Rs.)	Total (Rs.)
1.	Wet Salted Cow Hides	5000 Pieces equivalent To 1,25,000 Sq. Ft.	30 Per Sq.Ft.	37,50,000
2.	Processing Chemicals	L.S.	9Per Sq.Ft.	11,25,000
Total				48,75,000

(111) Utilities (Per month)

Sl.	Description.	Amount (Rs.)
1.	Power.	45,000
2.	Fuel/Diesel	15,000
Total.		60,000

(IV) Other Contingent Expenses (Per month)

Sl. No.	Description	Amount (Rs)
1	Postage and Stationery	5000
2	Telephone.	8000
3	Transportation Charges.	10,000
4	Consumable stores.	5,000
5	Repair and Maintenance	7000
6	Insurance	5,000
7	Other misc. expenditure	10,000
Total		50,000

(V) Total Working Capital (Per month)

Sl. No.	Description	Amount (Rs)
1	Staff and Labour	1,95,500
2.	Raw Material	48,75,000
3.	Utilities	60,000
4.	Other Contingent expenditure	50,000

Total **51,80,500**

(VI) Working Capital (for 3 months)

51,80,500X 3= 1,55,41,500

C. Total Capital Investment

Sl. No	Description	Amount (Rs)
1.	Fixed Capital	70,50,000
2.	Working Capital(3months)	1,55,41,500

Total **2,25,91,500**

Machinery Utilisation

Tanning drum is the bottleneck of production operation, tanning and post –tanning operations and finishing.

FINANCIAL. ANALYSIS

(1) Cost of production (Per Year))

Sl.	Description	Amount (Rs)
1)	Working Capital	6,21,66,000
11)	Depreciation on Building @ 5%	1,30,000
111)	Depreciation on Machinery and Equipments @10%	3,36,000
1V)	Depreciation on Equipments and Fixture@ 20%	50,000
V)	Interest on total Capital Investment @14%	31,62,810
	TOTAL	6,58,44,810
	SAY	6,58,44,800

(2)Turnover (per Year)

Sl.	Items	Quantity	Rate (Rs)	Value (Rs)`
1.	Grade 1.2%	30,000Sq.ft.	80	24,00,000
2.	Grade11.20%	3,00,000Sq.Ft.	60	1,80,00,000
3.	Grade111.40%	6,00,000Sq.Ft.	50	3,00,00,000
4.	Grade1V.30%	4,50,000Sq.Ft.	45	2,02,50,000
5.	Rejection 8%	1.20,000Sq.Ft.	32	38,40,000
			Total	7,44,90,000

(3) Net profit (Per Year)

Profit =Turnover---Cost of Production

Turnover = 7,44,90,000

Cost of production = 6,58,44,800 Profit = 86,45,200

(4) Net Profit Ratio

$\frac{\text{Net Profit per year} \times 100}{\text{Total turnover per year}}$

$\frac{86,45,200 \times 100}{7,44,90,000} = 11.6\%$

(5)Rate of Return

$\frac{\text{Net Profit per year} \times 100}{\text{Total Investment}}$

$\frac{86,45,200 \times 100}{2,25,91,500} = 38.2\%$

(6)Break----Even point

Fixed Cost

Sl. No.	Description	Amount (Rs.)
a)	Depreciation on Building@5%	1, 30,000
b)	Depreciation on Machinery@10%	3,36,000

c)	Depreciation on Equipments and Furniture@20%	50,000
d)	Interest on total Investment	31,62810
e)	Insurance	60,000
f)	40% of salary and wages	9,38,400
g)	40% of other contingent expenditure and utilities	5,04,000
	Total	51,81,210
	Say	51,81,200

B.E.P.

$$\text{B.E.P.} = \frac{\text{Fixed Cost} \times 100}{\text{Fixed Cost} + \text{Profit}}$$

$$\frac{51,81,200 \times 100}{51,81,200 + 86,45,200} \quad 37.47\%$$

Addresses of Machinery and Raw Material Suppliers

1. M/S .Bengal Machinery Co. 9-A, New Tangra Road, K olkata.
2. M/S .Annapurna Engg. Works,F-10/2, MIDC, Shirol, Kolhapur.olkata.
3. M/S Shalimar Engg. Works, 12-B, Prabhorah Sarkar Lane,Kolkata-15.
4. M/S Hindustan Egg.Works , Jawahar Nagar,Kolhapur.
5. Prototype Development and Training Centre,B-24. Guindy EstateEkkaduthangal, Chennai -
6. M/S .New Bengal Engg. Works,9A,New Tangra Road,Kolkata-46.
7. M/S .Rajam brothers Engg. Pvt,Ltd.57 Tirupalli Street, Chennai-1.
8. M/S. India Tanning Machinery Corporation,36-37,Angappa Meken Street, Chennai-1.
9. M/S . Egli Equipments Ltd. 24/16, Pantheon Road,Egmore, Chennai-6.
10. Wet Salted Cow hides Available Locally.

Raw Material and Chemical Suppliers

1. M/S .Tan India Wattle Extract Coporation, 95/A Mound Road,Chennai-16.
- 2.M/S. Sandoz (P) Ltd.,Sandoz House ,Dr.A.B Road Worli Road Mumbai-8.
- 3.M/S Leather Chemical Industries,1-A, New Alipur, Kolkata.
4. M/SAsiatic Chemical Company,26/46, Birhana Road, Kanpur.
5. M/S. BASF India Ltd., Tikon House,Jajmau, Kanpur-10.
6. M/S. Indofil Chemicals Ltd.,Nirlon House,Dr.Annie Besant Road Mumbai-20.
7. M/S.Bayer (India) Ltd.,749, Anna Salai, Chennai.
8. M/S. L.D.Chemicals, 461-D, Defence Colony Kanpur-10.
9. M/S Colour Chem Ltd., Jajmau, Kanpur-10.

PROJECT PROFILE

ON

UPPER LEATHER FROM COW HIDES

PRODUCT: UPPER LEATHER FROM COW HIDES

QUALITY AND STANDARD IS.8170-1983

PRODUCTION CAPACITY 60,000 Pieces Per annum

MONTH AND YEAR OF PREPARATION FEBUARY 2010

PREPARED BY

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