

## ALUMINIUM FURNITURE

**Introduction:** Due to their light, weight, corrosion resistance, easy portability compactness and elegant appearance Aluminium furniture is finding larger markets in spite of comparatively higher prices. With increased costs of wood and steel, Aluminium furniture is finding markets in Banks, Hotels, Offices and residences. It is more popular in economically well-off groups in Urban Societies.

**Markets:** due to its inherent advantages Aluminium furniture is gaining in popularity. In some products like Baby-Walker, Baby trolleys, Garden Chair, etc. Aluminium furniture has hardly any competition. With steep increase in prices of Wood and Steel, Aluminium furniture has found much wider markets. In Tripura Aluminium and Bamboo /Rubber-wood combination furniture where Aluminium is used in frames can have good export potential. In the State Chairs, Baby trolleys & Tea-poy/stool have good market.

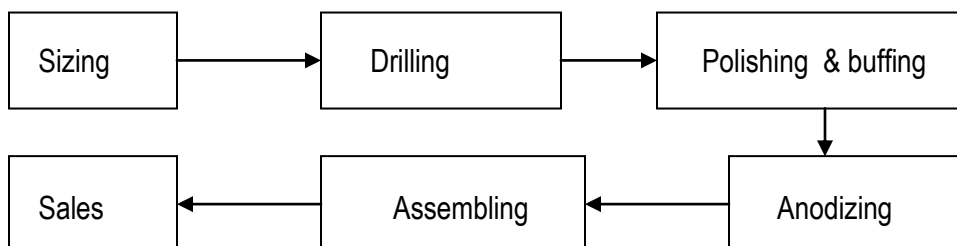
**Installed Capacity:** The Unit is assumed to work for Single shift of 8 hours per day for 300 working days per annum. It is also assumed that the product-mix shall be as shown in estimated annual installed capacity below:

Sl. No.	Product	Quantity per annum	Sales Value per annum
1.	Armed Aluminium Chairs with plastic seat & back seat; folding type	2000 Nos.	Rs. 9,20,000/-
2.	Baby Trollies	500 Nos.	Rs. 3,75,000/-
3.	Tea-poy/stool	100 Nos.	Rs. 25,000/-
	<b>Total</b>		<b>Rs. 13,20,000/-</b>

**Process of Manufacture:** The process of manufacture of Aluminium furniture include the following major steps:

1. Cutting of tubes and sheets to required sizes
2. Bending of tubes in Hydraulic Pipe bending machine
3. Drilling, counter sinking, making holes for riveting, milling, etc.
4. Removal of burs by files, emery paper and finishing
5. Polishing, buffing and cleaning
6. Anodizing and Dyeing components
7. Assembling

### Flow Chart



**Raw Materials:** Aluminium Tubes/pipes are the principal raw material of the Unit. Small quantities of Aluminium Flats are also required. The annual consumption at the installed capacity and costs are shown

Sl. No.	Raw Materials	Costs
1.	Aluminium pipes	Rs. 9,91,000
2.	Aluminium flats & sheets	Rs. 7,60,000
3.	Wood & Bamboo components	Rs. 4,24,000
4.	Plastic straps for seat & backrest	Rs. 11,25,000
5.	Fittings, polishing materials, etc.	Rs. 5,50,000/-
	<b>Total:</b>	<b>Rs. 38,50,000/-</b>

**Power:** At 200/200 volts, 50 Hz, AC Single phase & 3 wire. The unit will need a total connected Load of 5 KW. The annual consumption of power is estimated at 11476 KWHrs costing Rs. 20,657/-.

**Water:** The unit will need 500 Liters of water cost of drawing of water is shown in power cost.

**Manpower:** Apart from two machine operators all the manpower is available locally. The requirement of manpower and annual costs are shown below:

Sl. No.	Category of Manpower	No. of persons	Annual Costs
1.	Manager	1	Self
2.	Administrative & Sales Clerk	3	Rs. 1,08,000/-
3.	Skilled Workers	2	Rs. 84,000/-
4.	Unskilled Workers	2	Rs. 90,000
	<b>Total:</b>	<b>9</b>	<b>Rs. 2,82,000/-</b>

### **CAPITAL COST ESTIMATE**

1. <b>Land &amp; Building</b> with covered area of 186 Sq. M.	On rent
2. <b>Plant &amp; Machinery</b>	
(a) Two handled operated hydraulic pipe bending Machine with standard dies 42"nip rollers, Air Computers or, water pump, etc. with 12 HP Motors.	Rs. 36,000/-
(b) One 24" Metal Bandsaw Machine	Rs. 45,000/-
© One ½" Capacity Bench Drilling Machine	Rs. 18,000/-
(d) One double body heavy-duty land press No. 6	Rs. 10,000/-
(f) One hand operated multi-purpose bender	Rs. 6,000/-
(g) One double ended 8" Bench grinder	Rs. 7,500/-
(h) One Air Compressor with 3 HP Motor	Rs. 15,000/-
(i) Hand tools, Jigs & fixtures	Rs. 20,000/-
	<b><u>Rs. 2,70,000/-</u></b>

### 3. Miscellaneous Fixed Assets

(a) Electrification	Rs. 50,000/-
(b) Water Installation	Rs. 10,000/-
© Miscellaneous others	Rs. 40,000/-

**Rs. 1,00,000/-**

### 4. Provision for contingencies

**Rs. 20,000/-**

### 5. Preliminary & Pre-operative expenses

**Rs. 20,000/-**

**Total fixed Costs: Rs.4, 10,000/-**

### 6. Working Capital (for 3 months)

a) Raw Materials	3,20,833/-
b) Power	1,721/-
c) Salary & Wages	23,500/-
d) Miscellaneous expenses	3,946/-

**Total:: Rs. 3,50,000/-**

**Total Project Cost: Rs. 7,60,000/-**

### Means of Finance:

	<u>Urban</u>	<u>Rural</u>
a. Composite loan under PMEGP	Rs.5,32,000/-	Rs. 4,56,000/-
b. Subsidy	Rs.1,90,000/-	Rs. 2,66,000/-
c. Promoters contribution	Rs. 38,000/-	Rs. 38,000/-
d. Debt Equity Ratio	2.33:1	1.50:1

### Profitability:

(Rs. in Thousands)

Sl.No.	Description	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
1.	<b>Capacity utilized</b>	<b>60%</b>	<b>70%</b>	<b>80%</b>	<b>80%</b>	<b>80%</b>
2.	<b>Annual Sales Realization</b>	<b>3,456</b>	<b>4,032</b>	<b>4,608</b>	<b>4,608</b>	<b>4,608</b>
3.	<b>Annual Costs in Rs.</b>					
(a)	Raw Materials	2,310	2,695	3,080	3,080	3,080
(b)	Power	12	14	17	17	17
(c)	Wages & Salaries	282	289	296	304	311
(d)	Repair & Maintenance	16	16	16	16	16
(e)	Administrative overheads	75	79	83	87	91
(f)	Selling expenses	518	605	691	691	691
(g)	Depreciation	40	40	40	40	40
(h)	Interest	61	49	36	22	7
	<b>Total:</b>	<b>3,314</b>	<b>3,787</b>	<b>4,259</b>	<b>4,257</b>	<b>4,253</b>
	Total Variable Cost	2,840	3,314	3,788	3,788	3,788
4.	<b>Annual profit</b>	<b>142</b>	<b>245</b>	<b>349</b>	<b>351</b>	<b>355</b>
5.	Return on investment	18.68%	32.24%	45.92%	46.18%	46.71%
6.	Return on sales	4.11%	6.08%	7.57%	7.62%	7.70%
7.	Cash accrual	<b>182</b>	<b>285</b>	<b>389</b>	<b>391</b>	<b>395</b>
8.	Annual Contribution	<b>616</b>	-	-	-	-
9.	Break Even Point in percent	<b>46.17%</b>	-	-	-	-
10.	<b>Debt servicing capacity</b>	243	334	425	413	402
11.	Repayment of Loan	<b>87</b>	<b>100</b>	<b>115</b>	<b>115</b>	<b>115</b>
12.	<b>Debt serviced</b>	148	149	151	137	122
13.	<b>Pay Back Period</b>	<b>2 years 2 months 1 day</b>				
14.	<b>D S C Ratio (DSCR)</b>	<b>2.57:1</b>				

**Cash Flow Statement:**

(Rs in Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's capital	38	-	-	-	-	-
2.	Increase in subsidy	190	-	-	-	-	-
3.	Increase in loan	532	-	-	-	-	-
4.	Depreciation	-	40	40	40	40	40
5.	Profit before interests	-	203	294	385	373	362
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>760</b>	<b>243</b>	<b>334</b>	<b>425</b>	<b>413</b>	<b>402</b>
6.	Increase in capital investment	410	-	-	-	-	-
7.	Increase in Current Assets	350	-	-	-	-	-
8.	Interests	-	61	49	36	22	7
9.	Repayment of loan	-	87	100	115	115	115
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>760</b>	<b>148</b>	<b>149</b>	<b>151</b>	<b>137</b>	<b>122</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>-</b>	<b>-</b>	<b>95</b>	<b>280</b>	<b>554</b>	<b>830</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>-</b>	<b>95</b>	<b>185</b>	<b>274</b>	<b>276</b>	<b>280</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>-</b>	<b>95</b>	<b>280</b>	<b>554</b>	<b>830</b>	<b>1,110</b>

**Projected Balance sheet:**

Sl. No.	Description	Amount in Rs. Thousands as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of the Promoter	38	180	425	774	1,125
2.	Surplus from operations	142	245	349	351	355
	<b>NET WORTH:</b>	<b>180</b>	<b>425</b>	<b>774</b>	<b>1,125</b>	<b>1,480</b>
3.	Subsidy	190	190	190	190	190
4.	Loan Account	445	345	230	115	-
<b>A.</b>	<b>TOTAL LIABILITIES</b>	<b>815</b>	<b>960</b>	<b>1,194</b>	<b>1,430</b>	<b>1,670</b>
1.	Gross Fixed Assets	410	410	410	410	410
	<b>Less Depreciation</b>	<b>40</b>	<b>80</b>	<b>120</b>	<b>160</b>	<b>200</b>
	<b>NET BLOCK</b>	<b>370</b>	<b>330</b>	<b>290</b>	<b>250</b>	<b>210</b>
2.	Closing stocks	350	350	350	350	350
3.	Cash & Bank Balance	95	280	554	830	1,110
<b>B.</b>	<b>TOTAL ASSETS</b>	<b>815</b>	<b>960</b>	<b>1,194</b>	<b>1,430</b>	<b>1,670</b>