



PROJECT PROFILE

Product Name	ADJUSTABLE HOSPITAL BED
NIC Code	31003
Production Capacity Per Annum	400 Beds (275 Nos. Fowlers Beds and 125 Nos, General Purpose Beds)
Sale Per Annum in Rs.	56 lac
Month & Year of Preparation	June-2020
Prepared By	Sat Pal Assistant Director MSME-Development Institute, Plot No. 11 A .I.D.C. Karnal (Haryana) E – mail : dcdi-karnal@dcmsme.gov.in Website : www.msmedikarnal.gov.in

ADJUSTABLE HOSPITAL BED

1) PRODUCT & ITS USES

Adjustable hospital beds are made of steel & normally used in Govt. Hospital, Private Hospital, & Nursing homes etc. There are two types of hospital beds namely:

- i) General purpose Hospital Bed Steeds
- ii) Fowlers Hospital Beds

II) MARKET POTENTIAL

The demands for adjustable beds are increasing day by day due to the following reasons:

- i) Increase the number of Hospitals in private sector & their expansion.
- ii) Increase in number of private & Government nursing homes & their expansion.
- iii) Increase in number due to spread of viruses i.e. SARS-CoV, SARS-CoV-2, Hantavirus, MERS-CoV, Rotavirus, Dengue

The Govt. is encouraging new hospitals & nursing homes in private sectors in order to increase treatment facilities in accordance with the development in public health sector & as such it is likely to be a steady increase in the demand for hospital furniture. However, the growth rate is expected to be more than 5% to 8% per year and as such it may be ideal for the existing steel furniture manufacturer units to take up this activity for not only as diversification but also better capacity utilization by installing a few balancing equipments.

III) PRODUCTION TARGET

It is proposed to manufacturer 400 Beds per annum.

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IV BASIS & ASSUMPTIONS

- i) This project profile is based on 8 working hours a day and 25 days in a month and the break even efficiency has been calculated on 75% capacity utilization basis.

- ii) The gestation period in implementation of the project may be about 6 to 8 months. This period included making all arrangements, completion of all formalities, market surveys and tie ups, financial arrangements, purchase of machines, recruitment of staff, commissioning of plant and trial production etc.
- iii) The normal wages and salaries being paid in the industry to various grades of personnel have been considered and also the provision of minimum wages has been taken care of.
- iv) The rate of interest both for fixed and working capital have been taken as 10% P.A.

V. **IMPLEMENTATION SCHEDULE**

Implementation of the project involve various activities like market surveys and tie-ups, procurement of know-how, arrangement of premises/ land, building, preparation of project report, registration, financing, purchase of machines, commissioning of project, recruitment of staff and training, arrangement of power, procurement of raw materials, packing materials, trial production etc. in order to implement the project efficiently and in the shortest period there is a need to initiate many activities simultaneously as far as possible. This will not only cut the slack period but also will give quick results and be cost effective. It is advised to follow PERT/CPM/NETWORK analysis technique for implementation along with their estimated time requirement is given below:

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S.No.	Activity	Estimated period required
1	Market survey	15-20 days
2	Procurement of know-how/experts	30 days
3	Arrangement of premises	30-45 days
4	Obtaining quotation and cpreparation of project report	15-20 days
5	Registration and financing	45-60 days
6	Recruitment of personnel and training	30-45 days
7	Obtaining power connection	15-30 days
8	Procurement of machines and equipment	45-60 days

9	Installation and electrification of machinery	20-30 days
10	Procurement of raw materials, consumables, packing materials etc.	5 -10days
11	Product development/trial production	5 -10days.
12	Commercial production	5 days.

VI. **PRODUCTION DETAILS & PROCESS OF MANUFACTURING**

The basic operations involved in the manufacturing of adjustable beds are as follows:

- i) Cutting & bending of pipes
- ii) Cutting of MS angles
- iii) Cutting of strips
- iv) Welding & Riveting
- v) Grinding
- vi) Assembly of elevating mechanism
- vii) Painting & baking

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VII. **INSPECTION & QUALITY CONTROL**

IS:7378:1974 specifies dimensional & other requirements of fowlers beds used in hospitals. The above specifications may be followed for quality control.

VIII) **ENERGY CONSERVATION**

This industry is not a large power consuming industry; however maximum care should be taken in utilization of electrical energy.

IX) **POLLUTION CONTROL**

These types of industries are not producing any effluents or any other polluting materials. Therefore, pollution control measures are not taken into account.

X) **PRODUCTION CAPACITY:**

This unit is envisaged to produce 400 Nos. of different types of hospital beds to the worth of Rs. 56 Lacs.

XI) **LAND & BUILDING**

200 Sq. Mts. Built up shed rented @ Rs. 12000/- per month.

XII. MACHINERY AND EQUIPMENT

S.No.	Name of machine	Qty.	Rate (Rs.)	Amount(Rs.)
1	Pipe bending machine hand operated with fixtures locally fabricated	3 Nos,	30000/-	90000/-
2	Arc welding set	1set	25000/-	25000/-
3	Gas Cutting set with torch, regulators etc	1 set	20000/-	20000/-
4	Bench drill machine 13 mm capacity	1No.	25000/-	25000/-
5	Portable drilling machine 13 mm capacity	1No.	20000/-	20000/-
6	Flexible shaft grinder 1500 mm	1No.	10000/-	10000/-
7	Double ended bench grinder 300 mm	1No.	10000	10000
8	Hand sharing machine 3 mm capacity	1No.	10000	10000
9	Baking oven 2.5X2 mt.20 kilo watt	1No.	70000	70000
10	Hand press no.4	2No.	7500	15000
11	Cleaning pickling, phosphate tanks 2.5X2X2 mts.	LS	LS	1,00,000
12	Compressor with spray gun	1No.	25000	25000
13	Riveting machine portable type	1No.	20000	20000
14	Hand tools	LS	LS	15000
15	Fixtures and dyes	LS	LS	50000
16	Electrification and installation@10% cost of machinery	-	-	51500
17	Office equipments	LS	LS	75000
18	Preoperative expenses	LS	LS	50000
			Total	6,91,500

Xiii) Working Capital (Per Month):

i)Staff & Labour (personnel)(Per Month):

S.No.		No.	Rs.	Rs.
1.	Supervisor	1	12000	12000
2.	Accountant/Clerk	1	10000	10000
3.	Peon cum chowkidar	1	6000	6000
4.	Skilled worker	2	9000	18000
5.	Semi Skilled worker	2	7000	14000
6.	Helpers	1	6000	6000
7.	Labour benefits @ 20%	-	-	13200
8.	Total Salaries			79200

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iii) **RAW MATERIAL** (Per month)

1	MS Angle 40 mmX40mmX3mm & 38 mmX38mmX3mm 0.75MT@34000/-per M.T.	25500/-
2	M.S.Tubes 38.10mmODX1.6mm/1.2mmthick 1.5M.T.@35000 per M.T	52500/-
3	M.S.Tubes 25.40mmO.D.X1.6mm/1.2mm thick 1.25M.T.@35000 per M.T.	43750/-
4	M.S.Tubes 19.5mmO.D.X1.22mm thick 0.75M.T.@35000 per M.T.	26250/-
5	M.S.strips 1.25mmX25mm 0.75MT@35000 per M.T.	26250/-
6	Heavy Duty Castor Wheels 150 nos @ Rs.100/-per unit	15000/-
7	Nut bolts, scres, washers, flats, rubber items and paint	20000/-
	Total	209250/-

iii) **Utilities (per month)**

Power(L.S.)	25000/-
Water(L.S.)	5000/-
Total cost of utilities	30000/-

iv) **Other Contingent Expenses (per month)**

Rent	12000/-
Postage and stationery(L.S.)	3000/-

Telephone(L.S.)	1000/-
Consumable Stores (L.S.)	5000/-
Repairs and Maintenance	2000/-
Transport charges	20000/-
Advertisement and publicity	3000/-
Insurance	3000/-
Sales Expenses (L.S.)	10000/-
Total	59000/-

XIV) Working Capital (Per month)

Staff and labour	79200/-
Raw materials	209250/-
Utilities	30000/-
Other Contingent expenses	59000/-
Total	3,77,450/-

Therefore, requirement of working capital for 3 months

$$= \text{Rs } 3,77,450 \times 3 = 11,32,350/-$$

XV) Total Capital Investment

Fixed Capital/Machinery and Equipment	6,91,500/-
Working Capital for 3 months	11,32,350/-
Total	18,23,850/-

XVI) Cost of production per year

1	Total working cost per year 377450 x 12	4529400/-
2	Depreciation on machinery and equipment@10%per annum	46500/-
3	Depreciation on jigs and fixtures@20%	10000/-
4	Depreciation on office equipment@20%	15000/-
5	Interest on total capital investment @10%	182385/-
	Total	4783285/-

XVII) Total Sales(P.A.)

By sale of 275 Nos.fowlers hospital beds @ 17000/- each	46,75,000/-
By sale of 125 nos. General purpose hospital beds @7000/- each	8,75,000/-
By Sale of scrap(L.S.)	50,000/-
Total	56,00,000/-

XVIII) Profit

Profit = Total Sale – cost of Production

$$= 56,00,000 - 47,83,285$$

$$= 8,16,715/-$$

XIX) Percentage of Profit on Sale :

$$= \frac{\text{Profit} \times 100}{\text{Total Sale}}$$

$$= \frac{8,16,715 \times 100}{56,00,000} = \mathbf{14.58\%}$$

XX) Percentage of return over Investment

$$\frac{\text{Profit} \times 100}{\text{Total Capital Investment}}$$

$$= \frac{816715 \times 100}{1823850} = \mathbf{44.77\%}$$

XXI) Break Even Point

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

Annual Fixed Cost:

1	Rent 12000 x 12	1,44,000/-
2	Interest	182385/-
3	Depreciation on Machinery & Equipment@10%	46,500/-

4	40% on salary and wages	380160/-
5	40% on other expenses including utilities and excluding rent and insurance	355200/-
	Total	1108245/-

B.E.P.(percentage) = $1108245 \times 100 / 1108245 + 816715$

= **57.57%**

Addresses of Machinery Suppliers:

1. M/s S.N. Enterprises, Plot No. 9, 18/3, Mathura Road, Ajronda, Faridabad.
Ph.No.8048963742, 8071806777
2. M/s R.N.Machines, Village Bholapur, P.O. Sahabana, Back side Bonn Bread, Ludhiana. Ph.No.08049473702
3. M/s Venus Industrial Gases(P) Ltd., 154-155 km. Stone, GT Road, Umri(Kurukshetra) Ph.No. 8048968393,
e-mail:vigplsushilgupta@gmail.com