

PROJECT PROFILE ON COMPUTER FURNITURE

QUALITY & STANDARDS : As Per Customer's requirement
IS 71381 : 73 Hollow Rectangular MS
Section Fiber.
IS 14587 : 98 Pre – laminated medium
Density Fiber board for table top.
IS 303 : 89 for Pressed formed and
ergonomically shaped seat and back

- 1) Computer Table (Overall size 900 X 600 X 750mm) - 2000 Nos.
- 2) Computer cum Printer Table (Overall size 1200 X 700 X 750mm) – 1000 Nos.
- 3) Printer Table (Overall size 750 X 700 X 750mm) - 1800 Nos.
- 4) Computer Chair without Arms and adjustable seats having size 725 X 725 X 950 -1050mm - 4000 Nos.
- 5) Computer Chair with Arms and adjustable seat height 725 X 725 X 950 – 1050mm - 3000 Nos.
- 6) Executive Computer Chairs with Arms and adjustable seat height size 725 X 725 X 1100 -1200mm - 1000 Nos.

Volume : Rs.4,19,00,000

MONTH & YEAR OF
PREPARTION : March -2011

PREPARED BY

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INTRODUCTION :-

Within a carved span of time, Computers have carved out a niche in the history of mankind and changed the entire gamut of human life at an overwhelming space. Be it business, academics, defense strategy, budgeting research, engineering, medicine space exploration, communication, travel and hospitality, utilities, or designing. Computers have established themselves as an indispensable part and so also the computer. Some commonly used computer furniture are Computer Tables, Computer-cum- Printer tables, Printer Tables, Computer Chairs with or without coaster wheel base etc.

MARKET POTENTIAL: -

The marked demand for Computer furniture is increasing day by day with the increase in use of the Computers. Computers furniture has got domestic as well as export market. Long sitting hours on Computers has necessitated the use of computer furniture such as table and chair having proper dimensions and specifications. Computer tables are designed in such a way so as to accommodate Monitor, CPU, Key Board and other peripherals, with the optimum utilization of horizontal and vertical space. Care is also given to provide sufficient space while manufacturing computer chairs to accommodate the computer clubbed with other peripherals. Improper spinal support of chair has become the major cause for backache to many Computer users. Manufacturers are bringing out innovative changes to cope with this problem. Computer furniture is being mainly used in Office, computers Training Institutes Laboratories, Schools, Colleges, and homes.

BASIS AND PRESUMPTIONS

- 1) It is presumed that the unit will work for single shift of 8 hours and 300 days in a year with 75% efficiency.
- 2) The unit will take minimum three years to achieve full capacity utilization.
- 3) Labour wages are taken at the prevailing rates in the local market.

- 4) The rate of interest on Fixed and Working Capital is taken at an average rate of 16% per annum.
- 5) The rent of building is taken as per prevailing rates.
- 6) Cost of machinery and equipments/raw materials indicated, refers to a particular make and prices are approximate to the prevailing rate at the time of preparation of project report.

IMPLEMENTATION SCHEDULE :-

S. No.	Activity	Period
1.	Selection of Site	15 Days
2.	Preparation of Project Report	15 Days
3.	Registration with DIC	7 Days
4.	Financial arrangements with Banks	1.5 Months
5.	Machinery procurement	1 Months
6.	Installation of machines	15 days
7.	Procurement of Raw Materials	7 days
8.	Recruitment of manpower	7 days
9.	Trial production	15 days

Some of the above activities would be carried out simultaneously. The approximate time required to commence manufacturing would be 4-5 months.

TECHNICAL ASPECTS :-

Process of Manufacture

- (1) **Computer Tables:-** The Computer tables shall be fabricated in knock- down design for easy assemble and transportation. The base frame shall be made of hollow rectangular Mild Steel Section of 50mm X 25mm X 1.2mm thickness by cutting these sections in to desired sizes and base is made by welding the sections. The open edges of base frame are protected by PVC cover. Level Adjusters are mounted suitable at the bottom edges of

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base frame. The vertical frame for holding table top and shelf, shall be made out of 25mm X 25mm X 1.2mm thick hollow MS Square Section. The space between vertical frames shall be covered by 1mm thick steel CRC Sheet. All table top and shelf shall be made of pre-laminated medium density fibre-board of 18mm thickness of interior grade having teak/gray/ oak or any other shades specified by the customer. The all edges of tabletop shelf etc. shall be rounded or tapered.

Printer Table does not have any drawer/shelf etc, whereas the computer tables shall have a suitable drawer for keyboard made of 18mm of one side pre-laminated medium density board. Below the drawer, the provision is made sliding board of 9mm thickness and width 300mm which can be taken out on either side up to approximate 225mm for placing the mouse and pad. The table shall also be made with the provision of lockable drawer adjacent to the Key Board drawer, of appropriate size. One shelf of 18mm of one side pre-laminated MDF having a gap of 450mm from the drawer shall also be provided for holding CPU, UPS, etc.

Computer cum printer table shall also have a Key Board drawer/shelf, sliding board (for keeping the mouse and pad,) and a lockable drawer. Two shelves are also made for keeping CPU, UPS and stationery etc. A slot on table top is made for smooth passage of computer stationer. The side support shall be made of 50 X 6mm MS Flat welded to mainframe. The arm shall be supported on the side frame. The PUF and coined rubber sheet for seat and back rest shall be covered by tapestry/ fabric by stitching. And with the help of adhesive and nails. Fabric are also bought out from market which are available in different shades like Coffee Brown/ Navy Blue/Light Brown/ Grey etc.

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and used as per the choice of customer. The PUF arms for the computer chairs are available in plenty of designs in the market and shall be fitted according to customers specifications.

- (2) **Computer Chair** :- The Computer chair shall be revolving type fabricated in knockdown design for easy assembly and transportation by using 12mm thick ply and Pressed formed and ergonomically shaped seat and back which are easily available in the market in standard sizes. These seat and backrest shall be covered with mechanically formed PUF 50mm thick with an underneath coursed rubber sheet of 12mm thick. The PUF and coursed rubber sheet are also bought out from market and manually cut to desired sizes. Then the seat will be fixed to synchrony tilt mechanism, which is fabricated in the unit by cutting, bending and welding etc. Five pronged base of MS sheet, 2.5mm thick duly powder coated is supported on strong ABS Cylindrical turning twin type roller 50mm dia. The main support in system for chairs shall be fabricated out of 50 X 8mm section.

QUALITY CONTROL AND STANDARDS

- The Hollow Rectangular MS Section used for manufacturing of Computer Table shall conform to IS 71381 : 73 The pre-laminated medium density fibre board for table top shall conform to IS 14587 ;98.
- Pressed formed and ergonomically shaped seat and back shall be used conform to IS 303 : 89 having BWR AA type ply.
- The fabric for chair shall be used as per customer's requirements but in this project report, the calculation is based upon the fabric of standard quality with following specifications.

Weight of fabric	—	250 gms / Sq metre
Construction	—	Wrap 140 + 5% , Weft 120 + 5%
Breaking strength	—	5 + 20 cm between grips

Weft	—	130 (Min.)
Wrap	—	150 (Min.)
Material	—	Polyester
Count of yarn	—	Both Warp and Weft 2/14

All sharp edges should be removed and welding joints must be sound and strong. Coaster wheel movement of chair should be easy. Backrest movement should be noiseless. Computer table key board slide movement should be ease in operation. Table joints should be rigid.

Production Capacity (Per Annum)

(I) Computer Tables

- 1) Computer tables (Overall size 900 X 600 X 750mm)- 1800 Nos.
- 2) Computer –cum- Printer Table – Overall Size 1200 X 700 X 750mm – 1000 Nos.,
- 3) Printer Tables (Overall size 750 X 700 x 750mm) – 1800 Nos.

(II) Computer Chairs

- 1) Computer Chair without Arms and adjustable seat having size 725 X 725 X 950 – 1050mm – 4000 Nos.
- 2) Computer Chairs with Arms and adjustable seat Height size 725 X 1050mm, - 3000 Nos.
- 3) Executive Computer Chairs with Arms and adjustable seat height of size 725 X 725 X 1100 X- 1200mm, - 1500 Nos.

Motive Power

20HP.

Pollution Control

Noise Pollution created by machines should be controlled within limits.

Energy Conservation

Shunt capacitors should be provided to control power factor. As electricity is used as a supply of energy in the unit, hence for better results efficient motor should be used. Tube lights fans, etc should be kept off as and when not required.

FINANCIAL ASPECTS**A. Fixed Capital****(1) Land and Building**

- (i) 450 Sq. Mtrs. of covered area Rs. 14,000/-PM
- (ii) Machinery and Equipments

S.NO.	Description	Qty.	Amount (Rs.)
1.	Multi Purpose Wood Working Machine	1 No.	55,000
2.	Hand Operated Screw Press 5 Nos.	1 No.	17,000
3.	Arc Welding Machine 300 Amp.	1 Set.	15,000
4.	Gas Welding Set	1 Set.	10,000
5.	Pipe Shearing Machine 4" size	1 Set	15,000
6.	Double ended bench Grinder 6'	1 No.	10,000
7.	Flexible Shaft Grinder 6' Wheel size	2 Nos.	30,000
8.	Bench Drilling Machine $\frac{3}{4}$ " Cap with motor	1 No.	14,000
9.	Portable Drilling Machine	1 No.	6,000
10.	Powder coating equipment with oven tem. 300C 8 ' X 6	1 No.	2,50,000
11.	Air Compressor`	1 No.	10,000
12.	Phosphating Plant	1 No.	40,000
	Total		4,72,000
	Electrification and Installation@10% of the cost of Machinery		47,200
	Tools, Jigs, Fixtures etc.		40,000
	Total		5,99,200
	(iii) Pre- operative Expenses		10,000
	Total Fixed Capital (ii + iii)		6,09,200

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B. Working Capital (Per Month)

(i) Staff and Labour

S.NO.	Designation	No.	Salary	Amount
1.	Manager	1	8,000	8,000
2.	Accountant cum Clerk	1	5,000	5,000
3.	Skilled Worker	4	5,000	20,000
4.	Semi skilled Worker	4	4,000	16,000
5.	Un- skilled Worker/ Peon	3	4,000	12,000
	Total			61,000
	Add 15% perks			9,150
	Total			70,150

(ii) Raw Mateial

S/No	Particulars	No.	Rate(Rs.)	Amount (Rs.)
1.	MS Square and Rectangular Section of assorted size	46 MT	44,000	20,24,000
2.	Ball Bearing Channel 15' long and 2 mm thick.	4600 Set	45/- Set.	2,07,000
3.	Both side pre- laminated Particle Board 18 mm thick`	6000 Sq. Mtrs.	1000/- Sq.Mtr.	60,00,000/-
4.	Plastic Fittings, Floor Adjuster Screws, PVC Beading Misc.		L.S.	20,000/-

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5.	PUF Arm Set. I) For general type chair II) For Executive Chair	7000 Set 1500 Set	350/- 450/- Chair	24,50,000/- 6,75,000/-
6.	Tapestry/ Fabric: i) For general type chair ii) For Executive Chair	10,500 Mtrs. 3750 Mtrs.	200/- Mtrs. 300 Mtrs.	21,00,000/- 11,25,000/-
7.	MS Strip 50 X 5 mm size, MS Round 1 ½ size etc.	81MT	38,000	30,78,000
8.	MS Pedestal Arms of Assorted sizes.	42.5 set	38,000	16,15,000
9.	Twin Roller type ABS Coaster set	8,500 set	450/- set	38,25,000/-
10.	Plywood Seat (16' X 16' and 18' X 18') and Back 16' X 14' and 16' X 18' size set thickness 12 mm and PU From seat and Back set i) For General type li) For Executive type	8,500 set 7000 set 1500 set	450/ set 1500 set 2000 set	38,25,000/- 1,05,00,000/ - 30,00,000/-
11.	PVC Beadings Shoes for Chairs	LS		1,00,000/-
12.	Powder coating compound	1300 Kg.	200/- Kg.	2,60,79,000
	Total (per annum)			3,69,79,000/- -

	Say (per Month)			30,81,600
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(iii) Utilities

1.	Electricity	10,000/-
2.	Water	600
	Total	10,600/-

(iv) Other Contingent Expenses:

1.	Rent	14,000/-
2.	Postage & Stationery	2,000/-
3.	Telephone	1,500/-
4.	Transphone Charges	8,000/-
5.	Advertisement and Publicity	4,000/-
6.	Insurance	2,000/-
7.	Traveling Expenses	5,000/-
8.	Phosphating and cleaning agents and other Misc. Expenses	5,000/-
	Total	41500

(v) Total Recurring Expenses (per month)

1.	Salaries and Wages	70,150/-
2.	Raw Materials	30,81,600/-
3.	Utilities	10,600/-
4.	Other Contingent Expenses	41,500/-
	Total	32,03,850
	Say	32,03,900

C. Total Capital Investment

1.	Fixed Capital	6,09,200/-
2.	Working Capital for 3 Months	96,11,700/-

	Total	1,02,20,900
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FINANCIAL ANALYSIS/

(1) Cost of production (per annum)

1.	Total Recurring Cost	3,84,46,200/-
2.	Depreciation on Machines @ 10%	47,200/-
3.	Depreciation on Tools, Fixtures etc @ 25%	10,000/-
4.	Depreciation on office equipment @ 20%	8,000/-
5.	Interest on Capital Investment @ 12 %	12,26,508/-
	Total	3,97,37,908
	Say	3,97,37,900

(2) Turn- over

S/No	Description	Qty /Nos	Price (Rs.)	Amount (Rs.)
1.	Computer Table size 900 X 600 X 750mm	2,000	3,500/-	70,00,000
2.	Computer cum Printer Table size 1200 X 700 X 750mm	1,000	4,500/-	45,00,000
3.	Printer table size 750 X 700 X 750mm	1,800	3,00/-	54,00,000
4.	Computer Chair without Arms size 725 X 725 X 950 -1050mm	4,000	2,600/-	1,04,00,000
5.	Computer Chair with Arm size 725 X 725 X 950-1050mm	3,000	3,200/-	96,00,000
6.	Executive Computer Chair size 725 X 725 X 1100-1200 mm	1,000	5,000/-	50,00,000
	Total			4,19,00,000/-

Net Profit (per annum)

Turnover- Cost of Production = 4,19,00,000 – 3,97,37,900 = 21,62,100

$$(3) \text{ Net Profit Ratio} = \frac{\text{Net Profit per year} \times 100}{\text{Turnover per year}} = \frac{21,62,100 \times 100}{4,19,00,000} = 5.16\%$$

$$(4) \text{ Rate of Return} = \frac{\text{Net Profit per year} \times 100}{\text{Total Investment}} = \frac{2162100 \times 100}{102209.00} = 21.15\%$$

(5) Break even Point

S/No.	Annual Fixe Cost	Rs.
1.	Depreciation on Machinery, Furniture etc	55,200/-
2.	Rent of Building	1,68,000/-
3.	Interest on total investment	12,26,508
4.	40% of salary and wages	3,36,720/-
5.	40 % of other Contingent Expenses (excluding Rent and Insurance)	1,99,200/-
	Total	19,85,628/-
	Say	19,85,600

$$\begin{aligned} \text{B.E.P.} &= \frac{\text{Fixed Cost} \times 100}{\text{Fixed Cost} + \text{Point}} = \frac{19,85,600 \times 100}{19,85,600 + 21,62,100} \\ &= \frac{19,85,600 \times 100}{41,47,700} \\ &= 47.84\% \end{aligned}$$

Addresses of Machinery and Raw Material Suppliers

1. M/s Charandeep Industries, S C O 32, G.S. Complex, 1st Floor, Sangeet Cinema Road, Ludhiana.
2. M/s Akal Industries, 240, St, No.3 Darmesh Nagar, Near Campa Cola Chowk, Ludhiana.
3. M/s A.P Enterprises, 40 New Kanpur Nagar, Sultanwind Road, Amritsar – 143006.
4. M/s Nightingale Products, Bachittan Nagar, Near GNE College, Gill Road, Ludhiana.
5. M/s Welding and Tools Corporation, G.T. Road Miller Ganj, Near Overbridge, Ludhiana
6. M/s Kalgidhar Foundry and Agro Industries, G.T. Road, Opp: Power House, Mandi Gobinnagar,
7. M/s Ajit Electro Sales 9, gurudwara Market, Opp. Manager Cinema, G.T. Road, Ludhiana.
8. M/s A.P. Engineering Works, 42, New Kapoor Nagar, Sultanwing Road, Amritsar – 143006
9. M/s Guru Nanak Fabricators, 3201 St. No. 2, New Janta Nagar Opp. Arora Papace, Ludhiana – 141003.