

## WIRE NETTING

### Introduction:

Wire nettings are used in various applications such as embankments, concrete highways anchorage, grizzly, primary screen, dividers, guards of machines/gardens/houses and sheds for poultry/cattle farms. These nettings are more suitable in terms of its resistance and durability.

### The product:

Wire netting are made in different sizes and cross-sectional shapes, mainly hexagonal or square. The popular sizes ranges from 10 mesh to 40 mesh for square wire netting and ½ " to 1½" for hexagonal wire netting woven wires can be made of different materials including mild steel, cooper and brass. For majority of applications, galvanized MS wire are used.

### Market Potential:

In North Eastern Region, the main sectors from which demand for wire nettings emanates are, Flood Control Department, the Irrigation Department, Oil India Ltd., Oil & Natural Gas Commission, Tea gardens, Industrial Estate & Growth Centers, Poultry & cattle farms etc. As a whole demand for wire netting is estimated at 9800 tones at present in N.E. Region.

There are 5 – 6 major units in the region manufacturing wire nettings and these units are running in full capacity in view of the substantial take off from various individual departments and each unit is selling worth Rs 70 to Rs 90 lakh per year. In view of the above there are scope for another 25 such units to be set up keeping in mind the growth of institutions and households.

### Suggested Capacity:

A typical unit of the following capacity would be as follows:

Hourly production	:	30 pcs.
Working hours	:	8 (per shift)
Production rate/day	:	240/day
Average weight	:	6.3 Kg.
Working days/year	:	300 days.
Annual production	:	72,000 pcs. i.e. 453.6 Tonnes.

### Infrastructure requirement:

a) Covered area	:	1500 sq.ft.
b) Power	:	8 KW

### Raw Materials and its availability:

The major raw material required for wire nettings is GI wire. There are few wire drawing units in Assam. Significant quantities of wire still come to the region from outside. Hence, GI wires are to be procured from locally as well as through dealers. GI wire in the size range of 10 to 20 gauge may be largely required. It is estimated that 318 tonnes of GI wire will be required for this unit.

### Suggested Locations:

The suggested location are –

Assam	:	Guwahai, Tezpur, North Lakhimpur, Jorhat, Dibrugarh, Dhubri, Silchar.
Arunachal Pradesh	:	Itangar, Doimukh
Meghalaya	:	Shillong, Tura, Williamnagar,
Manipur	:	Imphal, Bishnupur.
Tripura	:	Dharmangar, Agartala.
Sikkim	:	Gangtok, Jorthan

### Production Process:

The major production process involves are –

- Twisting of wire.
- Putting the wire on bobbin winding machine through a spiral coiling machine.
- Packing.

**Capital Cost :**

A.	<u>Fixed Capital :</u>	(Rs. lakhs)
	Land & Building	Own
	Plant & Machineries	3.30
	Misc. Fixed Assets	0.40
	Preliminary & Pre-operative exp.	<u>0.30</u>
		4.00
B.	Working Capital:	<u>38.42</u>
		42.42
		=====

**Working Capital requirement:**

(Amount Rs. Lakh)

Raw materials	1 month	12.75
Finished goods	½ month	15.77
Receivable	1 month	<u>9.90</u>
		38.42

**Cost of production & Profitability:**

(Amount Rs lakh)

Raw materials	153.04
Utilities & overheads	0.70
Wages Bill	2.64
Other overheads	1.80
Selling expenses @ 10% on sales	21.60
Depreciation	0.33
Interest on Term Loan	0.36
Interest on Working Capital	<u>4.32</u>
	184.79

**Profitability:**

Sales realization	216.00
Profit	<u>31.21</u>

**Turn Over:**

The market price at present for hexagonal wire nets is Rs 3300/- per piece. Considering retailer/distributor margin, an ex-factory price of Rs 3,000/- per piece has been taken. Beside on annual production of R2,000 piece of wire nettings, the annual sales realization is estimated at Rs 2,16,000/- (As the sale price is on weight basis, the sales for square woven wire nets will not differ).

**Source of Finance:**

The source of finance is being estimated at the basis of 75% Bank/ Institutional finance and 25% as promoters' contribution, which is as follow

		Amount (Rs lakh)
A.	Bank Finance(75%)	31.81
B.	Promoters contribution (25%)	<u>10.61</u>
		42.42

**Note:** Bank finance has been estimated both for term & working capital loan.

**Plant & Machinery:**

The major machineries required are –

- Hexagonal Wire Netting machine – 1 No.  
(Max. width. Cap. (M) – 2 mtr, capacity 6 – 8  
Rolls of 45 Mtrs, Size 3.2 x 2 x 1.1,  
Power 3 HP)

- b) Universal wire netting machine with 2 HP motor & Electricals ) - 1 No.
- c) Spiral wind machine – 1 No.  
(Power – 1 HP.)
- d) Bobbin winding machine – 1 No.  
(Power – 1 HP)
- e) Bobbin Stand – 2 Nos.  
(200 bobbins)
- f) Beaming Carriage – 1 No.

**Cost of Raw materials & Consumables:**

Amount (Rs Lakh)

1.	G.I. wire <sup>3</sup> – 318 tonne:	
	a) Rs 33,000/tonne	149.04
	b) Packing materials	<u>4.00</u>
		<u>153.04</u>

**Cost of Utilities & Overheads:**

1.	Power	0.60
2.	Oil, Lubricant etc.	<u>0.10</u>
		0.70

**Manpower requirement & Wages Bill:**

Sl.No.	Category	No.	Salary per person Per month (Rs)	Total Wages Bill Per annum (Rs lakh)
1.	Manager	1	3,000	0.36
2.	Skilled workers	4	2,500	1.20
3.	Semi-Skilled workers	3	2,000	0.72
4.	Helper	3	1,000	0.36
	TOTAL			2.64

Profit Sales Ratio	=	14.44%
Profit Investment Ration	=	73.57%
Break Even point at 100%	=	30.27%

**Machinery Suppliers:**

- 1. M/s Acme Metal Industries,  
15/8, Narkeldanga North Road,  
Kolkata – 700 011
- 2. M/s Jain Engg. Works,  
147, Netaji Subhas Road,  
Kolkata – 700 001
- 3. M/s Unity Wire Products,  
40, Chetha Road,  
Kolkata – 700 027