

DETAILED PROJECT REPORT (DPR)
FOR
DOMESTIC MANUFACTURING OF ITEMS
WHICH ARE HAVING HIGHER IMPORT

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NAME OF THE ITEM: PULLEY WIRE
(GALVANISED M.S. WIRE ROPE)



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Chapter-1

Introduction

The Galvanized M.S. pulley Wire is a Mild Wire which is coated with a layer of Zinc. The coating of Zinc provides cathodic protection to underneath Steel surface. The Galvanised M.S. Wire offers better surface protection at lower cost in humid atmosphere.

Galvanized M.S. pulley Wire has versatile use in producing different Engineering items such as Building Hardwares, barbed wires, Screens rivets etc. Special quality of wire is also required for producing special purpose fasteners, reinforcement wire etc.

Steel wire ropes are widely used in many applications such as crane, tower crane, surface and underground mining, excavation, logging of any type of terrain, tramway, elevator, oil and gas, drilling, marine and electrical constructions. The selection of a rope must consider the strength, fatigue and abrasion resistance, crushing resistance, resistance to metal loss and deformation, resistance to rotation and the operating conditions. A special designed is required in particularly unusual operating conditions.

Application of these pulley wire ropes are widely used in industries, day to day life, safety of these system based on pulley wire ropes is one important aspect as life of human are involved, therefore manufacturing of pulley wire rope should be as per national/International standard in order to save life of the people.

Each application has specific needs for the type and size of wire rope required. All wire ropes, regardless of the application, will perform at a higher level, last longer and provide greater user benefits when properly maintained.

Pulley wire is one of 358 items reserved for purchase from Micro and small enterprises. MSE sector of India is highly uncompetitive in comparison to large manufacturer due to high working capital requirement, Quality standard, outdated technology and price fluctuation of raw material.

Chapter-2

COMMERCIAL DETAILS

2.1 HSN code of the product

Harmonised System of Nomenclature (HSN Codes) 7217 is used for Pulley Wire under Goods and Service Tax classification.

2.2 NIC code of the product

National Industrial Classification 2008 (NIC-2008) Code 24108 is used for Manufacture of wire of steel by cold drawing or stretching. NIC-2008 seeks to provide a basis for the standardized, collection, analysis and dissemination of industry (economic activity) wise economic data for India.

2.3 Clusters already existing on the product, if any.

Although there are no existing clusters in the country, where Pulley Wire are being produced.

2.4 Number of industries registered as MSME is available in the manufacturing of the product

S. No.	State Name	Micro	Small	Medium	Total
1	ANDHRA PRADESH	24	12	2	38
2	ARUNACHAL PRADESH	2	0	0	2
3	ASSAM	4	2	0	6
4	BIHAR	10	2	0	12
5	CHHATTISGARH	93	45	22	160
6	GOA	0	0	0	0
7	GUJARAT	85	34	3	122
8	HARYANA	47	21	11	79
9	HIMACHAL PRADESH	7	4	1	12
10	JHARKHAND	18	6	2	26
11	KARNATAKA	23	20	3	46
12	KERALA	14	4	0	18
13	MADHYA PRADESH	78	20	2	100
14	MAHARASHTRA	162	57	14	233
15	MANIPUR	1	0	0	1

16	MEGHALAYA	0	2	0	2
17	MIZORAM	1	0	0	1
18	NAGALAND	0	0	0	0
19	ODISHA	10	0	0	10
20	PUNJAB	77	34	17	128
21	RAJASTHAN	73	24	5	102
22	SIKKIM	0	0	0	0
23	TAMIL NADU	98	23	7	128
24	TELANGANA	29	3	0	32
25	TRIPURA	0	0	0	0
26	UTTAR PRADESH	93	30	8	131
27	UTTARAKHAND	6	3	0	9
28	WEST BENGAL	32	19	4	55
29	ANDAMAN AND NICOBAR ISLANDS	1	1	0	2
30	CHANDIGARH	5	6	0	11
31	DADAR AND NAGAR HAVELI	0	0	0	0
32	DAMAN AND DIU	0	0	0	0
33	DELHI	45	20	1	66
34	JAMMU AND KASHMIR	21	3	0	24
35	LADAKH	2	0	0	2
36	LAKSHADWEEP	0	0	0	0
37	PUDUCHERRY	0	0	0	0
Total		1061	395	102	1558

Source of data: Udyam registration.gov.in (As on 23/05/2021)

2.5 Number of industries available in large scale industries

Usha Martin Ltd. is the leading company in terms of revenues and production volume in India steel wire rope market. Bharat wire is the second largest company followed by Bedmutha Ltd. The other major companies in India steel wire rope market are Aradhya Ropes and Slings Private Limited, Asahi Ropes Private Limited, Orion Ropes Private Limited, Shree Steel Wire Ropes Limited and Mahadev Industries.

2.6 Data available for the imports for the past two years

Import (in million \$)

S.No.	HSCode	Commodity	2019-2020	%Share	2020-2021(Apr-Feb)	%Share
1.	7217	WIRE OF IRON OR NON- ALLOY STEEL	140.18	0.0295	105.19	0.0305
		India's Total Import	474,709.28		344,959.70	

2.7 Data available for the Exports for the past two years

Export: (in million \$)

S.No.	HSCode	Commodity	2019-2020	%Share	2020-2021(Apr-Feb)	%Share
1.	7217	WIRE OF IRON OR NON-ALLOY STEEL	42.31	0.0135	37.40	0.0146
		India's Total Export	313,361.04		256,349.65	

Source: <https://tradestat.commerce.gov.in>

2.8 Scope for the number of units number of years can be established, further

Indian steel wire rope market, in terms of revenue is expected to increase at a single digit CAGR during FY'2018-FY'2023 owing to infrastructure projects like Housing Projects, AMRUT, Smart City Mission and DMIC, along with resurgence in demand due to growth in mining industry as well as Oil and Gas industry.

The resurgence in the Oil and Gas industry is expected to increase the number of oil rigs which will further add impetus to the growth of steel wire rope industry. Steel Wire Rope market value majorly depends on growth of end user industries and CAPEX been laid by private and public participants in the market.

2.9 The demand in the domestic market

By Organized and Un-organized Players

In FY'2018, unorganized players have dominated the market in terms of sales volume followed by organized players. Organized players have a production capacity of more than or equal to 500 tons per annum while un-organized players have a production capacity of less than 500 tons per annum.

By Industry Application

Engineering and Construction segment has contributed the largest share in terms of revenues in FY'2018 from sales of wire ropes due to increasing government allocation on infrastructure projects like Housing for All, AMRUT and Smart Cities Mission. This was followed by the Oil and Gas Industry which contributed second largest share in terms of revenues in FY'2018.

By Rope Composition

Steel wire ropes use wire rods of black carbon steel, stainless steel or other steel alloys as raw material. There are various sub-segments of the steel types within these umbrella terms. Black carbon steel ropes dominate the market and account for highest production of the total in India steel wire rope market. The black carbon wire ropes are highly versatile and can be uncoated or galvanized. Stainless steel wire ropes are corrosion and rust resistant and are used majorly in marine applications.

2.10 Demand of the export market

Domestic sales have contributed the maximum share to the steel wire ropes market in FY'2018. Domestic companies' incapability of meeting international standards has been the proximate reason for fewer sales in the exports market. Usha Martin Limited, Bharat Wire Ropes Limited and Bedmutha Industries Limited cater to the needs of foreign market.

Plain Black Carbon Steel Wire Ropes segment has dominated the steel wire rope market in terms of production volume. The cost of black carbon ropes is more economical than galvanized wire ropes by 10-15% as they do not include the additional cost of zinc and associated production processes which appeals to Indian buyers. However, Galvanized steel wire ropes are more durable and hence they are exported to foreign countries or used in coastal areas domestically.

Chapter-3

TECHNICAL DETAILS

3.1 Sector in which product is falling

The Galvanized M.S. pulley Wire is a Mild Wire which is coated with a layer of Zinc. The coating of Zinc provides cathodic protection to underneath Steel surface. The Galvanised M.S. Wire offers better surface protection at lower cost in humid atmosphere.

Engineering and Construction segment has contributed the largest share in terms of revenues in FY'2018 from sales of wire ropes due to increasing government allocation on infrastructure projects like Housing for All, AMRUT and Smart Cities Mission. This was followed by the Oil and Gas Industry which contributed second largest share in terms of revenues in FY'2018.

3.2 End users of the products/ sectors

Steel wire ropes are widely used in many applications such as crane, tower crane, surface and underground mining, excavation, logging of any type of terrain, tramway, elevator, oil and gas, drilling, marine and electrical constructions. The selection of a rope must consider the strength, fatigue and abrasion resistance, crushing resistance, resistance to metal loss and deformation, resistance to rotation and the operating conditions. A special designed is required in particularly unusual operating conditions.

Application of these pulley wire ropes are widely used in industries, day to day life, safety of these system based on pulley wire ropes is one important aspect as life of human are involved, therefore manufacturing of pulley wire rope should be as per national/International standard in order to save life of the people.

Each application has specific needs for the type and size of wire rope required. All wire ropes, regardless of the application, will perform at a higher level, last longer and provide greater user benefits when properly maintained.

3.3 Governing Indian specifications

1. IS 1855 : 2003 Stranded Steel Wire Ropes For Winding and man-riding Haulages Mines
2. IS 1856 : 2005 Steel Wire ropes for Haulage purposes
3. IS 2266: 2002 Steel Wire ropes for General Engineering Purposes
4. IS 2365: 1977 Specification for Steel wire Suspension ropes for lifts, escalators and hoists.
5. IS 2581: 2002 Round Strand galvanized steel wire ropes for shipping purposes

3.4 Governing International specification

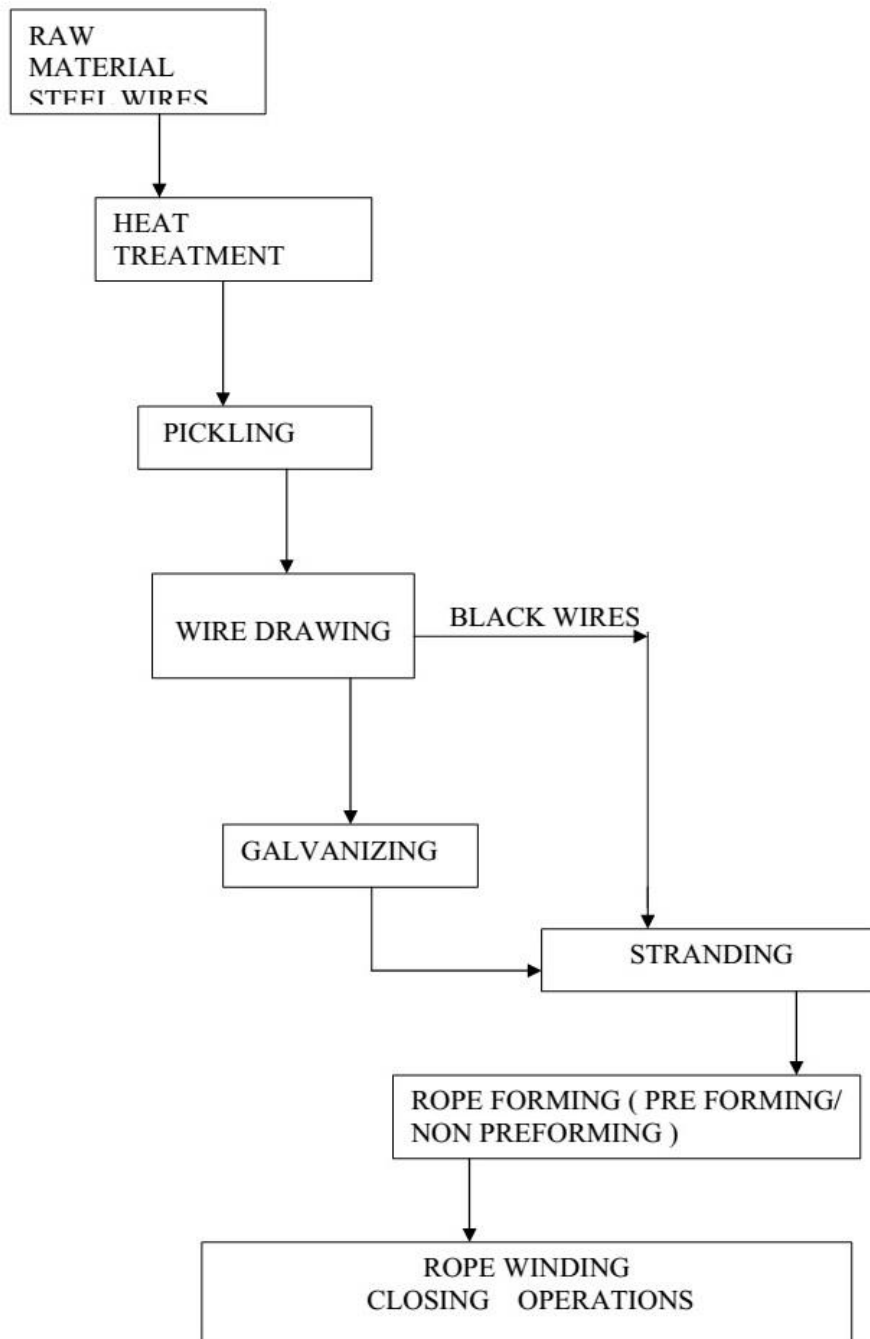
ISO 2408:2017 specifies requirements for the manufacture, testing, acceptance, packing, marking and issuing of a certificate of quality of wire ropes. It is applicable to round strand ropes and compacted strand ropes made from wires ropes that are uncoated (bright), zinc-coated or Zn-Al coated.

It is not applicable to ropes for

- mining purposes,
- aircraft control,
- aerial ropeways and funiculars, and
- lifts

3.5 Manufacturing Process Flow Chart

Manufacturing Process Flow Chart of Pulley Wire Rope



3.6 Qualitative Parameters of the Product

- Diameter of the rope
- Radius of the steel wires
- Strand lay length
- Strand lay angle
- Strand lay direction
- Nominal tensile strength
- Breaking force

3.7 Details of the Product Licenses to be obtained

- Registered with the Registrar of Companies (ROC) as a Limited Liability Partnership or a Private Limited Company.
- GST / PAN Registration,
- Registration in the Udyam Portal (udyamregistration.gov.in) for availing Udyam Registration under Ministry of MSME or with State Govt. agencies for availing Government subsidies is advisable.
- Trade License from the Local Municipal Authorities has to be obtained and also a factory License.
- NOC from State Pollution Control Board.
- License from Bureau of Indian Standards.

3.8 Equipment required for the manufacturing of the product

As detailed in the Chapter-3 (Bankable project report of Pulley wire (Financial Aspects) I. (Fixed Capital) b. (Machinery and Equipment required)

3.9 Test facilities required for the product

The stages of Inspection for processing of wire ropes are listed below :

- **Raw Materials :** Quality of Steel wire used before wire drawing –Diameter, length and mass, tensile designation

- **Heat Treatment:** Annealing Temperatures, time and duration of soaking ,
- **Pickling:** Concentration of bath – acid/alkaline, water wash temperature of bath, time duration Sampling for tensile testing
- **Wire drawing:** Diameter, number of draws , final diameter
- **Stranding :** No. of wires, No. of strands, Core formation, rope formation, Stranding speed - rotation of feeding drums checking for diameter of core, diameter of the ropes during construction Type of Lay (Ordinary / Lang), direction of lay, Winding (clearing) Final diameter of the ropes, preformed/ non preformed.

3.10 Existing Technology for the manufacturing of Wire Ropes

BASIC LEVEL OF TECHNOLOGY

At the basic level of technology, the operator manually controls the differential machine. This manual control requires highest level of skill of the machine operator to maintain uniformity of the product. This probably is the most demanding skill of any machine operator and acquired over years of experience. Historically, wire rope evolved from wrought iron chains, which had a record of mechanical failure. While flaws in chain links or solid steel bars can lead to catastrophic failure, flaws in the wires making up a steel cable are less critical as the other wires easily take up the load. While friction between the individual wires and strands causes wear over the life of the rope, it also helps to compensate for minor failures in the short run. Wire ropes were developed starting with mining hoist applications. Wire ropes are used dynamically for lifting and hoisting in cranes and elevators, and for transmission of mechanical power.

INTERMEDIATE LEVEL OF TECHNOLOGY

Since the 1800s, manufacturers and engineers have found ways to improve wire rope, through stronger materials and material treatments, such as galvanization, and different rope configurations. Today, wire rope makes possible many heavy industrial processes. It has become a necessity of the modern world.

3.11 Suggested Modern Technology for Implementation/ available in market

After this revolutionary change in manufacturing technology of wire rope, engineers found lots of advantage of new type of wire rope. Wire rope offered its users many advantages.

- The biggest benefit of wire rope is the fact that it is constructed using multiple wires and strands. This means that the weight, pressure and stress of a load is spread out across multiple pieces of metal, rather than being reliant on one wire or strand alone.
- Second, wire rope is extremely durable and, when matched properly to the application, can withstand great stress and elements like corrosion and abrasion.
- In addition, it is very versatile. Its much iteration and the ways in which the rope can be treated means that users can get rope custom fit for virtually any application.

- Another advantage is that a wire rope is much stronger than the latter, and can lift a great deal more. While the lifting weights vary between different types, you will find that ropes can lift up to 3 times weight in comparison with chain hoists.

COMPARISON OF TODAY’S FACTORY SCENARIO WITH FUTURE FACTORIES

		TODAY’S FACTORY		FACTORY OF THE FUTURE	
	Data Source	Main Characteristics	Main Technology	Main Characteristics	Main Technology
Component	Sensor	Precision	Smart sensors and failure detection	Knowledge of own operations, predictive ability	Monitoring of all features, life expectancy forecasts
Machine	Controller	Manufacturability and performance	State-based system monitoring and diagnostics	Knowledge of own operation, predictive ability, comparability ability	Real-time preventive status indicators
Manufacturing System		Performance and total asset efficiency	Lean operations: work and waste reduction	Self-configuration, self-maintenance, self-organizing ability	Risk exemption, performance

3.12 Raw material supply and availability

The material used for making the core of wire rope is Wires. Steel wires for wire ropes are normally made of non-alloy carbon steel with a carbon content of 0.4 to 0.95%. The very high strength of the rope wires enables wire ropes to support large tensile forces and to run over sheaves with relatively small diameters.

Chapter-4

THE DETAILED BANKABLE PROJECT REPORT OF PULLEY WIRE (MS GALVANISED)

4.1 INTRODUCTION

Pulley wire ropes are widely used in many applications such as crane, tower crane, surface and underground mining, excavation, logging of any type of terrain, tramway, elevator, oil and gas, drilling, marine and electrical constructions. The selection of a rope must consider the strength, fatigue and abrasion resistance, crushing resistance, resistance to metal loss and deformation, resistance to rotation and the operating conditions. A special designed is required in particularly unusual operating conditions.

The type of wire used affects wire rope performances. High carbon steel bright (uncoated) wire is the material most commonly used. To improve corrosion resistance, galvanized wire or stainless steel 18/8 is used in those applications where high resistance to corrosion is required.

Galvanized M.S. Wire has versatile use in producing different Engineering items such as Building Hardwares, barbed wires, Screens rivets etc. Special quality of wire is also required for producing special purpose fasteners, reinforcement wire etc.

The Galvanized M.S. Wire is a Mild Wire which is coated with a layer of Zinc. The coating of Zinc provides cathodic protection to underneath Steel surface. The Galvanised M.S. Wire offers better surface protection at lower cost in humid atmosphere.

4.2 MARKET POTENTIAL

The Galvanised M.S. Wire has very good demand for its versatile use in different applications. There is a large demand for this item from the down stream industries.

With the availability of appropriate technology, the activity is highly feasible in the small scale sector and marketing is generally not a problem.

4.3 BASIS AND PRESUMPTIONS

The profile is drawn on the basis of the following presumptions:

(1)	Working hours/shift	: 8 hr. per day
(2)	No. of Shifts per day	: One
(3)	No. of working day / year	: 300
(4)	Total no. of working hours	: 2400 hrs.
(5)	Working efficiency	: 75%
(6)	Time period of achieving maximum capacity utilization	: 3 years from the date of which production will be started
(7)	Labour charges	: As per Minimum Wages Act.
(8)	Rate of Bank Interest	: 12% per annum.

The value of machinery and equipment is estimated on the basis of prevailing market rates. It is expected that it may take about 8 to 9 months to complete all activities of the project, till commercial production is achieved. If the project is available with the promoter, a period of 8/9 months will be needed for site selection, , Building construction, selection and purchase of plant and machinery, Loan sanction from financial Institution, Erection and commissioning of Project for trial run etc. salaries and wages of employees has been taken based on qualification, experience and as prescribed by Govt.

4.4 Quality Control and Standards

Standardizations parameters are as follows :

1. IS:2266-2002 steel wire ropes for general engineering purposes.
2. IS:280-1977 specification for Mild Steel wire for general purposes.
3. IS:2629-1985, IS:2633-1986, IS:6745-1972 to test the quality of galvanization.

4.5 Production Capacity (per year)

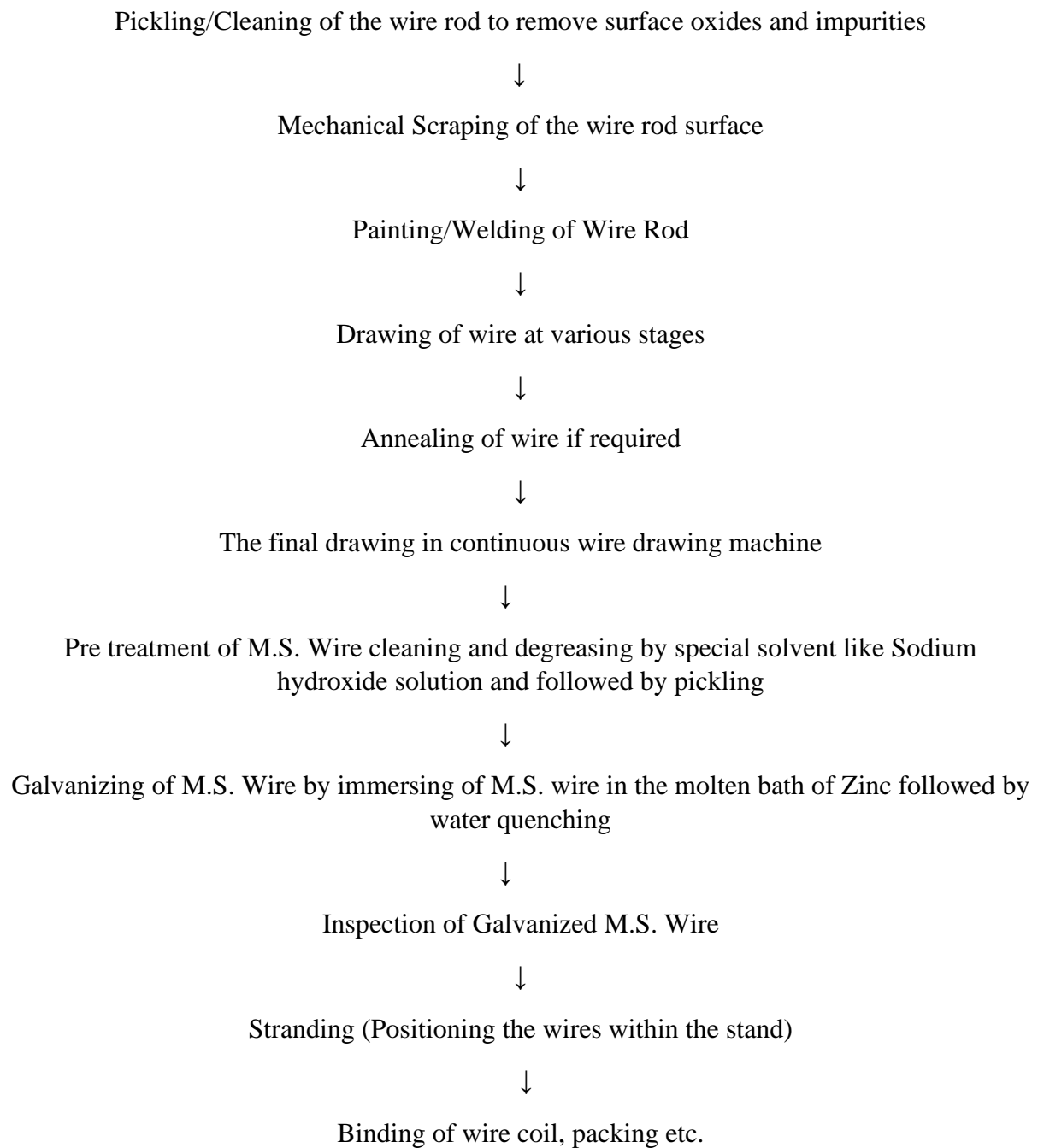
The production target of Galvanised M.S. Pulley Wire 1200 MT per year.

Quantity : 1200 MT
Value : Rs. 682.00 Lakhs

4.6 TECHNICAL ASPECTS

Technology and Manufacturing Process

The production process of Galvanized M.S. Wire is as follows:



4.7 FINANCIAL ASPECTS

A. Fixed Capital

(i) Land and Building (Rented)

Rent payable per month

Rs. 30,000

(ii) Machinery and Equipments

Sl. No.	Name of Machinery and Equipments	Qty.	Amount (in Rs.)
1	Heavy Duty Wire Drawing Bull Block intake capacity upto 10mm of M.S. Wire rod with 660 mm Capstan and 40 HP motor complete with reduction gear box etc.	1 No.	4,00,000
2	Automatic fork type Stranding machine	1 no.	8,00,000
3	Electric Motor 40 HP Sliping type for the above complete with Switch gear Control panel, etc.	1 set	1,50,000
4	Set of continuous Wire Drawing Machine Intake capacity for mm of M.S. Wire with 550 mm Capstan and 25 H.P. Motor complete with reduction gear Box etc.	4 sets	6,80,000
5	Set of Electric Motor of 25 HP for the above complete with Control Panel etc.	4 sets	3,00,000
6	Mechanical Desealer cap. Upto 10 mm of Wire rod complete with reduction gears Take off Drum and 10 HP motor and Electrical	1 No.	35,000
7	Wire pointing Machine with electric motor of 3 HP	1 No.	20,000
8	Wire Butt Welding Machine suitable to weld M.S. Wire upto 10 mm	1 No.	16,000
9	Electric Furnace Bell type for Annealing of Wire Coil rating 20 KW	1 No.	1,40,000
10	Hot Diping galvanizing unit consist of Pickling, Washing Flux Tank, Diesel Furnace, Zinc Bath, Extraction unit and Pot	L.S.	4,50,000
11	Electric Hoist of 1 ton capacity	-	1,00,000
	Testing Equipment		
12	Wire Testing Machine cap. 2 ton	L.S.	80,000
13	Equipment for coating test	L.S.	20,000
14	Gauges for Dimensional measurement of wire	L.S.	20,000
15	Electrification and Installation @ 10% of cost of Machinery and equipment	-	3,21,100
16	Cost of Dies of various sizes	-	100,000
17	Office equipment and furniture	-	100,000
18	Pre-operative Expenses	-	1,00,000
	Total		38,32,100

B. Working Capital (per month)

(i) Staff and Labour

Administrative

Sl. No.	Administrative Staff	No.	Salary (in Rs.)	Amount (in Rs.)
1	Manager	1	40,000	40,000
2	Supervisor	2	20,500	41,000

3	Skilled worker	8	19,000	1,52,000
4	Semi Skilled worker	5	17,100	85,500
5	Unskilled worker	8	15,500	1,24,000
6	Clerk /Store Keeper	2	17,100	34,200
7	Accountant	1	20,500	20,500
8	Peon/watchman	2	15,500	31,000
9	Helper	5	15,500	77,500
	Salary and Wages			6,05,700
	Add perquisites 15% of the salary			90,855
	/per annum			
	Total			6,96,555

*The wages of staff & workers are calculated on the basis Delhi Govt Wages Act.

(iii) Raw material

Sl. No.	Particulars	Qty.	Rate (in Rs.)	Amount (in Rs.)
1	Mild Steel Wire rod upto 10 mm Diameter	100 ton	30,000 per ton	30,00,000
2	Zinc Ingot	5 ton	1,80,000 ton	9,00,000
3	Acid Fluxes and other additives	L.S.	70,000	70,000
4.	Packing Materials	L.S	20,000	20,000
	Total			39,90,000

(iii)	Utilities		
1	Power	L.S.	40,000
2	Water	L.S.	2,000
3	Fuel	L.S.	50,000
	Total		92,000

(iv)	Other Contingent Expenses	Amt. (in Rs.)
1	Rent	30,000
2	Postage and Stationery	2,000
3	Telephone	2,000
4	Consumable Store	20,000
5	Repair and Maintenance	10,000
6	Transport charges	20,000
7	Advertisement and Publicity	5,000
8	Insurance	1,000
	Total	90,000

(v)	Working Capital	Amt. (in Rs.)
1	Raw material	39,90,000
2	Salary and Wages	6,96,555
3	Utilities	92,000
4	Other Contingent Expenses	90,000
	Total	48,68,555

Working Capital (for 3 months)

Rs. 146,05,665

C. Total Capital Investment (Amt. in Rs.)

(i)	Fixed Capital	38,32,100
(ii)	Working Capital	146,05,665
	Total	184,37,765

4.8 FINANCIAL ANALYSIS

(1)	Cost of Production (per year)	Amt. (in Rs.)
(1)	Total Recurring Cost	584,42,660
(2)	Depreciation on Machinery and Equipment @10%	3,21,100
(3)	Depreciation on furnace and Testing Equipment @20%	24,000
(4)	Depreciation on office equipment @20%	20,000
(5)	Depreciation on Dies @ 25%	25,000
(6)	Interest on total capital investment @ 12%	22,12,531
	Total	6,10,25,291

(2) Turnover (per year)

Sl. No.	Items	Qty.	Rate (in Rs.)	Amount (in Rs.)
1	Galvanised M.S. Wire	1200 ton	56,000 per ton	6,72,00,000
2	Scrap Wire	40 ton	25000 Per ton	10,00,000
	Total			6,82,00,000

(3) Net Profit (per year)

Turn Over - Cost of production

Rs. 68200000 – Rs. 6,10,25,291

= Rs. 71,74,708/-

(4) Net Profit Ratio

Net Profit per year x 100

= _____

Turnover per year

7174708 x 100

= _____

68200000

= **10.52 %**

(5) Rate of Return

$$\begin{aligned} \text{Rate of Return} &= \frac{\text{Net Profit per year} \times 100}{\text{Total Investment}} \\ &= \frac{71,74,708 \times 100}{1,84,37,765} \\ &= \mathbf{38.91\%} \end{aligned}$$

(6)	Fixed Cost	Amt. (in Rs.)
(1)	Total Depreciation	390100
(2)	Insurance	12,000
(3)	Interest on total Capital Investment	22,12,531
(4)	40% of Salary and Wages	33,43,464
(5)	40% of other contingent expenses(Excluding rent & insurance)	1,87,200
6.	Rent	3,60,000
	Total	65,05,295

$$\begin{aligned} \text{Break Even Point (B.E.P.)} &= \frac{\text{Fixed Cost} \times 100}{\text{Fixed Cost} + \text{Profit}} \\ &= \frac{65,05,295 \times 100}{65,05,295 + 71,74,708} \\ &= \mathbf{47.55\%} \end{aligned}$$

4.9 Details of Test facilities available in India

- Central Laboratory, BIS
- Central Laboratory ,BIS NRO Lab, Mohali, Chandigarh
- Central Mining Research Institute, Dhanbad

4.10 Details of Raw Material Suppliers

- (i) M/s Steel Authority of India Ltd.
- (ii) M/s Tata Iron and Steel Co. Ltd.
- (iii) M/s Hindustan Zinc Ltd.
- (iv) M/s Shree Bajrang sales Pvt. Ltd., Ganeshpath colony, Nagpur
- (v) M/s. N.D. Metal Impex, Dushewar Road, Ahemdabad, Gujrat.

4.11 Details of Machinery & Equipments Suppliers

1. M/s. Associated Machinery Mfg. Pvt. Ltd., 26/2 SOUTH OF G. T. ROAD INDUSTRIAL AREA, GHAZIABAD, UTTAR PRADESH – 201 001.
2. M/s C.S. Wire Pvt. Ltd., PLOT NO **90B**, PHASE I, IDA, JEEDIMETLA, HYDERABAD, ANDHRA PRADESH.
3. M/s Wire Machinery Mfg. Corporation, 7 A, Ventinard Road, Kolkata
4. M/s Refrigeration and Machinery Corporation, Rajendra Prasad Road, Mumbai – 400080
5. M/s Design Engineering Co., Wadala, Mumbai – 400 431
6. M/s Wesman Engineering Co. Pvt. Ltd., 346, Pantheon Road, Chennai
7. M/s Batliboi and Co., R.P. Road, Secunderabad.
8. M/s United Agro Engineering Co., R.P. Road, Secunderabad
9. M/s. Sant Engineering Industries , Karol bagh, New Delhi-110005

Chapter-5

SCHEMES AND CONSULTANCY SERVICES

5.1 Existing schemes available and their details

(a). Udyam Registration

1. Any person who intends to establish a micro, small or medium enterprise may file Udyam Registration online in the Udyam Registration portal (<https://udyamregistration.gov.in>), based on self –declaration with no requirement to upload documents, papers, certificates or proof.
2. On registration, an enterprise (referred to as - Udyam in the Udyam Registration portal) will be assigned a permanent identity number to be known as- Udyam Registration Number.
3. An e-certificate, namely, - Udyam Registration Certificate shall be issued on completion of the registration process.
4. Registration is free of cost and paperless.

(b). Credit Related Schemes

(i). Prime Ministers Employment Generation Programme(PMEGP)

To encourage new entrepreneurs to set up micro-enterprises through credit-linked subsidy support. Margin Money subsidy on Bank Loan ranges from 15% to 35% for projects up to Rs. 25 lakhs in manufacturing and Rs. 10 lakhs in service sector. The maximum cost of projects is Rs.25.00 lakh in the manufacturing sector and Rs.10.00 lakh in the service sector. Scheme applicable for any individual above 18 years of age, SHGs, Charitable trusts, Registered Societies etc.

(ii). Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE)

The objective of this scheme is to provide Collateral free loan upto a limit of Rs. 200 lakhs to new as well as existing Micro & Small Enterprises. The corpus of CGTMSE is contributed by Government of India and SIDBI.

(iii). Credit Linked Capital Subsidy-Technology Up-gradation Scheme (CLCS-TUS)

The objective of this scheme is to facilitate MSMEs through institutional finance for induction of well-established and proven technologies in the specific sub-sector/product approved under the scheme. Upfront subsidy of 15% on institutional Credit up to Rs.1.0 crore (i.e. subsidy cap of Rs.15.00 lakhs) for identified sectors/sub sectors/technologies is provided in the scheme.

b. Infrastructure Support to Develop Clusters-Micro & Small Enterprises Cluster Development Programme(MSE-CDP)

The scheme provides financial assistance for establishment of Common Facility Centres (CFCs)/establishment / up gradation of Industrial area /Estate/Flatted/Factory Complex;[InfrastructureDevelopment(ID)projects]MarketingHubs/ExhibitionCentresby Associations;ThematicInterventions and Support to State Innovative Cluster Development Programme for enhancing the productivity and competitiveness of Micro and Small Enterprises. For establishment of Common Facility Centers, the GoI grant will be restricted to 70% of the cost of Project of maximum Rs.20.00crore. GoI grant will be 90% for CFCs in NE & Hill States, Islands territories, Aspirational Districts /LWE affected Districts, Clusters with more than 50%(a)micro/village,(b)women owned,(c) SC/ST units. For Infrastructure Development, the GoI grant will be restricted to 60% of the cost of Project (Rs.10.00 crore for Industrial Estate &Rs.15.00 crore for Flatted Factory Complex). GoI grant will be 80% for Projects in NE & Hilly States, Island territories, Aspirational Districts / LWE affected Districts, industrial areas/estates/Flatted Factory Complex with more than 50%(a) micro/village, (b) women owned(c)SC/ST units.

c. Technology Up-gradation and Competitiveness Enhancing Schemes for MSMEs

i. Design Clinic Scheme: The objective of Design Clinic Scheme is to promote innovations in designing of the product and enhance the value addition of local products

and services. There is a provision of financial assistance of Rs.15 lakhs (GoI:Units::75:25) for individual or up to 3 Micro units and Rs.25 lakhs (GoI:Units::75:25) for more than 3 Micro units. For Small & Medium units, it is Rs..25 lakhs (GoI: Units:: 60:40) for individual or up to 3 Units and Rs.40 lakhs (GoI:Units::60:40) for more than 3 Units.

ii. Lean Manufacturing Competitiveness Scheme (LMCS): The Lean Manufacturing Competitiveness Scheme(LMCS) is an initiative to enhance the Competitiveness of the manufacturing sector by imbibing a culture of continuous improvement in order to increase the overall productivity of MSMEs through application of various Lean Techniques to reduce waste and increase productivity. Financial Assistance for Lean Intervention in MSMEs through Lean Consultants up to Rs.36 lakhs (maximum) per mini cluster of 10 units for a period of 18 months or till completion (GoI:Units::80:20; Rs.28.8 lakhs: Rs.7.2 lakhs).

iii. Financial Support to MSMEs in ZED Certification Scheme: The objectives of the scheme include promotion of Zero Defect and Zero Effect (ZED) manufacturing amongst MSMEs so as to promote adaptation of Quality tools/systems and Energy Efficient manufacturing, encourage to constantly up-grade their quality standards in products and processes without impacting the environment.

iv. Building Awareness on Intellectual Property Rights (IPRs): The objective is to enhance awareness of MSMEs about Intellectual Property Rights (IPRs) and to take measure for the protecting their ideas and business strategies through Awareness Programmes/Seminars, Workshops, Reimbursement for registration of IP, International Co-operation & setting-up IP facilitation centre across the country.

v. Entrepreneurial & Management development of MSEs through Incubators: The main objective of the scheme is to promote & support untapped creativity of individual and to promote adoption of latest technologies in manufacturing as well as Knowledge based innovative MSMEs (ventures) that seek the validation of their ideas at the proof of concept level. The scheme also supports engagement with Enablers who will advise such MSMEs in expanding the business by supporting the min design, strategy and execution. The Enablers will play a pivotal role and would be integral part of the business development. Host Institutes (HIs) shall be provided grant of up to Rs. 1.00 Cr. for

procurement and installation of relevant plant and machines including hardware and software etc. in BI in order to strengthen the technology related R&D activities and common facilities for incubates of BI. Grant in Aid to HI for developing and nurturing the ideas up to max. Rs. 15.00 lakh per idea. For students, the contribution will be Nil and for MSMEs/others, contribution will be 15% of total project cost.

d. Procurement and Marketing Support (PMS) to MSMEs

i. The objective is to create awareness and educate the MSMEs about various marketing strategies and enhancing marketability of their products/services. Assistance is available for a) Participation of Individual MSEs in domestic trade fairs/exhibition across the country b) Organizing/Participation in trade fairs/exhibitions (Regional/National/International) by the Ministry/Office of DC(MSME)/ Government organizations) Capacity building of MSMEs in modern packaging technique d)Development of Marketing Haats) International/National Workshops/Seminars) Vendor Development Programmes) Awareness Programme.

ii. **Public Procurement Policy:** To provide marketing support to Micro and Small Enterprises (MSEs), Ministry of MSME has notified the Public Procurement Policy for Micro and Small Enterprises (MSEs) : 2012 under the MSMED Act, 2006 which is effective from 1st April 2012 and has become mandatory w.e. f. April 2015. Amendment to this policy mandates 25% annual procurement from MSEs by Central Ministries/Departments/Central Public Sector Enterprises (CPSEs) including 4% from MSEs owned by SC/ST and 3% from MSEs owned by Women entrepreneurs.

More details about the schemes available at the website: www.dcmsme.gov.in and www.my.msme.gov.in

2. Proposed schemes

Industries in the manufacturing sector gets support through various existing schemes of the Central and State specific; new entrepreneurs may avail the benefit extended under such Schemes to set- up new units or extension of the existing units.

Chapter-6

CONCLUSION

Reasons for Import

A. Increasing Cost of Production

The Indian steel wire rope market is an extremely competitive market due to a mixture of increasing production of manufacturers and declining demand from user industries.

The competition is more pronounced in the domestic market, due to a drastic reduction in the number of mines during FY'2015.

B. High Working Capital requirement :

Material costs determine a large part of the costs of the end product, typically over 60%. As a result, steel wire rope manufacturers need to strive for perfection in the transformation processes in the company. That's where the profits are made. The expensive raw materials and work-in-progress (WIP) consume excessive amounts of the financial resources of a company. The prices of raw material are very fluctuating also require huge working capital requirement due to which small manufacturer may not able to compete large manufacturer.

C. Use of Basic Technology:

Currently basic is being used by Micro and small manufacturing units of India. Due to which most of the MSMEs have low productivity, energy in-efficiency and poor quality. As a result ,MSMEs are highly in-competitive in international market.

D. Quality Standard:

Domestic companies' incapability of meeting international standards has been the main reason for increasing import and decreasing export of rope wire.

Suggestions:

A. Raw material should be available at cheaper rate. It is recommended that Raw Material Assistance Scheme of NSIC may be widely publicized so that MSMEs may be benefitted by way of financing the purchase of Raw Material (Both indigenous & imported). This will give an opportunity to MSMEs to focus better on manufacturing quality products.

Benefits Under Raw material Assistance Scheme of NSIC:

- Facilitating procurement of Raw Material with credit support up to 180 days
- MSMEs helped to avail Economics of Purchases like bulk purchase, cash discount etc.

B. The quality of rope wire produced by SSI units are not at par with international standard due to non-availability of modern technology machines due to high capital investment requirement. Also, testing equipment normally available at various places related to test the pulley wire rope is very costly and requires lot of space. Therefore, it is difficult for SSI Unit to develop in house testing facilities. Testing charges for pulley wire rope is appearing to be quite high and time consuming.

It is recommended that CDP scheme may be utilized for enhancing the productivity and competitiveness as well as capacity building of Micro and Small Enterprises (MSEs) and their collectives in the country.