NAME OF PRODUCT:

ALLEN SCREWS

QUALITY CONTROL

IS-2269 AND IS-1367

PRODUCTION CAPACITY (Per Annum)	**342 MT @ 60,000/- per MT Value: Rs. 2,05,20,000/-**
MONTH & YEAR OF PREPARATION OF PROJECT PROFILE	**AUGUST, 2012**

By

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PROJECT PROFILE ON 'ASSEMBLY OF 'ALLEN SCREWS '

1. PRODUCT AND ITS USES:

Allen Screws are a Item of fasteners used to join two or more parts of metal or other hard material. These are used to join different parts of a Die/Fixtures etc. They have a cylindrical body with uniform threads all along the length. Round Head has hexagonal cavity is made for accommodating Allen Key which is c=used for tightening or unscrewing these screws. For screwing in or unscrewing a Allen Key is required for the same. These Screws are used in tapped holes having matching internal thread

2. MARKET POTENTIALITY:

Due to enhancement of industrial growth, the demand for these Allen screws, which may be termed as machine screws especially for quality screws, is increasing steadily. Moreover there is one or two such unit available in the operational jurisdiction of MSME-DI, Kanpur. Hence market potential for this Item is considered to be good.

3. BASIS AND PRESUMPTIONS:

i) The basis for calculation of production capacity on maximum capacity utilization has been taken on single shift basis for 300 days a year. During first year, second year and third year of operations the capacity utilization is 70%, 80% and 90% respectively. The unit is expected to achieve full capacity utilization from the fourth year onward.

ii) The salaries and wages, cost of raw materials, utilities, rents etc. are based on the prevailing rates in and around Kanpur. These cost factors are likely to vary with time and location.

iii) Interest on term loan and working capital loan has been taken 14% per Annum.

iv) The cost of machinery and equipment as indicated in the scheme are approximate of these ruling at the time of preparation of scheme. Entrepreneur may check up the latest and exact price for specific make and model of the machine selected.

v) It is presumed that unit will get full capacity within four years.

vi) It is presumed that operative period of unit will be 10 years.

4. IMPLEMENTATION SCHEDULE:

The major activities in the implementation of the project have been listed below and the average time for implementation of the project is estimated at 12 months:

	Work schedule	Period (in months)
1.	Preparation of project report	**1**
2.	Registration and other formalities	**1**
3.	Sanction of loan by financial institutions	**3**
4.	Plant & Machinery	
	a) Placement of orders	**1**
	b) Procurement	**2**
	c) Power connection/Electrification	**2**
	d) Installation/Erection of machinery/ Test equipment	**2**
5.	Procurements of raw material	**2**
6.	Recruitment of Technical Staff etc.	**2**
7.	Trial Production	**in 11th month**
8.	Commercial Production	**in 12th month**

Note:

1. Many of the above activities shall be initiated concurrently
2. Procurement of raw materials commences from the 8th month onwards.

5. TECHNICAL ASPECTS:

1. PROCESS OF MANUFACTURE:

First of all coils of the required size are cleaned and fed in to the Automatic Heading machine which gives required length & head, then trimming of head to required size is done in the Automatic Machine. After this threads are cut in the Auto Thread Rolling Machine. Then sorting is done by hundred percent usual inspection. Hen heat treatment of the Allen Screws is done as per

requirement. Finally gauging and few percentage of hardness testing is done. The packing is done accordingly to size & order.

2. QUALITY CONTROL AND STANDARD:

The scheme envisages for manufacture of metric series Allen Screws (Socket head cap screw) M3 to M20 i.e. 2.5 mm to 17mmwrench size and generally conforming to IS:2269, IS:44762 and threads are as per IS:1367.

3. PRODUCTION CAPACITY:

The unit has capacity to produce approximately 30 Tons Allen Screws of assorted size and the unit has capacity to increase or decrease the quantity of each type as per orders on the unit.

4. Motive Power: 42 HP Power will be required.

5. POLLUTION CONTROL:

No pollution is involved in the manufacturing process of Allen Screws. However proper height of chimney should be maintained in the oil fired furnace.

6. FINANCIAL ASPECTS:

1. FIXED CAPITAL:

A) Land and Building:

i)	Price of land in a Industrial area of size 50Meterx 30 Meters. The value of land (including lease deed and development of land and registration)	:	8,00,000/-
ii)	Cost of construction of factory shed, inclusive of space required for raw materials, finished goods, office etc.	:	10,00,000/-
			18,00,000/-

B) Machinery & Equipments:

Sl. No.	Description	Quantity	Amount Rs.
1.	Automatic double stroke cold heating machine capacity5mm to 10mm in dia and 5mm to 50mm in length with Motor of 7.5 HP.	One	1,50,000/-
2	Automatic double stroke cold heating machine capacity 10mm to 35mm in dia and 50mm to 75mm in length with Motor of 10 HP.	One	2,00,000/-
3.	Automatic Screw head trimming machine for above size with 5HP motor	Two	2,00,000/-
4.	Automatic cold thread rolling machine for above size with 5HP motor	Two	1,50,000/-
5.	Oil fired furnace with 1 HP Blower with oil tank & other accessories	One	1,00,000/-
6.	Hardness Tester	One	50,000/-
7.	Centre Lathe capacity 1550mm bed length and centre height170mm with all standard accessories with 2 HP motor	One	1,00,000/-
8.	Drilling Machine pillar type capacity 20mm- 1.5HP Motor	One	25,000/-
9.	Double ended Bench Grinder200mm dia x 25mm thickness with 1 HP Motor & 3000 rpm	One	25,000/-
10.			
		TOTAL	**10,00,000/-**
Other fixed assets			
5	Dies, Tools and Accessories	L.S.	80,000/-
6.	Installation & Electrification	L.S.	1,00,000/-
7.	Office Equipments, furniture and working Table etc.	L.S.	70,000/-
8.	Preoperative expenses	L.S.	65,000/-
		TOTAL	**3,15,000/-**

TOTAL FIXED CAPITAL 31,15,000/-

C) Working Capital (Per Month):

(i) Staff & labour:

Sl. No.	Designation	No. Of Persons	Salary/ Month Rs.	Total Salary per month Rs.
1	Manager	1	15,000/-	15,000/-
2.	Forman/Supervisor	1	8,000/-	8,000/-
	Clerk/Accountant	1	5,000/-	5,000/-
3.	Peon/Watchman	1	2,500/-	2,500/-
4.	Skilled Worker	4	5,000/-	20,000/-
5.	Semi Skilled Worker	4	3,500/-	14,000/-
6.	Helper	3	2,500/-	10,000/-
7.	Perquisites 15% of salary			11,175/-
			TOTAL	**85,675/-**

(ii) Raw material requirement (per month):

S. No.	Description	Quantity	Rate	Value (Rs.)
1	Alloy Steel wire size 5 mm to 10 mm	15 M. Ton	50,000/-per M. Ton	7,50,000/-
2	Alloy Steel wire size 10 mm to 35 mm	15 M. Ton	50,000/-per M. Ton	7,50,000/-
			TOTAL	**15,00,000/-**

(iii) Utilities (Per month):

S. No.	Description	Amount Rs.
1	Power 40HP	15,000/-
2	Water	1,000/-
	TOTAL	**16,000/-**

(iv) Other contingent expenses (per month):

S. No.	Description	Amount Rs.
1	Postage and stationery	2.000/-
2	Telephone/Fax Charges	2,000/-
3	Repair & maintenance	5,000/-
4	Transport & conveyance charges	5,000/-
5	Advt. & publicity	10,000/-
6	Consumables tools, oils & lubricants etc.	10,000/-
7	Miscellaneous expenditure	6,000/-
	TOTAL	**40,000/-**

D) Total recurring expenditure per month:

(I + ii + iii + iv) **Rs.15, 96,675/-**

Working Capital for 3 months: Rs.47,90,025/-

E) Total Capital Investment:

S.No.	Description	Amount Rs.
1	Fixed Capital	31,15,000/-
2	Working capital for 3 months	47,90,025/-
	TOTAL	**79,05,025/-**

RESOURCES FOR FINANCE:

S. No.	Description	Proposed Investment Rs.
1	Term loan from Financial Institutions (80% of Fixed Capital) at 14% p.a. rate of interest	24,92,000/-
2	Bank loan for 3 months (75% of working capital) at 14% p.a. rate of interest	35,92,520/-
3	Self raised capital from even funds & loan to	18,20,505/-

	meet the margin money needs at 14% p.a. rate of interest	
	TOTAL	**79,05,025/-**

F) Financial Analysis:

1. Cost of production per annum:

S. No.	Description	Amount Rs.
1	Total recurring expenditure	1,91,60,100/-
2	Depreciation on Machinery and Equipment @10%	1,00,000/-
3	Depreciation on tools, Dies and fixtures @25%	20,000/-
4	Depreciation on office Equipment, furniture @ 20%	14,000/-
5	Interest on total capital investment @ 14%	11,06,705/-
	TOTAL	**2, 04,00,805/-**

2. Turn over per annum:

S. No.	Item	Quantity	RateRs.	Total Sales Rs.
1	**Allen Screws of assorted sizes**	**342 Mt.**	**65,000/- per Mt.**	**2,22,30,000/-**
2.	**By sale of Scrap**	**18 Mt.**	**15,000 per Mt.**	**2,70,000/-**
			Total	**2,25,00,000/-**

3. Profit per annum (before taxes):

Turnover per annum-Cost of production per annum= **Rs. 21,21,095/-**

4. Net profit Ratio = $\frac{21,21,095 \times 100}{2,25,00,000}$ = **9.42%**

5. Rate of Return = $\frac{21,21,095 \times 100}{79,05,025}$ = **26.83%**

6. Break Even Point:

Fixed Cost per annum:

S. No.	Description	Amount Rs.
1	Depreciation on Machinery & Equipment @ 10%	1,00,000/-
2.	Depreciation on tools, dies & fixtures @ 25%	20,000/-
3	Depreciation on office equipment, furniture @ 20%	14,000/-
4	Interest on total Capital Investment @14%	11,06,705/-
5	40% of Salary & wages	4,11,240/-
6	40% of Other Contingent	1,92,000/-
7	40% of Utilities	76,800/-
	Total Fixed Cost	**19,20,745/-**

$$\textbf{Break Even Point} = \frac{\textbf{Fixed Cost x 100}}{\textbf{Fixed Cost + Profit}}$$

$$= \frac{19,20,745 \times 100}{19,20,745+21,21,095} = \textbf{47.52\%}$$

Name & Addresses of Machinery suppliers:

1. M/s International Machine Tools Corporation, Bank Street, behind State Bank Of India, Fort, Mumbai (M.S.)

2. M/s machine /Tools traders, 25, Ganesh Chandra Avenue, Calcutta.

3. M/s R.D. Nanda & Sons, 56, Shrudhanand Marg, G.T. Road, New Delhi

Name & Addresses of Raw Material Suppliers:

1. M/s Don Brake Liners, Madras
2. M/s Precision Gears Pvt. Ltd., Industrial Estate, Polo ground, Indore.
3. M/s yunus Spring Factory, Faridabad
4. M/s Tara Steel Industries, 6, Kanti Mansion, Kide Compound, Indore.