PROJECT PROFILE ON INDUSTRIAL DMS SAFETY BOOTS

NAME OF THE PRODUCT : INDUSTRIAL DMS SAFETY BOOTS.

PRODUCT CODE :

QUALITY & STANDARD : Ministry of Defence Specification

INT/TC/3835(H)

BIS Specification - IS: 11226 - 1985.

MONTH & YEAR OF PREPARATION

MARCH, 2014.

PREPARED BY : **LEATHER/FOOTWEAR DIVISION**

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PART-II

I. INTRODUCTION:

Footwear is a part of the apparel, which protects the food from vagaries of nature. In addition to this, other necessities of the human being like fashion, customs etc., have a bearing on the requirement of footwear. Industrial DMS Safety Boots with D.V.S. Sole are used by Defence Forces, Para Military Forces, Security personnel. It is also used by Police forces and Miners. The vigorous contacts with the different terrains are required to be faced as such in addition to absence of discomfort to the wearer, toughness is the second most important factor required to be introduced in this footwear.

Industrial DMS Safety Boot is a wide term and are sub-divided into different types of boots like combat boots. Jungle boots, high altitude boots, boots explosive (for working in area where explosive material are stored) etc. The requirement of the defence in India is about 7 lakhs pair per annum. In addition to this boots with or without deviations are used by mines and steel workers. Police and Para-Military Forces as such there is a wide scope for marketing this product. Now a days there is tremendous scope in civilian shoe market especially for export.

II. MARKET POTENTIAL:

The manufacture of Industrial DMS Safety Boots is concentrated at Uttar Pradesh especially at Kanpur because of the availability of basic raw materials i.e. upper and bottom leather in this area. Agra also has started producing this product during the last decade. The product has good demand in Ministry of Defence, Ministry of Home Affairs and in Mining Industry.

III. Production Target (Per Annum):

INDUSTRIAL DMS SAFETY BOOTS

Quantity : 50,000 Pairs

Value : Rs. 3,62,50,000/-

IV. BASIS & PRESUMPTIONS:

- 1. The production target given in the profile is based on single shift basis for 300 days in a year of 8 hours per day
- 2. Three years will be required to achieve 90% capacity utilization.
- 3. Labour wages are based on prevailing rates in the State.
- 4. Rate of interest on fixed and working capital investment are based on RBI interest rates.
- 5. The period of loan to be recovered by the bank or financial institutions as per their norms.
- 6. The cost of machinery and equipment are based on the prevailing rates at the time of preparation of project profile.
- 7. The cost of machinery, raw materials etc. may vary from time to time and place to place.

V. PRODUCTION DETAILS & PROCESS OF MANUFACTURE:

Industrial DMS Safety Boot is made from Chrome Tanned Zug Grain Leather Upper, lined at vamp with combination tanned lining leather to absorb perspiration. The sole and heal are manufactured by direct Vulcanizing process. The laces are "Laces Nylon Black 90 cm long".

The boot shall be made by DVS construction using wooden last model No.9150 or 10883. Conforming to the dimensions given below: - $\,$

SI. No.	Size & Fitting	Joint Girth in mm	Instep Girth in mm	Length of last in mm
1	5M 5L	229 235	232 238	259
2	6L 6EL	241 248	244 251	267
3	7M 7L	241 248	244 251	276
4	8M 8L 8EL	243 254 260	251 257 264	284
5	9M 9L 9EL	254 260 267	260 264 270	293
6	10M 10L 10EL	260 267 278	264 270 276	301
7	11M 11L	267 278	270 276	310

Components: -

The various upper and bottom components of leather shall be cut from the material and to the thickness as given below. All components shall be free from grain defects/damages and other visual defects. A full below tongue shall be used.

SI.	Components	Material	Thicknes	ss in mm	
No.			Minimum	Maximum	
1	Quarter	Chrome Tanned Upper Leather	1.8	2.5	
2	Vamp	Chrome Tanned Upper Leather	1.5	1.8	
3	Toe Cap	Chrome Tanned Upper Leather	1.2	1.8	
4	Full below Tongue	Chrome Tanned Upper Leather	1.0	1.5	
5	Vamp lining	Lining Leather	0.6	1.0	
6	Insole	V.T. Leather	3.5	4.0	
7	Stiffener	V.T. Sole Leather	2.0	2.5	
8	Toe Puff	V.T. Sole Leather	2.0	2.5	

The upper shall be snitched/closed on lock stitch machine using liner thread 3 card No.18 for counters, back and tongue joint with vamp and 5 card No. 18 for remaining portions. The number of stitches shall be 28 to 32 per decimeter. The back seam of the quarter shall be taped with tape cotton. Five eyelets shall be fitted in each quarter facing. The steel shank shall be fitted at the waist of the insole so that it shall support the waist. The rubber sole and heel shall be vulcanized on a high pressure moulding machine. The thickness of rubber sole and heel from outside for all sizes in the finished boot shall be as under: -

SI. No.	Components	Thickness (mm)
1	At Fore part	16 ± 1
2	At Waist	11 ± 1
3	At Heel	34 ± 1

QUALITY SPECIFICATION:

BIS Specification – IS: 11226 – 1985

Ministry of Defence Specification – IND/TC/3835(H)

Materials:

1	Chrome Tanned Zug Grain Leather	IS; 5677 – 1986
2	Leather Lining	IS: 3840 - 1979
3	Thread Liner 3 card No. 18	INT/TC/0289
		IS: 4229 – 1979
4	Eyelets Aluminium	IS:5061 - 1978

PRODUCTION CAPACITY: (Per Month)

INDUSTRIAL DMS SAFETY BOOTS

a) Quantity : 50,000 Pairs b) Value (Rs.) : 3,62,50,000/-

POLLUTION:

This industry will not generate any pollution.

ENERGY CONSERVATION:

The scope of energy conservation is limited. Thorough checking of the motor driving system should be done from time to time.

POWER:

100 H.P. (Approx.) may be required.

IMPLEMENTATION SCHEDULE:

Registration and other formalities - 1 month
 Acquisition of work shed - 1 month
 Machinery & Equipments purchased & Installation - 6 months
 Trial production - 6 months

٧. **FINANCIAL ASPCCTS:**

1. Fixed Capital:

i) Land and Building
Covered Area 2,400 Sq. Ft. (Rented) P.M.

Rs. 15,000/-

ii) Machinery and equipment:

S. No.	Description	Ind/ Imp	Qty.	Rate	Value(Rs.)
1	Sewing beam Hydraulic Clicking Machine (Pressure 20 tons, 900 X 430mm)	Imp	2	135000	270000
2	Bend knife upper splitting machine width 400mm	Imp	1	43000	430000
3	Heavy duty skiving machine with table, motor & dust collector (for toe puff & stiffener)	Imp	1	200000	200000
4	Upper skiving machine with table, motor, dust collector	Ind	2	55000	110000
5	High speed flat bed single needle machine	Ind	3	17000	51000
6	Heavy duty cylinder bed sewing machine with motor.	Ind	3	60000	180000
7	Zig Zag sewing machine	Imp	1	95000	95000
8	Punching & Eyeleting Machine (automatic loading)	lmp	1	120000	120000
9	Taping & Seam Rubbing Machine with motor	Imp	1	150000	150000
10	DMS Moulding Machine (Hydraulic Pressure)	Ind	10	130000	1300000
11	Last removing Jacks	Ind	1	50000	50000
12	Spray Booth	Ind	1	50000	50000
13	Brushing Machine	Ind	1	30000	30000
14	Lasto Meter	Ind	1	50000	50000
15	Sole Adhesion Tester	Ind	1	50000	50000
16	Thickness Gauge	Ind	1	10000	10000
17	Shoe Last		800	300	240000
18	Tools & Equipments				50000
19	Generator Set 20 KVA		1	250000	250000
				Total:	3686000
	Installation & Electrification charges				338600
					4024600

VI. WORKING CAPITAL (Per month):

(1) Personnel (Per Month):

SI.No.	Designation	No.	Salary(Rs.)	Total (Rs.)
1	Production Manager	1	20,000/-	20,000/-
2	Supervisor	2	10,000/-	20,000/-
3	Clerk	1	6,000/-	6,000/-
4	Accountant	1	8,000/-	8,000/-
5	Store Keeper	1	6,000/-	6,000/-
6	Peon	1	3,500/-	3,500/-
7	Watchman	1	3,500/-	3,500/-
8	Sweeper	1	2,500/-	2,500/-
9	Skilled Workers	15	6,000/-	90,000/-
10	Semi-Skilled Workers	5	4,500/-	22,500/-
11	Helper	5	3,000/-	15,000/-
			Total:	1,97,000/-
	Perquisites @ 15% on the	total salary	/	29,550
			Total:	2,26,550/-

(2) Raw Material (Per month):

SI. No	Particulars	Qty.	Rate (Rs.)	Value (In Rs.)
1	Zug Grains Leather	3,60,000 DM	4.0/DM	14,40,000/-
2	B. T. Sole Leather	2,500 Kgs	175/Kg	4,37,500/-
3	Raw Rubber Compound	4,000 Kgs	55/Kg	2,20,000/-
4	Grinderies, Packing etc.	10,000 Pairs	15/-	1,50,000/-
			Total:	22,47,500/-

(3) Utilities:

ii.	Electricity /Fuel Water	20,000/-
".	Total: -	20,500/-

(4) Other Contingent Expense (Per Month):

1	Rent	15,000/-
2	Telephone/Fax	1,000/-
3	Stationery/Postage	2,000/-
4	Transportation	10,000/-
5	Consumable Stores	5,000/-
6	Maintenance	5,000/-
7	Insurance	2,500/-
8	Others	5,000/-
	Total:	45,500/-

VII. TOTAL RECURRING EXPENSES (PER MONTH):

1	Staff &Wages	2,26,550/-
2	Raw Material	22,47,500/-
3	Utilities	20,500/-
4	Others	45,500/-
	Total:	25,40,050/-
	Say:	25,40,000/-

Working Capital for 3 months: 25,40,000 X 3 = Rs.76,20,000/-

VIII. TOTAL CAPITAL INVESTMENT:

		1,16,44,600/-
2	Total Working Capital	76,20,000/-
1	Fixed Capital	40,24,600/-

IX. COST OF PRODUCTION (Per Annum)

	Total:	3,26,38,790/-
4	Interest on Total Investment @ 15%	17,46,690/-
3	Depreciation on Tools & Equipments @ 25%	72,500/-
2	Depreciation on Machinery @ 10%	3,39,600/-
1	Working Capital	3,04,80,000/-

X. ANNUAL SALES:

Sale of 50,000 pairs of Industrial DMS Safety Boots 3,62,50,000/-@ Rs. 725/- per pair

XI. PROFIT (Per Annum)

(Before Income Tax)

Sales Value (-) Cost of Production

3,62,50,000/- (-) 3,26,38,790/- **Rs. 36,11,210/-**

XI. RETURN ON TOTAL INVESTMENT:

 $\frac{\text{Annual Profit X100}}{\text{Total Capital Investment}} = \frac{36,11,210 \text{ X100}}{1,16,44,600} = 31\%$

XII. % PROFIT ON TOTAL SALES:

= <u>Annual Profit X100</u> = <u>36,11,210 X 100</u> = **9.96%** Annual Sales 3,62,50,000

XIII. BREAK EVEN ANALYSIS:

Fixed Cost (Per Annum):

1.	Rent	1,80,000/-
2.	Depreciation on Machinery @ 10%	3,39,600/-
3.	Depreciation on Tools & Equipments @ 25%	72,500/-
4.	Interest on Total Capital Investment @ 15%	17,46,690/-
5.	40% of Salary	10,87,440/-
6.	40% of other contingent expenses	2,18,400/-
	Total Fixed Cost:	36,44,630/-
	Say:	36,44,600/-

Break Even Point:

 $\frac{\text{Fixed Cost X 100}}{\text{Fixed Cost + Profit}} = \frac{36,44,600 \times 100}{36,44,600 + 36,11,210} = 50\%$

XIIIV. Names & Addresses of Machinery & Raw Material Suppliers:

- M/s Supreme Electroplaters & Engineers,
 97/140, Abdul Ghani Road, Talaq Mohal, Kanpur.
- 2 M/s Leather & Packing Machinery Corporation, 1/23-B, Asaf Ali Road, New Delhi.
- 3 M/s Seinger Sewing Machine, The Mall, Kanpur.
- 4 M/s Bata India Ltd., Bata Nagar-743313.
- 5 M/s B. S. Engineering Works, E1/346, Shiv Ram Park, Najafgarh Road, Nanglori, Delhi-41.
- 6 M/s M. K. Engineering Works, 66-A, Shehzada Bagh, Old Rohtak Road, Delhi.
- 7 M/Precision Shoe Last Factory,60, Industrial Estate, Nunhai, Agra. (Shoe Last)
- 8 M/s Toscane Last Ltd., Thapar House, 124, Janpath, New Delhi-110001.
- 9 M/s J. K. Trader & Engineers, Kirti Nagar, Delhi-15.

RAW MATERIALS & GRINDERIES

- 1 M/s Threads India Ltd.,83/A, Pankai Industrial Estate, Kanpur.
- 2 M/s Modi Thread Ltd., Modi Nagar-201210. (UP)
- 3 M/s A. N. Soles International, C-121, Sector-2, NOIDA.
- 4 M/S Harman Sales Pvt. Ltd., 10, Munirka Marg, Vasant Vihar, New Delhi-57.
- 5 M/s Indian Eyelet Industries,5-D2, Rajendra Prasad Sarani, Clive Road, Kolkata-1.
- 6 M/s M. S. Patel & Company, Exelet House, South Vihar Road, Mumbai-72.

LEATHER

- M/s Sultan Tanners, Jajmau, Kanpur.
- 2 M/s Super Tanning Industry, Jajmau, Kanpur.
- 3 M/s Paradise Tanning Industry, Jajmau, Kanpur.
- 4 M/s Indian Tanning Industry, Jajmau, Kanpur.
- 5 M/s Zam Zam Tannery, Kanpur Road, Unnao.

NATURAL / RAW RUBBER

- M/s Tim Rubber,
 Co-operative Industrial Estate, Dada Nagar, Kanpur.
- 2 M/s Nitin Rubber, Industrial Estate, Dada Nagar, Kanpur.
- 3 M/s Alga Rubber Works, Fazalganj, Kanpur.
- 4 M/s Deepak International (India), 308 Km Stone, M.I.E. Bahadurgarh, Haryana.
- 5 M/s Chowdhary Rubber & Chemical Company, 1403, Pan Mandi, Sadar Bazar, Delhi-06.

STEEL TOE CAPS

- 1 M/s D. K. Engineering Works, 42-A, Dada Nagar, Kanpur.
- 2 M/s Rohini Processors, The Mall, (Behind Roxi Cinema), Kanpur-208001.
- 3 M/s Efficient Traders, Fazalgani, Kanpur-208012.

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