

INTEGRATED DEVELOPMENT OF LEATHER SECTOR (IDLS) SCHEME

**LIST OF FOOTWEAR AND FOOTWEAR COMPONENTS MAKING MACHINES
APPROVED FOR XII FIVE YEAR PLAN**

Sl. No.	Sub Sl. No.	NAME OF THE MACHINES
A		Machnies for footwear manufacturing
I		DESIGNING AND PATTERN MAKING
	1	CAD System
	2	Plotter & Cutter
	3	Digitizer
	4	Hand-operated cutter
	5	Electric pantograph
	6	Numeric control for fibred cardboard series cutting
	7	Micro-clicking press with turning arm
	8	Computer aided cutting table
	9	Shoe last thermoforming machine
	10	Model area measuring machine
	11	Pattern Shear
	12	Rapid prototyping m/c
	13	Software – Corel Draw, Adobe Photoshop, Auto CAD 3D MAX
	14	ERP software
	15	Desktop Computers with color Monitors & CD writers
	16	Color Printers
II		CUTTING
	1	Sewing arm clicking press
	2	Arm-type clicking press with automatic movement
	3	Beam press
	4	Traveling head press
	5	NC die-cutting system
	6	Nesting and dieless cutting system
	7	Area Measuring machine
	8	Welding-shearing die-cutting machine
	9	High-frequency type machine
	10	Strip cutter machine
	11	Multi-cutting machine
	12	Laser Etching / Engraving machine
	13	Crimping machine
III		MACHINES TO PREPARE AND STITCH UPPER SHOES
	1	Leather splitting machine
	2	Embossing / Stamping machine for linings/uppers (manual of automatic type)
	3	Socks stamping machine
	4	Skiving machine for upper components
	5	Fusing machine
	6	Seam pressing and taping machine
	7	Vamp pre-forming machine
	8	Modular system to hot-print mock-stitching, patterns and relief, high-frequency type
	9	Plating machine to emboss or print leather
	10	Perforating machine to make shoe lace holes
	11	Perforating and decorating machine
	12	Edge folding machine
	13	Thermo cement and folding machine with reinforcing tape
	14	Machine to make thermoplastic toe puffs on uppers
	15	Thermo adhesive toe puff attaching machine
	16	Cement spraying machine for vamps to couple uppers, lining and toe puffs
	17	Thermoplastic cementing machine
	18	Pleating machine for uppers
	19	Zig-Zag sewing machine
	20	Chording machine
	21	Arm-type rotary sewing machine for edgings and profiling (long-arm type)
	22	Flat-bed sewing machine, 1 needle with or without thread cutter.
	23	Flat-bed sewing machine, 2 needle
	24	Post bed single needle sewing machine with or without thread cutter
	25	Post-bed double needle sewing machine.

26	Cylinder bed binding machine
27	Heavy duty single needle flat bed sewing machine
28	Machine to sew imitation moccasin
29	Spot lining machine for stitching of moccasin aprons
30	Upper lining trimming machine
31	Strobel type overlock stitching machine
32	Gathering machine
33	Automatic sewing machine (Microprocessor controlled)
34	Computerized sewing machine for embroidery
35	Eyeletting machine (manual or automatic type)
36	Riveting machine (manual or automatic type)
37	Hook, eyelet applying machine
38	Machine to apply decoration onto uppers
39	Upper lacing machine
40	Machine to apply snap fasteners
41	Roller cementing machine for zippers
42	Belt dispenser (plain, automatic or computer aided type)
43	Wooden conveyor (readymade)
44	Mechnized Upper conveyor
45	Special sewing machine
46	Shoe-repairing sewing machine
47	Hammering machine

IV SOLE UNIT ASSEMBLY AND MACHINING EQUIPMENT

1	Insole tacking machine by tacks
2	Insole trimming machine
3	Insole applying machine, pressure type
4	Insole applying machine, cement type
5	Rib laying machine
6	Backpartmoulding machine
7	Backpartmoulding machine for moccasins
8	Backpartmoulding machine for stitch down/ideal applications
9	Upper edge roughing machine
10	Moccasin forming and ironing machine
11	Steamer for toe caps and/or heel seat and stiffeners
12	Whole upper conditioning machine
13	Toe forming machine
14	Pulling-over and cement lasting machine
15	Heelseat and side lasting machine
16	Heel lasting machine
17	Machine to pull and fix lining
18	Thermoplastic side lasting machine
19	Waist lasted, hook or tack type
20	Goodyear inseam trimming machine
21	Inseam stitching machine
22	Rough Rounding machine
23	Seat lasting for cemented and/or tacks Seat lasted for Goodyear applications
24	Heel crowning machine
25	Lasted shoe pounding machine for bottom leveling
26	Heat setter to ironing and conditioning shoes and boots lasted on last
27	Wrinkle chaser
28	Heel-seat beater Manual machine to roughen assembled edges
29	Automatic programmable roughing machine for lasted shoed & also with grinding device
30	Automatic cementing machine for lasted shoe
31	Semi-automatic rotary brush machine for water-dispersed adhesives
32	Cementing machine for soles
33	Tower dryer
34	Drying and activating machine
35	Flash activator
36	Universal type Sole press equipped with self-shaping pads
37	Automatic press with lower water pad-box
38	Baloon press (Dr. Funk type)
39	Chill setter with conveyor
40	Brushing machine for the removal of remains of glue along the edge last
41	Last pulling machine
42	Heel pre-fixing machine
43	Heel nailing machine

44	Gang nailing machine
45	Channeling machine for lasted shoes and soles
46	Channel opening machine
47	Channel closing machine
48	Stitch-marking machine
49	Trimming cleansing machine for edges of sole and heel (with or without nebulizer)
50	Manual trimming machines for heels
51	Edge trimming machine
52	Manual ornamental ribbing machine for soles
53	Manual band scouring machine for sole and heel already applied Lockstitch side wall sewing machine
54	Lockstitch sole swing machine for blake work (Mckay stitch)
55	Lockstitch sole sewing machine for direct seam of upper and sole
56	High-speed welt sewing machine for Goodyear applications
57	High-speed outsole stitcher
58	Soft-roller cementing machine for soles
59	Halogenating machine for rubber soles and similar materials
60	Top lift nailing machine
61	Vulcanizing machine with autoclave incorporated in the conveyor
62	Extruder for multicolor rubber foxing (PVC, TR, rubber) welt extruders, one and two colours
63	Manual conveyor, push-type
64	Electromechanical conveyor with variable speed or temporized stops
65	Loading/unloading robot
66	Rubber extruder
67	DMS plant
68	Flash trimming machine
69	PU/TPU DIP machine
70	PU pouring machine
71	PU pouring machine conveyour
72	Verticle/ horizontal DIP machine for PVC sole
73	DIP Moulds (Top and bottom)
74	UV activation chamber
75	Spray booth
76	Top line forming machine
77	SATRA sole adhesion tester
78	Toe cap impact tester
79	Flexometer
80	Tensile tester
81	Rub fastness tester
82	Color matching chamber
83	Polishing and brushing machine

B MACHINES TO PREPARE FOOTWEAR COMPONENTS

I	Toe Caps
1	Skiving machines with cutting lubrication
II	Stiffeners
1	Wetting machine
2	Skiving machine with cutting lubrication
3	Automatic machine for skiving, stamping and knurling
4	Machine to finish edge pitching of leather board material
5	Rolling machine
6	Rough scouring machine, wheeled, with pad
7	Dual station manual, pre-forming machine
8	Automatic heel sock performing machine
9	Heel sock cementing machine
10	Heel sock drying oven
11	Heating and moulding machine for thermoplastic counter stiffener
III	Insoles
1	Travelling head insole cutting machine
2	Machine for sandwich cutting of insole heel sock
3	Hole making machine for insoles of seat straps (sandals)
4	Insole grooving machine for notches to seat straps
5	Matrix Skiving machine for fiberboard
6	Machine to fit metal shanks to board shanks
7	Cementing machine with or without dryer
8	Edge Cementing machine
9	Stamping machine
10	Silk-screen printing machine for decoration of clearing insole, insole to board shank assembly machine

	11	Insole Moulding m/c
	12	Insole Bevelling m/c
	13	Profiling and pitching trimming machine (with or without sharpening machine)
	14	Folding machine
	15	Shank rivetting m/c
IV	Heel	
	1	Guillotine cutter for leather bands
	2	Machine for covering and pressing cork and leather heels
	3	Machine for pressing the anterior part of heel
	4	Machine to make holes and C-line of heel breast
	5	Machine to cut heel performs off strips
	6	Evening to cut heel performs off strips
	7	Lift flaring machine
	8	Sanding machine for leather-covered heels
	9	Rough-scoring machine for heel covings
	10	Machine to cement heel covers and heels
	11	Press to assemble lifts
	12	Heel pretrimming machine
	13	Heel digging machine
	14	Automatic abutting digging machine
	15	Spraying machine with or without device for leather stripes effect
	16	Automatic machine for heels milling, inclination and depth making
	17	Vertical dryer
	18	Tool sharpening machine
	19	Injection Moulding machine and water bath.
	20	Top lift fixing machine
	21	Veneer leather Cutting machine
	22	Super flow machines for pigment dispersion
	23	A.T.T machine with carbon balls for synthetic heel finishing
V	Out Sole	
	1	(CAD-CAM) working center for soles making
	2	Die-cutting, marking machine (automatic type)
	3	Blade-type pre-evening machine
	4	Roughing leveling machine
	5	Buffing-souring machine
	6	Manual pretrimming machine
	7	Automatic pretrimming machine
	8	Trimming machine for soles or foam half soles
	9	dge trimming machine
	10	Trimming machine to make antislip lines
	11	Roughing machine
	12	Edge roughing and growing machine
	13	Heel seat roughing machine
	14	Roughing machine for half sole
	15	Halogenating machine for rubber soles and similar materials
	16	Stamping machine to print brand and number
	17	Stamping machine for identification through processing cycle
	18	Decorating machine for stitch separation and grooving
	19	Topside cementing machine with soft roller
	20	Cementing machine with pressure roller, for pre-finished sole edge
	21	Pressurized tank for cement spreading with gun and brush
	22	Workbench with adhesive spraying (water-based and Polyurethane adhesive)
	23	Injection press for top pieces
	24	Sole edge cementing machine
	25	Welt attaching machine
	26	Welt chamfering at the beginning and at the end of application
	27	Halogenating machine for rubber soles and similar materials
	28	Stamping machine to print brand and number
	29	Stamping machine for identification through processing cycle
	30	Decoration machine for stitch separation and grooving
	31	Topside cementing machine with soft roller
	32	Cementing machine with pressure roller, for pre-finished sole edge
	33	Pressurized tank for cement spreading with gun and brush
	34	Workbench with adhesive spraying (water-based and Polyurethane adhesive)
	35	Injection press for top pieces

36	Sole edge cementing machines
37	Welt chamfering at the beginning and at the end of application
38	Managed rotation performing machine
39	Managed rotation edge-setting machine
40	Scouring machine for sole grain side
41	Scouring machine, sole edges and welt
42	Scouring machine to profile heels and soles
43	Press to fit welt or midsole to sole
44	Press for heel-sole fitting
45	Automatic heel nailing machine for pre-finished shoe
46	Connection rotary belt
47	Sole turning belt
48	Automatic collector
49	Vertical dryer
50	Electromechanical conveyor with variable speed or temporized stops
51	Manual conveyor, push-type
52	Stitch-separating machine
53	Automatic spraying machine
54	Machine to wrap and count meters
55	Automatic cementing-winding for welt (with counter)
56	PU pouring machine
57	PU sole roughing machine
58	PVC/TPR Vertical or horizontal Injection moulding machine
59	Outsole making mould
60	EVA injection moulding machine
61	Pre heating oven
62	Rubber mixing mill
63	Kneader
64	Calendering
65	Rubber extruder
66	Bale cutter
67	Ultrasonic rubber cleaner
68	Rheometer

VI **Leather Welt**

1	Machine to square various material
2	Machine to blunt joints
3	Roughing machine
4	Channeling machine
5	Machine to prepare welts for Goodyear application
6	Grooving machine
7	Stitch separating machine
8	Cementing machine
9	Seam press
10	Sewing machine for decorations
11	Stitch-separating machine
12	Automatic spraying machine
13	Machine to wrap and count meters
14	Automatic cementing-winding for welt (with counter)
15	Plotter to write and engrave
16	Varnishing tank
17	Edging shear for shaping the steel
18	Sharpening machines
19	Welding bench
20	Sundry accessories

VII **Machine for Manufacturing Shoe Last**

1	Machines for making plastic blocks
2	Machines for sizing of plastic blocks
3	Machines for turning of plastic blocks both mechanical as well as CAD/CAM including computer systems
4	Machines for making hinges
5	Machines & jigs & fixtures for fixing of hinge assembly in plastic turned block
6	Machines for digitising lasts by CAD/CAM including software including computer systems
7	Machines for making patterns by CAD including software & computer systems
8	Machines, jigs & fixtures & gadgets to check last structure
9	Machines for finishing of last both mechanical as well as CAD/CAM including software & computer systems
10	Machines for preparing, fixing & finishing of iron plates on last
11	Machines for fixing thimble

12	Machine for fixing back height
13	Machines for repairing of lasts
14	Machines & equipments for final finishing of plastic last
15	Machines, tools, jigs & fixtures for sharpening of tools
16	CNC laser and plasma steel sheet metal cutting machines
17	Last scanner.
18	Foot scanner for customization of last for the handicapped, orthopaedic and normal last.
19	Software for last modification and development of last out of foot scanned data.
20	Computerised Toe and Heel finishing m/c.
21	Machines for making hardware used in Last making.
22	Foundry equipment for Aluminium Last making.
23	Direct Injection Last making and equipment.
viii	ACCESSORIES –DIE CUTTER
1	Pattern circumference measuring machine
2	Punching machine (for saddles and steel strips)
3	Equipment to applying piercing devices and prick
4	Broaching machine
5	Shears for steel or iron
6	Chafing machine with copy
7	Folding machine
8	Belt grinder
9	Drilling machine
10	Marking machine
11	Notch indicator
12	Plotter to write and engrave
13	Varnishing tank
14	Edging shear for shaping the steel
15	Sharpening machines
16	Welding bench
17	Sundry accessories

NB: Any machine other than those appearing in the above List, can be considered by the Steering Committee on the recommendations of PIU