

1 R	MISCELLANEOUS	11.2	..With nailing
1 A	.Conveyors	11.3	..End lasting only
1 B	.Platform cover turners	12	.Wiper folder
1 F	.Rubber shoe assembly	12.1	..With nailing
1 G	.Arch support forming and inserting	12.2	...Toe lasting only
1 W	.Assembly machines	12.21	....With binder applying
1 M	.Moccasin machines	12.3	...Heel lasting only
4.1	COMBINED SOLE AND UPPER MACHINES	12.4	..Toe lasting only
4.2	.Lasting with laying and/or leveling	12.41	...With binder applying
4.3	.Inseam trimming	12.5	..Heel lasting only
4.4	..With welt beating	13.1	.With nailing
4.5	..With horn-carried knife	13.2	.With sewing
4.6	.Shoe turning	14.2	.Sole hold-downs
7	LASTING MACHINES	14.3	.Upper clamps
7.1	.With vamp cutting	14.4	..End bands
7.2	..Slitting or notching	14.5	.Nippers
7.3	.Prewelted upper	15	LAST INSERTING MACHINES
7.4	..End lasting only	15.1	DELASTING MACHINES
7.5	.Outturned upper, e.g., stitchdown	16	LASTING-FASTENER REMOVING MACHINES
7.6	..With nailing	16.1	SOLE-FLAP HEEL-BREAST COVERING MACHINES
7.7	..With sewing	16.2	.Combined and/or plural operations
7.8	..End lasting only	16.3	..Flap laying and heel tread clamping
7.9	.Draw wire type, e.g., wire lasting	16.4	.Laying flap on breast
8.1	.With flexible conforming means	16.5	.Splitting sole
8.2	..With wiper folder	16.6	.Trimming flap to breast outline
8.3	.Rotated nipper or wiper	16.7	..Heel-guided trimmer
8.4	.Pronged wiper folder	70	SOLE AND/OR HEEL BURNISHING MACHINES
8.5	.Nipper wiper	70.5	.Combined or plural diverse
8.6	..With nailing	73.5	..With coating application
8.7	...End lasting only	74.5	..With indenting
8.71	....With binder applying	75.5	...Heel only
8.8	..End lasting only	76.5	..With edge trimming
8.81	...With binder applying	77	.Rotary tool
9	.Nipper stretcher	78	.Reciprocating tool
9.1	..With sewing	78.5	..Heel traverse
10	..Wiper folder	79	..Hand guided
10.1	...Multiple nippers	79.3	.Fixed tool
10.2	....With nailing	79.2	.Tools and/or tool heads
10.21	.....With binder applying	77.5	..Rotary
10.3	.....Fed work	79.5	SOLE AND/OR HEEL WAX POLISHING MACHINES
10.4	.....Downward pull	85	SOLE AND/OR HEEL EDGE TRIMMING MACHINES
10.5	....End lasting only	85.1	.Combined or plural diverse
10.6	...With nailing	85.2	..With sole peripheral channeling
10.7	....With parallel horizontally disposed camshaft and gripper operating overdraw rod, i.e., continental type	85.3	...Clamped work
10.71	.....With binder applying	85.4	..With fastener inserting
10.8	...End lasting only	85.5	...Heel only

85.9	.Shank trimming only	28	..Clamped work
86	.Clamped work	29	.Channel-flap layers
86.5	..Sole edge only	30	.Channel-flap turners
86.6	...Traveling cutter	31.5	.Heel-seal forming
86.65	....Rotary table supported	31.6	..Spring heel
86.7	...Rotary cutter	32	.Peripheral indenting
87	..Rotary cutter	32.1	..With stitch finder
88	.Rotary cutter	39	.Sock-liner applying
89	..Multiple cutter head	39.3	.Stitch picking and/or cutting
90	..With adjustable rand guide and/ or guard	39.5	.Splicing half soles to outsoles
91	.Rotary cutter heads	40	.Slitting
92	..Axially adjustable	40.5	.Shank pieces or stiffeners
93	..With supplemental cutter	41.05	.Grooving
94	..Inserted cutters	41.1	.Pliabilizing soles in a shoe
95	...Angularly adjustable	41.2	.Pliabilizing soles
17 R	SOLE MACHINES	41.3	..With fluid treatment
17.2	.Peripheral operation and automatically bodily moved shoe support	41.5	.Tempering
33	.Laying and/or leveling	41.7	.Inside fastener end trimmers
33.1	..With fastener inserting	17 A	.Sbicca-type sole
33.2	..With heating means	42 R	HEEL MACHINES
33.4	..With welt pressing means	50	.Assembling
33.6	..With sole positioning means	50.1	..With die cutting
33.7	..Configured oscillating former indexed with sole	50.2	...With fastener inserting
33.8	...Oscillating jack	50.3	..With cement applying
34	..With rotatable leveling pressure roll	50.4	..Heel logs
34.5	...With power-operated transverse roll tilting	42.5	.With diverse operations
35.5	..Hammering and/or slicking	43	..Fastener inserting and breasting
36	..Multiple work supports	43.5	..Fastener inserting and molding
36.5	...Traveling work support carrying fluid pressure applying means	46	.Seal cutting
36.8	....Rotary work support carrier	46.5	.Spring heel beveling
37	..Rotary work support carrier	47	.Breasting
38	..Pads or formers	47.1	..Uni-directionally moving cutting edge
18.1	.Assembling	48	.Molding
18.2	..Bulk shoe fillers	49	.Beading
18.3	..Shank pieces and/or stiffeners	49.1	.Covering
18.5	.With diverse operations	50.5	.Removers
18.7	..With peripheral channeling	42 B	.Heel affixing
18.9	..With slitting	51	UPPER MACHINES
20	.Applying or reinforcing separate rib	52	.Assembling
20.2	..Full gemming	52.5	.With diverse operations
21	.Blank molding	53.1	.Assembled shoe shaping
22	..Edge	53.2	..By expanding and conforming
24.5	.Edge covering	53.3	..By conforming roller
27	.Peripheral channeling	53.4	..By conforming impactor
		53.5	..By conforming press action
		53.6	..By expander only
		53.7	...Wall-supported
		53.8	...Reciprocating expander
		54.1	.Loose upper shaping
		54.2	..Toe only
		54.3	..Heel only

54.4	..Crimping with former and wiper	114.6	..Top stretchers
54.5	...Belt-carried former	114.8	...With top holder
54.6	...Pivoted former	115.2	..Spot stretchers
55	..Folding	115.4	...With cooperating exterior former
55.1	...With slitting or notching	115.6	..Variable expander
57	.Turning	115.8	...Longitudinal and lateral
57.1	..With seam pressing	116.2	....Longitudinal and lateral lock
57.5	.Trimming	116.4	....Lateral lock
57.6	..Sole-attaching edge	116.6	....Longitudinal lock
58	..Skiving	116.8	...Lateral
58.3	.Buttoning or unbuttoning	117.2	....Lock
58.5	.Lacing or unlacing	117.4	...Longitudinal lock
59	.Strap covering	119.5	.Upper crimping and stretching
59.5	.Tape appliers	120.5	.Sole straightening
59.7	.Tempering	122	SHOEMAKERS' BENCHES
61 R	TOE AND HEEL STIFFENER MACHINES	123	WORK SUPPORT
62	.Skiving	123.3	.For loose heels
63	..Recessed carrier	123.5	.For boot trees
64	.Molding	124	.Expansible holder
65	..Roll	125	.Heel clamping
66	..Separable	126	.Last jacks
61 A	.Assembling	127	..With saddle
61 B	.With diverse operations	128 R	FORMS
67 R	WELT AND RAND MACHINES	129.4	.Heated
67.1	.Welt and rand formers	133 R	.Lasts
67.2	.Welt beaters	134	..Preliminarily adjustable
67 A	.Welt guides	135 R	..Separate heel block
67 B	.Combined welt preparing	136 R	...Hinged
67 C	.Welt attaching to loose sole and heel	136 A	....With movable instep block
67 D	.Plural diverse operations	136 B	....With single link
67 E	.Welt beating and slitting	136 C	....With double link
67 F	.Welt butting and attaching	135 A	...With sliding movement
67 G	.Beaters	137	..Instep-block fasteners
67 H	.Butting	138	...Sliding bolt
67 J	.Forming	139	..Heel plates and sockets
67 K	.Welt attaching	140	..Peg receivers
67 L	.Welt tempering	141	..Shoe retainers
103	TOOLS	133 A	..With fillers
104	.Sole and/or heel burnishing	133 B	..With altered surfaces
104.5	.Inside fastener end trimmers	133 C	..With heel fastener receiving means
107 R	.Lasting	133 M	..Material
108	..Fastener holding and inserting and upper stretching	128 B	.With deodorant, etc.
109	..Upper tensioners and hammers	128 H	.For open-heel shoe
110	..Upper tensioners	128 V	.Expanding vertical
111	...Multiple transversely positioned grippers	128 C	.With upper retaining means
112	...Toe	128 D	.With sole retaining means
107 A	..Over-lasted upper retainers	128 E	.Heel plates
113	.Fly holders	128 F	.With fastener receiving means
114.2	.Interiorly stretching assembled shoes	142 R	PROCESSES
114.4	..Fluid expander	145	.Lasting
		146 R	.Miscellaneous parts
		146 B	..Soles

146 BP ...Prepared
146 BCChanneling
146 BR ..Rubber soles
146 C ..Uppers
146 CK ...Edge finishing
146 D ..Toe and heel stiffeners
146 L ..Last making
146 M ..Orthopedic parts
146 S ..Shank stiffener making and
attaching
146 W ..Welts and rands
147 R ..Heel
147 A ..Rubber
147 B ..Covering
148 ..Filling shoes
142 A ..Evaginated shoe
142 B ..Thru-and-thru shoe
142 C ..Stitch-down shoe
142 D ..Welt-type shoe
142 E ..Rubber shoe
142 EV ..Rubber overshoe
142 F ..Cemented shoe
142 G ..Felt and fabric
142 J ..Interfitted sole and heel
142 K ..Protection of shoes
142 LC ..Lacing and closing
142 MC ..Moccasins
142 N ..Orthopedic
142 P ..Athletic
142 Q ..Repairing
142 RS ..Rubber sole attaching
142 S ..Sandals
142 T ..Sole-attaching
142 V ..Ventilated
142 W ..Leggings and gaiters

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