

2.

2.3 (Auto winder)

(1)

(tube)

가

.

,

(無人) 가

.

Abbott

Barber-Colman

(spooler)

1

(winding head)

1

가

가

1

.

1960 Schlafhorst Auto coner(10 1), 1961
 Leasona Uni coner(1 1)가 ,
 Schweiter, Gilbos, Meter, Savio 가 .

(無人化)

(2)

가 1
 , 가
 .

(3)

가
 , 가
 , 가
 가

Schlafhorst Auto coner Schweiter,
 Conematic(Murata), Kamimat(Kamitsu) .

(4)

2-4 (a) (b)

2-4(a)

	Schlafhorst	Schweiter	Leasona
	Auto coner	CA-11	Uni coner
		()	
	10 (10~50)	10	12 (24~108)
()	6	5.5	9
(m/min)	700~1,200	600~1,200	~1,100
	0 ° 00~9 ° 36 '	0 ° 00~9 ° 36 '	0 ° 00 ' ~9 ° 36 '
(mm)	330	280	350
(in)	3 1/3, 5, 6	5, 5 7/8	3 3/8, 5, 6
	,		,
			가
			
	. , . .		

2-4(b)

Murata	Kamitsu	Savio	Abboto
Cone matic No.11	Kamimat 550	RSA	Abboto-600
4 (12~24)	6 (12~4)	8 (24~48)	~200
6	7	8	
700~1,200	700~1,200	600~1,400	~1,200
,	,		
0 ° 00 ' ~9 ° 15 '	0 ° 00 ' ~9 ° 36 '	0 ° 00~9 ° 15 '	0 ° 00 ' ~9 ° 00 '
260	300	300	360
5. 6	5. 6	5. 6	5. 6
,		,	
			가
,			
,			

(5) (Schweiter) CA11

1)

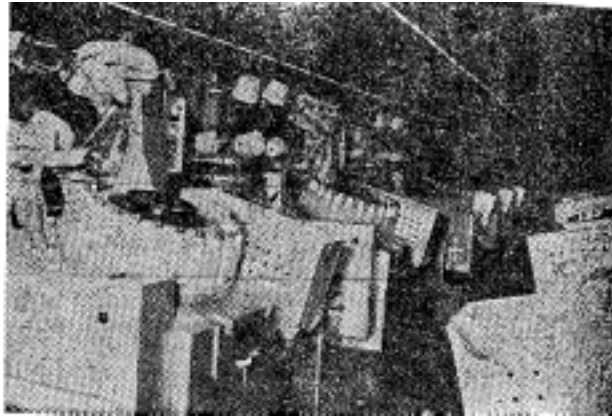
1 가

가

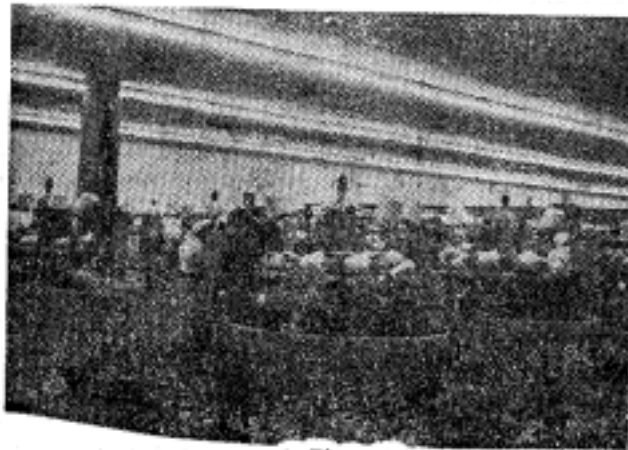
10

(soft package)

(cheese dyeing : 絲染)



2-16



2-17

2

(magazine)

(cop

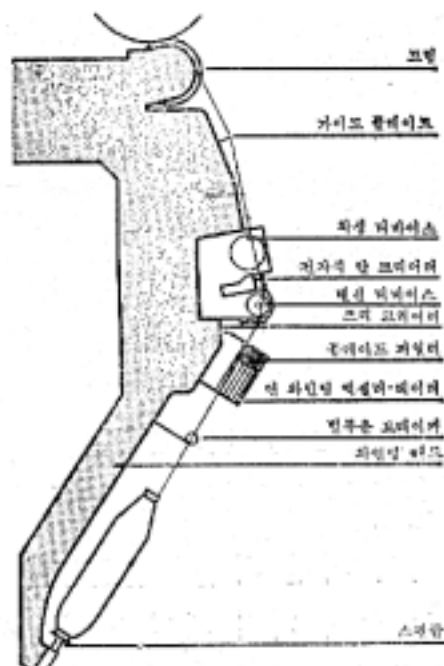
chute)

1

2

3

,



2)

()

.

a) (knob)

b) () .

c) '0' '9' 10 가

.

d) 가

.

3) (pre-tension)

· (blade feeler)가

(snarl)

가 .

4) (pre-clearer)

.

, ,

,

가

.

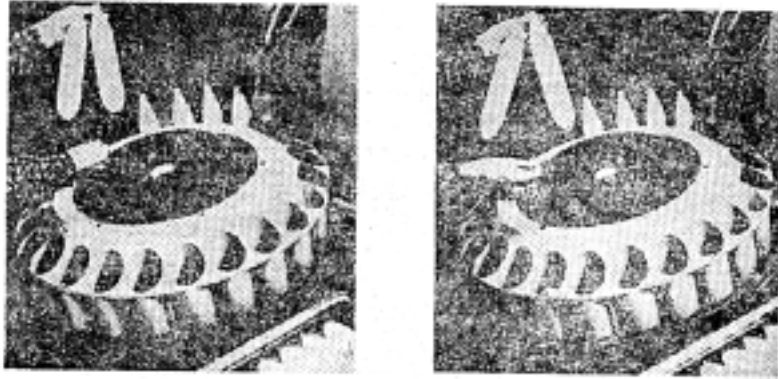
5)

a)

()가 .

.

.



2-19

b)

가

(가).

가

().

(6) (Schlafhorst) (auto coner)

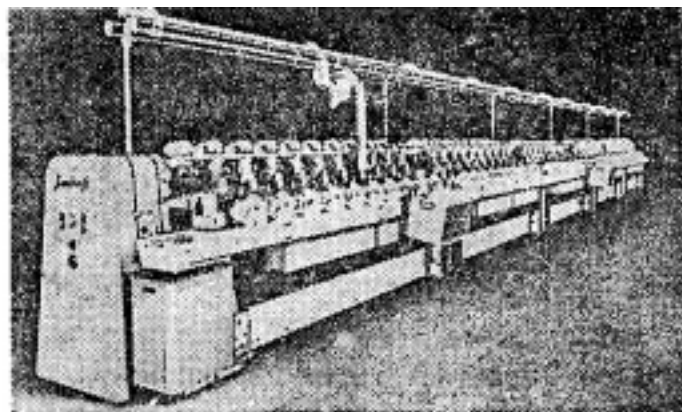
1)

a) , , ,

6's~60's .

b)

가 가 .



2-20

c) 가 가

, , , .

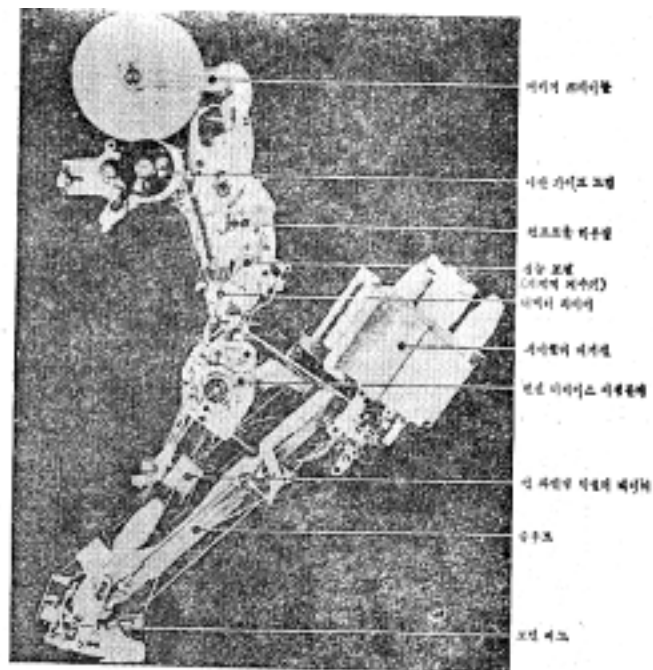
d) 가 .

e) (waxing device)가

f) (knot) 가 .

g) 1 가 50 가 10 (knotter carriage)가 1 .

2) (winding head)

가 ‘ (lateral displacement)
(anti-patterning)

2-21

a) (magazine) 5

b) (yarn clamp)

.

c) (chute)

.

d) (transfer rod)

(knotter carriage) (gripper arm)

.

e) (ejector)

.

f) (unwinding accelerator)

.

g) (suction arm buffer)

.

h) (lateral displacement device)

(soft winding)

.

i) (anti-patterning device)

(ribbon winding)

.

j) (package size control device)

.

k) 가 (lap guard)

.

l) (detector wire)

.

3) (knotter carriage)

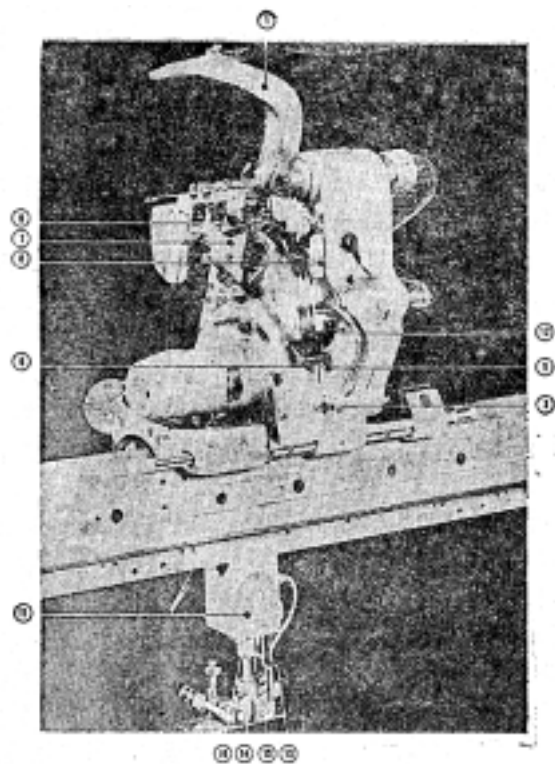
1 가 10

(cam assembly)

360 °

5

(knot tester)가



2-22

(suction arm)

(griper)

(thrust pin)

(thrust pin)

(knotter head)

(push rod)

(knot tester)

(jack roller)

(feeler)

(bobbin feeler)

(lifter rod)

(push rod)

4)

a) (gate feeler)

(detector wire) 가

가 .

b) 가

.

c) 가

가 .

d)

.

e) 가

.

f) (gripper arm)

(knotter head) .

g)

.