

()

3.

250~350m/min

(head)가

500m/min 가 .

가

. OE

. OE

1) Heberlein-Hispano

Hisplender(33)

80mm .

(web)

4 3 4

4가

(fleece)

, 2 4

가

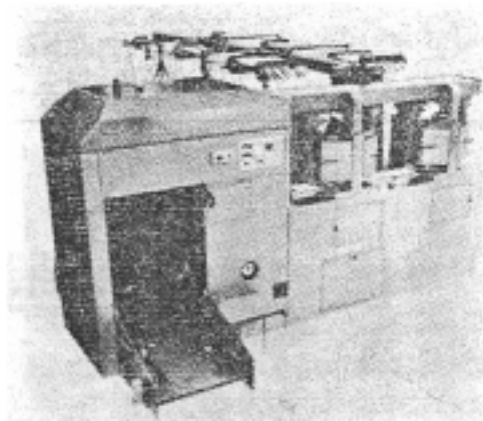
가

180~600m/min

가

가

OE



< 33>

2) Zinser

720 (34)

1

2

1,000mm

가

500m/min

350~380m/min

OE

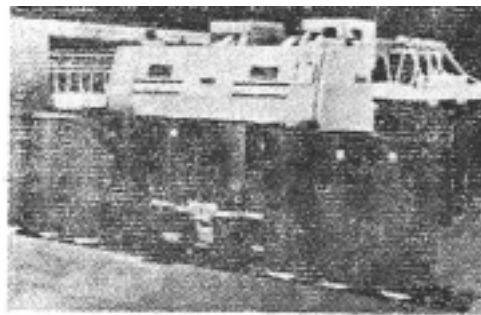
5

3

25~80mm

가 (가)

14% 8 6 가 10% OE



< 34>

3) Rieter

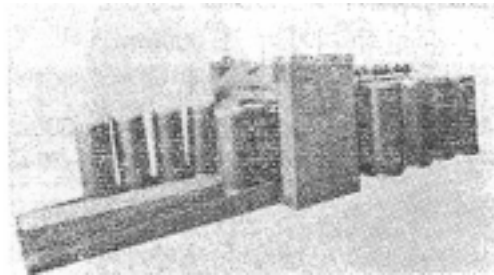
D/50 (35) 가
가
450mm
500mm 1,070mm 1,220mm
OE () 225, 300, 350
400mm 가 900mm 914mm
가 600m/min
500m/min

, (bar)

가

3

9.7



< 35>

3~8

20~42g/m . (ratchet)

75mm .

(caster)가

가 .

가

(給綿口)

4) Marzoli

Morzoli

가 1

S 51 (36)

가 2

S

52 (37)

S 51

가

500m/min

3~9

가

600mm × 1145mm

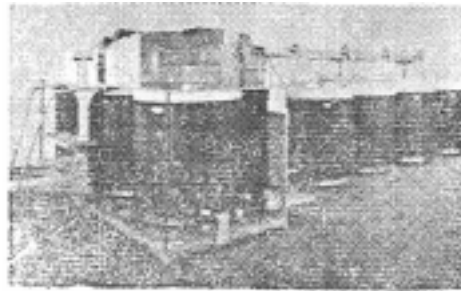
1000mm ×

1145mm

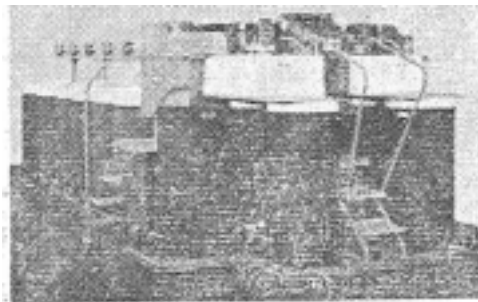
가 2 S 52
S51 .

가 1,000mm × 1,145mm
1,070mm .

가 600mm ×
350m/min .



< 36>



< 37>

5) Krupp Maschiner fabriken

perform 500(38) .

50~1000mm, 1.7~10dtex

500m/min OE
 Nm5(200tex) perform 500 1 2 가
 700mm 8
 75°
 가



< 38>

(sliver monitor)
 60m/min 6 12
 가 가
 가
 가 가 가
 3~4 가 가 3

500mm, 1,200mm

6) Howa

DFK-3(39) 가 500m/min

508mm, 1,143mm

가 (monitoring roller)

(面) 5

4

V

3

116mm

190mm

가

가



< 39 >

7) Vouk

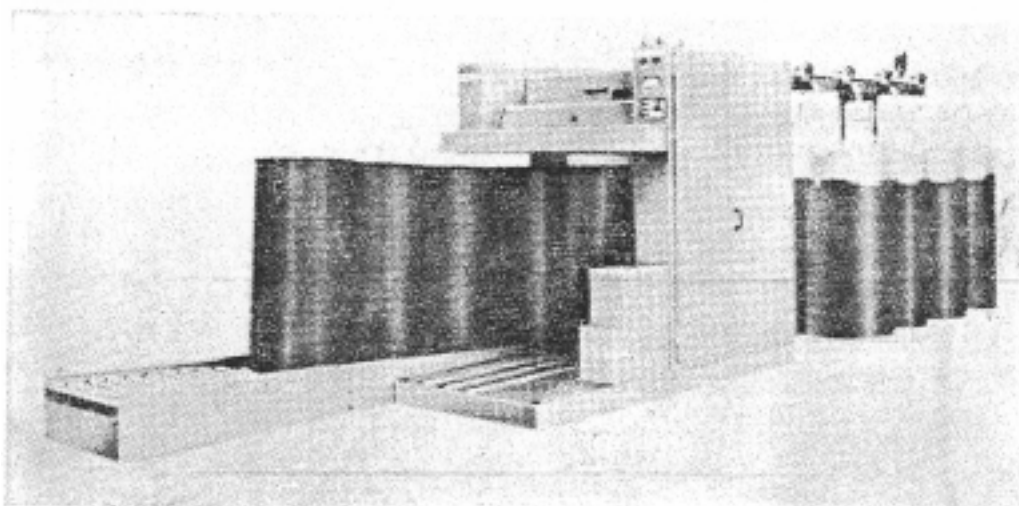
VS3A-ADC (40) 500m/min

3 4 60mm
 3 100mm
 4 10
 (toggle)

가

가

610mm × 1,220mm



< 40>

± 30%

8

가

가

가

가

5

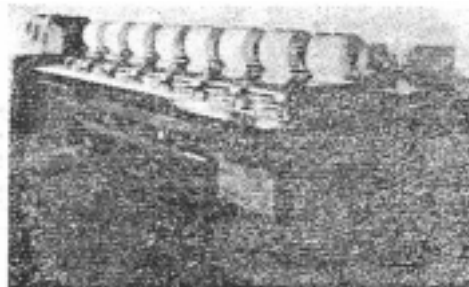
4.

30

140%

가

8



< 41>

1) Marzoli

P2 (41) 8 가

3/4 4 가 가 508mm ×

1.066mm

(nipper) , ,

가 (detaching)

240nips/min 가

4.90 6.54mm 10% 25%

가

가

267mm 305mm

2) Unitechna

1532 (42) 40mm 5.5~3.1ktex ,

265~300m 600mm 8

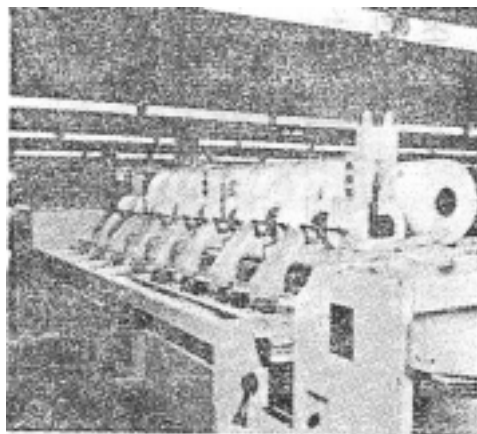
가

245nip/min

8~25% 50kg/h 2/2

6~13.5 14 가

500mm × 1,000mm 2



< 42 >

3) Platt Saco Lowell

CA(43) (side) 6 가

(double side)

205nip/min

+

65kg

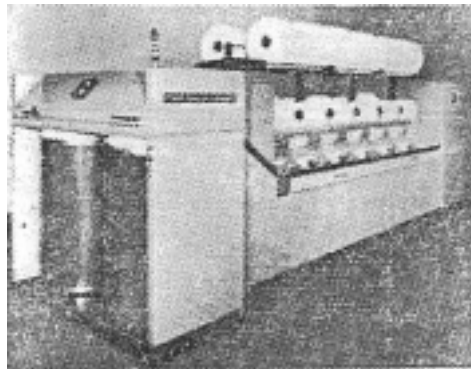
3.5mm

508mm

(nipper frame) 가

3

가



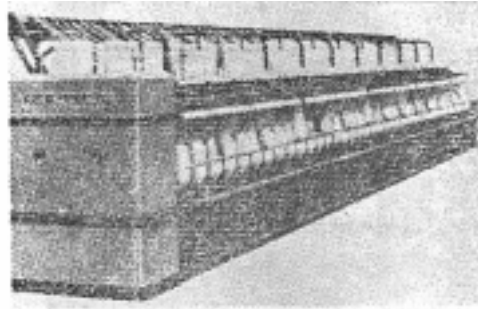
< 43>

5.

1) Platt Saco Lowell

Rovematic(44) 1960

ID 1,3000rpm 가 7/8”~3”



< 44>

2.50~24/12 Platt Saco
Lowell SKF

(flyer) 가
(natural twist) ,

(two-speed regulator)
가

가
. Rovematic 가 .

2) Schubert & Salzer

FB11 (45) 18~100mm
1,500rpm

가

15%

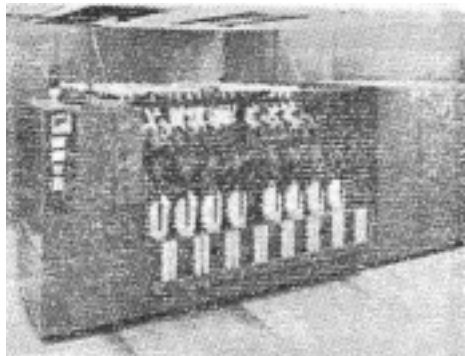
. Servo drive motor

Servo drive motor

가

가

가



< 45>

가

가 (flyer guard)

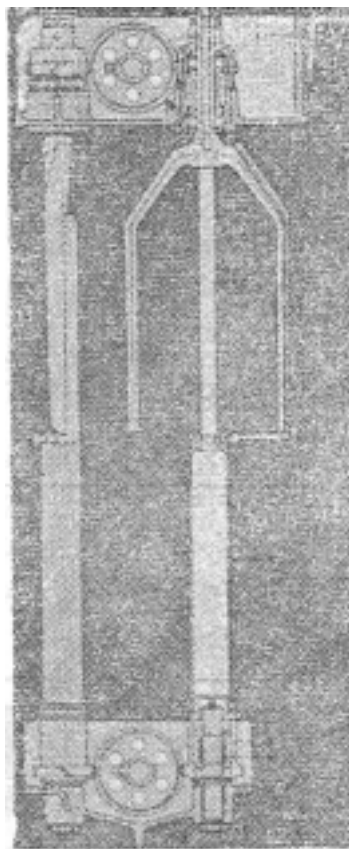
16

260mm

96

600mm

3) Toyoda



< 46 >

1. flyer beam 2. flyer 3. spindle 4.
5. package driving wheel 6. Step bearing 7. bobbin carriage

FL6(46) 1,3000rpm

152mm, 406mm

(collar)

가

가

가

가

가

(thin place)

가

가

SKF

Süssen

가

(induction hardening)

96 80

4) Castella & Cia

BBC(47)

SKF

Süssen

12 × 16"

14 × 7"

700~1,400

600~1,200rpm

가

(guide bush)

가

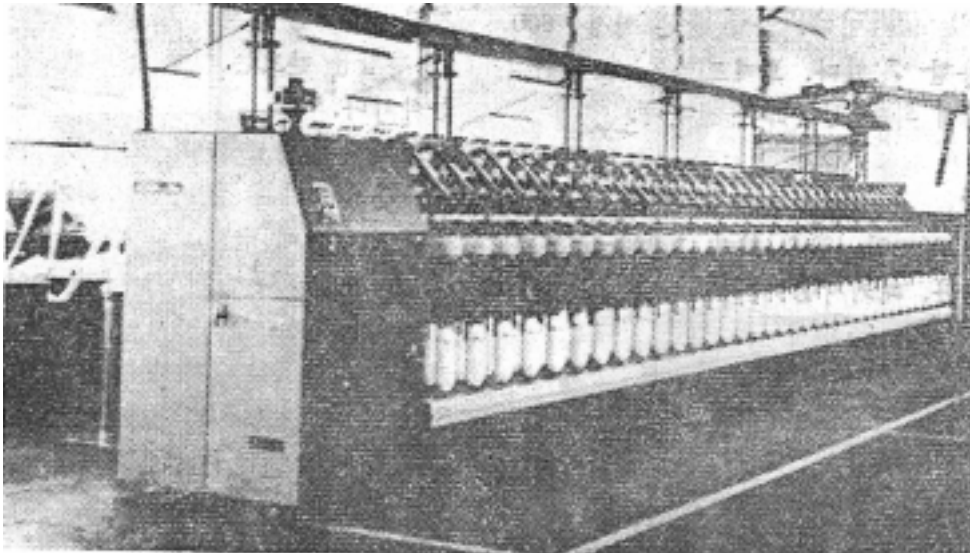
(oil bath)

(helical gear)

가

12

84



< 47>

6.

1976

OE

200

가 가

1 5,000

가 가

.

OE

3~4 가

OE

150 : 6~8

가

.

OE

가

40

OE

가

14~15,000rpm

가

40m/min

가

1 : 4

OE

SF

40%

Nm 4

1) Schubert & Salzer

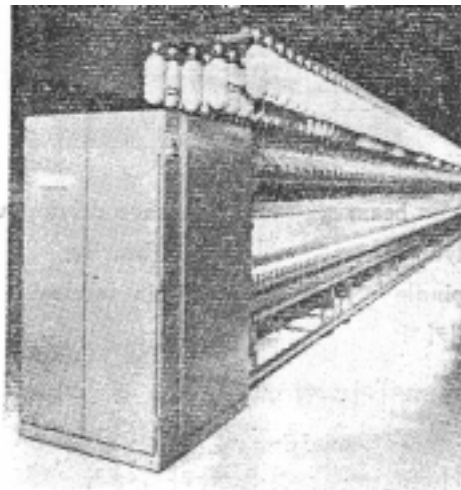
RB 18 (48)

80mm

Nm 45

48

572



< 48 >

(head stock)

1

2

(tip drum)

(jockey pully) 4
가 (lifting
rod)

(tail stock)

2

(fluted roller)

45°

2) Schlafhorst

Fioro (49) 1976

ITMA

가 (clamp joint) 가 ,

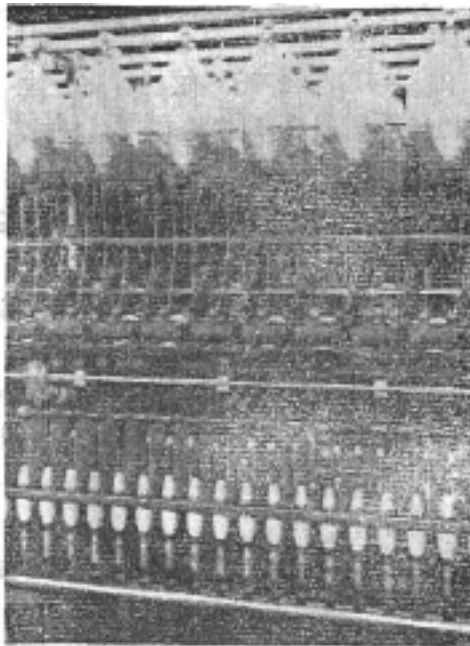
Süssen

(centering spindle)

(tangential belt)

Süssen 620

가



< 49>

, 가 (pull rod)

(draw strap)

(under winding)

가

800mm

75,

82.5, 90 100mm

200~300mm

65mm

7. OE

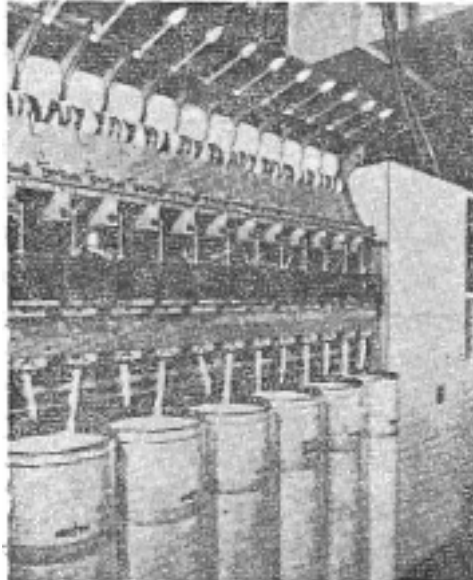
(10~40mm) ,
 (40~60mm) , (65~120mm) .
 40~175mm . 1
 19
 , 17 , 4 .
 10
 . OE 가
 . OE

-
-
- 가
-
-

1) Investa

Investa OE 100 1975
 ITMA OE BDA (50) .
 OE 120mm 12 가
 . 90,000rpm . 가
 Nm 34~85(30~12.5tex) . 45~225m/min
 . , 가

가



< 50>

8.

1) Dr. E. Fehrer GmbH

OE 가

가

DREF (51) 3.3~6.7dtex

120~180m/min

20~60mm

가

20

500

3

20~40g/m

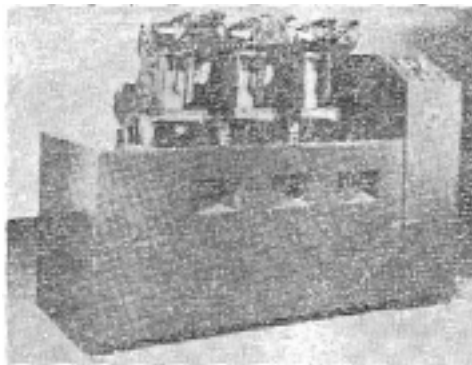
2,400~4,500rpm

4,000rpm

2

5kg

DREF



< 51 >

2) Polmatex

가 PFI (air vortex)

가 가

(spinning chamber)

80~200m/min

가

192

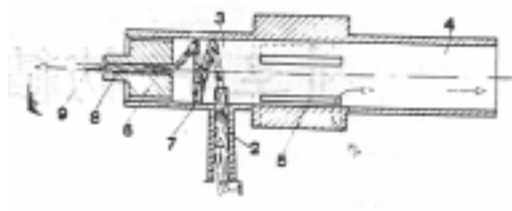
가

Nm 4~60

(2.5den)

(33%)

1.9kg



< 52> Spinning Chamber

- | | |
|--|------------------------|
| 1. fibres in feed duct of spinning chamber | 2. feed duct |
| 3. actual spinning chamber | 4. air line |
| 5. tangential air inlet ports | 6. end closure |
| 7. fibre ring | 8. hole in end closure |
| 9. yarn | |