

(1)-3

(2) Grevener()

1) : 1855 , Grevener Baumwoll Spinnerei AG.

3 ,

2) :

3) : Ring 20,000 , OE 1,200

250

5,000~6,00 DM(36~44)

4) : , , , , 100% ,

, 3.6~30's

5) : 15

6) : : Hergeth(Optomix, Air Fiber, Separater, Masterblend)

Trutzsechler,

hergeth 가

“ 가 ”

: Marzori () 60kg/

Trutzschler ()

7) : ,

8) : ●

● 가 , ,

● Hergeth가 .

(3) Hergeth Hollingsworth()

1982

Hollingsworth Platt Saco Lowell()

83

Hergeth , Hergeth

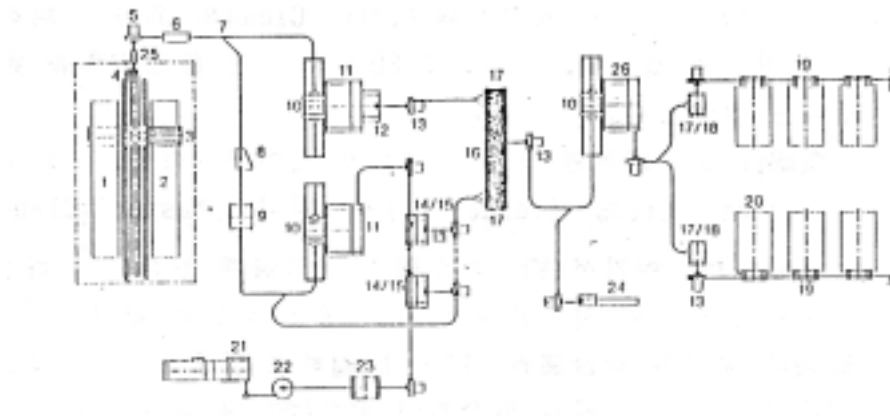
Hollingsworth가

.

, ()

.

< >



(1) (2)

.

(2) , Optmix(3)

, Roller Cleaner(9) , Laydown Cross Blender(11) .

(2)

Optmix(3) Laydown Cross Blender LCB(11)

Air Fiber Saparator AFS-T(10) Optmix(3)

, No.1

No.100(가 , Grevener 40) 가 Laydown Cross

Blender(11) .

(2)

Optmix(3) laydown Cross Blender LCB(11)

Air Fiber Saparator AFS-T(10)

Optmix(3)

, No.1 No. 100(

가 , Grevener 40) 가 Laydown Cross Blender(11) No.1

No. 100 , 100

, 가 ,

.

Air Fiber Separater AFS-T (10)

가

6 , 가

.

(11) Waste Blending Feeder(21)

Master

Clean(15) , Masterblend(16)

, Masterblend(16) . Master

clean(15) 2 ,

5 Master Clean 3

가 , 80%

.

, (1) Optmix(3) , (7)

laydown Cross Blender(11) Master Blend(16) , ,

.

.

1) (11)가 , 가

(20) .

- 2) $\pm 1\%$.
- 3) , Layer가 .
- 4) 가 .
- 5) 1/4, .

(4) Scholler()

- 1) : 1889 , 1944 ,
 ,
 Scholler Textile GmbH .
- 2) :
- 3) : Ring 37,200 , OE 7,752 (25 , 500 (40%가)
- 4) : 1 2,000 DM(90)
 가 Cash flow 10~13%,
 .
- 5) : , , (30's 48's), (90%가
 OE)
 Ring → 31's(48's)
 OE → 10, 16, 20's가
- 6) : 21 /
- 7) : 100
 , .
 .
 Trutzschler Card 60 (40in)
 (7) (10)

Ring , 4 가

~ (.

.

: Hergeth(Ring) Trutzschler(OE),

: Trutzschler, 40in

: Rieter, 200nip/

: Rieter, , 2 ,

: Zinser 96

: [Ring] Zinser 1,080 × 25

Schlafhorst

[OE] Ingolstadt Schlafhorst Autocoro

8) : . 60 (40kg/) 6

1

9) : ,

, ,

10) :

Q : 가 ?

A : 10%, 가 OE : 4.7 , Ring : 4.5~7.5(

), : 10 , 2.5 가

.

A : 가 37,000 1 6 .

1 12

A : 8~10 가

A : 5~30's OE , 20~30's OE .
20's .
, 30's, 34's가 , , ,
가 , 가 (W&W 가)
.

3) : Ring 39,000 , : 16
3,400 SF(30)

24,000 (2)

4) : 30~94's(49's)

5) : 3,200 /

6) : 44's 10%

70%

20%

50's ,

7) :

: Rieter,

: Rieter 20kg/

: ,

: Rieter 230nip/min,

40's 15% , 50's 20%

: Zinser 672 × 36 = 24,192

, Schlafhorst

Rieter

Murata

: Volkman

8) : 3 , 10

1 159 , 1 43

(89 42), 3

(가 24 가 ,

가)

9) : 100% , , .
elfc

10) :
Q : ?
A : 100% . , 가
25.5SF/ = 2,200 /
(96 /SF), ,
10% .

Q : ?
A : 0.11 SF/kWh=9.5 /kWh.
60%가 , 10%가 , 30%가 가
5~6%
가 가 .

Q : 가? ...
A : . 1 1/8in 30%
.

11) : , 83
가 , 가 ,
 ,

가

.

(6) Buhler()

1) : , 5 , 3 ED.

Buhler Spinnereien

2) :

3) : Ring : 24,192 , : 110

4) : , 1/3 60's, 44's 100% ,
50's 60's가

5) :

: Junir Hergeth 3 ,

: Rieter 27kg/ , 40in

: ,

: Rieter 270nip/min

: Rieter Ingolstadt, 2

Ingolstadt 1

.

400m/min , ,

: CV 2.7%, 69.3%, CV가 ± 3%

.

: Zinser 7 × 14in, 1,150rpm

0.12's → 1.3's

: Rieter 672 × 36 = 24,192

: 60 Machconer 3

6) : 5 3 .

. 134 / , 151 /

7) :

, 240kg ,

1 (1 30kg), 50

.

8) :

Q: 가 ?

A: .

() .

: 50 (30), : 5 (5), : 16 (10)

Q: 1 가 . 2 가 .

A : 가 2 가 .

44's 1 3/16in .

8 , 1 1

, 1 .

Q : 40's 가 12~13 , 13

8.35SF/kg

A : 44's → 10.30SF/kg, 50's → 11.10SF/kg, 60's → 12.60kg,

(1,100 T/M) (800T/M) 0.5~0.8SF .

, .

1 TPI(가) = 0.12SF(.)

Q : 가 ,

가?

A : . 5

48's 60's 110 140

.

Q : 가?

A : . 50% , 40~60's

가 , Streiff

Herman Bulher 가 OE

가

.

가

가 .

Q : ?

A : 90%가 . , , , , , ,

10% .

(7) kunz Windisch ()

1) : 1828 Heinrich Kunz

.

Spinnerei Kunz AG. , , , ,

.

Oerlikon-Buhle , Rieter

, Murata Machconer

Rieter .

2) : , .

3) : Ring 50,000 , 18

200 (30)

4) : → 40~80's, P/C → 8~50's

5) : 5,500 /

6) : 40's → 1 1/8in , ,

60's → 1 3/16in , (),

80's → 1 7/16in

7) :

: Rieter, 56 1 , 3

: Rieter, 35kg/

: Rieter, 270nip/min, 60~80's : 20%

40's : 14~17%

: Rieter Ingolstadt(Rieter)

Ingolstadt Autoleveller

CV 2.8% 2.5%

.

: Rieter, 1,150rpm, CM 40's 1.0's

: Rieter, Ring 576 × 34

: 36's , Ring 45mm 18,000rpm,

1,020 T/M, – 1,000 20 / ,

24mm/min(2~3), 24's

690 T/M

: Machconer, 54's → 1,090m/m/in,

20's → 610m/min

: Volkman Murata Double Twister

가 : , 1,

350kW , 40%

.[(2 , 170) 100% 가

].

8) : (

2,000)

. 34 Ring

15 , 60% .

9) :

Q : 36's, 45mm Ring 18,000rpm ?

A : 1 20 , 2~3

·

Q : P/C 3 ..

A : 3 , 4

· , 2 , 가

1 .

가 2 가 ,

가 . 1

, .

10) : 가

, 가 .

,

1 가 .

“4 .

가 ” .

(8) Gemona Gorizia ()

1) : 1900 , Manifattura di Gemona S.p.A.

1985 , Gemona 3

2) :

,

,

10~15%, 가 가

.

3) : Ring 28,000 (10,000)

[]

Ring : 100,000 , OE : 5,000 ,

, 17,000

Ring : , 20~100's, 36~37's

OE : , 8~30's, 17's

4) : , 32's

5) : 12 /

6) :

A: (3)

: 2 Rieter Uniflock,

72 × 2

: Rieter C4 , 40kg/ 6 × 2

: , 3 , ()

: Rieter E7 300nip/min

: Rieter D 1/2, 1 ,

. 24in , 2 , 6 ,

0.12's, 400m/min

: Rieter F 1/1, 7 × 14in 5 , 1,100~1,200rpm,

1.30's~0.9's

: Zinser 319SL, 1,090 × 9 =9,800 9 ()

: 38's 14,700rpm, 1.3's

30's 14,300rpm, 0.9's

24's 12,900rpm 0.9's

: Murata Linkconer, 22 × 9

B : (88 가)

: Rieter

: Rieter 8 (: Aerofeed U), 40kg/

: Rieter (25kg)

: Rieter 6 ,

: Marzoli 400m/min 6

: HOWA RT-3 2 , 1,200rpm 6 ,

24in × 5 , 0.12's-

1.3's

: Zinser #320, dhxhehvj , Ring 1,080 × 9

: 3.8's 17,000rpm, 42mm,

38's-2 , 40's-4 , 50's-3

: Murata 22 × 9 ,

,

: Carrier 1 , 1 가

.

9,720 4 , 1

: , P

,

130m × 40m 1 가 .

.

7) : 7 , 350 , 8,400 , 7 + 2 , 9 4
36

8) :

9) :

Q : , 7.7 / ,

261 1 2,000 / , ?

A : 5 , 36 / , 1,450~1,500

가 .

8%. ,

. 1

.

Q: ?

A : 가

2,200 / (2,200 /).

.

(가가 가 Slide

), , 3

() .

Q: ?

A : 가 가

. .

3 1 가 ,
(가) (1 1
가). ,
가 .
.

Q : .
Down-stream 가 .
Down-stream
?

A : EC ,
EC
 ,
 , 가
.

Down-stream
가 .
1 가 ,
 , 가
 , , , 가
가 .