

- (1) -

가

TI가

(the art in short-staple spinning)

가

1.

(raw material)

50%

가 가

, 가 ,

가

가 가

(spinnalility)

가

(processability)

가가

가 .

가

2. (fineness)

가.

가 3가 .

가 가 .

가 가 (additional fibre) 가

30

가 100 가 .

100 .

가 .

○ (spinning limit)

○

○

○ (fullness)

○

○

○

○

, in (),

(core)

가

(hair)

(steel wire)

가

가

()

$$\text{tex} = \frac{\text{(g)}}{\text{(km)}}$$

$$\text{dtex} = \frac{\text{(dg)}}{\text{(km)}}$$

dtex

值(micronaire value)

值	
3.1	very fine
3.1~3.9	fine
4.0~4.9	medium
5.0~5.9	slightly coarse
6	coarse

dtex =

值 × 0.394

()

가

(air throughflow method)

(unripe fibre)

가

tex

가

Schenck 500

值가 2.4 3.9

(cell wall)

(lumen)

(maturity index)

Schenck

50~80%가

30~45%

, 25%

(dead cotton)

(boll)

50%

가

가

가

○

○

○

가

○

○

3.

가.

가 3가 .

○

○

○

○ (handle)

○ (hairness)

○

, , (),

4~5mm

(waste)

(fly)

12~15mm

가

가

가

가

(staple diagram)

가

(ginning)

(cleaning)

가

(tuft)

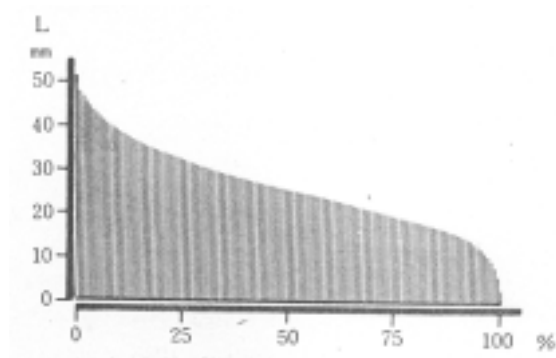
(2mm)

(30~60mm)

< 1>

(numerical

diagram)



< 1>

,

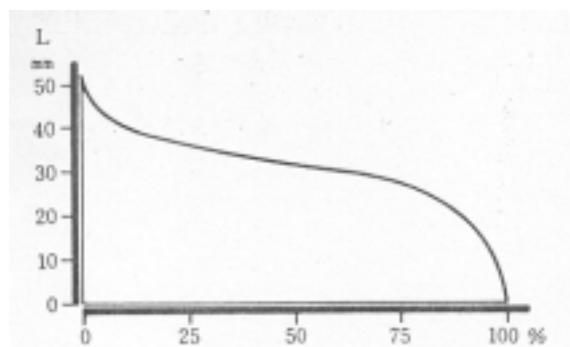
< 2>

(weight-biased diagram)

가

가

가



< 2>

(running behaviour)

가

(staple length)

가

$$\overline{l_w} = \overline{l_N} + S^2 / \overline{l_N}$$

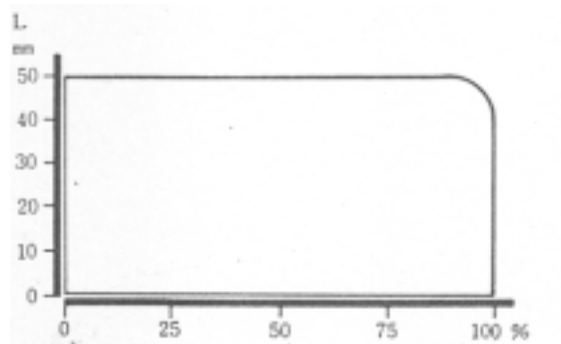
$$\overline{l_w}$$

$$\overline{l_N}$$

. S

(rectangular staple)

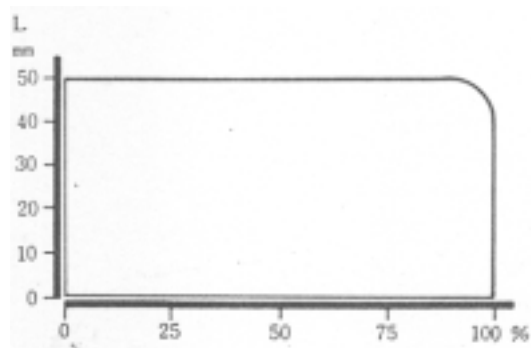
가



,

(triangular staple)

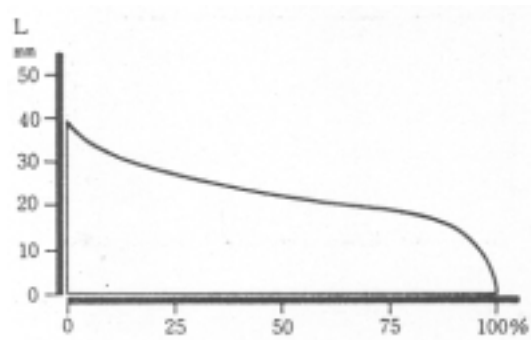
가 가



< 4>

3) (trapezoid staple)

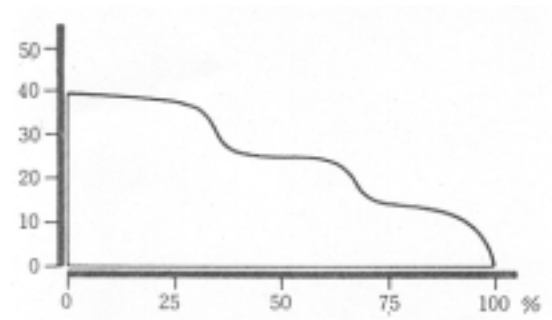
가



< 5>

4) (stepped staple)

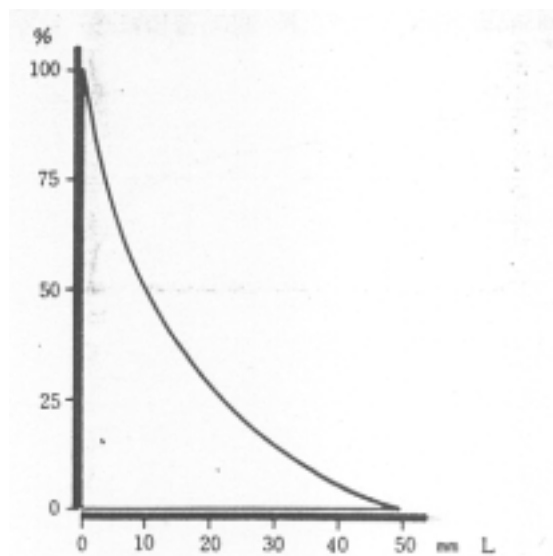
가



< 6>

5) (fibrogram)

가



< 7>

(nip)

(span length)

- ()
- ()
- ()

(classifying) [(trade)]

(hand) [(spinner's)]

1% - [(setting)]

2.5% - []

50% -

가

$$\frac{1}{32} \text{ "}$$

25%

15%

가

. 1%

2.5%

가

- (short staple) : 1 "
- (medium staple) : $1\frac{1}{32} \sim 1\frac{1}{8}$ "
- (long staple) : $1\frac{5}{32} \sim 1\frac{3}{8}$ "
- (extra long staple) : $1\frac{13}{32}$ "

가 가

- (50% -)
-
-

“가”

가

().

(, ,

가 .

가

Schenck E. Lord

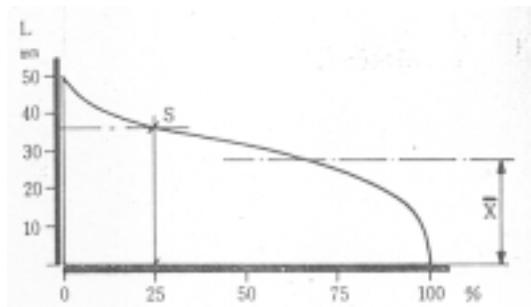
10, 11, 12 12.5mm(1/2 ")

12 12.5mm

가

가

, Lord 가



< 8 >

4.

가

6cN/tex(6km)

30~70%

가

3cN/tex ,

가

가 .

: 35~60cN/tex

: 15~40cN/tex

: 12~18cN/tex

(pressley strength)

93 : (excellent)

87 ~ 92 : (very strong)

81 ~ 86 : (strong)

75 ~ 80 : (medium)

70 ~ 74 : (fair)

70 : (weak)

가 (physical unit)

가 가 ,