

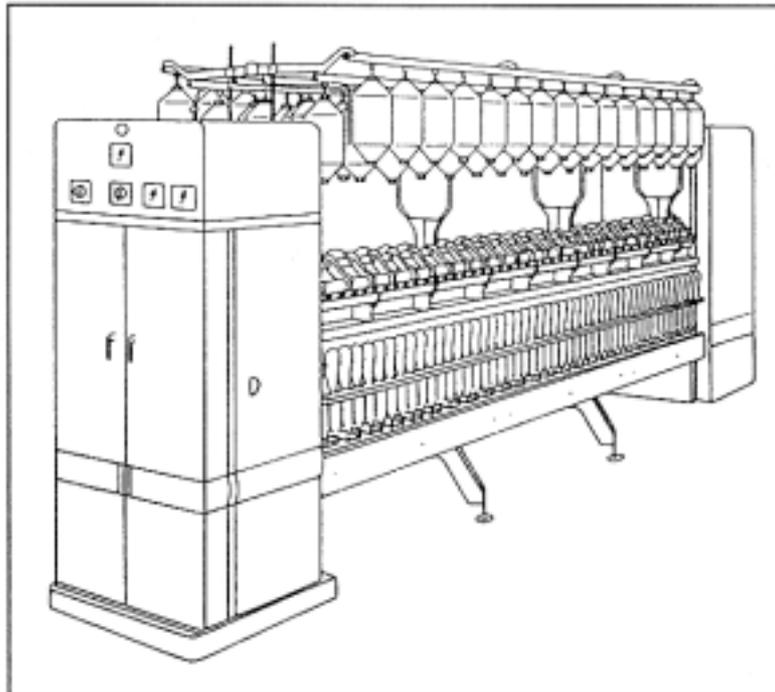
(I)

1.

1.1

1828 Jenk가 Thorp 가 1930

150



< 1 >

가

○

○

○

○

○

가

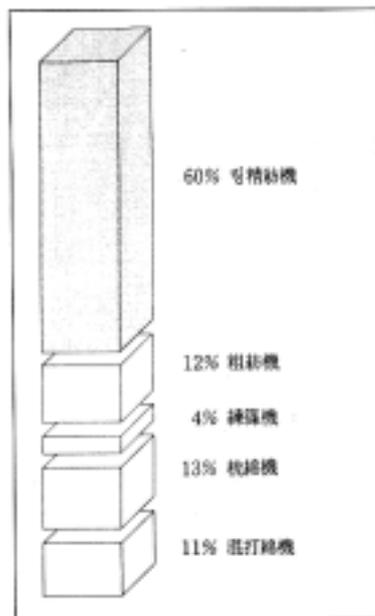
가

가

()

가

가



< 2 >

가

, Rieter

<

2>

○ () .

○

○ : 가

가 48mm 42mm

, 0.1 .

(

),

(knot-free length)

○ 가(1,000) :

가

○ :

○ : 50%

○

○

가

○

(Vol. 1).

2.

2.1

○

가

○

(strand)

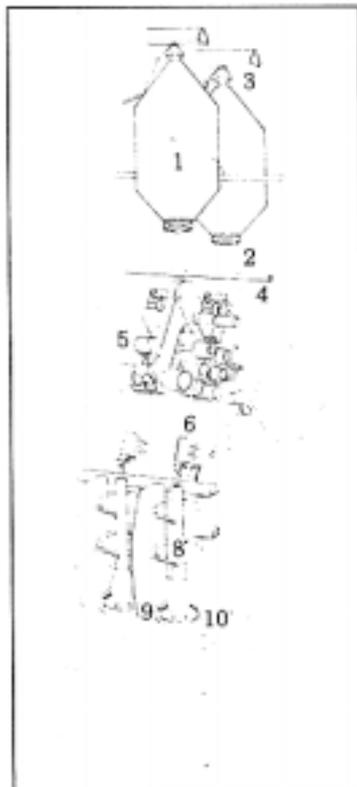
○

,

가

2.2

(3)



< 3 >

(1) (3) (2) 가

(4) (5) , 45~60°

가

(6)

1 1

(8) (9)가

가 (, 10)

가 (7)

(9)

(traverse stroke) ()

가

(가)

3.

3.1

(4 B)

(E)

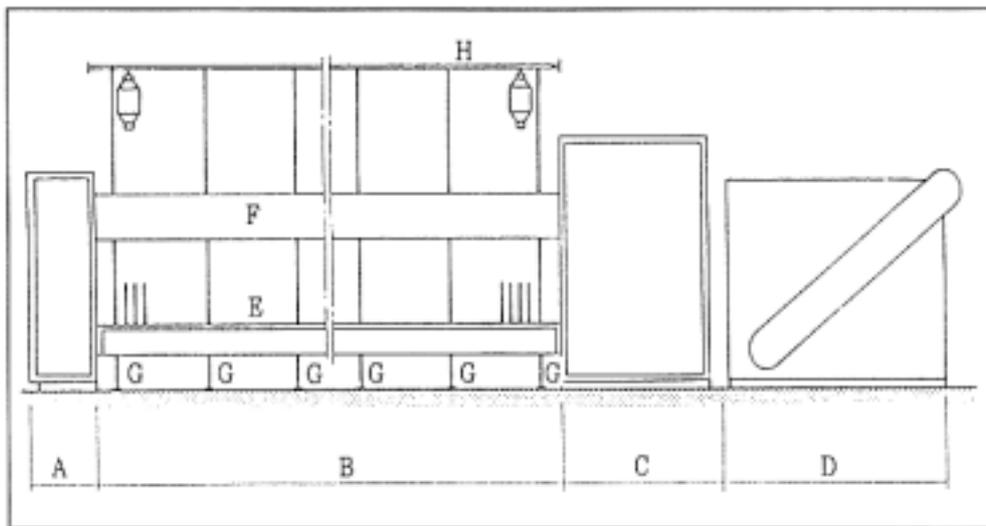
(F)

(G)

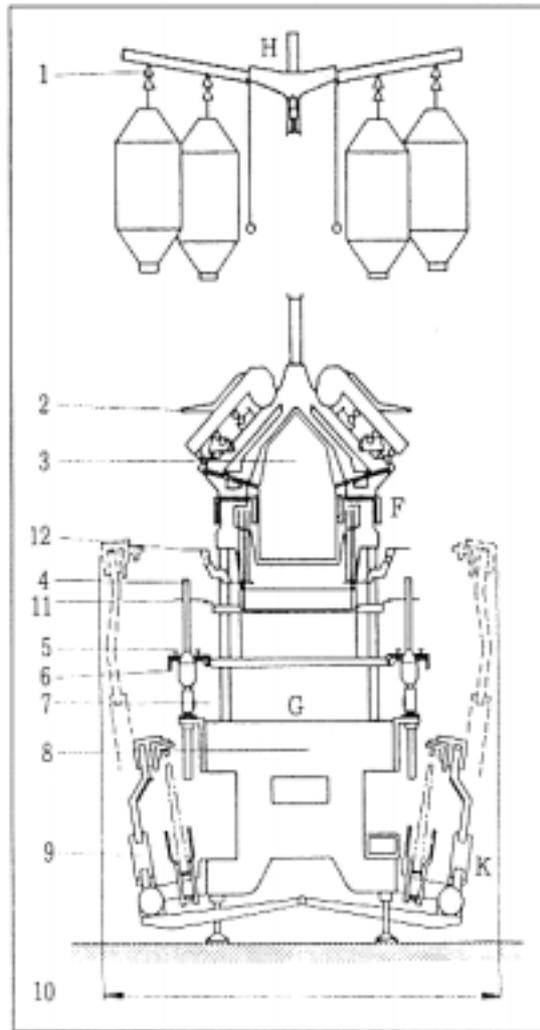
(H)

(5 4)

(2)



< 4 >



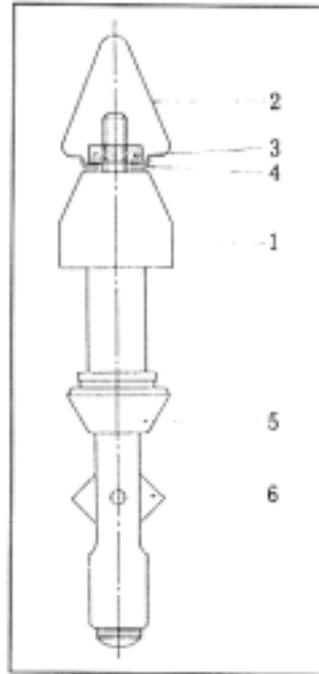
< 5 >

(B) (A C)

(D)

1,400mm) 800~1,000mm(50m
70~90mm

3.2 < 6>



< 6>

가 가

, 假 가

(skewer)

가

(2) ()

가

(6)

(5)

가

가 ,

(6) ,

가 , (6)

가 가