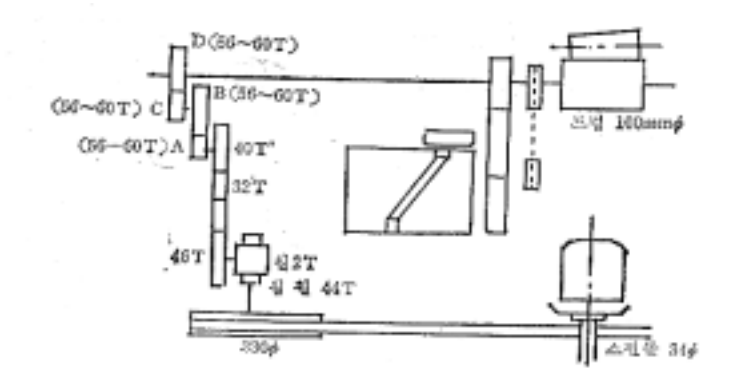

5.2



5-7

2)

$$\begin{aligned} (\text{TPM}) &= \frac{(\text{rpm}) \times 2}{(\text{m/min})} \\ &= \frac{D \times B \times 40 \times 44 \times 330 \times 2}{C \times A \times 46 \times 2 \times 34 \times 1 \times \pi} = 1,182.7 \times \frac{D \times B}{C \times A} \end{aligned}$$

$$(\text{kg}) = \frac{(\text{m/min}) \times 60 \times 24}{1,000 \times}$$

,

80~85%

3) 1 (5-8)

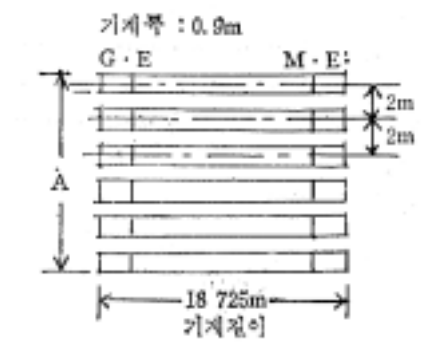
1kg t

$$t = \frac{Nm / 2 \times 1,000}{V}$$

Nm :

Nm/2 :

V : (m/min)



5-8

a)

x 1 가 15 A ,
 , 가
A , 가
60m/min

,
A :

$$\frac{\{2(x-1) + 0.9\}2(m)}{60(m/min)} () \dots \dots (1)$$

:

$$x \text{ (1 120 , 1 1kg) 1kg}$$

$$(\text{ 0.2 /kg })$$

$$x \times 120sp \times 0.2$$

$$x \text{ , 15}$$

$$x \times 120sp \times 0.2 \times \frac{15}{t} = 360 \frac{x}{t}$$

$$15$$

$$\frac{360x/t \times 18,725}{60} = 112.35 \frac{x}{t} (\text{ }) \cdot \cdot \cdot (2)$$

$$, :$$

$$15 ,$$

$$\frac{120x \times \frac{x}{t} \times 18,725}{60} = 561.75 \frac{x}{t} (\text{ }) \cdot \cdot \cdot (3)$$

b)

$$1 \cdot \cdot \cdot \cdot 20$$

$$1 \cdot \cdot \cdot \cdot 25$$

$$1 \cdot \cdot \cdot \cdot 25$$

$$,$$

$$x$$

$$= \frac{20 \times 120sp}{60} \times x = 40x (\text{ })$$

$$= \frac{25 \times 120sp}{60} \times x = 50x (\text{ })$$

$$= \frac{25 \times 120sp}{60} \times x \times 0.2 = 10x (\text{ })$$

$$, 15$$

$$40x \times \frac{15}{t} = 600 \times \frac{x}{t} (\text{ }) \cdot \cdot \cdot \cdot (4)$$

$$50x \times \frac{15}{t} = 750 \times \frac{x}{t} () \cdot \cdot \cdot (5)$$

$$50x \times \frac{15}{t} = 750 \times \frac{x}{t} () \cdot \cdot \cdot (6)$$

, 20% 가 15

$$(1)+(2)+(3)+(4)+(5)+(6)+(15 \times 0.2)=15$$

$$\frac{\{2(x-1)+0.9\}2}{2} + 112.35 \frac{x}{t} + 561.75 \frac{x}{t} + 600 \frac{x}{t} + 750 \frac{x}{t} + 750 \frac{x}{t} + 3 = 15$$

$$133,446x + 4xt = 722.2t \cdot \cdot \cdot (7)$$

() Nm60 8,000rpm

TPM680 , 1 가

$$V = \frac{2 \times 8,000}{680} = 23.5 \text{ m/min}$$

1kg

$$t = \frac{60 / 2 \times 1,000}{23.5} = 1,276.6$$

(7) 1 x

$$130,446x + 4x \times 1,276.6 = 722.2 \times 1,276.6$$

$$130,446x + 5,106.4x = 921,960.5x$$

$$x = 6.8$$

(2)

(撚斑),

가 가

. 가 .

가 , . ,

5-16

(燃斑) ()

				2				
		(tpm)	(rpm)	σ (tpm)	CV (%)	σ (tpm)	CV (%)	
/	2/60	600	8,000	-	4~5	-	3~4	
	2/60	680	7,000	5.0	2.2	4.8	2.2	
				9.1	4.3	6.5	3.1	
	2/64	650	8,500		6.3			
	2/40		5,000	3.14	2.98	-	-	
	2/44		5,000	5.08	4.10	-	-	
			6,000	6.22	4.85	-	-	
	2/48		5,000	5.52	3.97	-	-	
			6,000	6.36	4.88	-	-	
	2/28	415	8,000	2.8	2.2	2.6	1.9	
				3.8	2.9	8.2	6.3	
	2/62	700	8,000	5.6	2.5	4.0	1.9	
				6.5	3.1	4.8	2.2	
	2/60	tpi 31.0	8,000		3.7		2.1	
	2/34	tpi 17.0	11,000		3.6		-	
	2/40	210	7,000	-	3.54	-	-	
	10%			-				
/		tpi 18.3	8,500		6.5	-	5.6	
	40/2							
				-	7.0	-	-	
	30/2	tpi15.84	11,000		3.91		-	
	60/3	tpi 23.5	12,000		3.0		3.8	

5-17

()

			DT CV%	RT CV%	
/	2/40	840	5.18	5.23	1=25cm, n=50
	2/60	680	4.58	3.96	
	2/52	590	4.37		1=50cm, n=30
	2/52	590	15.11		1=10cm, n=30
	2/34	690	4.26		1=50cm
	2/40	840	3.05	3.11	1=50cm, n=30
	2/56	860	3.55		
	2/80	530	4.54	6.16	1=20cm, n=50
	2/32	195	4.90	4.77	
	2/32	270	5.18	5.20	1=25cm
	65/2	860	4.85		spindle 9,000rpm
	65/2	860	5.38		11,000rpm
	65/2	860	4.57		11,000rpm
	50/3	900	3.00	2.10	

() 1= (cm) n=

DT = Double Twister, RT=Ring Twister

1) (撚斑)

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2)

(絲種)

(S-S curve)

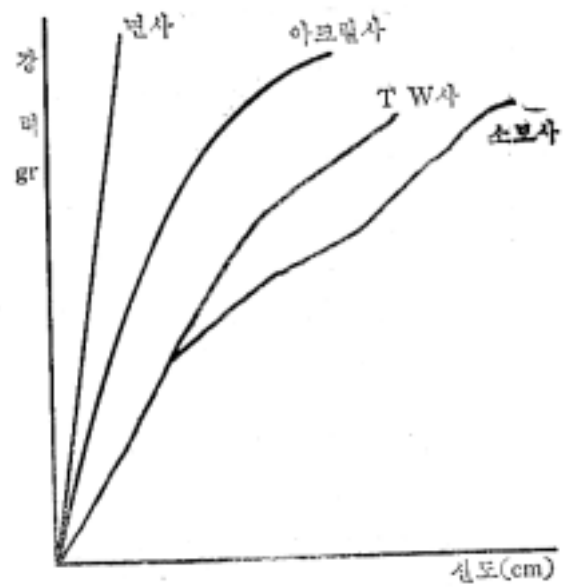
5-9

가

가

가

가 ()



5-9

5-18 ()

			(g)	(%)	
1	2/36	250	812	12.5	810g
	2/48	580	276	26.2	281g
	2/49	280	210	12.8	()
	2/56	830	622	26.0	
	P/W 2/30	550	1,115	28.2	1,145g
	2/52	660	717	29.2	DT, 707g
	2/60	900	560	31.6	569g
2	12/2	400	1,597	8.5	
	50/3	900	910	7.7	
	P/R 20/2	516	1,060		1,075g
	30/2	672	708		730g
	40/2	724	514	18.7	502~540g
	24/2	520	1,309	14.7	
	24/2	680	814	16.5	

5-19 ()

운 전 조 건				강 력				신 도				비 고
				2중연사기		팅연사기		2중연사기		팅연사기		
사(糸)종류	번수	연수 (tpm)	스핀월회전수 (rpm)	X (g)	CV (%)	X (g)	CV (%)	X (g)	CV (%)	X (g)	CV (%)	
소모사	2/60	600	8,000	239.4	—	240.4	—	29.62	—	26.38	—	오일팅합
"	2/60	680	7,000	230	3.9	250	4.0	20	7.5	17	11.2	
"	2/28	415	8,000	543	2.5	539	2.8	22	6.1	22	4.1	
"	2/64	650	8,400	219	6.3	—	—	11.5	13.3	—	—	
P/W사	2/62	700	8,000	600	4.7	640	3.6	26	2.7	29	3.5	오일팅합
아크릴사	2/40	216	7,000	631	—	638	—	16.8	—	16.5	—	
"	2/60	310	8,000	609	8.4	511	8.1	10.6	8.2	9.9	6.3	
P/R사	면연수 65/35 40/2	tpi 18.3	8,500	480	—	502~ 542	—	19.1	—	19.4~ 20.2	—	
P/R사	30/2	tpi 15.84	11,000	493	—	—	—	19.6	—	—	—	면분부레 카 없음.
면 사	60/3	tpi 23.5	12,000	712	—	727	—	19.1	—	21.9	—	
P/C사	34/2	tpi 17.6	11,000	710	6.2	729	6.7	6.8	—	6.0	—	
				804	9.4	—	—	16.4	—	—	—	

(3)

1) (燃斑)

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(强燃)

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2)

(smoke yarn)

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3) (燃込)

가 가 . 가

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가

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4)

가 , 가

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