

()

(swift)

가

가

S. Law & Son

“ Just Fancy ”

“ (fancy) ”

“

XX

(Mr. X's fancy)

가 .”

가

가

65 °

7

가

가

가

(1)

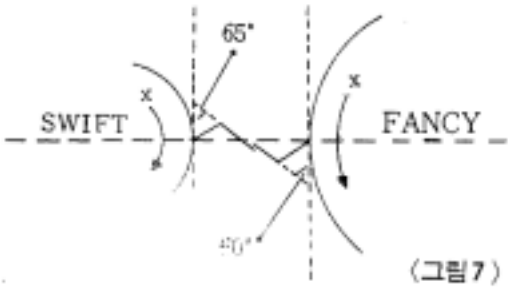
(2)

(3)

.(WIRA Carding Vol. 4, p. 34).

가

가



가

가

가

8a

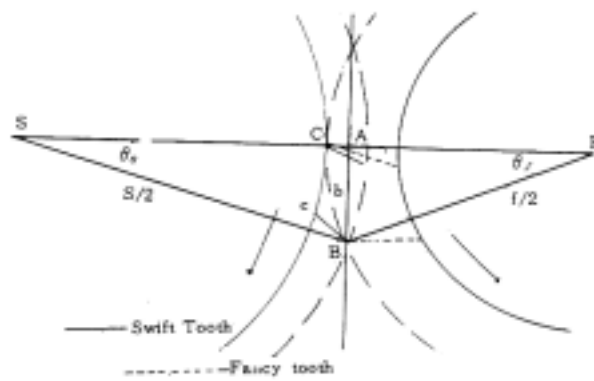
8b

가

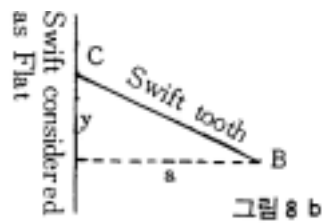
B

가

가



< 8a>



< 8b>

AB

AB=CB

,

: X%,

: α

: a

AB=b

,

b

$y = a \cdot \cot \alpha$

$$X = \frac{a \cdot \cot \alpha}{b} \times 100 \dots \dots ?$$

.

가

S F,

s f

a, a, b, f, S

$$b = \sqrt{\frac{a(f \cdot s)}{f + s}} \dots\dots\dots$$

. (WIRA 'Woollen Carding 1958' p. 122

.) b ,

$$X\% = 100 \sqrt{\frac{a(f + s)}{f \cdot s}} \cdot \text{Cot} \alpha \dots\dots\dots$$

, 가

$$a = b^2 \cdot \frac{s + f}{sf} \dots\dots\dots$$

36in 50in, 4in 14in

a b 0.4in 0.8in 가

. 0.04in 0.08 b

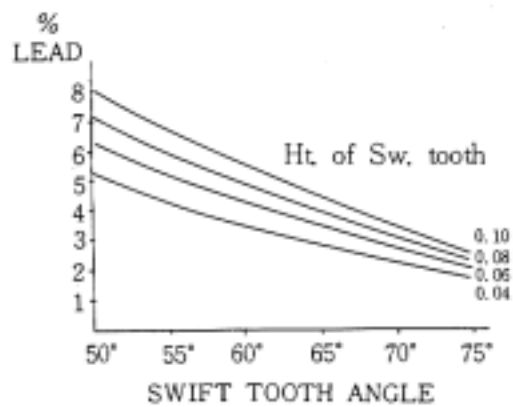
0.4~0.8in . 9 10 가 0.04 0.1in

50 ° 75 °

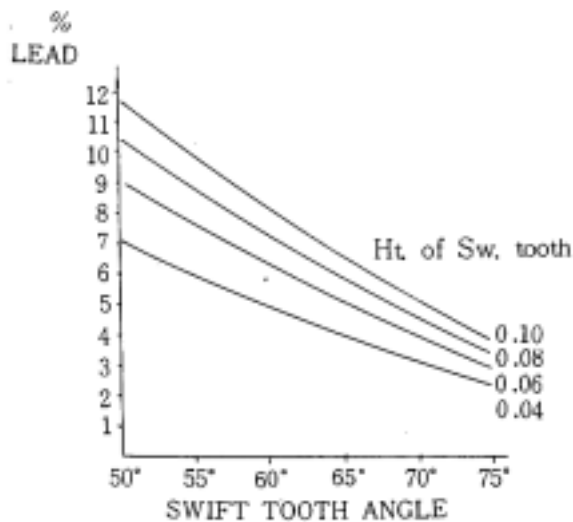
.

< > 가 (1/1000 in)

b *		0.4	0.5	0.6	0.7	0.8	0.9
36 in Swift	14 in Fancy	16	25	36	49	64	81
	12 in "	17.8	27.8	40	55	71	90
	10 in "	20.4	32	46	62.5	82	105
	8 in "	24.4	38.1	55	75	98	124
	6 in "	31	48.5	70	95	124	157
	4 in "	44.3	69.5	100	136	178	225
50 in Swift	14 in Fancy	14.6	22.8	32.8	44.7	58.5	74
	12 in "	15.3	25.8	37.2	50.5	66	84
	10 in "	19.2	30	43.2	58.8	77	97
	8 in "	23	36.2	52	71	93	117
	6 in "	29.8	46.6	67	91.5	119	151
	4 in "	43	67.5	97	132	172	218



< 9> 50 " 14 "



< 10> 36 " 6 "

(11)

,

•

가

•

.(9 10)

가

$$\text{FS}(\quad)(\quad) \quad (11)$$

•

.

가

가

(fly stripper)가

3

가
(Knee) 65 ° 가

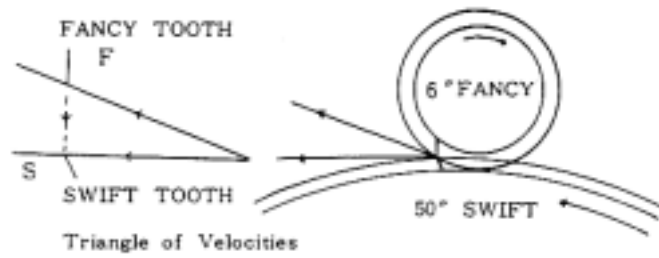
60/65 °

가

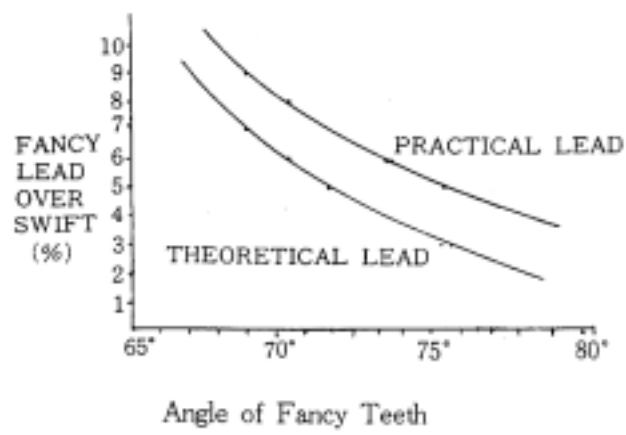
가

가

(fettling)



< 11>



< 12>

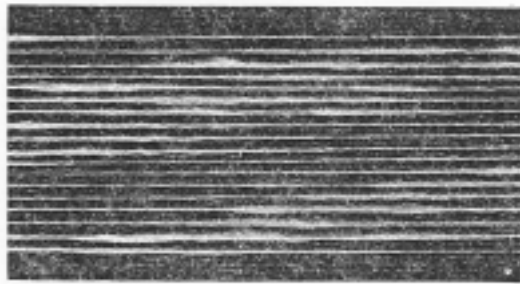
(slub yarn)

13 , (14)가 .

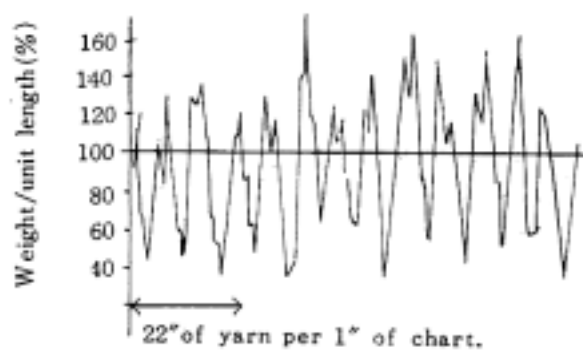
.(1)

가

. (pinion) (crown wheel)
 ,
 .
 (arm)
 (crank) .
 . 4% $\pm 4\%$ 74 °
 (lifting) 0%
 8% .



< 13>



< 14> 13

가 .

가

.

a.

b.

c.

(pulley) 가

, 25

(change wheel)

가

4%

.

100%

V

(V-Pulley drive)가

.

가

(strip)

가

가

.

가

.

15

(punch)

.

(inch)

(thread)

가

가

.

,

14

7/16in

(whitworth)

가

0.072 "

. ,

0.012 "

.

가

가

가

.

.
; 가

.
.
(Zero Setting)

가 . (pop) 가

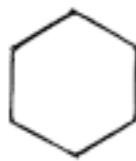
. 1

0.072in

5

0.006in .

0.06in 0.08in



< 15> Head of 7/16 " fancy setting screw with " pop " mark at 10 min. past

가 100 ()
) . 가 가

(尺)

100

().

가 가

/

(gearing)

< > (%)

Fancy Diam.	12N	12N	12	12N	12N	12N	12N	12N	13N	13N	14	14N	14N	%
400	397	392	388	385	381	378	374	371	368	364	361	358	0	
404	401	395	392	388	385	381	378	374	372	368	364	362	1	
408	405	399	396	392	389	385	382	378	375	372	368	365	2	
412	409	403	400	396	392	389	385	382	379	375	372	369	3	
416	413	407	404	400	396	393	389	386	382	379	375	372	4	
420	417	411	408	404	400	396	393	389	386	382	379	376	5	
424	421	415	412	407	404	400	396	393	389	386	382	379	6	
428	425	419	416	411	408	404	400	396	393	390	386	383	7	
432	429	423	420	415	412	408	404	400	397	393	390	386	8	
436	433	427	424	419	415	411	408	404	400	396	393	390	9	
440	437	431	428	423	419	415	411	408	404	400	397	394	10	
444	439	433	430	425	421	417	413	409	405	401	397	393	11	
448	443	437	434	429	425	421	417	413	409	405	401	397	12	
452	447	441	438	433	429	425	421	417	413	409	405	401	13	
456	451	445	442	437	433	429	425	421	417	413	409	405	14	
460	455	449	446	441	437	433	429	425	421	417	413	409	15	
464	459	453	450	445	441	437	433	429	425	421	417	413	16	
468	463	457	454	449	445	441	437	433	429	425	421	417	17	
472	467	461	458	453	449	445	441	437	433	429	425	421	18	
476	471	465	462	457	453	449	445	441	437	433	429	425	19	
480	475	469	466	461	457	453	449	445	441	437	433	429	20	

* 51in 가 100

37in 138

V.A(Variation across) (Scotch-feed) 가

. 가 (

.) V.A

가 /가

(tape carrier roller) 가

가

가

(Ebb & Flow Effect)

- (Fielden-Walker levelness tester) (

16)



< 16> A, B

가

1. , 가
(nylon, Terylen) 가
(lambswool) 가

2. (hopper) (Scotch feed)
(Vickers' Electrol) 가
/

3. 가

/ ,

가

.

a. 가

가

.

b,

B

A

.

c.

.

. 가

가

가 .

가

가 .

.

. 가

.

.

a.

b.

c. (blend) 가

.

(E. F. E)

(16)

. 가

(reeling)

가 .

; 가

.

16 . A

가 가

. 가 가

. B 가

. .

가

.

가

.

.

(rag, felted wool, skin) ,

.

1. 15 ° .

가 .
(),
.
가 .
(Drons field card mounting gear)가 .