

1.

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B. Russell

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< 1>

PTFE (sledge)

PTFE

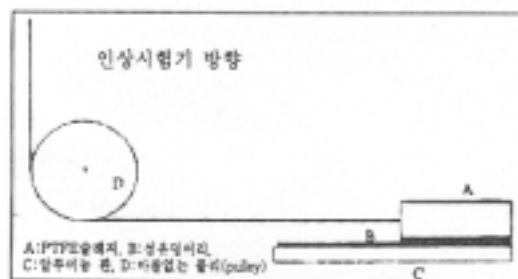
가 (fiber tuft)

가 (hand-staple)

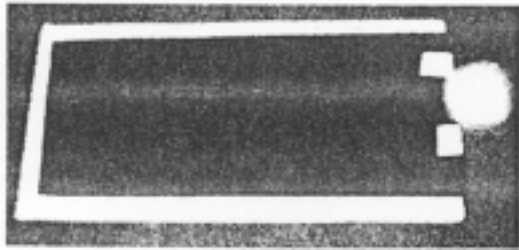
< 2>

20mg

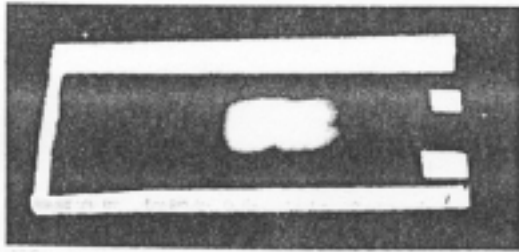
20mg 2 < 3>



< 1>



< 2>



< 3>

2.

< 3>

PTFE
 $2.8 \times 1.5\text{cm}$ 4.06g PTFE SDL
 50mm/min ,
 25kgf 가
 6
 , 4.06g 29.06g .
 5g 가 , 5

$$F = CN^n \quad (1)$$

式

가

F , N , C , n

μ

6가

6가

< 1>

< 1> (HVI 900A)

		(in)	(g/tex)	(%)
1	4.6	1.04	30.4	6.5
2	4.9	1.03	27.6	6.2
3	4.8	1.06	25.6	6.6
4	4.7	1.02	27.5	6.4
5	4.7	1.04	27.6	6.5
6	4.4	1.08	28.7	6.2

3.

6가

< 2>

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가 가 ,

< 4>

< 2>

	(gms)					
	4.06	9.06	14.06	19.06	24.06	29.06
1	4.75	6.75	8.40	10.30	12.45	20.70
2	4.80	7.05	8.40	9.40	11.50	13.40
3	4.20	6.10	8.90	9.10	11.20	15.50
4	4.20	5.90	7.80	9.40	10.90	12.30
5	3.90	6.00	7.30	8.75	10.30	12.55
6	3.88	5.32	6.70	7.90	9.65	11.23

()

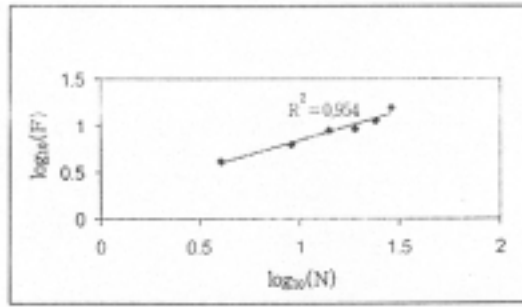
< 3>

	$F=CN^n(R^2)$
1	0.879
2	0.976
3	0.954
4	0.990
5	0.984
6	0.978

가 $F=CN^n$
, C n .
. C n
.
(3). < 4>
가
 μ .

< 4>

	$C(Pa^{1-n})$	(n)
1	1.659	0.664
2	2.304	0.502
3	1.657	0.620
4	1.814	0.560
5	1.695	0.571
6	1.747	0.530



< 4> (3)

C .

가 ,

가

, C

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(2)

가 ,

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가

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가

가

33,000ft

. 5

10

가

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가 .

가

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(rough)/

(smooth),

(soft)/

(harsh)

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4.

Textile Asia, 2001/5)

. (Friction in fiber assemblies: