

1.

,

(fiber migration) 가

(bundle)

, 가

,

,

가

, 가

가?

가

20%

가

가

2.

2.1

가

5

/ 50/50 100% () Ne 28 Suessen EliTe , 가 2.8, 3.2, 3.6, 4.0, 4.4 < 1> .

< 1>

	(in)	(mm)		
			dtex	
	1.10	-	-	4.1
	-	38.1	1	-
100%	1.44			3.4

100% (tracer fiber) 0.5% ,

, , ,

CI(Cotton Incorporated) Suessen
EliTe 가 ,
(,).
/ 가 (,
가).
/ , 100% 3

2.2

Image Analysis
Application(ver 3.0) 가
Spin Panorama 2.1

3, 5
150

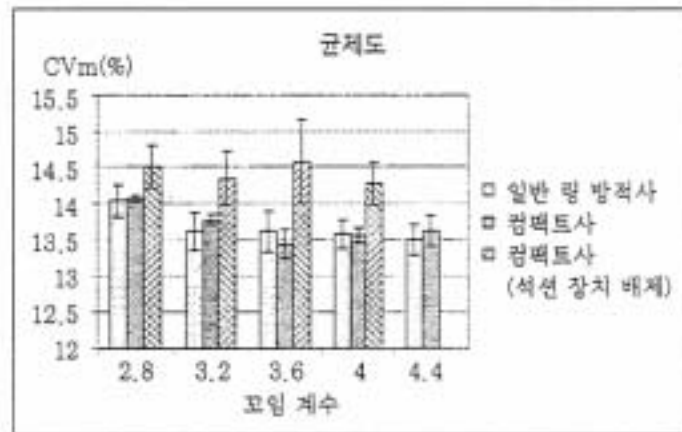
2.3

50/50 /
100% SAS (8)
SAS PROC GLM (ANOVA)
,
가 가 (p) 0.05
,
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가
, ‘2
F ()
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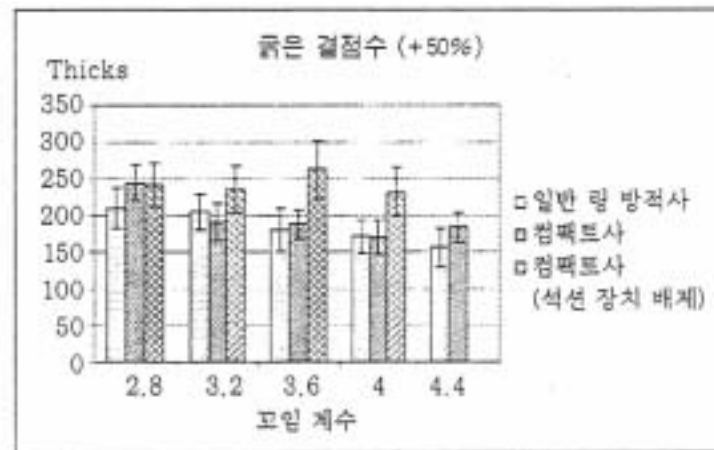
3.

3.1 가

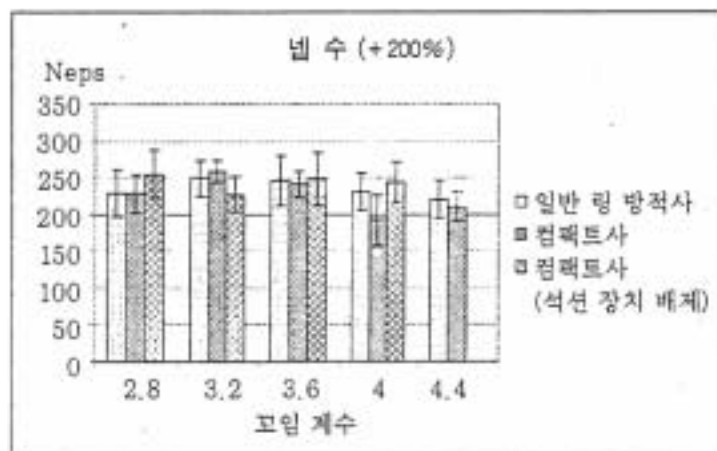
/ 100%
Uster Tester 3 Uster Tensorapid
(70 , 65%) /
< 1> ~ < 6> , 100% <
7> ~ < 12> .



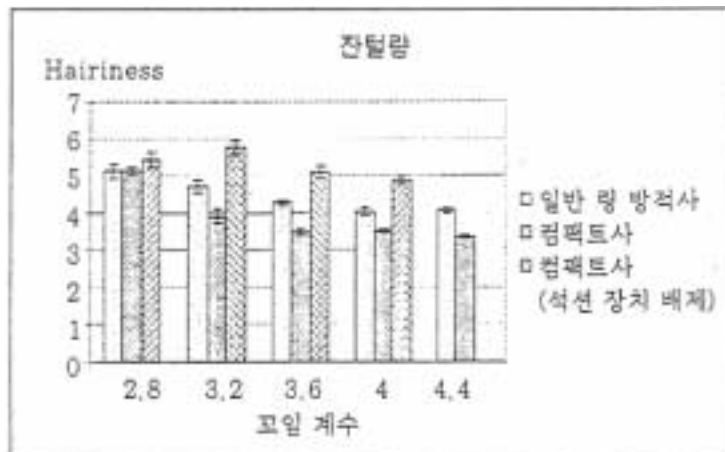
< 1> 50/50 /



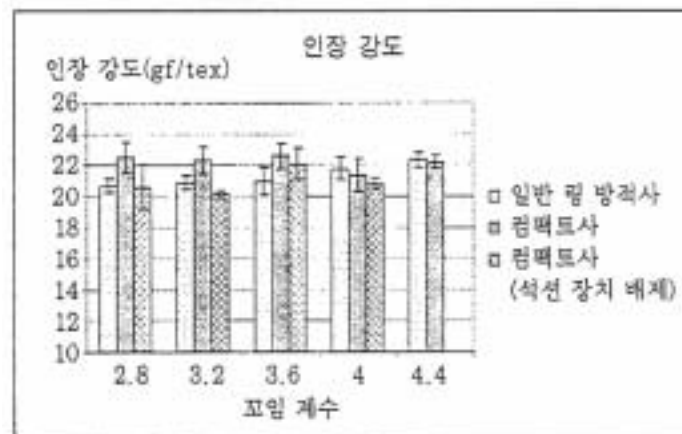
< 2> 50/50 /



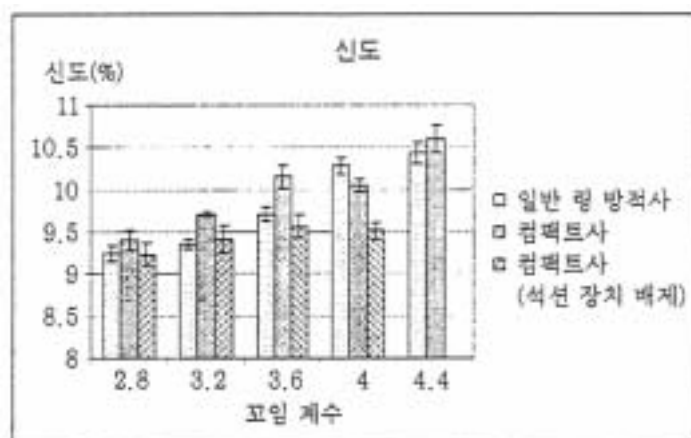
< 3> 50/50 /



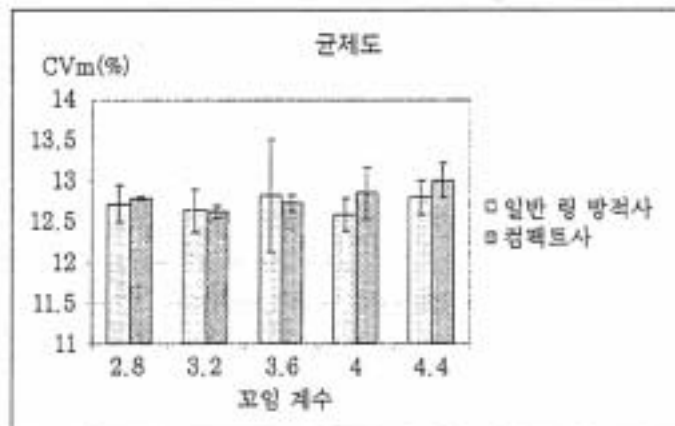
< 4> 50/50 /



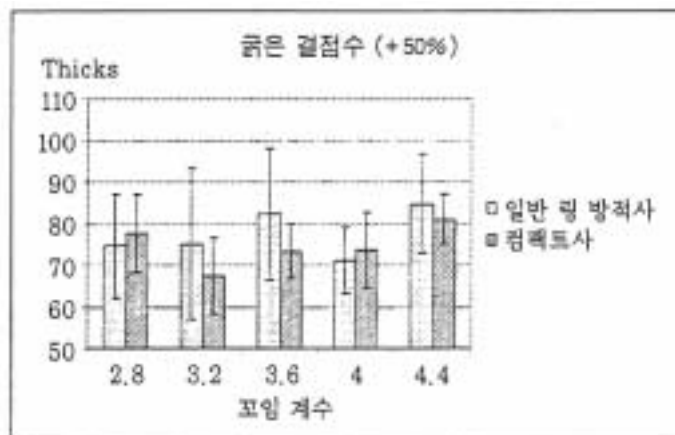
< 5> 50/50 /



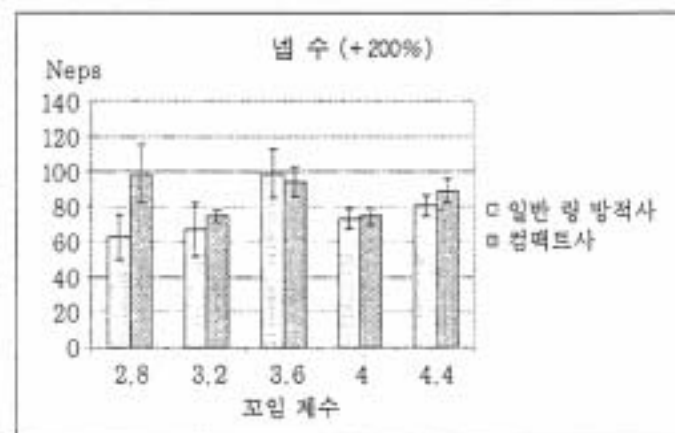
< 6> 50/50 /



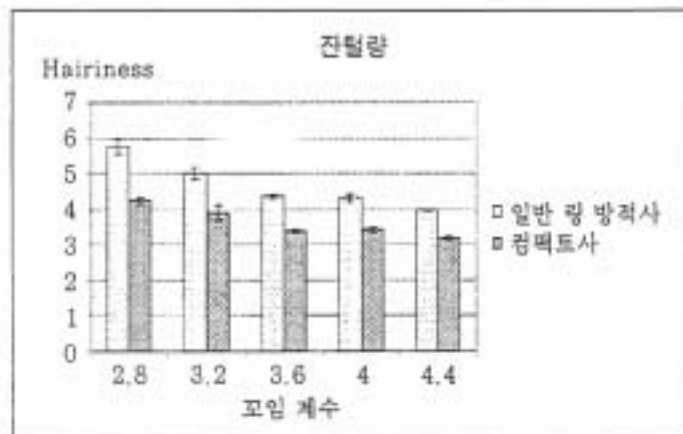
< 7> 100%



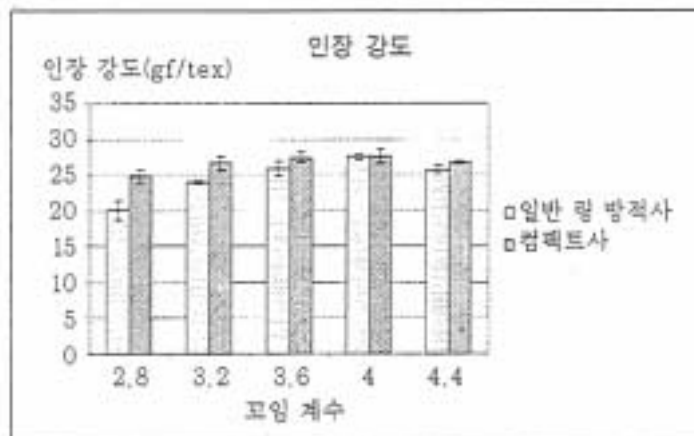
< 8> 100%



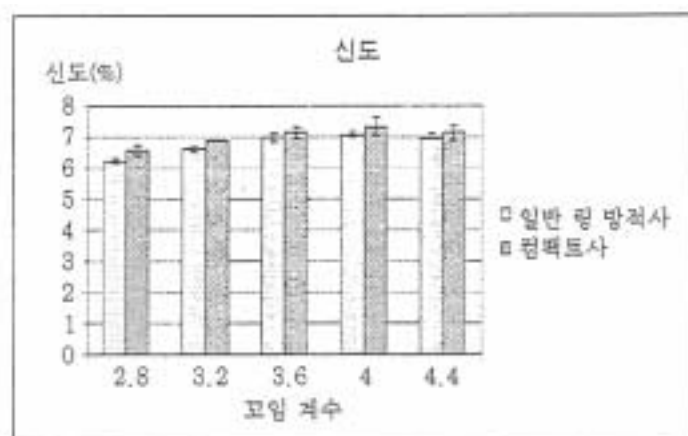
< 9> 100%



< 10> 100%



< 11> 100%



< 12> 100%

가
1> ~ < 6>

50/50 /
가

가 가 가

가 가
가 가
가 가

(TM)

가

100%

가
가

가
2

4.0 가 가

가 4.0
0 가

3.2 가

가 < 2>

< 2>

				r.m.s.					
	2.8	0.323727	1.542133	0.143307	1.624641	16.47075	25.30205	0.27086	0.141173
	2.8	0.357873	2.074667	0.175227	1.766691	16.61155	24.01695	0.23112	0.126113
	3.2	0.302187	1.9386	0.1553	1.840852	16.29383	26.56981	0.263267	0.12782
	3.2	0.355867	2.295133	0.17416	1.945241	18.11121	25.6482	0.239453	0.13068
	3.6	0.34466	2.514667	0.16866	2.22323	20.27555	23.35809	0.23966	0.129887
	3.6	0.36944	2.7158	0.18898	2.109869	19.52946	27.17588	0.226807	0.127207
	4.0	0.317193	2.570467	0.158527	2.372344	19.95335	26.00455	0.236453	0.121167
	4.0	0.364053	3.1514	0.181433	2.554557	20.98661	24.61131	0.219407	0.117727
	4.4	0.34296	3.064267	0.17314	2.551964	22.22591	22.02409	0.227453	0.121753
	4.4	0.35196	3.367733	0.176827	2.797565	22.54247	25.19522	0.209573	0.114767

가

0.5

가

0.5

가

가

가

가

(r.m.s.)

가

r.m.s.

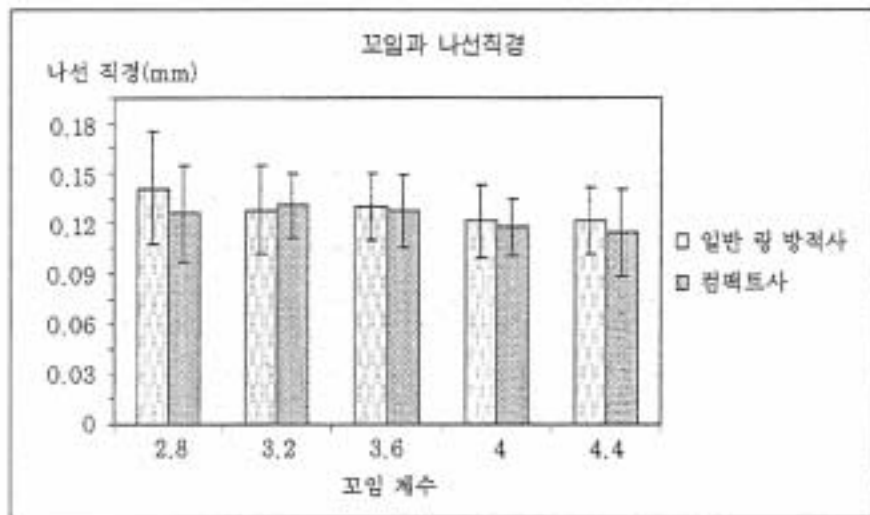
가

r.m.s. 가

가

(SAS PROC GLM, $\alpha = 0.05$)

< 13 >



< 13 >

가

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(tie-in point)

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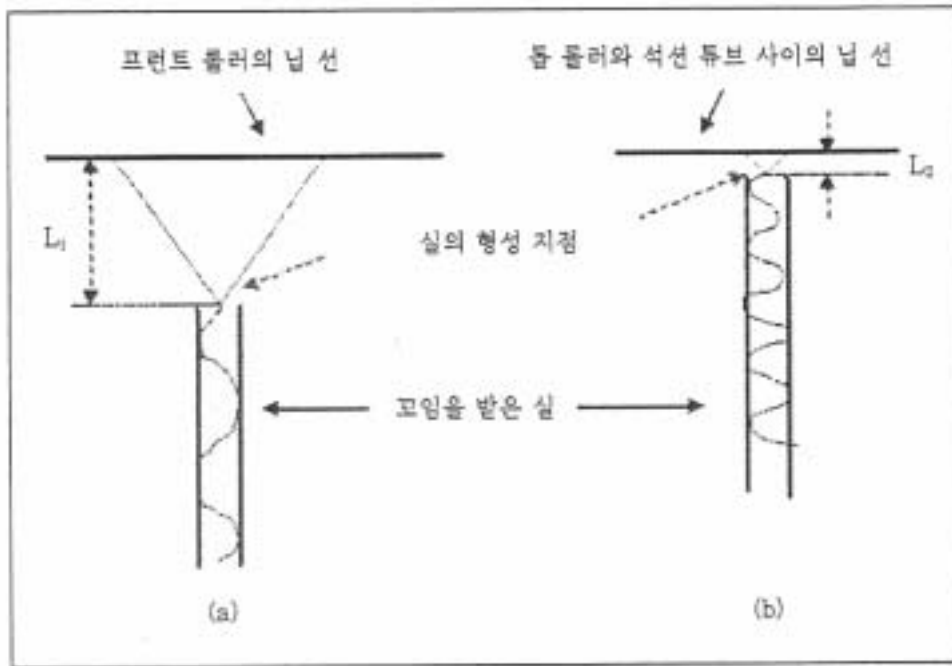
·

,

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(,).

< 14>



< 14>

(a)

(b)

(L :)

(r.m.s.)

가 ,

가

r.m.s. 가 가

4.

가 .

가 가

가 100%

가 가 가 , 가

100%

가 ,

가 , (

가),

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가 .

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(Comparison of Properties and Structures of Compact and Conventional Spun Yarns ;
Textile Research Journal, 2006 No.9)