

1.

가 가 (nep)

.

.

.

가

.

(thick), 가 (thin)

(cloudy effect)

,

(weft knitted fabric) 가

.

, ,

(knitting efficiency)

.

.

2

.

,

.

가

,

가

가

.

(fine-gage warp and double knitter)

가

.

50%

50%

.

, (ginning) ,

.

,

,

가

/

.

(regular tenacity polyester fibers)

(high tenacity polyester fibers) /

2.

SLM(strict low middling) 가

5 . 1 . 5

, ,

가 2 ,

가 2 . Average strength ,

가 , Short staple

< 1>

Cotton	Fine fiber	Coarse fiber	High strength	Average	Short staple
Grade	Strict middling	Strict middling	Strict middling	strength Middling	Strict low middling
Length:					
Classer's(in.)	$1\frac{1}{8}$	$1\frac{3}{32}$	$1\frac{3}{32}$	$1\frac{1}{16}$	$\frac{21}{32}$
Digital fibrograph:					
2.5% Span length(in.)	1.14	1.10	1.12	1.11	0.93
50% Span length(in.)	0.50	0.51	0.51	0.49	0.41
Uniformity ratio	44	46	46	44	46
Micronaire reading	3.9	5.2	4.8	4.8	5.1
Tenacity:					
Stelometer, O-gauge(g/tex)	43.6	42.5	48.1	39.1	38.1

, 80%/

20% 60%/ 40% .

가 1.5in , 가 1.5denier .

. 8lb double creeled roving
 (TM) 2.8, 3.2, 3.6,
 4.2, 4.8 5 가 / .
 2.8, 3.2, 3.6 TM 가 .
 TM 2.8 3.6
 TM . 18-cut 22-cut
 .
 , , 가 .
 dye beck (Solvent scour)
 .
 5.5% (+)
 가 . , , ASTM AATCC
 .

3.

5
 가 . 2
 18/1 30/1 Uster .
 Uster , Short fiber
 가 .
 fine fiber 가 가 .
 .
 5 18/1 30/1 Uster
 (Imperfection counter) 가 3 . Uster
 1,000 , Uster . Fine fiber

가 가 Coarse fiber
가 가 . Short staple
, 1,000 가 (thin & thick) Uster
(18/1), Uster (30/1).
가
. Coarse fiber
가 가 가 .

< 2>

면	균제도 18/1	C. V. (%) ^a 30/1
Fine fiber	13.9	17.8
Coarse fiber	15.1	18.8
High strength	14.1	18.7
Average strength	15.1	18.8
Short staple	18.7	23.2
Uster average	18.0	19.4

a. Uster

2.8, 3.2, 3.5 TM

< 3>

Cotton	Imperfection Count*			Yarn grade
	Thin	Thick	Neps	
18/1 Carded yarns:				
Fine fiber	8	22	9	B+
Coarse fiber	21	41	7	A—
High strength	4	75	32	B+
Average strength	16	77	15	B
Short staple	180	216	18	B
Uster average	38	300	175	
30/1 Carded yarns:				
Fine fiber	80	324	48	B
Coarse fiber	154	424	36	B+
High strength	131	717	168	C+
Average strength	163	558	55	B—
Short staple	842	1256	104	C—
Uster average	110	580	500	

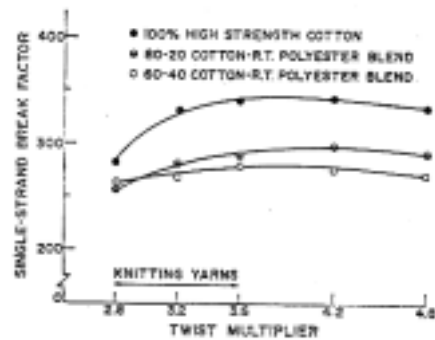
a. 1000

TM 2.8, 3.2, 3.6

< 4>

Cotton	Single-strand break factor (no. × oz.) ^a			
	Carded		Combed	
	18/1	30/1	18/1	30/1
Fine fiber	289	276	334	311
Coarse fiber	263	256	303	271
High strength	312	272	348	316
Average strength	252	233	287	266
Short staple	176	164	—	—

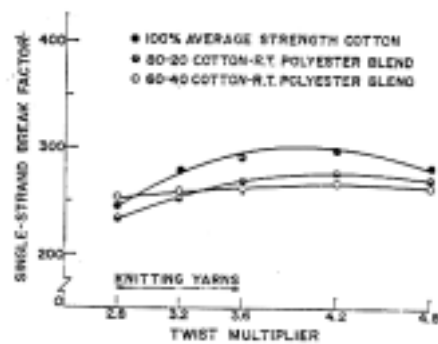
a. 3.2 TM



< 1>

: High Strength

24/1



< 2>

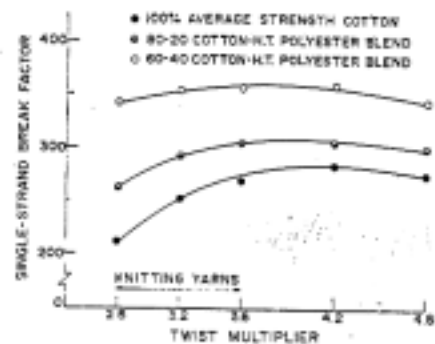
: Average Strength

24/1

18/1 30/1

(single

strand break factors)가 4 . 18/1 High strength
가 . 30/1 Fine fiber
가 High strength . Fine fiber
Coarse fiber 가 10%
. 가 가 가
가 . High strength Average
strength 20%
. Average strength
Short staple 40% .



< 3> - : Average Strength

18/1

/ 가 ,
.
, 1 2
High strength (1) Average strength (2) 24/1
20% 40% /
- . (46g/tex)
Average strength High strength

가 6% 8%

31% High

strength 100% High strength

(1). Average strength

가 (2).

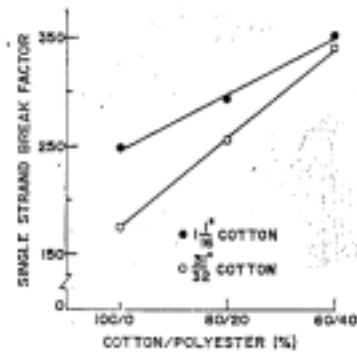
Average strength 20% 40%

- 가 3 .

가 , 가

가

가 .



< 4> Short staple Average staple

Short staple

20% 가 .

4 Short staple (31/32in) Average strength(1 1/16in)

, 20% 40%
 , .
 Average strength Short staple
 40% . Short
 staple 가 Average strength 가 .
 20% 가 14% , 40%
 가 4% .

4.

5 (grey fabrics)
 .
 가 . High strength Average
 strength 15% 27% 가 , Average
 strength Short staple 가
 30~35% .

< 5>

Cotton	Bursting strength (lb)			
	Carded		Combed	
	18/1	30/1	18/1	30/1
Fine fiber	110	82	119	90
Coarse fiber	101	82	120	82
High strength	124	86	144	93
Average strength	101	73	113	80
Short staple	78	54	—	—

6 Average strength High strength 가
 . 가 40%
 .

가

< 6> 가

Cotton	Bursting strength (li)			
	Carded		Combed	
	18/1	30/1	18/1	30/1
High strength	78	58	89	66
Average strength	62	44	69	51

가

가

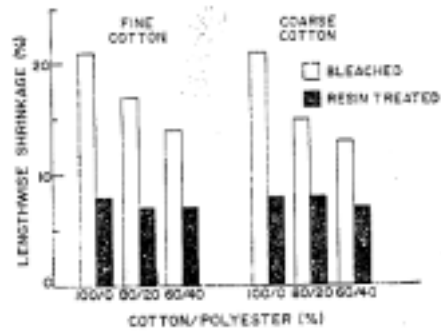
가 . 7 Short staple Average Strength ,
가

가

< 7> 가

Fabric	Flat abrasion cocles)*	
	18/1	30/1
Short staple cotton:		
100% Cotton	392	205
80% Cotton, 20% polyester	2205	590
60% Cotton, 40% polyester	3240	630
Average strength cotton:		
100% Cotton	370	200
80% Cotton, 20% polyester	2085	701
60% Cotton, 40% polyester	2276	600

5 6 가 , 가
/ (%)가
20%
40% 가
100%
.



< 5> /

5.

1. Fine fiber (3.9) 가 가 ,
가 .
2. 18/1 High strength 가
30/1 Fine fiber 가 High strength
3. 20% 40% 가
가 가

4.

가 .

5.

. High strength

가 가 .

6. /

가 , , 가

.