

Digital Fibrograph, Comb Sorter, Shirley P.E. Stapler

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Castellar가 “The Relations between the fiber length parameters obtained from the Digital Fibrograph,
The Comb Sorter, and The Shirley Photoelectric Stapler” .

1.

Digital Fibrograph

Comb-Sorter

가

,

Fibrograph

.(1-3)

Digital Fibrograph

S. L.(Span length) com sorter

U.H.M.L(the upper-half

mean length) M.F.L.(the mean fiber length) U.Q.L.(the upper quartile length)

가

(% : Span amount)

.

Shirley photo-electric(P.E) Stapler

Staple length S.L.

.

Digital fibrograph

Servo Fibrograph

.

100%

0.15in.

comb

,

Span length Span amount가

Span length

가 Span length

50% Span length가 10mm 50% 가 10mm

P.E. Stapler

2.

2.5% S.L. 0.81 " 1.50 " 33

가 Digital Fibrograph 4

Sample , hand-comb

. Raes 가 (4) comb

method 가 Fibro sampler

가 2.5% 90% Span length 5%

4 2.5% S.L. 1%, 90% S.L.

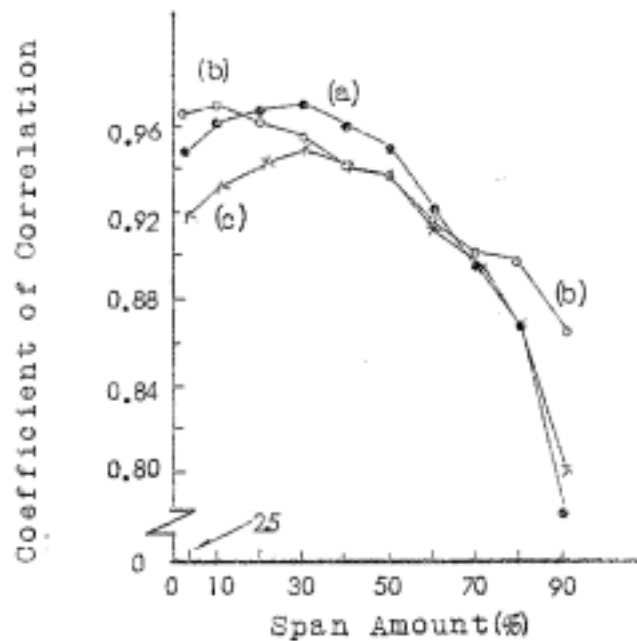
4% , 가

가 S.L. check

가 Comb
 Sorter , 4 sample
 U.H.M.L., U.Q.L., M.F.L., ,
 U.H.M.L. 1.5%, U.Q.L. 1.6%, M.F.L. 2% .
 5fringes Shirley P.E. Stapler ,
 2% .
 Digital Fibrograph Comb Sorter Shirley Miniature Card
 lap Shirley P.E. Stapler roving
 .
 () , data[5]
 Cotton 가 ,
 ,

3.

digital Fibrograph S.L. Comb Sorter Shirley P. E. Stapler
 < 1>
 plot .
 S.L. U.H.M.L. 가 가 가
 가 , 30% .
 30% S.L. U.H.M.L. 가 .
 U.Q.L. U.H.M.L.



< 1> Correlation coefficients between (a) S.L. and U.H.M.L., (b) S.L. and staple length, and (c) S.L. and M.F.L. plotted against the span amount

U.H.M.L. Classer (가)

2.5% S.L.

가

< 1> U.H.M.L. 2.5% S.L.

가 (r = 0.950), U.H.M.L. 30% S.L. 가 (r = 0.972).

U.H.M.L. 2.5% S. L.

2.5% S.L.

Digital Fibrograph

가

Comb-Sorter M.F.L. Digital Fibrograph S.L.

U.H.M.L.

30%

Digital Fibrograph

S. L.

Comb-Sorter

M.F.L.

가

Shirley P.E. Stapler

Staple length

S.L.

(%)가 10%

가

가

2.5%(r = 0.968) 10%(r = 0.971)

(Shirley P.E. Stapler

Staple length

Digital Fibrograph

2.5% S.L.

10% S.L.)

4.

(1) Comb Sorter

() U.H.M.L., () U.Q.L. ()

M.F.L. Digital Fibrograph

Span length

30%

(2) 2.5% ~ 10% S.L. Shirley P. E. Stapler

Staple length

가

가 10%

가

Span length

Staple

length