

(Cold pad batch dyeing)

•

가 .
가

“strike” 가 .
, , , pH, 가
가 .

가 .

(WOOL MARK)

가 가 가

IWS

가 /

가 .

48 .

가 /

/ 가 .

IWS / 1969

가

가

1973/74

/ 1/10~1/20 가

가

/ ,

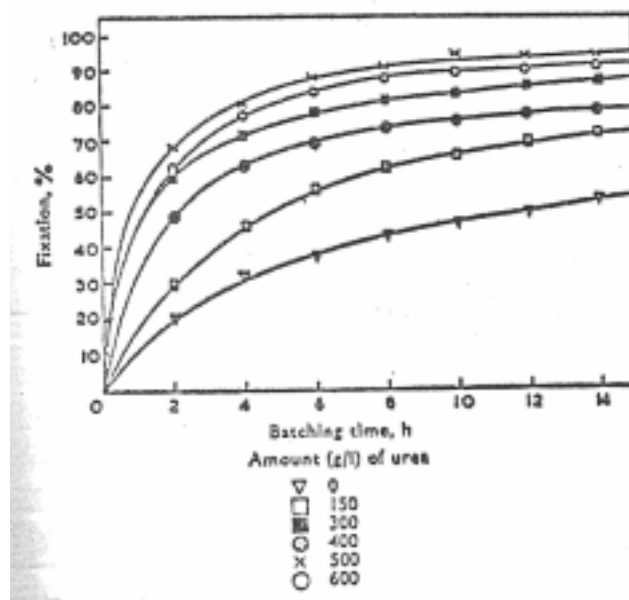
가

가

1.

150, 300, 400, 500, 600g/l

Procion Brilliant Red M-5B(C.L. Reactive Red 2)



< 1> Effect of urea concentration on dye fixation

< 1> (1) 가

Lissapol N(ICI, polyoxyethylene nonylphenol) 10g/ℓ, acetic acid(80%) 1Mℓ
 /ℓ, Solvitose Gum OFA 10g/ℓ 가 300g/ℓ 가
 300g/ℓ

2. (wetting agent)

Aerosol OT(ACY : an alkylsulphosuccinate) Lissapol N(1)

“frosty”

frosty Dispersol VP 가

“skittery”가 가

3. (thickening agent)

가

가

carboxy methyl cellulose(CMC)

가

locust bean gum

Guaranate AP5(SCF), Guaranate

HV50(SCF) Solvitose Gum OFA(Schoten)가 가

10g/ℓ

7g/ℓ가

4.

가

가

,

가

가

가

가

가 가

가

가

가

가

“skittery”가

skittery 가

5.

(batching)

24 , 48 가 .

.

Lanasol (Ciba-Geigy), Procion (ICI)

Cibacron, Cibacron Pront Reactofil(Ciba-Geigy)

Levafix E, Verofix (Bayer)

Drimarene, Drimalan F(Sandoz)

ISO

No.3

, . (4% owf

) 가 .

가

. ,

IWS

.

6.

pH 가

.

1) pH

가 .

가 .

< 2> pH 8.5 pH

2.5, 4.0, 7.0

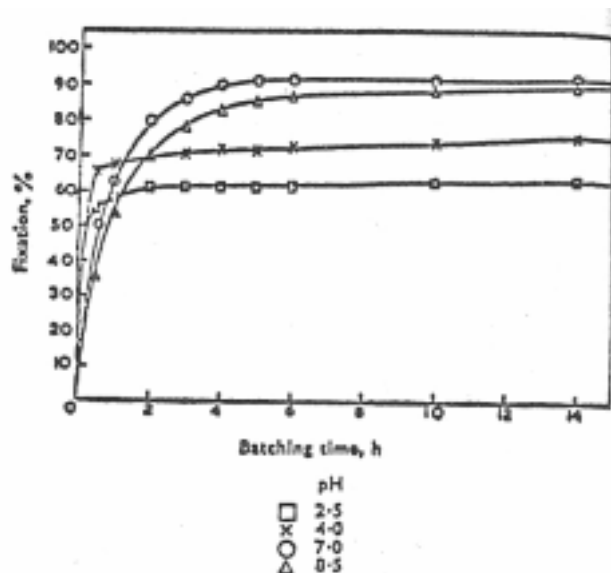
300g/l Urea

10g/l Lissapol N

1g/l Acetic Acid(80%)

10g/l Solvitose Gum OFA

10g/l Prodon Brilliant Red M-5B



< 2> Effect on dye fixation

pH가

pH가 5

pH 4

pH

2) 가

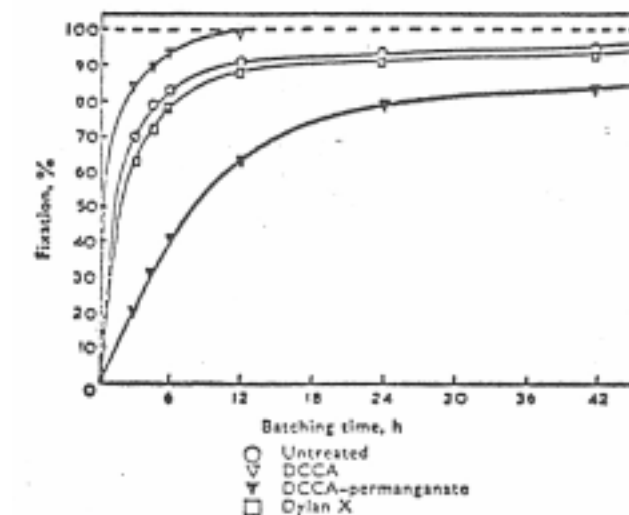
가

DCCA(2% owf), DCCA-permanganate(2%-2% owf), DyIan X(2% owf Sodium permono Sul furic acid) 가 Procion Red M-5B(10g/l)

. < 3> . DCCA 가

가 DCCA 가

cystecic acid가



< 3> Effect of shrink-resist treatments on dye fixation

7. (Color matching)

가

8.

3g/l (0.880) 50□

가 .

10~20% 가 .

가 .(.)

50□

pH 5 . ,

가 가 .

.

/

. , ,

가

.

1.

two bowl .

bowl . bowl 가 .

가 가 가 .

bowl bowl

. bowl

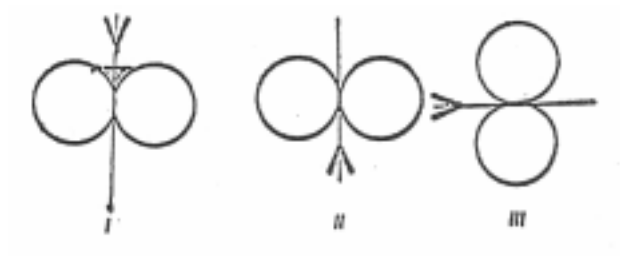
.(17"

)

60~75°IRHD(International rubber hardness degrees scale)가

가

가 가



< 4> Pad-mangle arrangements

:

< 4(i)>

bowl

가

(121).

가

가

가

,

가

가

가

10m/min

가

가

가

: < 4(ii)>

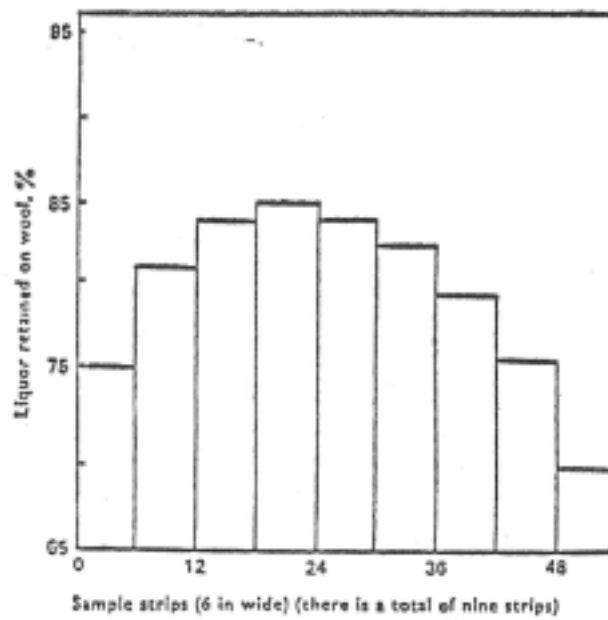
가 가 가

: < 4(iii)>

() 가

가 (

Antifoam H-10)가 40l



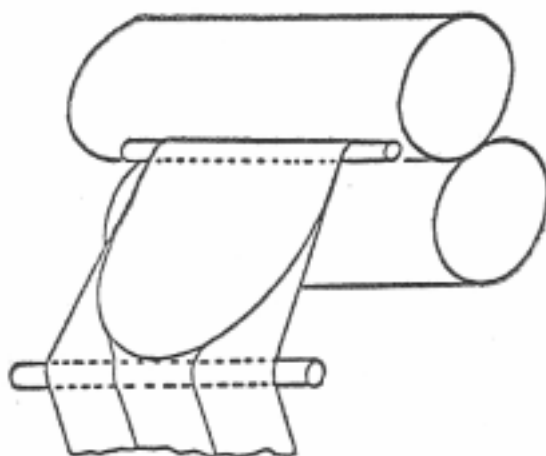
< 5> Liquor pick-up across a 54-in fabric

가 . 54"
6"

< 5> curve

< 6> expander far 가 ,

5%



< 6> Mangle with straight roll at nip

< 7>

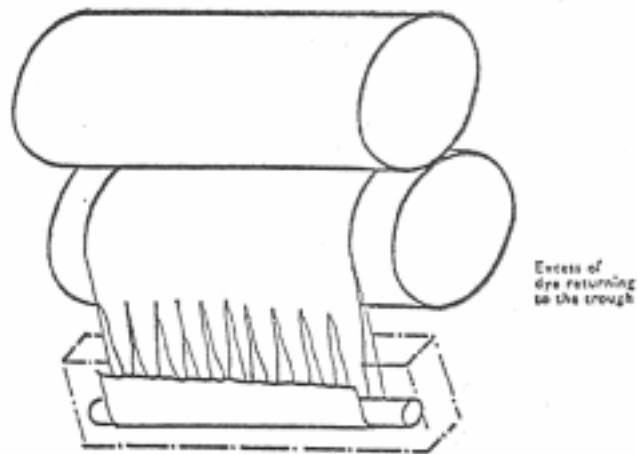
가

< 1>

1ft(30cm)

가

100% owf



< 7> IWS wool pad-mangle

< 1> Effect of Mangle Arrangement on Expression Across a Fabric

Mangle arrangement	Order of difference in expression (%) across fabric
Standard	12—15
Raised bar	5— 7
Pad-through re-located	2.5

2.

가

가

(10 r.p.m.)

20

$4\frac{1}{2}$ "

가

2"

3.

가

가

가

< 2> Range of Pick-ups of Different Dyes at Different Linear Pressures

Dye	C. I. Reactive	Pick-up(%) at linear pressure(lb/in of roll width) of						
		150	180	210	270	300	330	360
Lanasol Blue 3R	Blue 50	104.8	103.7	94.3	83.2	78.9	75.5	69.5
Lanasol Yellow 4G	Yellow 39	108.1	94.2	91.2	81.3	76.9	73.5	68.9

< 2>

Procion Red M-G(40 g/l)

pH

가

4. Sewing of the pieces

(50%)

.

/

가

,

가

navy

navy

가가

가

IWS

가