

Uster Classimat

1.

“Uster Classimat” 가 .
 ,
Slub, Nep 가
“Uster Classimat” , ,
S.F , .
 ,
“Uster Automatic Yarn Clearer”
Clearing Swiss Zellweger
가 ,
 .

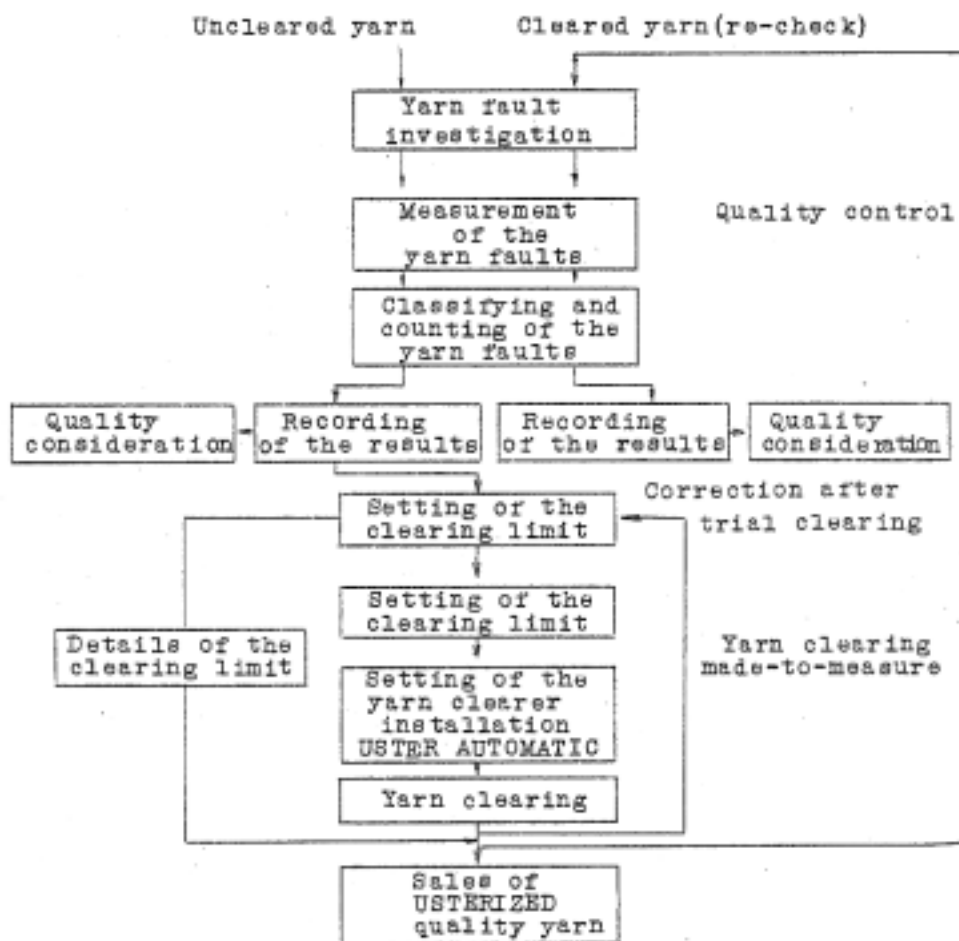
2. Uster Classimat

2.1 Classimat System

[1] Classimat System
“Clearing ” Clearing ”
yarn clearing “Made to measure”
 .

2.2 Classimat Grade

Classimat Grade
Grade (Length) (Cross-Sectional Size)



< 1> Classimat System

Classimat Grade 16 Class(A1 D4)

○

○

Class A. 1cm

Class 1. +100% ~ +150%

Class B. 1~2cm

Class 2. +150% ~ +250%

Class C. 2~4cm

Class 3. +250% ~ +400%

Class D. 4cm

Class 4. +400%

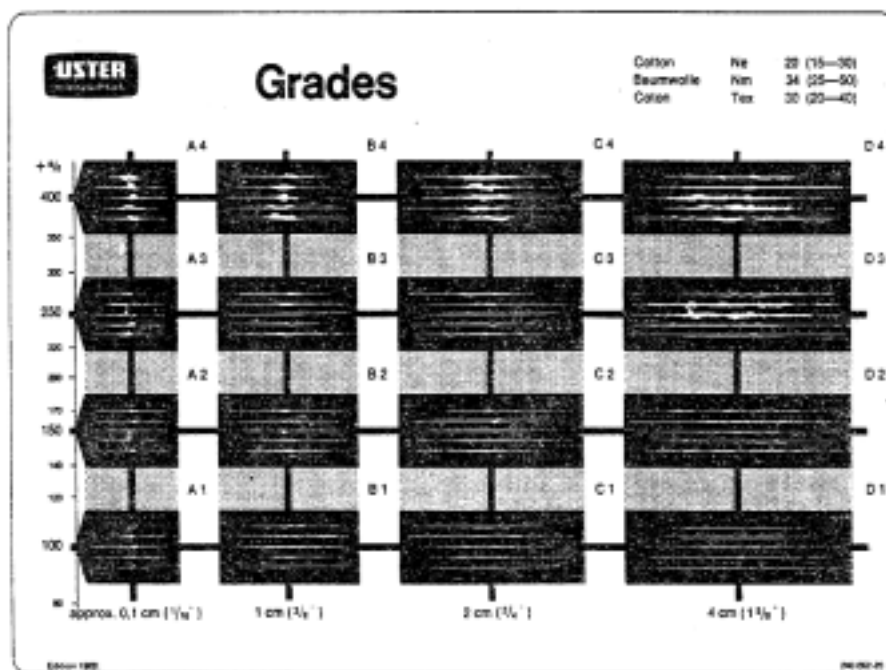
Class 4 Group
 , Class C3 가
 +250%+400%, 가 2cm 4cm
 Classimat Grade 2 가 (100%)
 (100%)

○

Ne 8~120, Nm 12~200, Tex 75~5 4 Grade ,

○

Ne 11~65, Nm 12~60, Tex 80~16 3 Grade



< 2> Classimat Grades(Cotton Ne 20)

2.3 Classimat Test Sheet

Class

Test Results Sheet Uster Classimat Grade Clearing

limit . Test Sheet Test Condition

,

Class

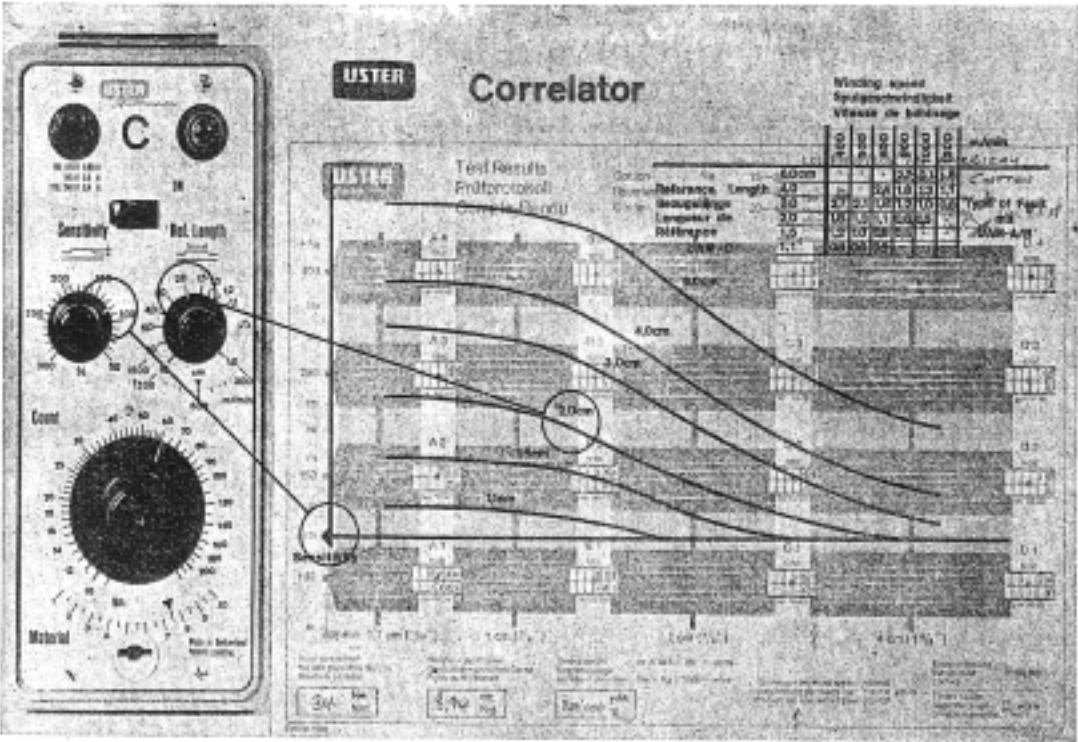
100,000m 가 .

2.4 Classimat Correlator

Setting 가

Clearing limit . Reference length(cm),

Sensitivity(%)가 .



< 3> Test Results, correlator Setting

[3] Correlator Clearing limit
Clearing limit Yarn clearer
, Clearing limit .
Yarn Clearer Setting [3] Sensitivity
Setting 120% Correlator Reference length
2.0cm . Correlator
. Claaimat Grade
Glassimat Grade Correlator Grade
가
Clearing limit , Uster Automatic Yarn Clearer
Setting 가 가 Clearing
limit가 .

2.5 Uster Classimat Standard

Standard Value Swiss Zellweger 가
, , Sampling
Testing Cared Cotton , Combed Cotton , Worsted
10 m (50%
) Uster Classimat Statistics .

2.6 “USTERIZED”

Classimat

3. “Classimat”

3.1

Classimat (feults)

, .

3.2

Classimat 6 Unit Calibration

. unit 1 Bus-Bar , Bus-Bar

Cable .

3.3

Yarn Clearer

6 Unit

가 Classimat Grade

16 . 가

Cross-section Size 가 Length

. System Cross-section Size 가

Set Percent(%)fhTJ .

3.4 Classimat System

[4] Capacitive System()

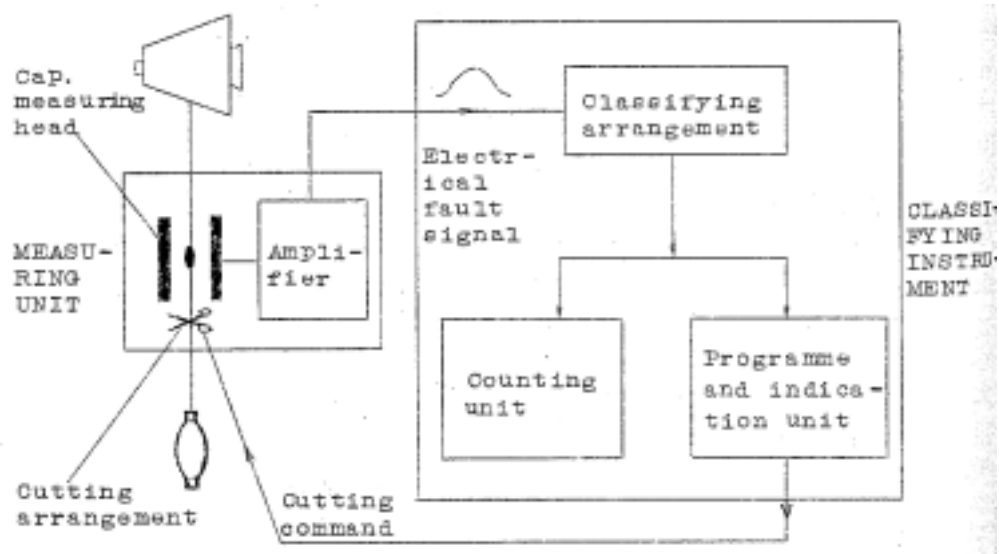
Measuring Head(10mm) 2 Plate 가

Condenser .

가 (fault)

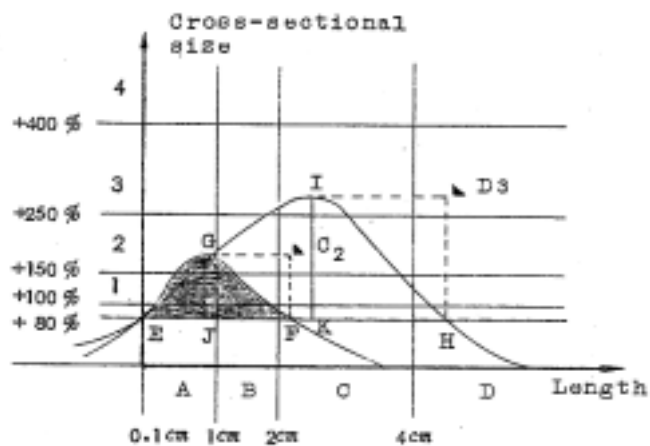
, Control

Knife가 .



< 4> Classmat System

3.5



< 5> 2

[5] Length Cross-Sectional Size

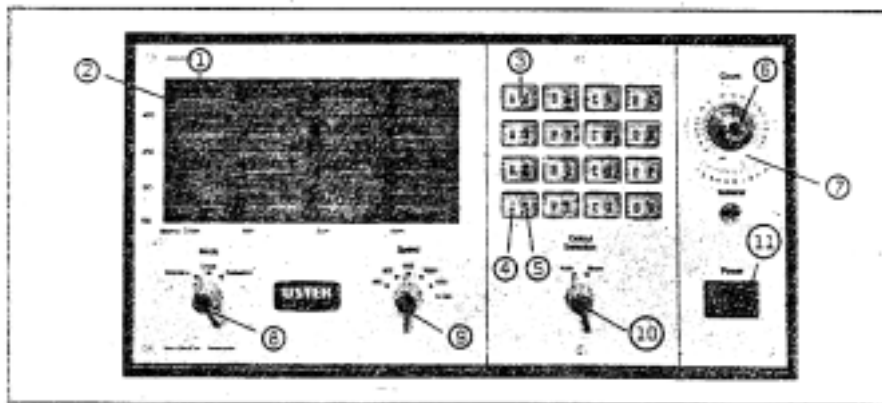
가 Counting . [5]

○ C2 Grade - EF가 Fault Length

- GJ가 Fault Cross-Sectional Size

- D3 Grade – EH가 Fault Length
- KI가 Fault Cross-Sectional Size

3.6 Classimat



< 6> Classimat Front Panel

Counter

Counter trip switch

Programming and Indicating Arrangement for Clearing

Programme Indicating Lamps

Fault Indicating lamps

Yarn Count Potentiometer

Material Number Setting

Operating Switch with the Positions Operation, Check, and Calibration

Switch for Setting the Winding Speed

Switch for Setting the yarn Clearing(KNIFE or BRAKE)

Mains Switch with built-in Indicating lamp

*Push-Button()

Push-Button

Push-button

Counting , Button Class
 Push-Button , Head
 Class Push-Button Cutting
 Counter . Out-put Selection Switch Brake Set No-cut
 Counter

* Material Number Yarn Count()

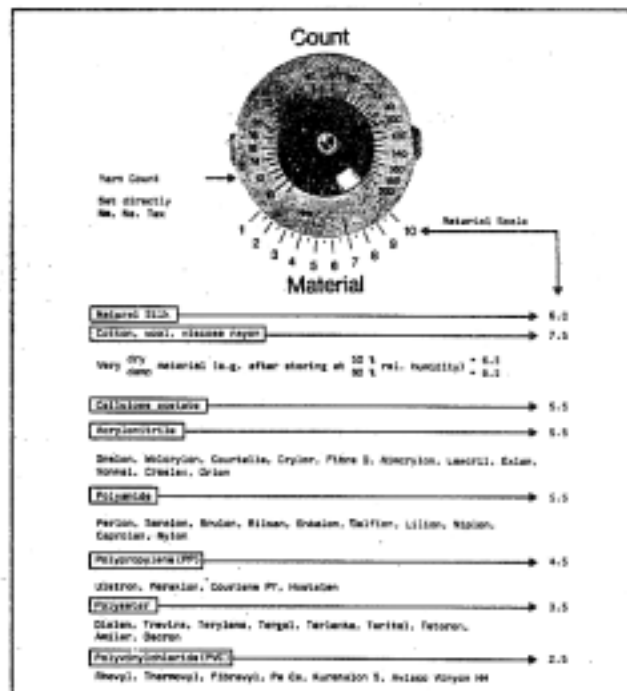
Material Set Count Set

Setting .

o Blend Yarn Material Number

, Polyester/Wool(55%/45%)

$$\frac{55}{100} \times 3.5 + \frac{45}{100} \times 7.5 = 5.5$$



< 7> Material Number

* Out-put Selection(10)

Switch					Cutting	
		가	Brake	가	Winder	
Switch	Brake	Bus-Bar	Setting	Plug		Relay
	winder		Cutting	(		
) Switch	knife	Set	Cutting			.

3.7 Classimat Calibrating Instrument

Unit	Check	Calibration			Cable
Classimat	Set	Mode switch	Check		“Check”
Calibration	“Calibration”	Set	Calibration	head	
Monofilament가		head		Unit	
가 Check	가	Correct	Green lamp가		가
		low, High	Red lamp가		. Check
가 Low	High	Amplifier unit	Potentiometer		

3.8 Classimat

1. : Nm 10~200
Tex 100~5
New 9~180
Nec 6~120
2. : 400, 600, 800, 1000, 1200m/min
3. : $\pm 2\%$ (Calibration)
4. : 110~250V, 50/60Hz, 75W.

5. : 40

4.

16 Class Counting
 , A4 1
 A3, A2, A1 1 Counting 3, 2, 1 Counting
 Class
 < 1> Counter Class
 < 2> A3 A3-A4=25-5=20가
 A2=200 , A1=1000 가 .

Class
 (10 m) 가
 30 m 10 m
 (1 4 5) < 3>, < 4> .

< 4> Uster Classimat Statistics

	A	B	C	D
4	5	6	4	2
3	25	9	8	4
2	225	59	16	4
1	1,225	100	20	5

< 1>

	A	B	C	D
4	5	6	4	2
3	20	3	4	2
2	200	50	8	0
1	1,000	41	4	1

< 2>

	A	B	C	D
4	3	6	6	3
3	15	12	9	6
2	139	177	21	9
1	816	2701	38	18

< 3>

	A	B	C	D
4	1	2	2	1
3	5	4	3	2
2	46	59	7	3
1	272	90	13	6

< 4>

5.

Data 가

Data

,

1. 가 Check

2. ,

3.

4. Clearer

5. 가 Clearer

6. Clearing limit

6.1 Clearing limit

Yarn Clearing Clearing limit

clearing limit

10t 3

Clearing limit

Clearing limit Cross-sectional Size +150%, Reference length

2.0cm (+120%, 1.5cm)

(+220%, 3.5cm) Clearing

< 5>

1. Cut 가 .(77.5:45.0:27.5)

2. Winding .(49.0%:73.0%)

3.

4.

< 5>

梳 毛 糸	Test I	Test II	Test III
糸欠陥 (100,000 m 当)	77.5	45.0	27.5
Winding 効率(%)	49.5	67.0	73.0
繰板斗 効率(%)	91.0	89.5	90.5
除塵時間 / 織物当 (分)	43	43	44
修正時間 / "	22	22	23
織物判定	良	良	良 (단, Thick places 量 多少含有)

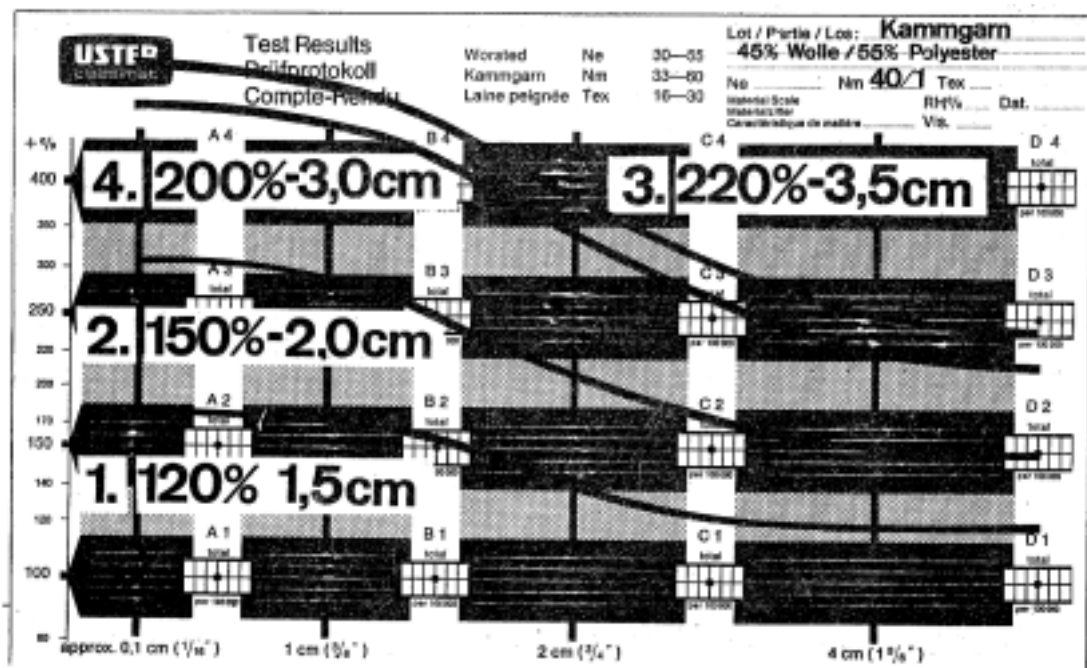
3 Clearing

가 Test Thick places

가

Clearer Clearing limit

+200%, 3cm가 .(8 4)



< 8 > 3 Clearing limit

*

○ Test : Sensitivity = 120%, Ref. Length = 1.5cm

Test : Sensitivity = 150%, Ref. Length = 2.0cm

Test : Sensitivity = 220%, Ref Length = 3.5cm

Clearing

가

Winding

가

1. Clearing

가

2.

Clearing

가

Knot

가

. Knot

가 가

가 가

3. Clearer

Knotting

Winder

[9]

Winder

Clearing Knot

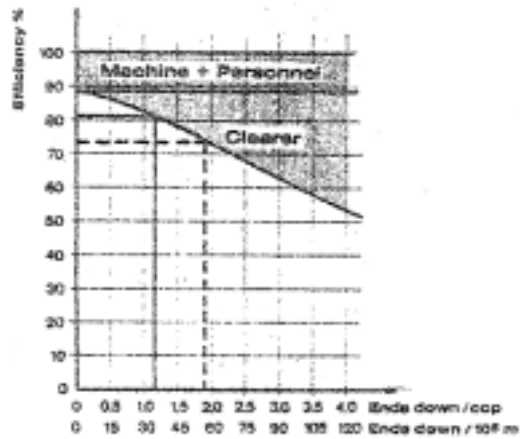
10 m

57

37

Winding

7% 가



< 9> Knot Winder

6.2 Clearing limit

Clearing limit

1. 100% Shirt Fabrics(poplin)

○ Clearer : +170%/1.0cm~+200%/3.0cm

2. Polyester 67%, 33% Coat

○ Clearer : +190%/110cm~+200%/3.0cm

3. 45%, Polyester 55% ,

○ Clearer : +150%/2.0cm~+200%/3.0cm

4. 100% ,

○ Clearer : +170%/1.5cm~+200%/3.0cm

7.

Uster Automatic Yarn Clearer

“Classimat

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Clearing limit
 ,
 , Winding , Knot
 . 가 “Classimat
 ” , 가

Clearing limit
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 “Classimat ” 가
 가
 가 “Classimat ”
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