

(3)

- MDTA 3 - QUICKSPIN(1) -

1

,

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가 ,

.

,

USTER QUICKSPIN

.

USTER QUICKSPIN

(non-lint content)

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1960

가

가

가

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가 :

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. 가

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-

.

(seed coat fragment) ,

.

50~75%가

가

. 가

가 .

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.

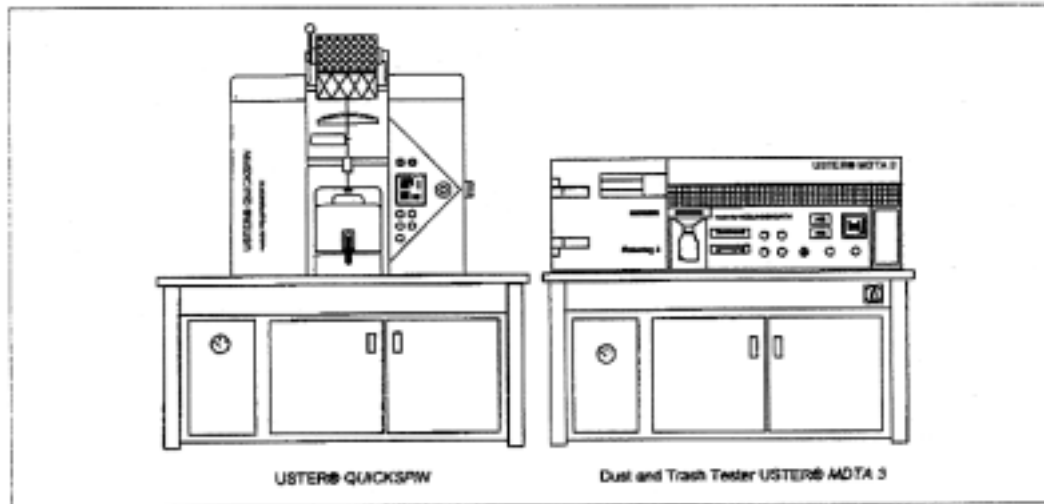
ITV(Institut fur Textil – und Verfahrenstechnik

Denkendorf) QUICKSPIN , Zellweger Uster 가 ,

1999 ITMA SDL(Shirley Development Limited) 가

2 USTER QUICKSPIN

2.1



< 2.1> USTER MDTA 3 USTER QUICKSPIN

	USTER MDTA 3	USTER QUICKSPIN
	-	-
	-	- 가
	- → MDTA 3 →	- →
	- → MDTA 3 →	- → QUICKSPIN
	-	-
	-	-
	-	-
	-	-
	-	-
가	- /	-
	- 가	-
	-	-
	-	-

< 2.1>

2

Rotoring

USTER MDTA 3

가

QUICKSPIN

2.1.1 USTER MDTA 3

/

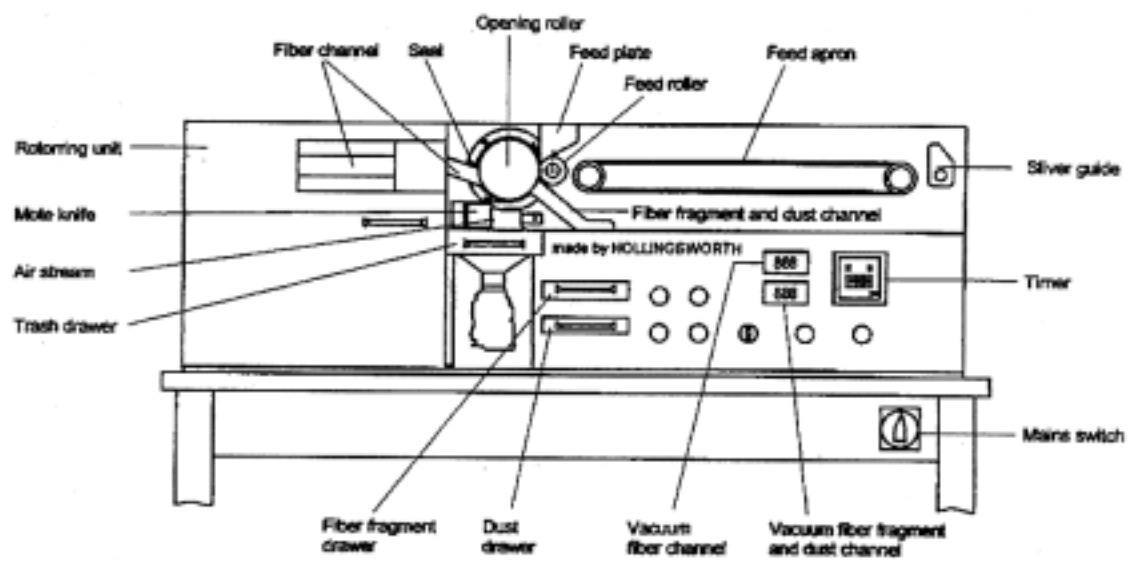
가 ,

(dust channel)

가

2

< 2.2>.



< 2.2> USTER MDTA 3

, .
 .
 300mm 1m 가 .
 .
 USTER MDTA 3 1 ,
 , / ()
 가 . MDTA 3 2
 . USTER
 MDTA 3
 . USTER QUICKSPIN
 .

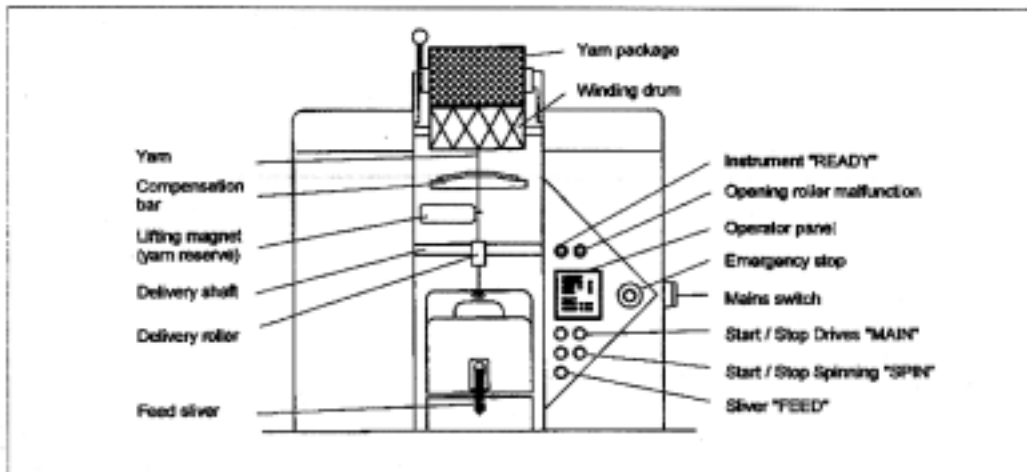
2.1.2 USTER QUICKSPIN

.
 가
 . RU 14A(Rieter) SE
 9(Schlafhorst) 2가 ,
 RU 14 .
 , ,
 < 2.3>.

USTER MDTA 3

,

3~4



< 2.3> USTER QUICKSPIN

2.2

5.2g USTER MDTA 3 5g(5 ktex

70 grains/yd) 가 .

25tex(Ne 24) . 5ktex

, 가 200 200m .

가

,

. 가 1m 4

가 . MDTA 3 2 가

. 가 , 200

.

가 USTER

1.5

가

3.1 USTER MDTA 3

•

	1.2% 1.3%~2.0% 2.1%~4.0% 4.1%~7.0% 7.0%	가 가
	0.05% 0.06%~0.10% 0.11%~0.15% 0.16%~0.20% 0.20%	가 가
	0.01% 0.02%~0.03% 0.04%~0.05% 0.06%~0.09% 0.09%	가 가

,

.

Rieter

가 .
가 ,
(cleaning element)
.
가 가 가 .

3.2

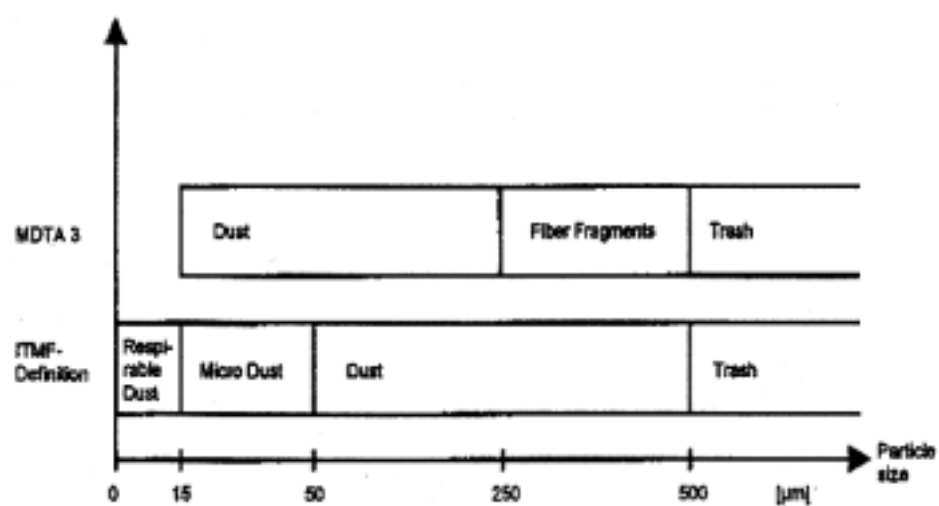
ITMF(International Textile Manufacturers Federation)

(trash), (dust) (micro dust) .

USTER MDTA 3

15~500 μ m (250 μ m)

(250 μ m~500 μ m) < 3.1>.



< 3.1>

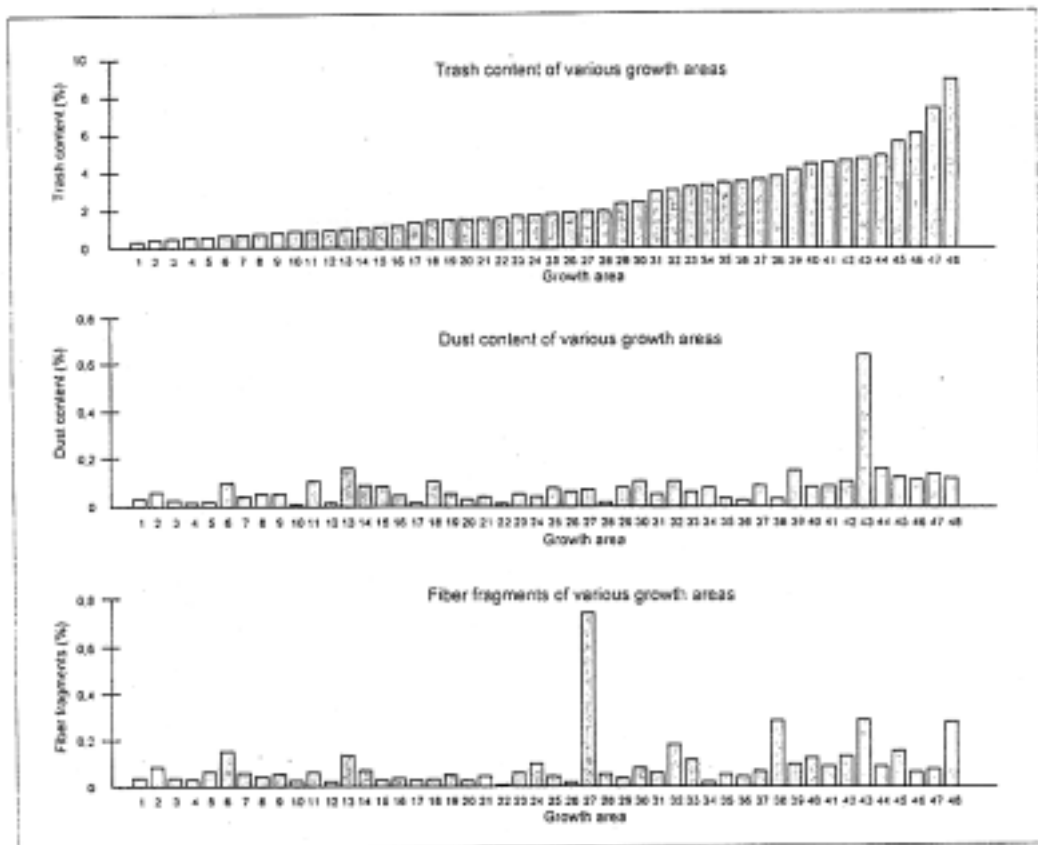
가
가
가

가

가

< 3.2> , 27

가



< 3.2> 가 ,

3.3

가 , , .
USTER MDTA 3
가 , /
.

3.3.1 (cleaning efficiency)

/ ,
 ,
 . , 가
.

USTER MDTA 3 :

$$RG_M = \frac{T_{input} - T_{output}}{T_{input}} \times 100\%$$

, $RG_M =$, $T_{input} =$ USTER MDTA 3 1
input , $T_{output} =$ USTER MDTA 3 1
output .

0~100%

(2).

3.3.2 (cleaning degree)

(cleaning intensity) .

$$RG_R = \frac{T_{input} - T_{output}}{T_{input}} \times 100\%$$

, $RG_R =$, $T_{input} =$ USTER MDTA 3 1
 $(T_1$), $T_{output} =$ USTER MDTA 3 2
 $(T_2$).

0~100% 가 ,
 가 (2).

3.3.3 (cleanability)

. , 1 가 ,

:

$$RW = \frac{T_1}{T_{tot}} \times 100\%$$

, $RW =$, $T_1 =$ USTER MDTA 3 1
 $, T_2 =$ USTER MDTA 3 2 ,

$$T_{tot} = T_1 + T_2$$

50~100% .

3.3.4 (cleaning effort)

가 ,

$$RA = \frac{T_{tot}}{RW} \times 100\%$$

, RA = , RW = , T₁ = USTER MDTA 3 1
 , T₂ = USTER MDTA 3 2
 , T_{tot} = T₁ + T₂

ITV

.

0 ~ 4	
4.1 ~ 8	
8.1 ~ 12	
12	