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,
(Hequet 2000 ; Waston 2000). (
, , ,)
.
() (
) (Hendrix, 1995).
가 (Sisman Schenek,
1984).
Hendrix(1992) 가 ,
38.8% Melezitose($C_{18}H_{32}O_{16}$) 1.1% Trehalulose
($C_{12}H_{22}O_{11}$) 가 43.8% Trehalulose 16.8%
Melezitose .
Miller(1994)
Trehalulose Sucrose($C_{12}H_{22}O_{11}$)가
가 Melezitose Glucose
($C_6H_{12}O_6$) Fructose($C_6H_{12}O_6$) .
.

(Perkins, 1984

; Hequet, 2000).

Gutknecht (1986)

,

. Frydrych(1993) Termodetector

. Price(1998) (

1.2%) (21 , 80%) 가

(24 , 55%)

.

가 (Morton Hearle, 1993),

가 .

가 가 가 (Hector

Hodkinson 1989).

가 .

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2.

2.1

Trehalulose Melezitose

(High speed stickiness detector(CIRAD, Montpellier, France))

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10

HVI (Model 900 Automatic,

Zellweger Uster, Knoxville, TN) HPLC (Dionex Corporation, Sunnyvale,

CA)

2.2 HVI

Zellweger Uster HVI (Model 900 Automatic)

4

10

2.3 HPLC

1g 20Mℓ (18.2 가)

가 . 0.2μm (Nylon membrane polypropylene housing, National Scientific

)가 (Becton Dickinson)

. 1.5Mℓ 1.5Mℓ (C4013-

15A, National Scientific) (gradient eluent system)

(Dionex CarboPac PA1 anion-exchange guard column

CarboPac PA1 Anion-exchange analytical column)

Eluent 1 200mM NaOH Eluent 2 500mM sodium acetate(C3H3NaO2 ·

3H2O) 200mM NaOH . 3 (

10 × 3 = 30)

2.4 (High Speed Stickiness Detector)

1994 ITMF(International Textile Manufactures Federation) Thermodetector(CIRAD, Montpellier, France) . Thermomechanical 가

가

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Thermodetector (Frydrych, 1994).
3 (10 × 3 = 30)

2.5

< 1> . , , , , .
Ne 30(19.68 tex) 14 72 .
Ne 22(26.84 tex) 10 20

.

. 13.6kg

.

,

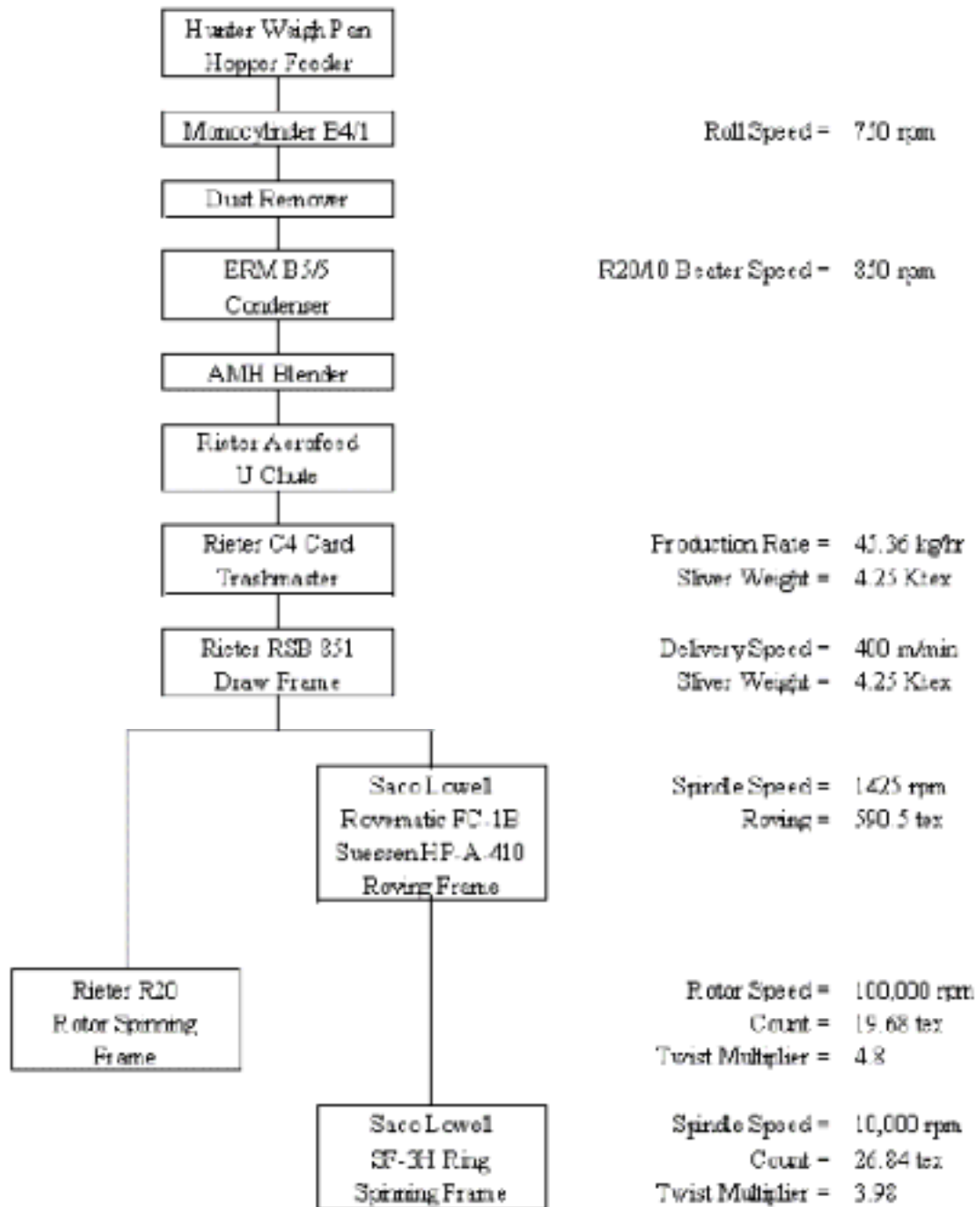
.

.

가

45.4kg

50%



< 1> Outline of the mechanical process for the spinning trials

17 . 4
 4 50%
 4 75% . 3
 87.5% . 2
 93.75% .

, ,

HPLC

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2.6 HPLC

(Kim wipes EX-L, Kimberly-Clark, Roswell, GA) . 18.2 가
 20ml . HPLC

3 .

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2.7

4 20 .
 가 Elitex BD200M(Elitex, Usti
 and Orlici, Czech Republic) . 18.2 가 20ml
 . HPLC

3 .

.

2.8

Fructose, glucose, sucrose, trehalulose Melezitose

. Trehalulose Cornell Sigma Chemical

Company(St Louis, MO) . 48

(65±2%, 21±1)

. $t_0=0$

m_0 () , (

65±2%, 21±1)

(4) (m_t)

. $[(m_t-m_0)/m_0] \times 100$

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