

< > - INDEX 99

1.

INDEX 99 1999 4 27~30 4 Palexpo
, INDEX (EDANA),
(INDA), (ANNA) 3 3

INDEX 99 34 430 INDEX 96
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2.

INDEX 가 , ,
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가 가 . 가
, .
, Converting, Perforating, Laminating
가 .

가

Blend 가

가 →

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3.

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3-1. 가

가 34 430 가 , ,
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가 312
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5 , 20 가 ,
() 2
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3-2

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(PVA) 가 ,
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가가 , .

Table 1. 가

가		가	
	99		3
	73	가	3
	46		3
	27		3
	22		2
	12		39
	11		3
	7		2
	8		5
	9		20
	4		2
	3		4
	13		6

Table 2.

	, .	31
(Scrim)	Scrim and reinforcement	6
	Chips or granules	10
		24
(Fiber and Filament)	(,)	8
가	Superabsorbent	9
	Surface treatment chemicals	8
	Adhesive, hot melts, etc	15
(Adhesive, Binder)	Binders, latex, foams, etc	13

Table 3.

Nonwoven production machinery	Web preparation	Extruders/die	16
		Fiber preparation	20
		Cards	13
		Other web preparation	14
	Web laying	Drylaid	17
		Wetlaid	3
		Short fiber airlaid	8
		Spunlaid, meltblown	16
		Other weblaying	12
	Web bonding	Chemical bonding	10
		Thermobonding	27
		Hydroentanglement	10
		Stich-bonding	7
		Needling	7
		Other web bonding	12
Converting		Roll winding	47
		Machinery for hygienic	38
		Folding	22
		Calendering/coating/laminating	22
		Embossing	23
		Printing	9
		Packing	33
		Other	45
Auxiliary equipment		Control and testing	31
		Applicators	12
		Wires, belts, pumps, etc	13
Waste handling		Recycling	27

3-3.

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3-4.

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Table 4.

Hygienic	Coverstock, topsheets, acquisition layers for baby, feminine Contaminent barriers and pants	72 39
Health care (Medical)	Face masks Swabs and Sterile wraps Draps and gowns Hospital bedlinen Underpads	53 50 48 33 42
Wipes	Cleanroom Household Industrial Medical Personal cosmetic	36 57 58 41 50
Home furnishing	Floor or wall covering Uphostery and mattress fabrics	30 44
Clothing and footwear	Interlining Protective garments for industrial, laboratory Outwear, sportswear, underwear	39 34 21

	Shoe components	47
	Synthetic leather, handbags	39
Filtration	Oil absorbents	27
	Liquid	33
	Air, gas and dust (Home, Industrial)	52
Automotive	Headliners, Filter, Seatcovers, Insulation and sound proofing	29
Civil engineering (Geotextiles)	Fluid collection, Landfill, Road building, Reinforcement	24
Building	Housewraps, Roofing	42
Agriculture	Greenhouse, Crop protection, Capillary maps	33

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4-1.

a) ,

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Vileda

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Foam coating

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b)

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- Diol Dicarboxylic acid (Condensation polymerization)

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- Copolyester > Homopolyester

- Linear chain > Branched, Crosslinked chain

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- Hydrophilic > Hydrophobic

- >

← 가

4-2 Isolyer Company Inc,

OREX

(PVA)

. OREX 96

OREX PVA .

a) Characteristics

Hot water soluble at 96 → Less solid waste

No chemical or thermal binders → Soft, comfortable, good drapes

Highly absorbent, Anti-static, Low lint

Ultraviolet resistance

High tensile strength, tear strength

Resistance to chemical

b) Applications

Personal protective

Industrial wipes

Medical, surgical gowns and drapes

Disposal bags

4-3 M&J Fibretech

Wood pulp

Air-laid

, Latex bonding Thermal bonding .

a) Latex bonding

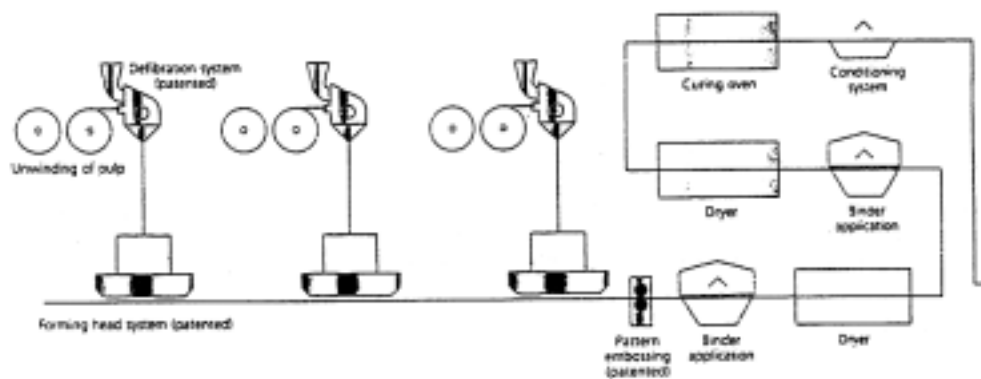
Latex bonding

Air-laid

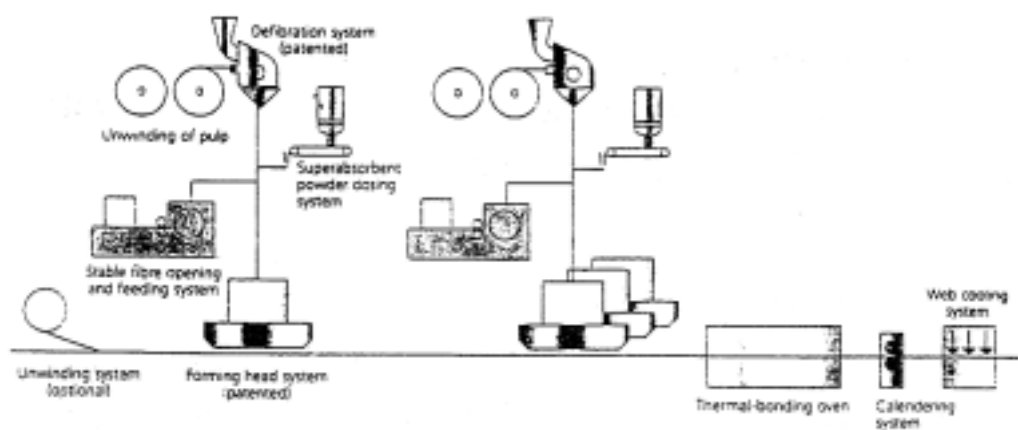
, attractive, textile

, wet ,

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Latex-Bonding Plant



Thermal-Bonding Plant

b) Thermal bonding

, Acquisition layer Wicking layer
.

4-4 Texbond

Ultratex , , ,
, . , 가 , 가
, Roofing,
Insulation, Medical supplies .

4-5 Cavitec

Cavitec 가
/ rotary screen process
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가 .
screen

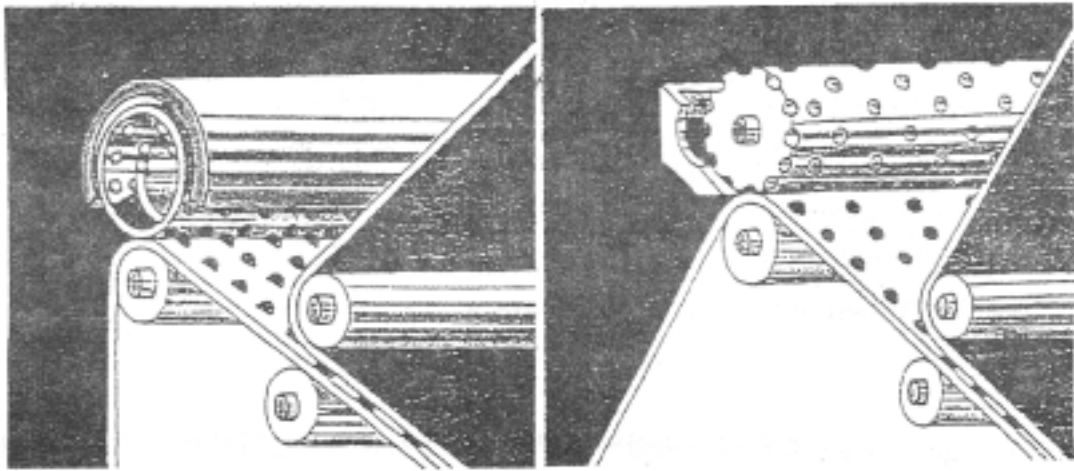
● Applications

Functional cloth : Sport wear and leisure wear, Protective wear

Medical and hygiene sector : Medical textile

Furniture industry : Seat, covers

Technical composite material : Barrier composites, filter laminates



4-6 Ason Engineering, Inc.

Ason

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coverage, barrier

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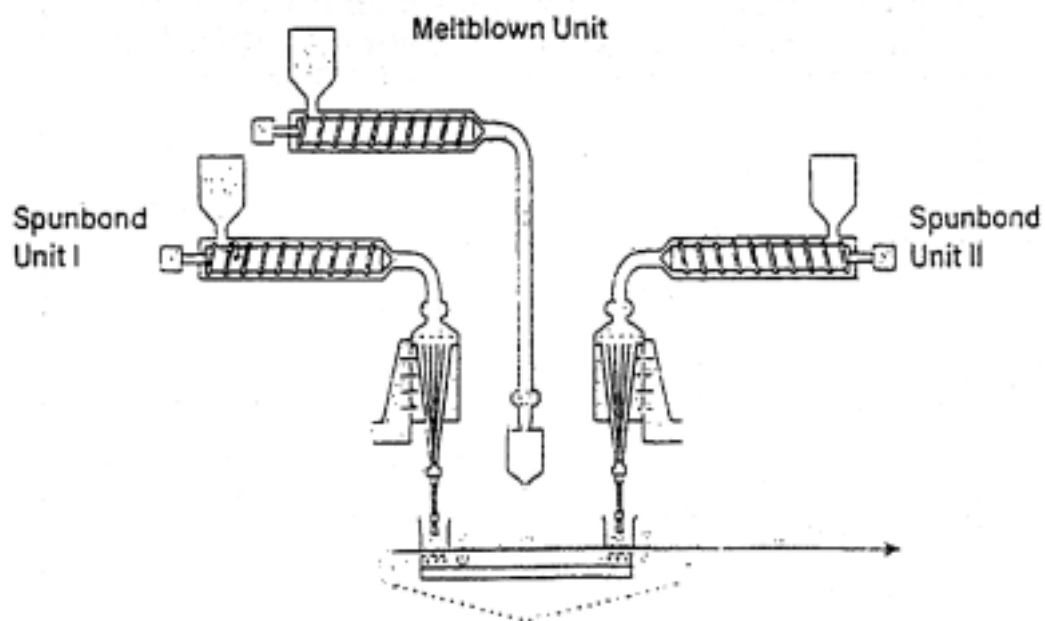
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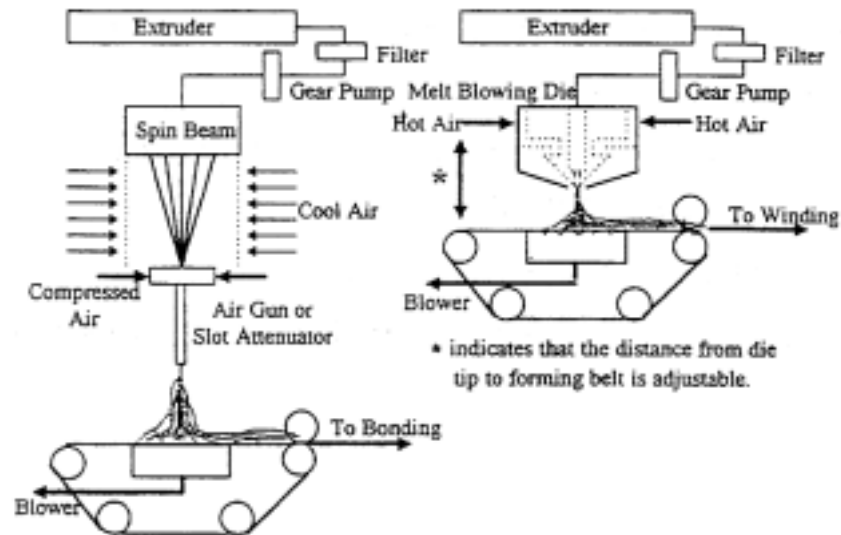
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Table. 5 , Ason

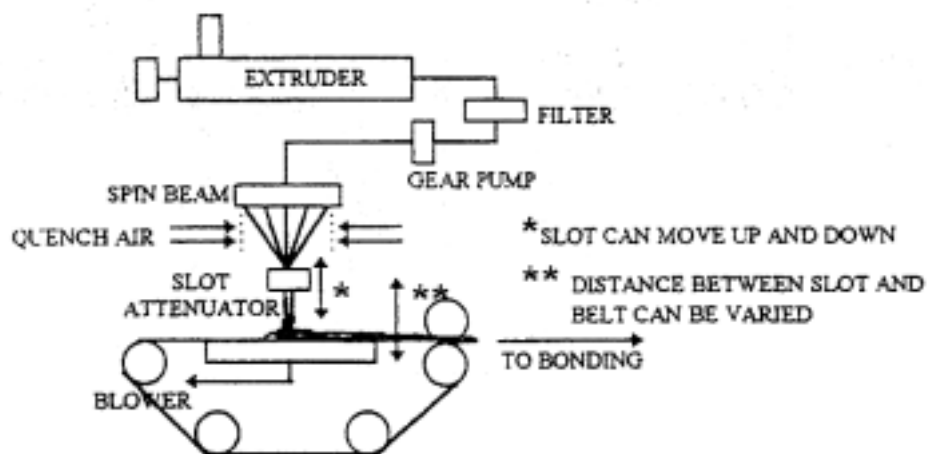
Characteristics	Technologies		
	Spunbond	Ason Spunbond Technologies	Meltblown
Spin length (m)	3.0~4.0	0.3~1.0	< 0.1
Mechanism of drawing force	Vicous friction	Vicous friction + Form drag.	Form drag.
Forming distance	Fixed	Variable	Variable
Filament velocity (m/min)	< 3,000	4,000~6,000	> 10,000
Filament denier	> 2	0.5~2	< 0.5
Production rate (kg/hr/m)	100~180	240~300	50~70
Fabric strength	Medium	High	Low
Fabric uniformity	Poor	Good	Good
Production cost	Medium	Low	High



SCHEMATIC OF SPUNBOND AND MELTBLOWING PROCESS



SCHEMATIC OF ASON SPUNBOND PROCESS



barrier

가

Spunbond/Meltblown/Spunbond(SMS)

SMS

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Ason

(1~4 bar) slot attenuator

, spinneret

slot

slot forming belt

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- Spinline : spinneret drawing device .
- Quench : chamber 가 .
- Drawing force : Form drag/Vicous friction
- Forming distance : slot forming belt 가

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carding

carding

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