

# **NONWOVENS IN FILTRATION WORLDWIDE 2003 - 2010**

Third Edition

July, 2003

**( in part updated in 2005 and 2006)**

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FILTER MEDIA CONSULTING, INC.

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## TABLE OF CONTENTS

	PAGE
SUMMARY & HIGHLIGHTS	5
PREFACE	7
METHODOLOGY	9
LISTS OF MANUFACTURERS WORLDWIDE	11
FILTRATION THEORY	12
NONWOVEN TECHNOLOGIES IN FILTRATION (Brief Summary)	14
General Comments	14
Dry Laid or Dry Formed Process	14
Needled Felts	15
Spunbonding	16
Meltblown/Microfiber Technology	18
Nanofiber Technology	21
Electrets (Electrostatically Enhanced Nonwovens)	22
Wet Laid Nonwovens	24
Spunlaced Hydroentanglement	25
Engineered Nonwovens and Composites	26
PTFE Expanded Membrane	26
FIBERS IN NONWOVENS	28
General Comments	28
PLA – Polylactic Acid	29
LYOCELL™	29
FOSS 211	29
Creslar®	29
Kermel®	30
Chinfunex™	30
Metamax®	30
Sulfar – PPS Fiber	30
DuPont ETFE	31
Basofil®	31
Emmitex™	31
Poly-ox	31
Conductive Fibers and Fabrics	32
Bicomponent Fibers	33

## TABLE OF CONTENTS

	PAGE
APPLICATIONS	34
<b><u>DRY FILTRATION</u></b>	
HVAC	34
Residential Market	42
Industrial/Commercial	45
MERV	46
Filter Media	48
HEPA/ULPA	54
Filter Media	56
Synthetic Media	59
Applications	60
Media Market	62
PLEATED DUST CARTRIDGES	64
Markets	66
Market Size	67
VACUUM CLEANER	69
Filter Media Aspects in Europe	69
Filter Media Market in North America	76
Filter Media Market in Asia/Pacific	77
PTFE Expanded Media	78
AUTOMOTIVE	80
Air Intake Filters	80
Cabin Air Filters	85
Diesel Fuel	88
Airbag Diffusers	91
Total Automotive Nonwoven Media	93
AIR INTAKE FILTERS	94
Radial Fin Filters	96
Markets	97
SHAPED AND MOLDED FITLERS	98
ACTIVATED CARBON MEDIA	101
AQF TECHNOLOGIES LLC	101
HOLLINGSORTH & VOSE EUROPE	102
KX INDUSTRIES LP	103
FREUDENBERG	103
3M COMPANY	103
Other Concepts and Companies	104
Brief Descriptions of the Most Common Processes	105
Markets	107

## TABLE OF CONTENTS

	PAGE
<b><u>LIQUID FILTRATION</u></b>	108
DISPOSABLE LIQUID CARTRIDGES	108
Applications	111
Filter Media	113
Markets	115
Estimated Sales by Industry Applications	116
MICRON RATED VESSEL BAGS	117
Food and Beverage Industry	117
Estimated Sales for the Dairy Industry	119
Brewery and Beverage Industry	119
Estimated Sales for Beer, Wine and Beverages	121
Edible Oils	121
Estimated Sales for Edible Oils, Cooking Oils, etc.	123
Can and Beet Sugar Industry	123
Estimated Sales for Can and Beet Sugar	124
OTHER FILTRATION APPLICATIONS	125
FORECAST 2004 – 2010	127
COMMENTS TO FORECAST	128
DISCLAIMER	130
SPECIAL SEGMENT REPORTS	
1. CELLULOSE MEDIA & WET-LAID NONWOVENS	
2. NEEDLED FELTS FOR DUST COLLECTION & BAGHOUSE SYSTEMS & LIQUID FILTRATION	
3. SPUNBONDED NONWOVENS & COMPOSITES FOR FILTRATION	
4. MELTBLOWN/MICROFIBER Electrostatically CHARGED NONWOVENS & NANOFIBER FILTER MEDIA – WORLDWIDE	
5. EXPANDED PTFE MEMBRANE FILTRATION MEDIA - WORLDWIDE	

## SUMMARY & HIGHLIGHTS

This report is the most extensive report we have ever published. Because of its complexity we decided to divide the report into a 'main' publication,

**"Nonwovens in Filtration" and five segment reports:**

**"Cellulose Media & Wet-Laid Nonwovens"**

**"Needled Felts for Dust Collection & Baghouse Systems & Liquid Filtration"**

**"Spunbonded Nonwovens & Composites for Filtration"**

**"Meltblown/Microfiber Electrostatically Charged Nonwovens & Nanofiber Filter Media – Worldwide"**

**"Expanded PTFE Membrane Filtration Media – Worldwide"**

These segment reports may also be purchased separately.

\*\*\*\*\*

If there is a "Single Largest Issue" between now and 2010, it is 'nanofiber technology' and its penetration in many existing markets and applications.

\*\*\*\*\*

Looking at growth between now and 2010, the single most important market is "China". It is important, however, that China will not offer the greatest opportunity in all segments of filtration, but rather in 'selected ones'.

\*\*\*\*\*

The U.S. has shown that 'tight Government Legislation' may be the key to expected growth (pm 10 legislation, pm 2.5 legislation) but its 'enforcement' is another story. If all industries would fully comply with current **outlet emissions**, the baghouse/fabric collector market and filter bags with it, would be 100% larger.

\*\*\*\*\*

The residential HVAC market segment – unique to North America only – will grow 15% annually because people will invest in more efficient filters than the original \$0.90 furnace panel filter.

There are 105 million households in the U.S. with 80% air conditioning and heating/forced air systems that will pay between \$3.50 and \$8.50 per filter, at least two times a year rather than the previous \$0.90 for glass or polyester material. Currently 18% - 23% of all households are expected to use such filters. This may increase to 60% - 70% of all households in 2010. Allergy, health concerns, and 'dust awareness' will be the driving forces.

\*\*\*\*\*

Face masks and particularly the so-called medical SMS filter media has seen normal growth until earlier in 2003. With SARS however, that changed dramatically with the production of one million masks per day for the last 3 months in China alone. We were told that in China more than One Billion face masks will be produced in 2003. The Avian Flue creates a new opportunity.

\*\*\*\*\*

We used the following exchange Rates at mid/late June 2003, adjusted rates in 2005 and 2006.

\$1.00 = €0.84	€1.00 = \$1.18	£1.00 = \$ 0.60
\$1.00 = ¥120	\$1.00 = RMB 8.20	\$1.00 = WON 1,200
\$1.00 = RAND 8.0	\$1.00=\$1.50 (Australia)	\$1.00 = \$1.35 (Canada)

\*\*\*\*\*

Further growth in automotive applications for nonwovens replacing phenolic resin impregnated cellulose paper will continue, but it is a slow process.

\*\*\*\*\*

Meltblown/microfiber/electret nonwovens and now also nanofiber materials are the fastest growing segment within nonwovens in filtration.

\*\*\*\*\*

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