

Falling prices

Nonwovens production in Western Europe grew by almost 9% in 1999 to reach 909,800 tonnes, according to the latest figures from EDANA.

In terms of square metres, the increase was higher, at around 10%, to 23,239.9 million square metres – reflecting the downward movement in weight of products.

As the graph below clearly illustrates, the output of the West European nonwovens industry has doubled in less than ten years, and EDANA's secretary general **Guy Massenaux** has predicted production figures, when released, will show sizable growth in 2000 also.

Polypropylene is the most important polymer used in the nonwovens industry in fibre or granule form, accounting for 492,300 tonnes out of a total of 944,200 tonnes.

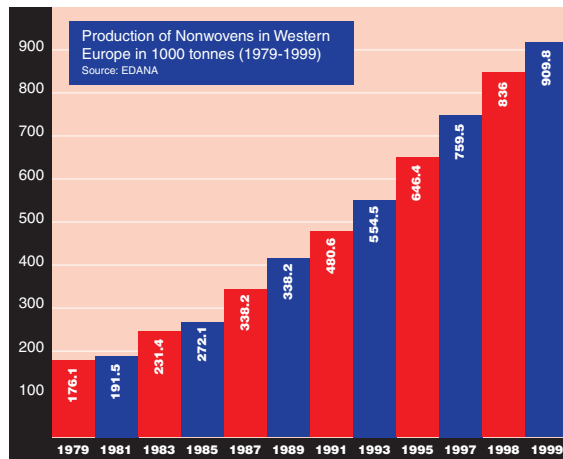
In monetary terms, the estimated turnover for West Europe's nonwovens industry was put at Euro 3,600 million reflecting falling prices in showing no progress in relation to that for 1998.

The industry is said to now employ some 15,000 people in West Europe.

Mr Massenaux is to retire at the end of this year, and his successor as secretary general has been named as **Paul Dewingaerden**, pictured right, who brings nonwovens experience in the medical, food and industrial fields to the post, having worked for a major nonwovens producer for a number of years.



"It is an exciting challenge and a privilege to succeed Guy Massenaux," said Mr Dewingaerden. "My key objectives will be to improve EDANA's services to its members, to promote the European nonwovens and hygiene industries and to consolidate their global recognition with the collaboration of international associations."



Technical commitment

Vita Group reports that the major upgrade of its two nonwovens facilities in the UK is now approaching completion, together with additional hygiene capacity in Belgium.

Executive chairman **Jim Mercer** said the Continental European nonwovens businesses had again produced very creditable performances, particularly in view of rising raw material prices, but that the UK market was difficult and

the group's ability to respond was hampered by the disruption caused by major capital expenditure programmes at the two main UK sites.

"The development of nonwoven products for technical applications remained a key focus for our businesses," he added. "The £6 million acquisition of **Texidel** in France, primarily servicing the automotive market, demonstrates our commitment to growth in these technical areas. We continue to seek opportunities to develop our global strategy for these products, with particular emphasis cur-

rently focused on Europe and the USA."

Worldwide, Vita is the largest manufacturer of highloft polyester nonwovens and a leader in the converting of man-made fibres into customer-designed products. A vast range of nonwovens are based on capabilities of chemical, thermal, through-air or mechanical bonding. Vita's markets are mainly focused on polyester nonwovens for mattress, upholstery and fashion businesses, air and spraybooth filtration, needlefelts and other high-tech constructions for automotive, building and industrial applications and high-performance nonwovens for hygiene disposables.

Vita Group made a profit before tax of £44.2 million in the first six months of 2000, up 6% on last year's record first-half result. Sales at £492 million were 4% ahead of 1999.

The results, however, were achieved in a climate of increasing raw material prices and further strengthening of sterling, two factors that in the second quarter had particular impact, on our coupled with "operational difficulties" at the UK nonwovens businesses which reduced overall operating margin from 7.9% to 7.5%.

NovaThin expansion

Rayonier, based in Jacksonville, Florida, is to invest \$15 million in a new 12,000 ton per year production facility for its NovaThin line of engineered absorbent products.

In addition, the company has renamed its specialty pulp products segment the **Performance Fibers Group**.

"This new facility will enable us to meet growing demand for *NovaThin* products and will also serve as a research platform from which we will develop new generations of absorbent materials," said **Lee Nutter**, chairman, president and CEO.

NovaThin pre-formed absorbent cores for diapers and feminine hygiene products have gained rapid acceptance because of their thinness, absorbency, comfort and cost benefits.

NEW PRODUCTS



Dermatophagoides pteronyssinus
– the lowly house dust mite

Sleeping easy with air exchange

Web Dynamics has launched a new anti-allergy fabric under the trade-name *Webflex-AX*, which is said by the company to have superior performance, appearance and tactile qualities compared to other products on the market and is suitable for use with down and feather pillows and covers.

Webflex-AX is a fully air and moisture permeable manufactured fabric that is chemical-free while offering total protection against asthma-inducing allergens and sharp ends.

Tested extensively at Edinburgh's **Institute of Occupational Medicine**, results of particle barrier test on samples of the fabric have shown 100% barrier effectiveness for all particles above 0.5 microns in size. Never having tested an air permeable fabric

giving results even close to these, the IOM (experts in challenging fabrics with microscopic dust particles at precise micron sizes) took the unusual step of rechecking and recalibrating its test rig before confirming the findings.

When a zipped pillow case made from the fabric was subjected to similarly exacting tests, the results proved equally outstanding. A less than 1% penetration was recorded for the smallest particle sizes.

The company's work on breathability in engineered fabrics underpins the development. Until recently the term 'breathable' signified vapour transmission only.

Whether mechanically engineered or chemically diffused, the aim has been to enable moisture vapour to escape

from inside a fabric in order to limit heat build-up and condensation. In bedding, the ability of the material to release moisture vapour is essential. But if this process compromises the fabric's ability to act as a barrier to allergens, it defeats its own purpose. Traditional cottons, for example, breathe extremely well, but offer a poor barrier to microscopic particles.

What Web Dynamics has done is to develop air exchange – a combination of vapour transmission and air permeability.

While vapour transmission dispels moisture, air permeability secures thermal equilibrium giving greater all-round comfort. Protection against allergens is achieved through the fabric's very fine filaments which act as a super-filter while allowing air to pass through normally.

Asthma

Most experts agree that the allergen Der p1 (protein) found in the faeces of the lowly House Dust Mite, *Dermatophagoides pteronyssinus*, is a major factor in 8 out of 10 cases of childhood asthma, eczema and rhinitis. This allergen is very much present in typical home environments. Mites infest mattresses, pillows and duvets, affording shelter, warmth, moisture and food in the form of unwanted skin flakes, in their millions. The mites themselves are less of a problem than their droppings, which break down into a micro-dust and are easily inhaled when dispersed through movement.

Many ways have been devised to prevent microscopic faecal dust being blown, shaken and puffed out of bedding into the atmosphere. PVC, cling film, polybags and a variety of waterproof and barrier fabrics have been tried, but they tend to be uncomfortable, noisy, slippery, make you sweat and, like many impermeable materials, produce a 'bellows and suction' effect unsuitable for the bedroom environment.

Barrier filtration

It was during tests aimed at defining European standards for protective clothing that Web Dynamics' **Tim**

