

**STATISTICS:****– a good start for 2003**

This year is clearly off to a better start than 2002 which, after a weak Q 1, turned out to be a year of further growth particularly for exports and the thin foil products used mainly in packaging. At 203,000 tons, the first quarter's total tonnage for 2003 showed a gain of 7% over the same period in 2002 (189,500t). Exports are still excellent with a growth of 12% over Q1 2002 and with sales inside the EAFAs 'home' territory showing an increase of 6%.

Deliveries of the thicker gauges used mainly in technical applications are showing a market recovery. These grew by around 13% within EAFAs countries, regaining some of the ground lost recently in the industrial sector due to the adverse economic conditions.

**Outlook is for sustained demand**

"According to the current indications received from members, strong demand is continuing for the second quarter," said EAFAs Secretary General, Stefan Glimm. "This year promises to continue the long term growth in alufoil shipments, with the third quarter perhaps developing more modestly than the unusual rate experienced for the same period of 2002."

The territory embraced for EAFAs statistics now includes: Armenia, EU, Czech Republic, Hungary, Russia, Switzerland and Turkey.

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**ALUFOIL: life support system?**

Today we take for granted the ways in which packaging delivers food and drink, pharmaceuticals and confectionery, in a perfect condition ready to be used despite the hazards of the environment, handling, storage and distribution. Modern packaging systems are technological miracles driven by the demands of consumers for quality coupled with economy.

Aluminium foil is playing a central part in this scene. Throughout our day it helps to deliver dependable quality – from the moment we unwrap the butter at breakfast to opening some chocolate while watching TV in the evening. In between, the examples of alufoil's contributions to our typical day are countless.

But alufoil is not in our lives just because it looks good. It is there for its combination of properties and its economy. Total barrier is combined with heat resistance and its compatibility with other materials and with virtually everything it is asked to protect. Economy is evidenced in the very small thickness needed, in the ready recyclability of the used aluminium and in the savings which an alufoil layer can make in the weights of other laminated substrates.

Lightweight packs such as alufoil containers or flexible alufoil aseptic pouches are bringing great economies in the related logistics. Thanks to significant reductions in weight and space demands, source minimisation is being enabled by alufoil, not just in the packs themselves, but also in their distribution.

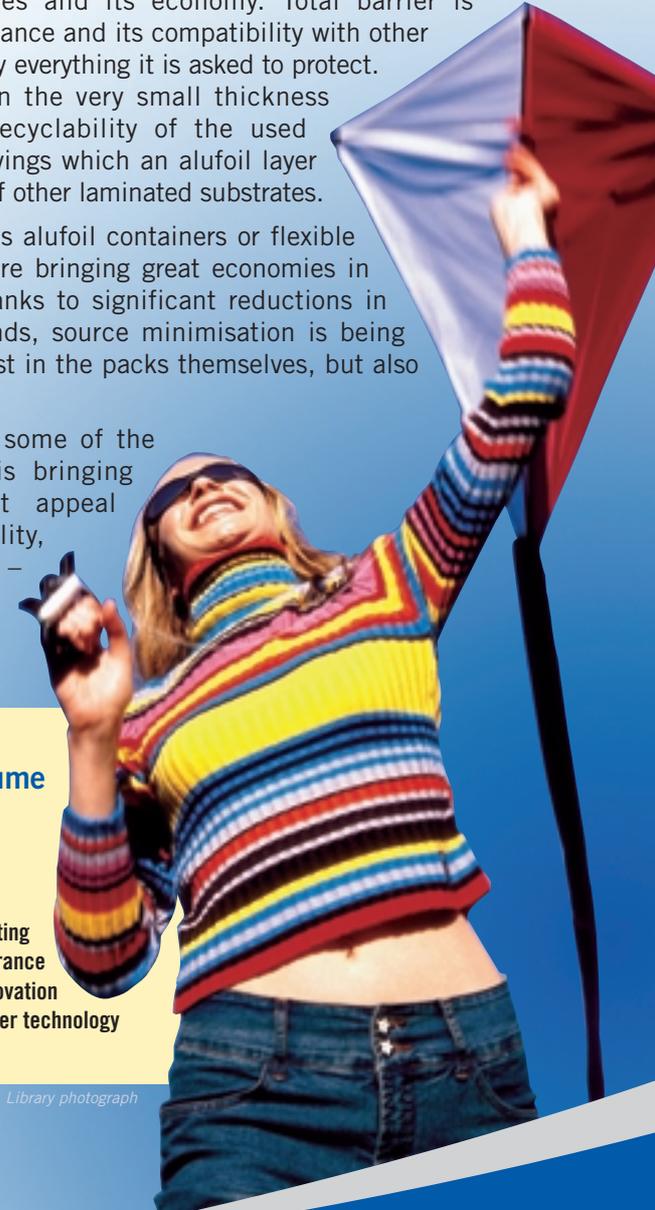
This edition centres on some of the ways in which alufoil is bringing new levels of product appeal and quality, sustainability, practicality and hygiene – in other words

*'lifestyle enhancements'!*

**Alufoil part of the  
'young trend' in perfume  
– new PUPA pouch**

The introduction to the cosmetic sector of fresh pack solutions is demonstrated in "J", a trend setting design. This latest women's fragrance launched by PUPA combines innovation and originality and brings together technology and fashion . . . ► page 2

Library photograph



# Innovation

## Alufoil part of the 'young trend' in perfume – new PUPA pouch - from front page

The product design really reflects the target: the teenage market. It is an absolutely unique concept among cosmetic products – the first perfume to pick up a theme from fashion: Denim Jeans.

The denim pocket is saddle-stitched in red, with a double-tab PUPA label at one side. Inside the pocket, a pouch in aluminium foil contains the perfume.



Assembled onto the alufoil pouch is a broad plastic spray cap with a polished aluminium finish on the visible side.

The new design and materials have enabled the creation of a light and handy perfume pack with an easy dispenser for the handbag or even for the jeans pocket. Thanks to its compact format – 15 or 30 ml – it can also be considered as the first "take away" beauty-product.

## Sanpellegrino brand capitalises on beverage can hygiene

First announced in 2001 (Infoil 11), the idea of the alufoil cap for cans is now fully proven and in the market. Italian drinks producer Sanpellegrino SpA is capitalising on the protection and decoration provided by colourful alufoil caps supplied by Ecocap's s.r.l. of Bologna. The result is a range of attractive, colourful and eye-catching packs.

As well as providing the guarantee of a clean and hygienic can top and aperture for direct drinking, the EcoCap adds sales appeal to the beverage can. It converts the can top area into further brand identity and provides a medium for special promotions without any change to the can body design.

The physical characteristics of the alufoil provide the ideal combination of practical and environmental benefits. The 'stackability' of the

## Clever packs with Alufoil lids Hot and cold running coffee – on the move!



Now, coffee addicts never need to be far from a cup of coffee – hot or chilled. They can have one ready in a few seconds wherever they are. The Italian food company Malgara Chiari & Forti SpA has two instant drinks systems on the market. One is called 'Caldo Caldo', the other 'Freddo Freddo'. Similar in design, but activated by different chemical reactions to create heat or cold, the packs consist of an alufoil-lidded alufoil cup (supplied by Alcan Packaging Singen, Germany) with the ready-made coffee. This cup is inside a plastic container which also has water and a reactive material inside separated by an inner membrane.

When the base of the outer container is pressed, the membrane is broken. This allows the water and compound to mix, so heating the contents or cooling it. Thanks to the conductivity of the alufoil inner cup, the temperature is transferred quickly. After a shake of 40 seconds, the drink is ready and the printed alufoil lid can be peeled off.

The pack is ideal for situations where a quick hot or cold drink is required, wherever the nearest facilities may be.

## Sterylkit UPI

## Mini first aid kit in an alufoil-backed blister pack

A complete first aid kit is now available in a compact blister pack created by Klocke Verpackungs-Service GmbH. Designed as a pocket dressing for minor scratches and abrasions, the Sterylkit has two blister compartments and a single adhesive plaster. One compartment contains a liquid antiseptic, the other a sterile gauze.



The disinfectant liquid is squeezed past the internal seal wetting the gauze pad. The gauze can now be exposed by bending and cracking the blister along a scored line, and the wound can be cleaned without fingers touching the gauze or the liquid. The sticking plaster attached to the back of the pack can now be placed over the wound.

The alufoil-backed blister pack combines functionality, safety and user convenience.



## Maggi 'Letter Soup' demonstrates tough pouch laminate

Danapak Flexibles of Denmark have introduced a new puncture resistant alufoil laminate specially for powdered soup and similar mixtures containing sharp particles. At the same time, the laminate is 27% lighter than the paper laminates traditionally used for similar pouch products.

The laminate is made up of a special high gloss white OPP which is tandem extrusion coated with polymers along with a layer of aluminium foil. The sachet design is printed by rotogravure and varnished giving a very high quality appearance. The lamination process is solvent free, and a low sealing temperature allows very high speed packing.



# Sustainable development

## Solar cookers – a bright idea can save lives

Some cardboard, a few metres of aluminium foil, a transparent plastic bag, and a dark-colored cooking pot are the simple elements in a low cost invention that has already helped hundreds of thousands of people in Africa.

Solar Cookers International (SCI), an NGO with offices in Kenya and the United States, promotes simple, aluminium foil based solar cookers. These work by reflecting and concentrating the sun's rays onto the cooking pot. The highly reflective alufoil harnesses the free and abundant solar power. The transparent plastic around the pot lets the sunlight in but holds a cushion of hot air so that temperatures inside rise to 95 - 120°C – hot enough to kill bacteria and to cook food.

Solar cookers can also be used to sterilize drinking water. They can therefore be a life-saver in sunny countries or in disaster stricken areas where fuel and clean water are absent or in short supply – and there's no carbon dioxide released to the atmosphere.

SCI favours alufoil-lined solar cookers over more elaborate versions because they are inexpensive and the materials are readily available.

In one of the many projects around the world, SCI has brought solar cooking to more than 20,000 families in refugee camps in eastern Africa.

More information: [info@solarcookers.org](mailto:info@solarcookers.org) or [www.solarcookers.org](http://www.solarcookers.org)



Maina Manumure sells solar cookers in Zimbabwe

## Independent study results in switch to alufoil from plastic lids

The largest organic yogurt producer in the USA, Stonyfield Farm, has just “flipped its lid” – substituting a tough aluminium foil seal for the plastic lid and inner seal formerly closing its yogurt cups. The company estimates that replacing the plastic lid will result in a packaging waste reduction at source of more than 270 tons.

Stonyfield's switch to the alufoil lid was made after an exhaustive independent study by the University of Michigan's Center for Sustainable Systems to identify ways to improve the environmental attributes of its packaging. The study compared several options but the alufoil closure was chosen by Stonyfield because it met all product quality attributes, significantly improved the environmental performance of the company's packaging, and reduced costs.

The company reports other savings resulting from the switch to alufoil:

- 16 percent less energy is used
- 13 percent less water is used, amounting to 800,000 gallons (3.3 million litres).

Stonyfield Farm has received numerous awards over the years for its waste reduction, energy efficiency, and environmental advocacy efforts.

*Additional background on lidding dairy products: Independent studies in Europe have shown that the protective light barrier of alufoil helps to preserve the taste and quality of dairy products in lidded tubs. (See [www.alufoil.org](http://www.alufoil.org) - reference library: Yogurt Lidding Study - June 1994, and Foil best for lidding cream pots: new research - Autumn 1997)*

## Downgauging

### – when less means more

Our diagram illustrates just how significant has been the drive over the past 15 years or so to reduce the thickness of alufoil without the loss of barrier properties. The molecular structure of aluminium creates a virtually total barrier even in extremely thin gauges. This means that, given the technology, the drive for source reduction in aluminium foil will continue. It also means that less alufoil provides more square metres, more units packed.

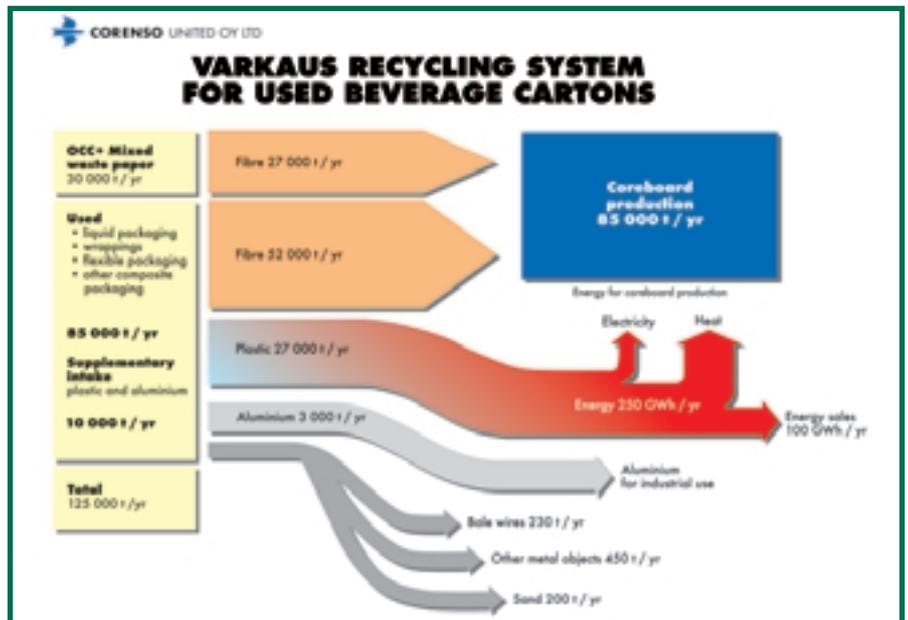
#### Source reduction of aluminium foil

Laminated tubes	-25%
Flexible packaging	-28%
Beverage cartons	-30%
Chocolate foil	-30%
Cigarette foil	-30%
Coffee foil	-30%

## Sustainable energy generation coupled with recovery and recycling

The major Corenso investment in Varkaus, Finland, continues to pay dividends. The Ecogas Energy Plant created a recycling break-through when first launched in 2001. The innovative ECOGAS process, based on the Group's own research, recovers fibre, converts the plastic layers of used multilayer packaging into gas for energy and recovers aluminium.

Since the start-up of the Ecogas plant, almost all the fossil fuels formally used in Stora Enso's integrated industrial complex have been replaced by biofuels and fuels derived from recycling. The Corenso recycling plant now processes 125,000 tons of mixed packaging waste into 250GWh of heat and electricity per year. Some 3,000 tons of aluminium are recovered.



# Sustainable development

## Social aspects

### Helping to counter autism

Trials with 40 autistic children in the USA\* using a completely new technique involving aluminium foil are reported to have been very positive. Now, the first trial in Europe is being started by Robin Tinsley of Newbury, England, whose 11 year old daughter, Susie, has severe autism. In Susie's case her disability is being regarded as a chronic auto immune condition although the causes and nature of autism are still the subject of research.

The results of the USA trials suggest that trigger elements in the living environment can be suppressed by covering all surfaces in a special clean room with aluminium foil. The complete barrier stops all such elements including volatile organic compounds from paint, paper and plastics.

Robin Tinsley is constructing a special clean room annexed to his home in which his daughter will stay for 6 months in an air-filtered environment. Using alufoil provided by an EAFA member, every surface in the room including furniture is being covered. Here, previous experience indicates, her immune system will stand the very best chance of recovery.

(More information: [autismprogram2003@yahoo.co.uk](mailto:autismprogram2003@yahoo.co.uk) or [\\*kslimak@ix.netcom.com](mailto:*kslimak@ix.netcom.com))

## UK recycling



### Design for recycling meets corporate social responsibility

Looking good, and being fit-for-purpose are no longer enough. Aluminium provides a readily and valuably recyclable material with significant social benefit. The UK's Aluminium Packaging Recycling Organisation (Alupro) recently ran this advertisement in the packaging and end-user trade press. It brings attention to the merits of aluminium to pack designers and marketeers who wish to enhance their company's social profile.

## Turning used aluminium packaging into trees!

Now Alupro has launched a year-long programme which links aluminium recycling with a massive planting programme with a target of 35,000 new trees across the UK.

"With its high value, and a 95% energy saving each and every time it is returned for recycling, Aluminium is the perfect material to focus public attention on what can be achieved through getting the recycling habit" says Alupro communications director Cherry Hamson.



HRH the Princess Royal plants a tree to launch a new garden for people with special needs. The project is part of an Alupro initiative which is helping community/charity groups raise funds through aluminium recycling.

([www.alupro.org.uk](http://www.alupro.org.uk))

## Facts on Foil:

### Heat performance

#### Conductivity

The value of fast heat transfer can be overlooked when considering the material choices available for flexible and semi-rigid packaging. Applications where the excellent heat conductivity of aluminium is a benefit include:

- Induction-heated seals for bottles and pots used for pharmaceutical tablet and cosmetic creams: Fast transfer of heat ensures a reliable seal and no risk of damage to the contents.
- Heat-sealed pouches and sachets: Quick and even heat spread allows high production rates, minimum distortion or damage to the supporting substrates and predictable seal performance.
- Sterilisable packs: For autoclaved products, the absolute minimum of time is required for heat to penetrate the

packaging material to the product and to achieve sterilisation with minimum damage to the quality of the food inside.

- Baked and microwaved products in alufoil containers: The product is heated quickly to cooking or re-heating temperature, the aluminium carrying the heat evenly across the whole container and 'hot spots' are avoided.

#### Heat resistance

The ability of aluminium to retain its shape and strength in a temperature range from the coldest 'deep freeze' environment to fierce heat of a grill, makes alufoil the natural choice for applications such as containers for frozen bakery products and ready meals. Also, in most of the applications calling for heat sealing, the stability of the metal under localised heat helps the other materials, such as plastics and paper, to resist melting or heat damage.

## Foil Packs of the Year 2003:

### – closing date September 30th

Entry for the EAFA Trophy Award is free and the prize is world-wide publicity for the winners. Anyone can enter, provided consent is obtained from the brand owner.

For entry conditions, further details and a downloadable entry form go to:

[www.alufoil.org/foilpack/entry.htm](http://www.alufoil.org/foilpack/entry.htm)

