

# Ice Cream Update

Autumn 2008



Welcome to the Autumn 08 issue of the Tetra Pak Ice Cream Update. I cannot believe it is a year since the last ICA show. It has been an interesting and busy year; my highlights include taking Italian Ice Cream makers Grom to Scotland to learn about Ice Cream (see August issue of Ice Cream) and the launch of the DeepBlue 300. By James Clarke

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Where to see Tetra Pak: **Exhibition News.**

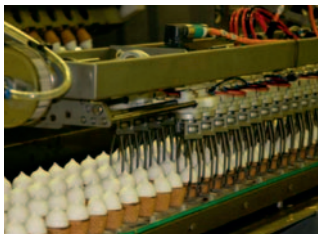
**ICA 08: Ice Cream Alliance Exhibition** at Harrogate 4-6 November 08

**Anuga FoodTec 2009** Cologne Germany 10-13 March 09

## From Russia with Love

From an article by Jonna R. Hedegård, Tetra Pak Hoyer A/S

**Russian Ice Cream manufacturers have good reason for looking to Tetra Pak to help them solve the pressing challenges facing them today. Market stagnation has made innovation and product development more important than ever to help capture market share, whilst rising raw material prices and tough competition create hard conditions for maintaining a healthy profit. Enter Tetra Pak, which has the products, expertise and local presence to help manufacturers overcome obstacles and make the most of the potential.**



Russian ice cream production in Moscow has been thriving thanks to new equipment from Tetra Pak.

### Innovative portfolio

The world's leading supplier of ice cream equipment and complete production lines, Tetra Pak has more than 700 machines in operation in Russia. Tetra Hoyer continuous freezers, extrusion lines, filling and moulding machines, ice cream mixing equipment, ingredient feeders etc ... the product portfolio is comprehensive. In recent years, Tetra Pak has reconfirmed its reputation as a pioneer of ice cream technology with the launch of the Tetra Hoyer DeepBlue™ low-temperature concept - enabling cost-efficient production of ice cream with a premium smooth and creamy quality.

### Top service and consumables

Today, the Tetra Pak Trading Group is a leading supplier to the Russian market, with warehouses in Moscow, Novosibirsk and Krasnodar ensuring efficient distribution to ice cream plants all over the country.

Tetra Pak's strong technical sales and service (TS&S) organisation provides all the machine spare parts and upgrades manufacturers need. Coupled with our supply division Danice, we supply everything an ice cream manufacturer requires - all the ingredients, wrappers, sticks and other consumables that are part and parcel of commercial ice cream production.

### A Russian leader

Ruski Kholod is one of the dominant Russian Ice Cream companies to emerge

from the period of consolidation that currently prevails in the Russian ice cream industry. Ruski Kholod has long relied on Tetra Hoyer equipment to provide a top, cost-effective performance. At its new plant in Moscow, built last year, a Tetra Pak extrusion line, stick novelty line, filling line and low-temperature Tetra Hoyer DeepBlue™ line are in place - not to mention a number of Tetra Pak's newly developed continuous freezers with economical and eco-friendly CO2 refrigerant.

Built in a city where labour costs are astronomically high, Ruski Kholod's Moscow plant relies on the high-level automation Tetra Pak equipment can provide. The ability of the Tetra Hoyer Profill stick novelty lines to accommodate large inclusions is particularly favourable for the innovation of premium ice creams. The same is true of the Tetra Hoyer DeepBlue™ line - the first installed in Russia.

### Tuned in to Customers & Market needs

The growth of the Russian middle class has driven Premium sales upwards. Hardly surprisingly, then, that the first product to roll off Ruski Kholod's Tetra Hoyer DeepBlue™ line targets the luxury end of the market.

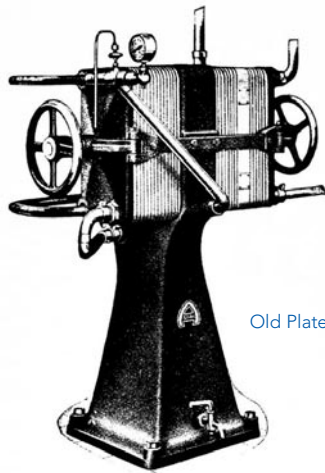
One of the beauties of Tetra Pak's low-temperature technology is that it favours the development of premium and economy ice creams. A typical Russian ice cream formulation with 15% fat can obtain a highly indulgent mouthfeel, a low-cost recipe can cut back on costly raw materials at little or no expense to eating qualities. With raw material prices at an all-time high, Tetra Hoyer DeepBlue™ is a welcome opportunity to keep rising costs at bay.

# Ice Cream Alliance 08 Are you ready? We are.



For a change, we will be showing some of the range of ancillary equipment Tetra Pak has available, from Mix Proof Valves to Rotary Pumps; from PHEs to CIP systems.

David and James will be available on the stand throughout the show, so why not come along and have a chat.



Old Plate Pack

Albert Dracke patented a plate heat exchange process in 1878 where one liquid cooled another. In 1923 the Plate Heat Exchanger (PHE) as we now know it was developed by Dr Richard Seligman. There have only been a few changes in the original design/concept since. The base concept of interchangeable plates with counter current flow still provides one of the most efficient heat transfer mechanisms. The Plate Heat Exchanger or PHE is the workhorse of the fluid industry, and the ice cream industry. Thanks to modern techniques and materials, a greater thermal efficiency can now be achieved, with effective temperature differences as low as 1°C

## Is it time to upgrade your PHE?

By Theresa Faley

between media and product. As energy costs rise, it really is time to look at your old plate packs and see if they are costing you money. With the development of computerized fluid and heat transfer modeling over the past decade, the already excellent PHE concept has been refined.

Tetra Pak has developed a tool to evaluate the optimum level of heat and energy utilization for each individual customer. One of the challenges with ice cream is not just heat transfer but pressure losses due to nature of the ice cream.

For an existing process we can assess the current heat recovery possible and the optimum to give a balance of energy savings versus capital costs. This would take into account pressure drops over the Plate Pack and then the choice is yours.

With modern plates and computer aided design a quick and accurate assessment can be made of the equipment that will give you yearly cost savings and rapid

payback of the investment needed to bring your plant up-to-date. Whether you are using the PHE for water heating/cooling duties, pasteurization of ice cream, or other applications, we have a unit to suit.

The range available for the ice cream industry is vast; from small, zero maintenance brazed packs to the range of Tetra Plex® heat exchangers:

### Advantages of a Tetra Plex® PHE

- Fully upgradeable and adaptable design to cope with your changing requirements
- Long running times due to exceptional plate design
- Solutions for customers of every size
- Long equipment lifespan
- Compact designs
- Patented flow distribution for elimination of stagnant areas and maximum flow
- Simple re-gasketing: no need to remove plates from frame so saves time
- High food hygiene standards



New Brazed Plate Pack

## DeepBlue™ 300

Tetra Hoyer DeepBlue™ Freezers were originally launched in 1400L and 3000L sizes for use with Ammonia systems and on an Industrial scale. However, the market asked for a smaller unit for bespoke production, development, and specialist high margin products. Enter the DeepBlue™ 300 self-contained freezer capable of up to 300 litres an hour, ideal for development, and specialist niche products.

### Next Issue:

The Flavour of 08: Review of ICA 08 from Harrogate

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