



# Scandinavian Dairy Information



New Danish dairy grant ●

Dairy based ingredients ●

Analysis technology ●

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# Argentina sees rapid growth

By Henning Mortensen

*Experiencing rapid growth in milk production, Argentina looks set to become a major player in the world market for dairy products. This development entails large investments in new process equipment: GEA Niro has supplied the world's most advanced spray drying plant to La Serenísima, one of Argentina's most innovative dairy companies.*

Argentina is becoming more and more influential on the global dairy scene. Following last year's record production of 9.7 million tonnes, most observers expect Argentine milk production in the year 2000 to range somewhere between 10.5 and 11 million tonnes. In other words: growth rates matched by few other countries in the world.

As a logical consequence, investments in new process equipment have been booming in recent years. This has been strongly felt at Niro A/S in Copenhagen, a leading supplier of spray drying plants, which has supplied the Argentine dairy industry for more than 30 years. One of the largest dairy companies in Argentina is La Serenísima, based in General Rodríguez 50 km north of Buenos Aires in the fertile part of the pampas, whose vast grass areas hold the potential for continued growth in milk production. Not surprisingly, international dairy groups are queuing up to make

investments and to collaborate with the Argentine dairy industry. La Serenísima processes about 1.4 billion kg milk each year.

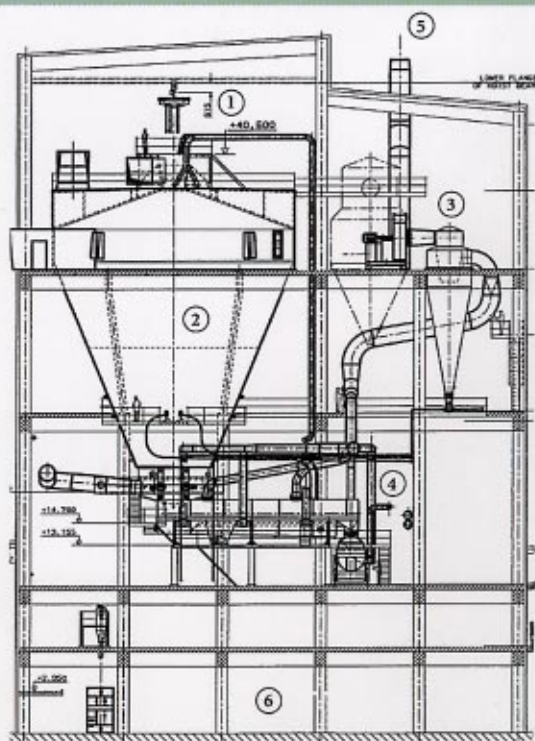
## New investments

The strongly growing milk production has necessitated investments in new drying capacity since a large part of the growing production will be processed into milk powder. Last year Niro completed the installation of the largest and most advanced spray drying plant of the multistage type at La Serenísima in General Rodríguez, a plant which is now a landmark of today's Argentine dairy industry. It has a capacity of 12,000 kg/h instant whole milk powder, and is, incidentally, the 5th

spray drying plant supplied by Niro to La Serenísima.

## Synergies

"When projecting and installing a plant like this it becomes necessary to draw upon the vast resources of the GEA Group, and the synergies between the various GEA group members across the world have taken full effect", says Vagn Westergaard, MSc (Dairy Science), Division Manager, Dairy Division, Niro, with more than 25 years' experience in projecting and commissioning of large complete spray drying plants. "Niro France S.A. has designed the two evaporators for the plant. It soon became clear that one large evaporator would be impossible at a factory of this size. The evaporator would have been too large for shipment and no crane in the world would have been able to hoist it into place" explains Vagn Westergaard. At the other end of the world, Avalon Engineering Ltd. in New Zealand designed the largest automatic powder bagging line in its history. It can handle 18 tonnes per hour or twelve 25 kg bags per minute. La Serenísima operators



*View of building and spray dryer installation. The liquid milk concentrate is sprayed into the chamber down to fluid beds for powder agglomeration/cooling. Final powder handling, packing, and storage takes place at the base of building.*

- ① Milk concentrate in
- ② Drying chamber
- ③ Cyclones
- ④ Vibrated Fluid Beds
- ⑤ Exhaust air
- ⑥ Powder handling/packing

were trained in New Zealand, before the equipment was shipped. Niro Soavi SpA, Italy, has supplied the homogenizers for the project; GEA Liquid Scandinavia, Denmark, the CIP system; and Tuchenhagen GmbH, Germany, the pipework components.

The evaporators, the spray dryer and the silos were manufactured at Niro's Combi Engineering A/S factory in Kolding, Denmark.

### Innovative company

La Serenisima dates back to 1929 when the company began production of mozzarella and ricotta cheeses. Most of the dairy's production is concentrated round General Rodríguez where the various plants cover an area of 126,000 m<sup>2</sup>. Other smaller plants are distributed throughout the country.

Approx. 3.7 million litres of milk are collected every day from 1,300 big and small producers. Last year's turnover was USD 700 million. The product range comprises whole and skim UHT milk, the latter with extra natural milk calcium; UHT milk fortified with iron; powdered whole and skim milk; butter; milk jelly; yoghurts; desserts; flans and jellies; cottage cheese; cream cheese; hard and grated cheese; mozzarella and ricotta for both industrial and family consumption.

### Alliance with Danone

With a view to strengthening the company and promoting product development La Serenisima last year established an alliance with the French company Danone. Concurrently with the growth in milk production La Serenisima is stepping up exports. The most important export product is milk powder, but also growing volumes of butter and cheese are exported. Brazil is the biggest importer with a local distribution centre in São Paulo. Until recently Russia was also an important market. In the year 2000 the dairy company expects to show exports representing about 500 million kg milk.



Boasting a capacity of 12,000 kg/h of instant WMP, La Serenisima's plant in General Rodríguez is a landmark of today's Argentine dairy industry.

Also Argentina is hoping for the next WTO trade round to result in a much more liberal world trade than the present. ■

### Argentina milk and dairy product projections

Calendar year		Aver. 1992-96	2000
<b>MILK</b>			
Production	mt pw	7.9	10.5
Liquid sales	mt pw	1.9	2.3
Industrial use	mt pw	6.0	8.2
Farm price <sup>a</sup>	Peso c/kg	17	21
Wholesale price <sup>b</sup>	Peso c/kg	39	42
Per capita cons.	litre	53	61
<b>BUTTER</b>			
Production	kt pw	42	62
Consumption	kt pw	43	49
Exports	kt pw	4	13
Per capita cons.	kg	1.2	1.3
<b>CHEESE</b>			
Production	kt pw	371	510
Consumption	kt pw	354	420
Exports	kt pw	13	97
Per capita cons.	kg	10.4	11.5
<b>SKIM MILK POWDER</b>			
Production	kt pw	27	40
Consumption	kt pw	25	14
Exports	kt pw	8	26
<b>WHOLE MILK POWDER</b>			
Production	kt pw	106	134
Consumption	kt pw	94	111
Exports	kt pw	18	24

a) Average producer price

b) Wholesale price calculated by OECD

Source: Agricultural Outlook, 1998-2003



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