

Building not just a new plant, but a new company

Tara's huge green field site



Tara, Israel's third largest dairy company has built a completely new dairy site in Netivot, in the South of the country. The undertaking involved a NIS1bn investment, including expenses for staff redundancies. IDM visited the new plant, which was equipped by general contractor GEA TDS, for an exclusive report.

"We are not just building a new plant, we are building a completely new company", says Plant Manager Gali Yarom. What she means is that Tara is undergoing a step change towards a total focus on highest quality of product and services and a general boost in marketing. This goes along with a change in attitude of

the workers who will eventually, stirred by continuous professional motivation, become proud to be with Tara and full of creativity.

To understand this, one must look at the old plant in the middle of Tel Aviv which was actually built 70 years ago and really was no more up to modern standards. This was exactly the reason that made Tara's owner, CBC (Central Bottling Co., Coca-Cola), develop plans for a new site ever since the acquisition of Tara in 2006. Granted, a little push was given by authorities who no longer wanted a production plant inside the city as well as the fact that the harsh Israeli environment standards could no longer be met... But the general plan of



The new Tara plant



Milk reception area



Cream pasteurizer



UHT plant for ESL milk processing



Aseptic process line



Cottage cheese process line

CBC was anyway to significantly increase the market position of Tara, for which the new plant has now laid the ground.

As Tara concentrates all its resources at Netivot, close cooperation of the various departments is guaranteed. Mrs Yarom: "We have all departments at the site which will give a real boost to our activities and all developments will speed up. Now we can really take it up with our strong competitors!"

Choosing GEA TDS

General contractor for the whole processing part at the new site was GEA TDS. The company has been at the site since 2011 and administered the works using more than ten of their experts at a time. Why Tara chose GEA TDS has a number of reasons. Mrs Yarom explains: "Our project was most complex; a multitude of new equipment had to be taken into operation. Some 75% of our machines and equipment is brand new; the rest has been gradually transferred from the old plant. GEA TDS was, in contrary to a competitor, not at all reluctant to take up this work and they gave us operational guarantees even for equipment that was not made by them. The whole project has always kept time schedules and budget restrictions. To sum it up: We found a reliable, absolutely trustworthy partner in GEA TDS who has always kept its promises".

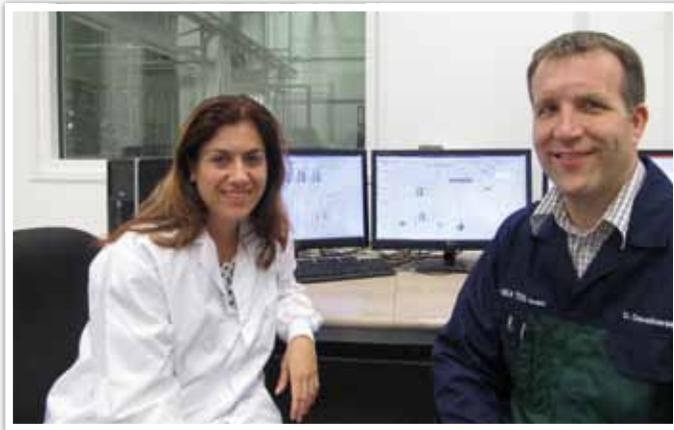
Of course, Tara knew GEA TDS before from various smaller projects. And it might have helped that Müller regularly use the services of GEA TDS. But there was another coincidence: the head of the GEA TDS team at Netivot, Olaf Drewelowsky, has been working for the Müller group in the management of technical projects for 10 years. So, two not too different worlds came together. Mr Drewelowsky states: "It is really a very rare fact, but even after such a long project time both sides still feel a common spirit, the atmosphere in our meetings is always relaxed and good. Even though, it is natural that we don't have the same opinions from time to time".

The new plant

The new green field plant is impressive. Built on a little hill in the industrial park of the small city of Netivot, it attracts everyone's view with its sheer size and its clean white outfit. The total site measures 104,000m² providing 39,000m² of production and logistics area. The whole plant is built for expansion, and there's ample space for additional capacities inside the building. Designed for a daily milk intake of 1m litres, the Netivot plant currently processes some 650,000 litres a day. The product portfolio is quite large, ranging from fresh and flavoured ESL milk to yoghurts and custards of all kinds, and from butter to semi-hard cheese and Cottage Cheese, from sour cream to quarg and normal cream (42%). Partnering with the German Müller group since 2008, Tara also produce an assortment of Müller branded yoghurts incl. the Froop line of products.

The design of the plant is basically a two-storey concept with raw material flowing from top down via a gallery floor where the entire batch mixing etc. takes place. The upper floor is the place for processing, while the ground floor is reserved for filling. The operation follows basically of 3 shift model with the exception of Sabbath where production has to be closed down. A magazine article like this cannot describe all the equipment and capacities that were installed in the new plant.

Just a few remarks here: the milk reception is built for 45,000 litre road tankers and has 2 reception lines equipped with an 80,000 litre draining capacity, each. Once empty, the trucks move forward a few meters to meet the CIP stations. There are a total of 150 tanks installed at the plant. 9 decentralized CIP stations guarantee efficient cleaning all over the site. There are 3 pasteurisation lines with a total capacity of 80,000 l/hr. and another 3 UHT tube heat exchangers (running at 125 °C for ESL production) with a total capacity of 40,000



Gali Yarom, Plant Manager, and Olaf Drewelowsky, head of the GEA TDS team at Netivot (photo: IDM)

l/hr. Given small batch sizes, the plague of any dairy plant today, the process tanks for yoghurt are equipped with cooled agitators to minimize product loss. The sweet and acid whey is filtered or pasteurized and then concentrated using RO. There is even a NF plant for caustic recovery.

There are several parts that GEA TDS did not supply such as the new Cottage cheese production incl. a continuous washer-dryer (Tetra Pak), the cheese presses and brine bath (de Klok-slag) and the Casomatic (Tetra Pak Tebel).

Automation

Automation was the part that ProLeiT from Germany had to supply. Project engineer Stefan Seith explains: "We implemented, based on our process control system Plant iT, a recipe and material flow handling, an integrated solution for the existing Labour Information Management System (LIMS) plus a Line Management System (LMS), all directly coupled to SAP. The ERP generates production orders and breaks it all down onto the processing level where it initiates the single production runs. The Tara project was the biggest single contract for ProLeiT in the dairy industry so far". Mrs Yarom adds: "We have seen the reference of ProLeiT at Müller and we like the ability of the concept in terms of reporting and direct communication with SAP. ProLeiT offer standard software with possibilities for extending at all time. In our old plant, we worked with non-standard software, this huge disadvantage has finally found its end!"



ProLeiT Project Engineer Stefan Seith: The Tara project was the biggest single contract for ProLeiT in the dairy industry so far (photo: IDM)



Synerlink packaging line

Tara has amongst others installed an Arcil FFS packaging machine equipped with a sterilisable Dosil doser and a Tecmapack boxing machine, producing Liegeois chocolate in a cup with a large taper ratio and made with clear PS and an OPS label. Arcil had to reproduce the MOO cup which is the symbol of Tara's brand – a tapered cup that flares upwards. To ensure the correct dosage of the whipped cream, Dosil developed a filler that protects the integrity of aerated products. This dosing machine can be steam-sterilized on-site (SIP) (3 bar @ 130°C).

The machine produces 4-packs at an output of 20,000 cph, much more cost-effective than with Tara's previous individual pre-shaped cups. The machine can produce, as a second format, a Müller brand cup.