

Controlling variety

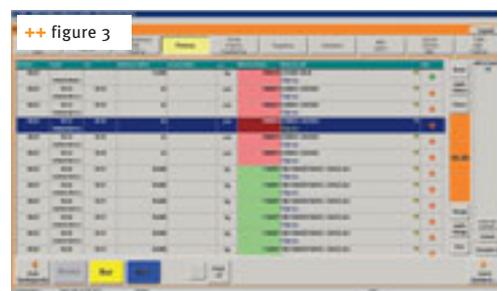
THE BATCHES ARE SMALL; THE DIVERSITY IS DIFFICULT TO BEAT AND ALMOST EVERYTHING IS MADE BY HAND. THE PARENT COMPANY OPERATES ON A SAP LEVEL. THE TURKISH DIVAN GROUP SHOWS US HOW TO HANDLE THESE DIFFERENT WORLDS



++ figure 1



++ figure 2



++ figure 3



++ figure 4

✚ Marc Pauquet, Executive Pastry Chef of Divan, has had many experiences in his professional career and has had to solve many technical and organizational problems. Today, he heads the entire production of patisserie, pastry and baked products of the Divan Group and the associated complex technical and organizational problems. The production facility is located in rooms with many nooks and crannies. An almost unlimited and constantly changing assortment of products is manufactured on a dozen production lines,

predominately with a lot of manual work. The batches are small and the flow of information concerning who of the 120 employees has to produce which product and where the raw materials will come from is for them a Herculean task which is difficult to solve satisfactorily at any given time. As a result Pauquet decided on the introduction of production control software. Another reason was that the entire Divan Group uses SAP programs for administration and materials management and had also requested qualified data.

++ figures 1+2

Touch screens in the production area

++ figure 3

Screenshot

++ figure 4

Turkish Delight, also called Lokum, is a confection manufactured from water, sugar and starch. It is a soft and sticky product with a transparent light yellow color. It is enhanced with flavors, pistachios or nuts. Lokum comes from the Turkish "lokma" which translates to a bit, morsel or an appetizer. The complete name is "rahat lokum" (convenient bits) which comes from the Arabic "rahat al-hulqum".

Marc Pauquet

Marc Pauquet (47), Executive Pastry Chef of Divan, entered the world of baking in his hometown of Eupen, the capital of the German speaking part of Belgium. As a Master Pastry Chef he taught at a professional school in Eupen and worked in different well known pastry & confectioner shops in Belgium and Germany and later managed the "Rathauskonditorei", a small cafe & confectionery shop in Eupen that had a very demanding clientele, including members of the government and the Belgian Crown – royal family. In 1995, he started his international career on first class cruise ships and international hotels all around the world. During that time he also joined, for four years, "Divan Pastaneleri" as a pastry kitchen chef. In 2005, he came back to Divan and became "Corporate Pastry Chef & Pastry Production Manager", supervising more than 200 employees in different locations namely Ankara, Antalya and Moscow. The daily production of the pastry team is more than 500 cakes, 100 kg of sweet cookies, 150 kg of savory cookies, 800 kg finest chocolates and 800 kg of a Turkish Delight called Lokum. +++



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The new software had to meet three basic requirements. Firstly each worker, including untrained ones, had to be able to operate the Software via touch screen without too much distraction from his/her actual work. Secondly, the software had to be “bakery proof”, easy and safe to install and simple to use without long training sessions by software experts. Thirdly, the software needed to be able to communicate with the SAP software already used.

Pauquet decided on the cabTool software by toolbox. This software is used in all production departments and in packaging.

Orders from customers and the comparison of the warehouse stock with the finished products are done via the SAP software. A “production order” is generated that states the quantities to be produced. This “production order”, together with the required master data which contain the information on recipes, raw materials and processes, is transferred to cabTool. Based on this information, cabTool calculates the optimal production schedule. The result is provided as a work list for the individual sections or work places and sent to 12 touch screen PCs installed in the production and packaging sections. These work lists are updated several times a day. Via cabTool, the employees are provided with paperless job orders and they then confirm via touch screen when the job has been completed. The weighing equipment, thermometers, packaging machines and label printers used for the job are also integrated so that cabTool can initiate the printing of the required labels including the bar codes needed by the SAP warehouse management.

Complex products such as a gateau, for example, had previously been itemized so that each department had to confirm the raw materials needed and used; the bakers indicated the raw materials and the type and number of cake bases made; the cream department noted their raw materials and the cream made available and so on.

Now, the products are broken down into sub-recipes and confirmed. cabTool reports the completion of the individual steps and the raw materials used via an interface directly linked to the SAP software. Added to that all information such as how many workers are involved with certain tasks and for how long are collected by cabTool and then passed on to SAP in an aggregated form where the information is included in the calculation.

All this information is also included in the traceability database and the timekeeping.

Pauquet was rather surprised by the results achieved from this comprehensive collection of data and control. It was only a few months after the introduction of the computer-based production control that the productivity in the bread bakery rose by 30% and the inventory shortage was reduced by 80%. Pauquet explains, “Via the continuous control of all raw materials and semi-finished products, the ingredients and products are only requested when they are really needed. A safety margin does not need to be calculated any more. My employees rely on the information on the touch screen and they can see for themselves that their efficiency is improving.” +++

Divan Group

The Divan Group is one of the leading food service companies in Turkey; it belongs to the Koç AG, a Turkish industrial holding that employs a worldwide staff of 85,000 and which reported an annual turnover of 45bn USD in 2009. The family company was founded in 1920 by Vehbi Koç; it is active in various market sectors: energy, automotive, household appliances, finance services, information technology, tourism, construction and food. The Divan Group serves the food sector via the Palmira A.S. subsidiary. The Group was founded in 1956 and now operates eight hotels, 17 patisseries, some of which have their own coffee shops, 15 supermarket bakeries, ten restaurants and two catering units. The turnover of the Divan Group amounts to about 40m Euros with the pastry shops, patisseries and bakeries contributing 12m Euros. The production range includes cakes, gateaux, ice cream, bread, croissants, Danish pastry, savory items and sweet baked goods, Petit Four, chocolates and other chocolate products, and also specialties such as hand coated almonds, pistachios and coffee beans as well as Turkish Delight. All the products, which are made with huge amounts of passion, are sold in the Divan patisseries or in “Divan Corners” in Turkey. In other countries, the products are sold in high end shopping malls such as Galeries Lafayette in Paris and Harrods in London. Other customers of Divan are Starbucks, McDonalds and IKEA. About 90% of the products made are sold via its own patisseries, bakeries and hotels. The 24/7 production has its main shift between six in the morning and three in the afternoon. The raw materials are received almost on a daily pattern. Staff training is important to Divan. All employees are trained in-house several times a year. Approximately 60% of the employees have worked for Divan for more than 20 years; they are specialists in their field. The other 40% are untrained workers. +++

