

BCM Kosmetik GmbH

Taylor's beautiful schedules mean customer service goes up and planner stress goes down at rapidly expanding cosmetics plant

Taylor Scheduler allows one Master Planner to do in an hour what previously took four Planners at BCM's German plant three days. During a time of tremendous volume growth, service levels are up from 75% to 99% and planners are more effective. Implementation by local partner Interaktiv took about 4 months, including two-way integration to ERP for constant updates. Further expansion of the plant's volume and upgrades to the Taylor system are ongoing.

Business Drivers

The Cosmetics business is a complex mix of fast-paced fashion changes and regulated production. At the BCM Kosmetik plant in Dietzenbach Germany, the number and range of products manufactured has been increasing rapidly. Production volumes have grown significantly and are expected to grow tenfold in a few years. Change and growth has made production planning and scheduling quite challenging.

When the project was started, customer service fill rates were about 75%. To achieve this relatively respectable result, four master planners had to put in significant effort over three days. Volumes and planning complexity had grown over previous years. And Excel-based schedules had to be "fixed" for a week. Materials shortages and other discrepancies between the plan and reality meant that the plan was not really fixed, and production had to adjust every three hours or so. This caused the planners great stress.

This growth accelerated when a corporate review of production later revealed excess plant capacity, and shut down a sister plant. Those products are being distributed to Dietzenbach and two other plants. Products have been added in waves, and this growth will continue for at least another year.

This will mean even further complexity in scheduling and greater challenges in improving customer service. As with any contract manufacturer, the customers' objectives become the major goals of the Company. In BCM's case, its retail customer Boots requires excellent on-the-shelf availability of every product.

"We can be much more exact with the Taylor Scheduler – to the day and hour. Excel was not detailed or flexible. At the time, I never imagined I could click and get a schedule – or see whether there is capacity on a machine... I can now see all of that at a glance."

- Marion Koebeler
Master Planner
BCM Kosmetik

Boots Contract Manufacturing (BCM) is the development and manufacturing division of £5.3B UK-based retailer Boots Group PLC. The 10,000 m² plant in Dietzenbach Germany is one of five BCM facilities. A combination of automation and a Total Quality Management approach go into the manufacture of lipsticks, nail polishes, powders, mascaras, foundations, skin & sun care products and gift sets. Some of these areas are regulated because the products touch lips, much like food industry production.

The Business Case

Since BCM produces Boots' own brands of products, the parent and customer company's brand depends on the quality and availability of BCM's output. Selling house brands produced by contract or private label manufacturing has been a cornerstone of many successful retail companies' strategies in the past few years. Store brand products increase consumer loyalty while providing higher volumes with more profit margin for the retailer.

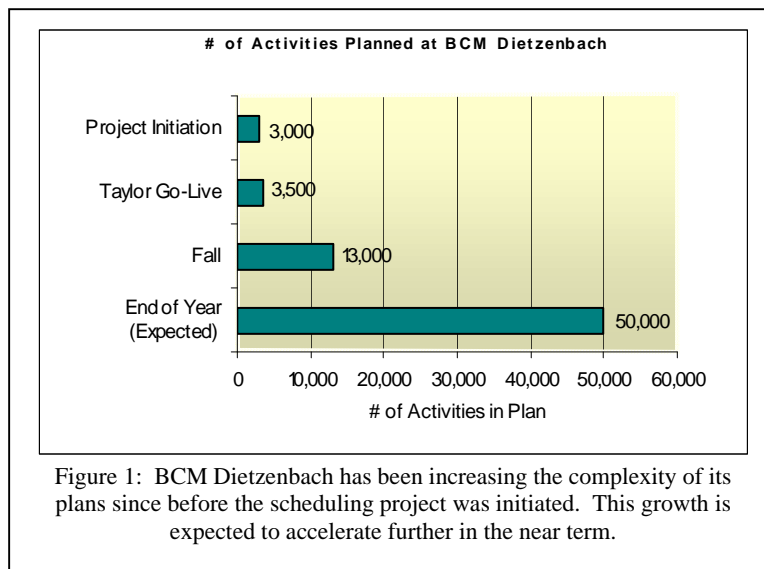
For this effect to materialize, BCM products must be available on the shelf when consumers are ready to buy. Thus, customer service and order fill rates are key metrics for BCM's success. Manually scheduling the high quantity of orders through production was difficult. It took four master planners three days in Excel. Shipping as promised – to achieve customer service goals – was especially tough. Every new order or late material receipt required a planner to check all materials and resources and then manually re-schedule from scratch.

And that was only the beginning. BCM Dietzenbach realized its production volume and complexity were growing – even before news of the new products that would arrive from the plant being closed. More products would require more changeovers and higher asset utilization. With the Excel schedule 'fixed' for a week, the constant changes were not reflected in the plan. Maintaining, let alone improving, service levels would be a challenge.

While BCM and parent company Boots instituted its set of corporate key performance indicators after this project was underway, a few of them indicate some of the key business priorities.

- ◆ Product availability on the shelf
- ◆ Customer service and fill rates
- ◆ Inventory levels
- ◆ Schedule adherence

BCM did not conduct a financial justification of its project to implement the Taylor scheduler. It was simply a necessity for the Dietzenbach plant to keep up with the pace of change and growth. As part of BCM's Total Quality Management (TQM) initiative, the Taylor scheduler project focused on improving the quality of planning and scheduling processes.



Selecting & Implementing Taylor

BCM Dietzenbach searched out advanced planning and scheduling software, and found that most packages were for lower-volume processes such as machine building. Of the three products they evaluated, only Taylor could handle the plant's order volume at the time. And while they did not foresee the magnitude of their growth, they were already growing. Handling many orders and

planning activities would be critical. (Figure 1.)

The distributor for Taylor Scheduling's software in Germany is Interaktiv GmbH. After demonstrating the system to win the confidence of BCM and their business, Interaktiv began implementation and training. The initial project took between three and four months.

Getting data into the scheduling system quickly was key to the project's success. Interaktiv programmed two-way integration between the Taylor Scheduler and BCM's ERP System, ABAS EKS. Integration to ERP keeps orders flowing into the scheduler accurately. Routings in ERP go to the workcenter level, and are the basis of Taylor's routings that include detail for the 170+ machines in the plant.

Getting the system running required Interaktiv to understand regulated manufacturing requirements as well as BCM and its specific processes. BCM found Interaktiv to be an outstanding partner. "In fact, we liked Interaktiv so much, we asked them to handle our ERP system, ABAS, as well. We originally had another company working on that system, but we did not get to the same level of open partnership," says Matthias Thomas, Director of IT for BCM Dietzenbach.

Since then, the system has undergone significant improvements and continues to change with BCM's business. As the BCM sister plant is closing down, the first product line to arrive in Dietzenbach was the powder products. In the second wave, mascara and lipstick products are moving in as well.

As BCM learned what worked best, Interaktiv also changed the interface to ERP so that new data goes directly into the Taylor system and flows to ABAS EKS from there. In addition, the annual version upgrades for the ERP system require some interface work to ensure data exchange remains seamless.

Training has been a critical ongoing aspect of system success, since the plant changes from one week to another. Interaktiv has come in to re-launch at a few major inflection points, and conducts implementation reviews regularly.

Performance Improvement Achieved

The Dietzenbach plant has achieved its major objective of reducing stress for the planners. At the same time, the system has helped the plant keep up with the structural changes of the company. Production volume through the BCM Dietzenbach plant has grown every month since they initiated the project, so the Taylor Scheduler's capabilities and scalability have been put to the test.

While key performance indicators were not in place at the outset of the Taylor system's use at BCM to compare with current performance, there have been some clear cut benefits. These include:

- **Service level increase:** BCM Dietzenbach used to ship about 75% perfect on-time orders, and they are now at 99% service level. Delivering orders more reliably helps ensure that Boots brand products are available on store shelves, which is Boots' #1 KPI.
- **Planner efficiency boost:** what was once done by four master schedulers is now performed by just one person – and there are more products and activities to plan. Two of those previously mentioned master schedulers are now production schedulers.

- **Inventory reductions:** the plant has reduced work-in-process, finished goods, and raw materials. The improved visibility and flexibility of scheduling with Taylor has allowed BCM Dietzenbach to operate in a more just-in-time fashion.
- **Better data quality & ERP use:** while BCM long knew that some of the data in its ERP system was not accurate, setting up and using the Taylor Scheduler has forced them to clean up that data. As a result, BCM Dietzenbach has gained stronger and more fully functional ERP modules including MRP, Routings, and Financial Planning.
- **Plant-to-Plant Coordination:** BCM has a plant in Poland that assembles some of the products made in Dietzenbach into finished goods for sale. The single instance of Taylor creates precise schedules for both plants today.

Future of Taylor at BCM

Clearly, the BCM Dietzenbach plant is planning to add more products. As additional waves of products come into the plant from the facility that is closing, Taylor will plan and schedule all of those. That will entail training two more master planners at the plant.

Interaktiv is also assisting BCM to add new rules into the Taylor Scheduler to make it even more flexible and capable of meeting business priorities. Some examples are:

- ♦ dividing firm orders for high priority from planned orders with lower priority in scheduling and re-scheduling;
- ♦ allowing more flexibility to move firm orders a little after the first frozen week;
- ♦ moving on-time jobs so that status is visible in ABAS

“We had pretty good customer service, but only through the hard work of quite a few people. Now, not only have we reduced four Master Planners to one, the Planner’s role has changed dramatically. They now focus on conflict management and exceptions. The system does the planning.

- Klaus Lieschka
 Senior Manager,
 Customer Service Center
 BCM Dietzenbach

A current Taylor upgrade project at BCM Dietzenbach is focusing on allowing base data to be administered in both Taylor and ABAS systems. This data includes work centers, machines, and routings. Routings will be maintained in Taylor as the system of record, and only transferred to ABAS when something changes.

BCM plans to add the Operator Panel, to provide associates in the plant a view of the scheduling system and a way to enter production and yield status information. Currently, they use white boards to record events. BCM also hopes to deliver instructions to operators on what to do next, based on software Taylor is currently developing.

BCM plans to use Taylor’s new simulator for Capacity Planning as well. This will add what-ifs and longer term planning to the current use of Taylor at BCM for master planning and production scheduling.

Beyond the Dietzenbach plant, BCM plans to bring Taylor to the plant in Poland. With their own system, the staff there will gain better visibility into their own planning situation. Currently, a poor communication connection means the plant in Poland has just two PCs on which to view the schedule. As the number of work orders continues to skyrocket in both plants, this visibility and local control will further improve production performance.

Taylor scheduling is reducing stress lines for planners at BCM, and making their performance ever more attractive. As BCM improves, Boots and the consumers it serves will gain the benefit of finding the cosmetics they want, when they want them.