

IMPROVED SERVICE LEVELS AND LOWER COSTS: THE ROLE OF TXT

VALUE OPPORTUNITIES

- *To improve the planning of critical resources (materials, machinery and labor)*
- *Realtime assessment of the impact of changes in demand and critical aspects of internal production planning*

TXT E-SOLUTIONS RESPONSE

- *Demand Planning*
- *Operations Planning & Scheduling*

RESULTS

In synergy with other initiatives over the same period, the TXT project has contributed to:

- *Improving the service level from 50-60% to 96%, with peaks of 98%*
- *Reduction of work in progress, and hence material stocks, by 20%, in terms of both coverage and costs*

Corporate Profile

Dell'Orto www.dellorto.it was founded in 1933 and is a leading manufacturer of carburetors for motor cycles and lawn mowers, oil and petrol pumps for motor cycles, butterfly valves and intake manifolds for the car industry. With production of over 2,800,000 items per year, Dell'Orto supplies customers such as BMW, Renault, Fiat, Ferrari, Rover and Valeo in the car sector, Piaggio, MV Agusta, Aprilia, Guzzi, KTM, BMW, MBK, Derbi and Peugeot in the motor cycle sector. Dell'Orto has a turnover of over 50 million Euros and 400 employees.

Supply Chain Context

All production is handled by the two plants in Seregno and Cabiato: foundry, mechanical and turning processes, surface treatments including galvanizing and chrome-plating, up to and including assembly and dispatch. The production departments, such as the foundry, mechanical engineering and turning, are based on make-to-stock logistics, whilst assembly follows the assembly-to-order model, dispensing with a finished product warehouse. But what are the restrictions and problems that planners have to face? On the one hand, the seasonal demand for motor cycles and lawn mowers, requiring

efficient management and planning of human resources. There is a 20% variation in operations personnel between the peak and low seasons. On the other, shorter and shorter lead-times. Until the beginning of the 1990s, Dell'Orto operated in a virtual monopoly situation, with monthly orders. Today, also faced with growing competition in Italy and abroad, the company guarantees weekly schedules for most customers, with the option of daily deliveries on request. All requiring considerable input to implement services and just-in-time production logistics.

The Dell'Orto Challenge

In this context, it is imperative to have tools enabling real time assessment of the impact of changes in demand on production schedules. The project created in partnership with TXT has precisely this aim: to provide a clear view of resources and the ability to reschedule quickly in the face of critical factors and sudden changes in demand. The previous approach, with planning supported solely by the ERP system and manual sequencing, offered no option of real-time workload assessment nor the issue of internal production

plans with absolute certainty of their feasibility.

The chosen solutions include TXT Production Planning and Operations Planning & Scheduling.

The TXT project is part of a broader initiative, combining the use of software applications with lean production philosophy, and the application of Just-in-time and kanban logistics. These are implemented within the company, with all production processes controlled by a workflow management approach, also including a number of external suppliers, with the implementation of critical analysis involving all divisions.

Why TXT?

To operate non-generic software geared to the specific needs of the industry: this is what led Dell'Orto to TXT. In addition to the product, the flexibility of TXT personnel in relation to specific customer needs convinced Dell'Orto management that TXT was the right partner for the changes under way in the company.

The Solution

Integrated with the FORMULA order forecasting and management system, TXT **Production Planning** enables planners to analyse critical areas in the medium-term, in order to optimize the use of resources. Upstream of MRP calculation, data is transferred daily by **Operations Planning & Scheduling**, supporting assembly line sequencing and production planning scheduling in other departments. All modifications, production releases and cancellations are performed via the solution and are transferred to the management function for progress monitoring. Its users, all in the planning division, can consult data on easy-to-read displays, featuring delivery schedules and critical resource saturation (raw materials, machinery and labor). A series of graphics and interactive displays (Gantt, Pert, histograms) makes logistics easier to organize whilst "what-if" simulations demonstrate the effects of different decisions.

The impact of unexpected events on existing plans (such as production line down time) can be seen immediately and the impact and feasibility of new orders is also assessed in real-time, speeding up reaction time. The transition from open-end capacity planning to prompt critical resource and operational resource planning considerably reduces handover times, Work-in-Progress, and improves customer service levels. Specifically, in synergy with other projects launched in the same period, and with the adoption of lean-production techniques, the project in partnership with TXT over the last three years has contributed to improving service levels from 50-60% to 96%, with peaks of 98%. In relation to Work-In-Progress and hence material stocks, Dell'Orto has registered a reduction of 20% in both coverage and costs. An excellent service, therefore, with ever decreasing costs, for a company which has made innovation, performance and reliability its key strengths.

“ In recent years we have taken giant steps towards reducing Work-in-progress and in improving customer service. The results achieved, with an improvement in service level from 50-60% to peaks of 98% and a 20% reduction in Wip, are due to a process of change which combines the use of new software with in-house application of lean production techniques. The TXT project was the springboard for this leap in quality. ”

Marco Vignati, Logistics Director - Dell'Orto