

DESCRIPTION OF THE QGUAR SYSTEM IMPLEMENTATION

Place of implementation:

Ciemno Gnojna – Mszczonów

Implemented system:

Qguar APS

Qguar MES

Cooperation commencement date:

2015



Company profile

Mostva is one of the biggest companies in Poland that provide comprehensive logistic services to the automotive sector. Wide range of provided services comprises, among others, international and home distribution of cars, shipping, warehousing or specialized equipment assembly. Assembly services provided to car importers, dealers and final clients comprise primarily the following; comprehensive handling of limited editions, involving over 120 different types of optional car equipment, fitting of standard and non-serial accessories (e.g. GPS, upholstery), vehicle adaptation to special purposes (police, municipal services). All these services are provided, while maintaining the highest quality of their performance and ensuring proper environment protection, which is reflected in ISO 9001 and 14001 certificates that the company has been holding almost since the beginning of its business activities.

Business line characteristics/challenges

Growing scale of business activities of the company engendered a need to modify the traditional manner of planning of and control over assembly works and preparation of vehicles for shipment to clients. The company must manage a huge amount of components and diversified tasks that make up the process of realization of installation works and planning of transports, while abiding clients' exacting requirements related to punctuality and continuity of deliveries. It also needs information about the progress of order realization that would allow it to identify the cause of a potential problem, as well as advise vehicles for further distribution. The specific character of business activities of Mostva requires planning to be carried out in a multidimensional manner, so as to take into account specializations of employees, outfit of assembly posts, availability of elements to be assembled, while maintaining serial character of performed operations and abiding by the order completion lead time that is binding for the company.

Selected solution

To meet the needs of the company in the domains of planning, supervision of the assembly process and production logistics, Mostva decided to implement a scheduling system and a production management system, namely Qguar APS and Qguar MES, respectively. They were aimed at automating the process of planning, increasing operational performance and acquiring quick feed-back about the progress in the realization of the production plan. The system was integrated with the ERP-class system provided by the SIMPLE company, as well as with the DATACAR system, i.e. a Mostva's proprietary solution, dedicated to manage the entire vehicle life cycle and data exchange between particular systems, including contractors' systems.

Benefits

Thanks to Qguar APS, the planning department acquired an efficient tool to organize the work of the assembly department, as well as the preliminary and pre-sale vehicle preparation lines. The formerly-implemented manual scheduling process was replaced with an automatic process. The system takes into account the employee competence matrix – crucial, from the point of view of Mostva – and component availability. Integrated optimization algorithms allow the realization time to be reduced, costs to be minimized and appropriate workload of assembly posts to be ensured. At present, planners are free to decide about order priority.

Reporting options available in Qguar MES facilitate monitoring of events within the assembly room and their subsequent analysis. The built-in production logistics module enhances the process of component flow. Data recorded by the system allow one to construct a complete genealogy of a performed assembly task. The knowledge acquired in this manner allows one to correlate parts used, actions performed and employees involved with a particular task, which ensures easy identification of potential irregularities.

Integrated Qguar MES and Qguar APS systems allow for instantaneous information flow between the departments of planning and production. Therefore, delegated tasks reach appropriate employees faster, while planners acquire complete information about the progress in order completion.

