

# Use Case: Automotive / Plant Construction

# Setting New Standards

Gaining Certainty and Capacity with Data Continuity



# Challenges

- Laborious schedule co-ordination amongst participants
- Manual digitalisation of analog
  progress data
- Transfer of obsolete data between project phases and subsections
- Group-wide performance evaluation of various projects

Automotive plant construction is one of project management's most demanding disciplines. Numerous participants engage with multiple high quality requirements and low fault tolerances.

As a leading manufacturer, **Volkswagen AG's** ambitious goals are driving the digitalisation of the automotive industry. Now the Wolfsburg based company is using a new tool to grasp the progress on the construction and modernisation of their production lines. Almost no other OEM comes as close to the vision of data continuity on large-scale industrial projects.

### **Solutions**

- Data centralisation via Smart Objects
- Permanent, automated status updates
- Continuity thanks to real-time synchronisation of all involved
- Unified reporting according to OEM parameters

"COMAN reduces costs and increases performance and quality on the construction site."

Giuseppe Lo Presti, Planning and Production Engineering, IT-Systems Volkswagen AG

#### Taking Construction Site Documentation to a New Level

# Volkswagen standardises their plant construction progress recording and reporting with real-time data

Data continuity brings Volkswagen AG's plant and tool manufacturing huge benefits. Key user Giuseppe Lo Presti therefore pays special attention to the application of COMAN project management software. It impresses with its tailor-made fit to the automotive machinery and plant engineering industries. Always looking for the latest innovations, the project coordinator is responsible for IT-systems in planning and production technology.

Thanks to the use of the real-time tool in series production, specialist departments achieve transparency in all their construction site processes, scheduling and reporting. But of course, other teams and divisions such as the pressing plant, paint shop, final assembly and planning may also benefit from the system's possibilities.

#### Analog vs. Digital

Those responsible always need to know the current state of progress on the construction site. Is any area delayed? Why? Who needs notification? To achieve this, one has to match the schedules of all involved, update their layouts, document attached checklists and milestones and grasp their status.

"For a long time we were doing this in Microsoft Excel and even manually, with written documentation of status messages, sticking coloured labels on plant layouts and checking long lists and printed schedules", explains Giuseppe Lo Presti. "Meetings and updates using documentation like that took a long time."

The resulting transfer to a digital, sendable report meant double the workload and high susceptibility to errors. As on-site construction continued and statuses changed, management received outdated reports. This improved with the introduction of the COMAN project management software, which ensures data continuity. From green field to brown field sites, construction to modernisation, ramp up management to maintenance of production facilities – the tool connects all project participants, from clients to project managers and employees to suppliers.



Visualisation of relevant components in the VW model

COMAN takes input from digital layouts, BoM, checklists, schedules as well as status messages and directly recorded on-site open points. The solution brings together all the real-time data into one hub in an audit-proof manner. "Unlike before, you now always have the absolute topicality of a status", says the 48-year-old.

#### **Standardisation Helps**

The value of viewing live data relating to any part of the construction site at any time and quickly identifying delays and problems quickly crystallised itself. Together with automatic report generation, these features ensure high levels of transparency. "Colleagues who were previously responsible for digitising reports are now using their time to work more productively", concludes Lo Presti. The standardisation of documentation, visualisation and reporting creates high recognition value, no matter which construction site worldwide the responsible managers refer to. According to VW management, the uniform reporting system is proving useful in controlling and determining the progress of construction sites in America, China and Europe.



Ramp-up chart from automated VW reporting

#### Usage Obliged

COMAN reduces costs and increases construction site performance and quality. In addition, the centralised solution supports the networking and communication of all project participants. As a result, the automotive group obliges its suppliers to use the project management software. Interlocking and common standards have the advantage that users can, depending on their access authorisation, examine all user-specific processes and stages in their view. How far along is the work of company A? On which object are there open points, problems or deadlines? Where do project leaders need to step-in to avoid mistakes? Multiplier Lo Presti gives an example: "While building the foundation of a chassis manufacturing plant, the in-tool view of the assembly team's progress can help prevent scheduling difficulties within the entire plant. Basing agreements on this information ensures clean and transparent processes."





"COMAN replaces the old process, but still serves it so well that you don't have to change and get used to it immediately." – Giuseppe Lo Presti

#### Taking and Giving

As a key user, Giuseppe Lo Presti supports COMAN Software GmbH in the further development of their practice-based software. Continual communication and incorporation of his departmental requirements provides valuable information. The solution's functionality grows with the collected needs of the in-house users. This benefits all the OEMs and suppliers who work with COMAN. VW also benefits, he says, from the features of other software users.

VW's first-level support - which also includes in-house training - distinguishes between advancements and configuration options: "Where other, larger, software developers need a lot of time and budget to adapt to customer needs, a key user can quickly benefit from a model adjustment." Rapid further development is testimony to the agility of the software start-up and is also a plea for more cooperation between large corporations and entrepreneurs. "It's great to be presented with the results of a request so quickly. It's like a chef - you get your creation served-up right away", Lo Presti compares. Of course, he would like to share the good experiences with other VW subsections and wants to involve departments such as final assembly, the paint-shop or conveyor technology in the future.

#### Valuable Input

How do other car manufacturers and suppliers use the software for their process and project management? How do they solve specific problems? Once a year, the Stendal-based development team of COMAN Software GmbH organises a Key User Meeting. Users from automotive and mechanical plant engineering are invited to get to know new functions, application scenarios and to exchange ideas.

This look outside the box brings each participant interesting insights and added value from other users, which can then be transferred to their own daily work. "I am always happy when we are the ones contributing further innovative ideas about the software", emphasises the Volkswagen manager proudly.



Company: Headquarters: Company size: Volkswagen AG Wolfsburg 670,000 employees

For the planning and realisation of new plants and production lines, Volkswagen AG has its own internal department, the Volkswagen Construction Group. Following their "Transform Together" strategy, process-oriented optimisation was set-up to include the construction of entire factories. Their task: to establish global standards in project controlling.





Our project management software connects clients, project managers, employees and suppliers involved in the construction of industrial plants. All these parties can grasp and synchronise their status in real time. With this data continuity, all of them can see the same state of affairs, but the information is tailored to the rights and needs of each user. In this way, transparency is created and complexity reduced.

In addition to the visualisation of the complete construction site activities, all the project data is centralised, regardless of its source. COMAN defines the information and translates it for all parties. This creates standardisation and allows each step to be documented in an audit-proof manner. The participants needn't change from their familiar software landscape and can even work remotely.

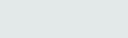
Our solutions originate from close cooperation with distinguished partners from the automotive environment. From the generic approach of many industry representatives, we generated a model that is simple to adapt to other industries. Because no matter where collaborative work is done: lost time, cost explosions and unproductive discussions are to be avoided.

As used by, among others:

# SIEMENS











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**KUKA** 



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