For OPEL, it’s all about QUALITY

OPEL has always given priority to the quality of its products, one of the core values of the Opel brand, attaching great importance to innovative technologies which are likely to strengthen and guarantee this quality.

True to its philosophy, OPEL opted for ALERT to secure and optimize its assembly lines in Rüsselsheim (its headquarters, 15,600 employees) and Eisenach, Germany.
OPEL production organisation

At OPEL, the automobile production is divided into different shops, all independent and composed of assembly lines or production units:

- **Body Shop**, where the metal sheets processed in the press shop are then assembled into body-in-white.
- **Paint Shop**.
- **General Assembly**, where seats, roof, cables, instrument panel, windows and windscreen wipers are added to the body.

The work processes of every shop are automated and monitored by GE Fanuc CIMPLICITY, combined with the ALERT software to quickly react and process the alerts to be sent to the relevant staff.

The communication roads between the shops are also monitored by the system.

As part of the PMC system (Production Monitoring & Controlling), Opel Rüsselsheim and Opel Eisenach chose CIMPLICITY to monitor their sites.

CIMPLICITY, part of the Proficy software range, enables data acquisition, monitoring and synoptic visualization of production subsets, and supervision of automatisms.

CIMPLICITY displays the functioning of every shop (body shop, paint shop and general assembly) on the monitoring centre screens and enables not only to follow the production progress but also to alert relevant staff in case of a system failure. CIMPLICITY provides alarm management and features visualization and archiving. According to their priority, the alarms are indicated either directly on the corresponding screen in the monitoring centre with the signal lamps changing colours and/or flashing or/and on a big screen and/or signal lamps on site.

**ALERT, the essential complement of CIMPLICITY**

In order to inform the relevant operators, CIMPLICITY relies on the ALERT software to transmit the alerts to their DECT phones and to manage their acknowledgements (confirmation message indicating that the operator took the alarm into account) which are automatically sent to CIMPLICITY. With the CIMPLICITY mediator embedded in the ALERT software, it was easy to integrate the two systems.

Each shop generates an average of 60,000 messages a day but only the important ones are transmitted by ALERT.
Staff members are alerted via DECT phones: if the call is acknowledged by the relevant operator, the ringing cycle stops; however, if the call is not acknowledged, the ringing cycle goes on, dialling the following number on the list. The ringing cycle is limited to three levels maximum: should the 2nd number fail to answer as well, ALERT informs the management unit that no member of staff is reachable. The integration of ALERT software enabled to enhance staff mobility: operators are not bound to their screens anymore. They can move around the site freely, carrying out more useful tasks.

**Optimal reactivity**

In the Body Shop, up to 700 industrial robots grasp, weld and measure prefabricated parts of the body. A robot failure must be detected very quickly and must immediately be notified to relevant technical members of staff.

The combination of ALERT and CIMPLICITY makes this reactivity possible: it enables to avoid very costly stoppages and to limit their duration as much as possible.

According to Michael Gaulke, project manager at OPEL Rüsselsheim, alerting "the right person, in the right place" is THE benefit of ALERT.

**Traceability: ALERT’s bonus**

ALERT is also able to record every event and alarm occurring on the monitored system as well as every action of staff members (acknowledgements, login, logout). Michael Gaulke emphasizes this very useful "bonus" of ALERT because the software OPEL used before offered no such possibilities. With these features, ALERT guarantees a complete traceability.
After he completed his locksmith apprenticeship in his father's business, Adam OPEL left his native Germany to go to Paris in 1858 and the city’s industrial development inspired him. With the experience he gained from working with French sewing machine makers, he set up his own production in 1862 in Rüsselsheim, Germany.

In 1886, his sons made their first bicycle.

In 1899, the 1st automobile was released from Rüsselsheim production lines. To start with, the vehicles were mounted on Darracq (French car manufacturer) chassis. The OPEL brothers, Fritz et Wilhelm, paid careful attention to the French know-how in order to improve it, and in the autumn of the same year, the 1st entirely OPEL car was released.

Almost 100 years later, in the 90s, the environmental concerns quickly became one of the priorities. In 1989, OPEL was the first European car manufacturer to equip all its models with a catalyst.

Nowadays, the company employs about 40,000 people and is one of the major European car manufacturers. Endowed with enthusiasm and expertise, Opel designs, manufactures and sells innovative cars such as Insignia, Astra and Corsa. The Opel Ampera, elected “Car of the Year 2012”, is the first electric vehicle manufactured by a European manufacturer.