

## Integral Plant Maintenance at Mercedes-Benz Russia and GAZ

### Complete maintenance for an engine plant

#### Customer

Mercedes-Benz Russia and GAZ Group

#### Plant, project

OM646 Engine plant  
Yaroslavl, Russia

#### Implementation period

Since June 2013

#### Scope of delivery and performance

Performance-based maintenance of the engine plant, including all production processes and equipment.

Siemens and Mercedes-Benz Russia and GAZ Group have formed a service partnership for the new engine plant in Yaroslavl. Under the contract, Siemens is responsible for maintenance of all equipment, including the assembly lines for engines, cylinder heads and camshafts. The contract also includes spare part management and implementation of a Computerized Maintenance Management System (CMMS).

#### The challenge

Mercedes-Benz and his partner GAZ chose Siemens to be its maintenance partner at a new engine plant in Yaroslavl, Russia. The new plant offers a capacity to manufacture diesel engines for the Russian market, for locally produced Sprinter Classic. In addition to engines for the local market, the Yaroslavl plant will also produce spare parts.



*Picking carts/engine assembly line*

Mercedes-Benz Russia and his partner needed a service partner in order to ensure the operation of these lines in a maintenance partnership arrangement.

The challenges included coordinating the entire maintenance management operation, in particular inspections, corrective and predictive maintenance activities, and the optimizing spare parts management. Siemens developed a customized maintenance solution that includes all electronic and mechanical maintenance activities (Integral Plant Maintenance).



Siemens service experts support the customer on site



Loader and grinding machine – camshaft line

## The solution

The Integral Plant Maintenance concept from Siemens was tailored to production specific needs. The primary goal was to meet the customer's strict availability requirements. This was accomplished with an optimized maintenance management system. Through predictive maintenance, line downtime is selectively avoided, and planned downtime is used to perform the necessary maintenance work. The service solution from Siemens is also responsible for other tasks, including:

- Inspections
- Preventive maintenance
- Corrective maintenance
- Optimizing the supply and stocking of spare parts

As they were working out the concept, the local maintenance experts were able to draw on the extensive knowledge base of Siemens' global expert network. They received optimal support in implementing the Siemens Integral Plant Maintenance standard through coaching sessions and process mapping workshops. Siemens maintenance experts realise planned and unplanned maintenance activities on two shift operation geared with a performance based contract. Performance Indicators includes plant availability and per-unit maintenance costs.

## The benefits

The benefits for the customer are clear: customer has a single point of contact for service activities that secures the optimal performance of their equipment and systems for years to come. A precise adaptation of maintenance activities to the plant's processes also ensures a comprehensive collaboration between the maintenance team and all levels of customer's organization. This secures the maximum availability of the customer's production equipment, the ability to optimally schedule production, and the means to calculate costs over the long term. Because it results in the reliable performance of all equipment, the maintenance work performed by Siemens actively contributes to the customer's competitive strength.

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