

ABB Service Agreement with Remote Service Case Study: Comercial de la Forja (Comforsa)



Companies supplying parts to the automotive sector have to be more efficient than ever before in an increasingly competitive global environment. Comforsa, a Spanish company, has found that ABB robots combined with Remote Service is helping it refine demanding production processes.


Robots increase productivity and improve part quality

The metallurgical company Comercial de la Forja (Comforsa), located in northern Spain, has implemented and improved a variety of foundry processes in the last few years. These include forging by mechanical presses, hot extrusion, heat treatment, machining operations and grinding.

Comforsa's Maintenance and R&D departments jointly decided that using robots would increase productivity and improve part quality. They also wanted to work closely with ABB to maintain the robots and decided to sign up for a Response Package which includes Remote Service and links the robots to ABB's MyRobot webpage.

This allows Comforsa technicians to remotely monitor the robots at work in Comforsa's factories.

Benefits with Remote Service for Comforsa

- Improvement of process capability, productivity and significant improvement in cycle times.
- A return on investment for each robot of less than three years.
- 40 percent reduction in robot downtime 
- If errors appear Remote Service helps to detect and solve the problem.
- Alarm alerts if errors appear and automatic analysis help to detect and solve issues.
- Remote Service enables the development of predictive maintenance programs to minimize production losses.
- Access to ABB's MyRobot webpage provides information on robots, reports from maintenance visits and other services.

Nineteen robots are attached to ABB Remote Service

Comforsa has specialized in the production of technologically advanced parts, mainly for the heavy machinery, truck & trailer, automotive and aeronautical industries.

Producing highly technological parts means applying challenging production processes and meeting stringent customer specifications and high quality levels as part of the day-to-day production practices.

Of Comforsa's 35 robots, 19 are now connected to Remote Service. "The robots are working in very difficult operating conditions in the forging area [temperatures can reach more than 1000°C], so an intensive maintenance program is required," says Assumpta Vizcaino, Manager of R&D dept.

ABB called us to say a robot needed an adjustment

The number of times operators need to intervene because of a robot problem is decreasing as ABB's real-time remote monitoring of the robots provides continuous feedback to Comforsa.

"Once ABB called us to say a robot needed an adjustment and at that moment we had not noticed any problems, as the robot was still performing within its parameters," says Josep Planas, Head of Maintenance at Comforsa's factory.

"Nevertheless, by making the adjustment suggested by ABB, we ensured that it would not fail in the future."

The alarm alerts us when errors appear

Remote Service monitors parameters on the robots such as alarms, signals and temperatures 24 hours per day and seven days per week.

Planas points out that "the alarm alerts us when errors appear and the automatic analysis capability represents a great help to detect and to solve any problem immediately."

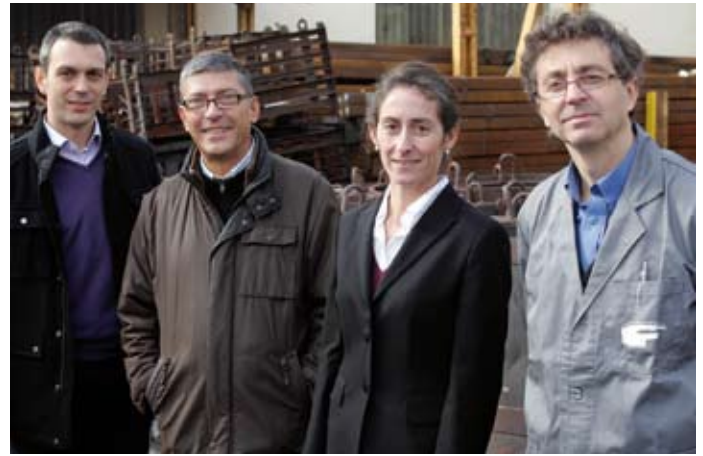
Also, all the data collected by Remote Service enables the development of a predictive maintenance program which ensures that maintenance is done before errors occur.

Preventive maintenance is very important

Furthermore, maintenance schedules can be aligned to the production plan, so that the maintenance department can schedule necessary maintenance when the line is stopped or when stopping it would cause least production loss.

"A stoppage of one robot could result in a 33 percent reduction in our production capacity – so maintenance is very important to us," says Vizcaino.

For the scheduled maintenance ABB sends the most appropriate specialist from its team of 100 technicians, although some work can also be done remotely by PC or by phone.



Using ABB robots with Service Agreements fulfils our expectations

Additionally, Comforsa has access to ABB's MyRobot web-page, where it can find all information needed for its robots as well as reports generated from the preventive maintenance visits and other services performed.

"Overall the chosen automation approach using ABB robots and Service Agreements fulfils our expectations," says Planas. "The best result is the availability ratio, up to 98.5 percent for most of the robots. ABB is continuously improving its service and its product, bringing always new ideas."



Good reasons to invest in a Service Agreement with Remote Service

- High uptime of the production assets
- Immediate response in case of unplanned stoppages
- Minimize the cost for corrective maintenance
- Program back-up for recovery
- Faster ramp-up of new product introduction
- Online access to robot information
- Lower environmental impact