

# Innovative calibration management system for a new generation power plant



**EDF natural gas combined-cycle power plant  
in Bouchain, France**

BEAMEX  
CASE  
STORY

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A BETTER WAY TO CALIBRATE

As part of the modernization of EDF Energy's power plants, EDF Bouchain located in Bouchain, France became the first new generation combined cycle power plant in the world. Bouchain is the first natural gas combined-cycle plant equipped with the new 9HA combustion turbine developed by GE. It has an installed capacity of 605 MW or the equivalent of the electricity consumption of 680,000 French households.

The power plant has entered the Guinness Book of Records due to its efficiency.

The automation/electricity department is made up of 7 technicians who manage remedial and preventive maintenance for the entire power plant.

In the interests of quality, safety and durability of the installations, it was essential for the automation department to be equipped with a calibration management system capable of meeting its strict requirements. The Beamex integrated calibration system was an obvious choice in terms of automation, time-saving, monitoring, traceability and confidence in the data produced.

Because the outage period at Bouchain is only 3.5 weeks, carrying out more than 400 measurement checks with a small staff is a major challenge!

The services provided by Beamex made it possible to prepare all the data, procedures and tasks to be performed so that the service provider company was operational from the first day of the outage period.

"In collaboration with Beamex, we prepared an Excel table with the data from all the instruments. Beamex integrated this directly into the Beamex CMX software, giving us a ready-to-use system. Beamex also conducted a training session to meet the needs of EDF: Time, planning and topics," explained Laurent Hernu, Automation/Elec. Manager.

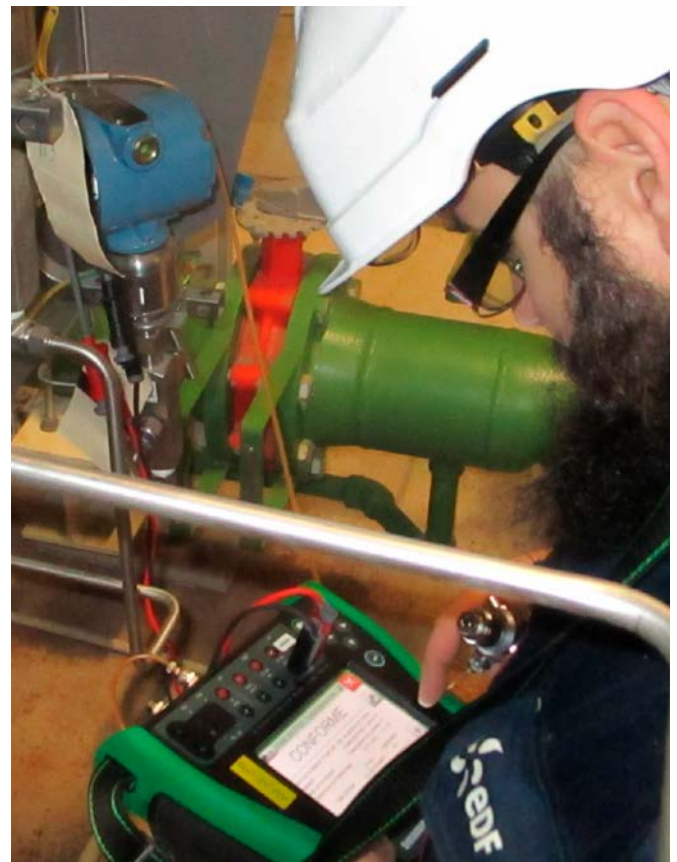
The complete elimination of paper in all procedures led the team performing the calibrations to save approximately two weeks of their time. There was no longer a need to manually input data into a third-party system (Excel type).

The multifunctional features of the MC6 calibrator and communicator drastically reduced the amount of equipment that each technician needed to carry down to a single device. Indeed, the MC6 made it possible to carry out pressure and temperature calibration, as well as communication with HART and Foundation Fieldbus transmitters. As a result, handling was greatly simplified because users only needed to become familiar with one interface.

In addition, the use of the bMobile application and the Maintenance Inspection feature have made it possible to enter maintenance checks. "This is very useful because these tests are directly transferred to a smartphone so that the maintenance technician can monitor and enter the various operations," explained Laurent Hernu. After the work is completed, the data is transferred to the Beamex CMX calibration software.

The precision of the MC6 calibrator also halved the number of pressure modules needed at Bouchain. In addition, the reliability of the results transmitted will allow EDF to prepare its future audits calmly and confidently.

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**Calibration being performed by Cédric Demeure, Instrument technician**



# EDF CCG Bouchain, France

## DESCRIPTION

- Beamex MC6 multi-function calibrator and communicator
- Beamex CMX Calibration Management Software.
- Beamex professional service: Database conversion, support and training  
Beamex Bmobile Application
- PGC and PGXH Pumps
- Beamex Care Plan maintenance program
- SSA software maintenance agreement

## MAIN ADVANTAGES

- Turn-key solution
- Durability thanks to maintenance agreements
- Support and customization
- Ease of use
- Easy and secure access for the service provider company
- Time-saving
- Controlled maintenance cost
- Local support

CASE  
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IN BRIEF

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“THE USE OF THE BMOBILE APPLICATION AND THE MAINTENANCE INSPECTION FEATURE HAVE MADE IT POSSIBLE TO ENTER MAINTENANCE CHECKS. “THIS IS VERY USEFUL BECAUSE THESE TESTS ARE DIRECTLY TRANSFERRED TO A SMARTPHONE SO THAT THE MAINTENANCE TECHNICIAN CAN MONITOR AND ENTER THE VARIOUS OPERATIONS”

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