

# Beamex Case Story

UPM Kymmene, kraft pulp mill  
Pietarsaari, Finland



Providing a calibration solution  
for a pulp mill's new needs.

**beamex**

# THE PULP MILL'S NEW RECOVERY BOILER IS THE LARGEST IN THE WORLD.

When it comes to calibrating process instruments, Kalle Vikman (UPM Kymmene, Pietarsaari, Finland) has worked in co-operation with Beamex for almost 30 years. "I've worked in co-operation with Beamex since it was established", says Kalle. It was natural, then, to choose Beamex as the calibration partner when the project for building a new single-line recovery island at Pietarsaari kraft pulp mill began. After the investment, the production capacity of the pulp mill will increase to 800,000 tonnes per year. The main equipment of the new recovery island includes the evaporation plant, recovery boiler, back pressure turbine, recausticizing plant and lime kiln. The recovery boiler is the world's largest. The new recovery island improves cost efficiency at the mill and reduces emissions per tonne of pulp produced.



*"I've done co-operation with Beamex since it was established", says Kalle Vikman, UPM Kymmene Pietarsaari, Finland.*

## The situation

The calibration need was related to the new recovery island and its new process instruments. "We decided right from the start that every piece of new equipment that arrives will be tested and calibrated before installation", says Kalle. This calibration need was quite remarkable – it included 1,300 measurement circuits, 550 control circuits and 400 open/closed valves. "We have bigger calibration needs than before", explains Kalle. Usually calibrations are performed on a larger scale during shutdowns and, in addition, about 5 to 10 calibrations per week are performed as control checks. During the start-up there have been approximately 5 to 10 calibrations a day. Calibrators are mainly used by the factory's 15 mechanics, five of which are working at the new recovery island.

**“Sure, we have always had some form of (calibration) documentation, but before it used to be pieces of paper written by hand”, Kalle points out.**

### **The solution and main benefits**

The Beamex equipment provided the solution: the new MC5P calibration bench system, portable MC5 multifunction calibrators, QM6 calibration management software and some accessories (e.g. calibration hand-pumps). The co-operation with Beamex has been intense all these years. Portable MC5 calibrators are in daily use. The portable calibrator is excellent, thanks to its many functions. “It is good, because we only need to carry one device when we need to use a calibrator out in the field”, says Kalle. “Ease-of-use is also very important”, Kalle adds.

They also decided to use the QM6 software for calibration management. Using calibration software has its benefits – it electronically documents calibration data. This increases work productivity and minimizes human mistakes. There is no need for writing calibration documents by hand. “Sure, we have always had some form of (calibration) documentation, but before it used to be pieces of paper written by hand”, Kalle points out.



*Portable MC5 multifunction calibrator in use at UPM Kymmene.*

# CASE STORY IN BRIEF

## Customer profile UPM Kymmene, kraft pulp mill Pietarsaari, Finland

### Business Situation

UPM Kymmene invested in a new single-line recovery island at the Pietarsaari kraft pulp mill. The production capacity of pulp will increase to 800,000 tonnes per year. The main equipment includes the evaporation plant, recovery boiler, back pressure turbine, recausticizing plant and lime kiln. The recovery boiler is the world's largest. UPM Kymmene decided that they would test and calibrate all process instruments before installation. This included 1,300 measurement circuits, 550 control circuits and 400 open/closed valves.

### Solution description

- MC5P calibration bench system
- Portable MC5 multifunction calibrators
- QM6 calibration management software
- Accessories: calibration hand-pumps, etc.

### Main benefits

- Calibrators are easy to use
- Documentation is accurate and fast with calibration software
- Portable calibrators are very suitable for field use
  - no need to carry several devices
- QM6 software creates calibration documentation easily while you do your other work

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