BEAMEX SOLUTIONS FOR

# CALIBRATION EXCELLENCE

beamex

# THE BEAMEX CALIBRATION ECOSYSTEM

The Beamex calibration ecosystem is a unique combination of calibration technology and expertise that allows process industry customers to digitalize their calibration process and unleash the power of their calibration data. Every component in the calibration ecosystem supports you throughout the solution lifecycle to meet your data-enabled business needs.

## Calibration **Management**

**Beamex calibration management software** lets you manage instrumentation assets and calibration procedures – what, when, and how to calibrate.

You can analyze high-quality, digital data securely stored in your calibration management software. Identify trends, create reports, generate calibration certificates, and ensure compliance.

## Calibration **Equipment**

**Beamex calibration equipment** combines advanced functionality with ease of use and unmatched accuracy for demanding industrial conditions.

Beamex multifunction calibrators reflect the result of decades of experience providing world-class solutions for the process industries.

## **Expert Services** and **Support**

**Beamex team of** experienced, world-leading specialists will guide you throughout the solution lifecycle, from definition to daily operation.

We provide calibration services, repairs, and service plans to help you keep your calibration equipment operating at its full potential throughout its lifetime.

**Customers made efficiency gains of**

**30%**

by utilizing calibration management software

**Customers were able to save**

**50%**

by combining calibration software with calibration equipment

**Customers were able to save**

**75%**

by utilizing the whole ecosystem

### ONLINE CALIBRATION SAVINGS CALCULATOR

Calculate how much you could save on operational costs in just a few clicks!

resources.beamex.com/calibration-savings-calculator

## WHY CHOOSE THE BEAMEX CALIBRATION ECOSYSTEM?

**Secure Digital Data Flow and Data-Enabled Decisions**
Data is your most valuable asset. Our technology captures data digitally at the measurement source and ensures secure data flow between products and systems.

**Calibration Excellence**
We will help you develop your calibration program and continuously analyze, improve, manage, and execute calibrations.

**Multifunction Calibrators**
Calibration for pressure, temperature, and electrical signals in a single device.

**Suitable for Regulated Industries**
Suitable for highly regulated industries with demanding compliance and quality requirements.

**Guided Calibration**
Calibrate in the field with predefined procedures and step-by-step guidance from your Beamex calibrator or software.

**Sustainable by Design**
We design durable, scalable, and highly configurable solutions that evolve to meet your changing needs.

OUR PURPOSE:

# A safer and less uncertain world

# EXPERIENCE A BETTER WAY

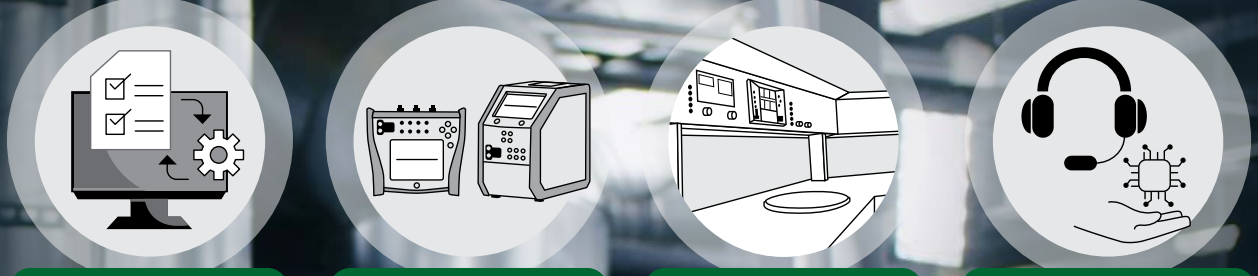
to improve your calibration process

## LET OUR EXPERTS GUIDE YOU!

Every business is different, and our experts will help you find the right solution while streamlining your workflows for maximum efficiency.

**» beamex.com/contact-us**

## THE BEAMEX **CALIBRATION ECOSYSTEM**



**CALIBRATION MANAGEMENT** | **FIELD CALIBRATION** | **WORKSHOP CALIBRATION** | **SERVICES**

# CALIBRATION MANAGEMENT

Calibration management software automates calibration work scheduling, data collection, and reporting, reducing the risk of human error and saving time. By centralizing calibration data, calibration software also improves traceability, supports compliance with standards like ISO 9001, and provides insights for decision-making and audit purposes.

- Scalable and cost-effective
- Improved quality of work life for mobile workers
- A platform for collaboration
- Cloud-based

## Beamex **LOGiCAL**

Calibration Management Software

**Beamex LOGiCAL** is a modern SaaS calibration solution that helps you streamline and digitalize your calibration processes. With LOGiCAL, you always know what, when, and how to calibrate, and can perform your calibration work efficiently.

LOGiCAL connects seamlessly with Beamex documenting calibrators and the Beamex bMobile Calibration Application, making your calibration process more consistent, streamlined, and reliable.

LOGiCAL securely stores calibration results and maintains a complete calibration history for traceability.

Accessible from anywhere, LOGiCAL is ideal for teams working across multiple sites. It's a cost-effective way to improve efficiency, accuracy, and compliance in your calibration work.

REQUEST A DEMO:
BEAMEX.COM

- **All-in-one calibration solution**
- **Fit for highly regulated industries, helping you to comply with 21 CFR Part 11**
- **Feature-rich, including advanced functionalities**
- **On-premises**

# Beamex **CMX**

Calibration Management Software

**Beamex CMX** helps you manage instrumentation assets safely and plan and execute all calibration work efficiently, even in highly regulated industries.

CMX guides the entire calibration process step by step, including field work, ensuring traceable, consistent, and repeatable results every time.

All calibration results, including calculated uncertainties, are securely stored in CMX, giving you a complete and traceable calibration history. Standardizing and automating processes reduces risks and improves efficiency.

Data integrity and change management are critical in regulated industries such as pharmaceuticals. With CMX, you can track every change to your calibration database and meet the requirements of 21 CFR Part 11 and other regulations for electronic records, electronic signatures, and data integrity.

Your reliable, traceable, and reusable calibration data in CMX becomes one of your company's most valuable assets for enabling continuous improvement.

# Beamex **bMobile**

**Beamex bMobile** is an intuitive, multi-platform solution for offline guided execution and documentation of field calibrations. It is used in combination with Beamex CMX or Beamex LOGiCAL Calibration Management Software.

During the calibration, bMobile guides you through the calibration process and lets you key in the calibration results.

The Beamex bMobile application works offline, so you don't need a network connection when completing the calibration task.

beamex bmobile

# TAKING CMX TO THE NEXT LEVEL

## CMX Analytics Dashboard

The Beamex CMX Analytics Dashboard provides an easy-to-use visual summary of your key calibration performance indicators.

## Beamex Business Bridge

A commercial, configurable off-the-shelf solution for connecting Beamex CMX and maintenance management systems such as SAP or IBM Maximo.

## Software Service Agreement

A software service agreement (SSA) ensures access to the latest innovations and updates so your software can evolve with your operations.

# MC6

# FIELD CALIBRATION

Versatile, accurate, and reliable, the Beamex MC6 family of field calibrators meets the diverse calibration needs of process industries worldwide. Whether working in the field or in hazardous environments, the MC6 family of field calibrators offers models tailored to your requirements.

## KEY FEATURES OF THE BEAMEX MC6 FAMILY

- **Multifunction Calibrators:** Provides calibration capabilities for pressure, temperature, and electrical signals in a single device.
- **High Accuracy:** Ensures precise measurements with traceable, accredited calibration certificates.
- **User-Friendly Interface:** Features a large touchscreen with multilingual support and multiple UI modes.
- **Field Communicator:** Includes an integrated communicator for the efficient maintenance of smart field instruments.
- **Digital Data Flow:** Documenting calibrators that connect with Beamex software, enabling paperless calibration.
- **Durable Design:** Built for demanding environments with an ergonomic, IP65-rated construction.

## COMMON CAPABILITIES OF THE BEAMEX MC6 FAMILY

- Pressure measurement (internal/external)
- Voltage measurement and generation
- Current measurement and generation
- Frequency measurement and generation
- Pulse counting and generation
- Switch state sensing
- Built-in 24 VDC loop supply
- Resistance and RTD measurement, two simultaneous channels
- Resistance and RTD simulation
- Thermocouple measurement, two simultaneous channels
- Thermocouple simulation
- HART, FOUNDATION Fieldbus, and Profibus PA communicator

# Beamex **MC6**

Advanced Field Calibrator and Communicator

**The Beamex MC6** is a high-accuracy field calibrator that offers calibration capabilities for pressure, temperature, and various electrical signals. It is also a multi-bus field communicator for Fieldbus instruments.

# Beamex **MC6-Ex**

Intrinsically Safe Advanced Field Calibrator and Communicator

**The Beamex MC6-Ex** is the world's most accurate intrinsically safe field calibrator and communicator. It is ATEX, IECEx, and North American certified and can be used in all hazardous areas. It offers calibration capabilities for pressure, temperature, and various electrical signals, and can be used as a multi-bus communicator for Fieldbus instruments.

# Beamex **MC6-T**

Multifunction Temperature Calibrator and Communicator

**The Beamex MC6-T** combines a state-of-the-art temperature dry block with built-in multifunction process calibrator and communicator technology. It offers versatility that no other temperature calibrator can match, providing calibration capabilities for temperature, pressure, and various electrical signals as well as a multi-bus communicator for Fieldbus instruments.

READ MORE ONLINE
BEAMEX.COM

*Available with a range of different inserts*

## CUSTOMER STATEMENTS

Instead of carrying as many as 30 different pieces of equipment in the field, technicians now only need one – the **Beamex MC6**.

**Jason DePalma**, Supervisor of Engineering Services, Glatt Air Techniques, US

Using the **Beamex MC6** field calibrator and communicator for pressure calibrations has decreased the time it takes to conduct the calibration procedure in the field by over 80%.

**Bill Adams**, Process Control Systems Specialist, DC Water, US

What used to take three or four of us to do in the past, can be done by one, maybe two of us. Just the **Beamex MC6** alone is like having another technician on staff.

**Kristopher Weifel**, Senior Instrument and Control Technician, Cornell University Central Energy Plant, US

# RELATED PRODUCTS AND SERVICES

## Equipment Services

Calibration and Repair Services – All instruments, including calibrators, need to be calibrated regularly. Keeping your calibrator up to date with regular calibration is important to maintain accuracy and for compliance.

Beamex service plans – Beamex Care Plan and Beamex Calibration Plan – are contracts that cover annual recalibrations, repairs, and much more.

## Download Center

The Beamex website Download Center offers free access to firmware updates, device descriptions, software tools, and more. It helps you keep your Beamex solutions up to date and performing at their best.

www.beamex.com/download-center

## Training

Classroom and online training with Beamex calibration experts ensures you have the necessary skills to utilize your calibration solution to its fullest potential.

## Expert Services

Beamex team of experienced, world-leading specialists will guide you throughout the solution lifecycle, from definition to daily operation, and help you get the most out of Beamex calibration technology.

The Beamex service and support portals are easy gateways to request calibration and repair services for your Beamex calibration equipment, or support from Beamex team of experts.

## FIELD COMMUNICATOR

The MC6 family of calibrators contain a multi-bus field communicator for HART, FOUNDATION Fieldbus, and Profibus PA protocols to calibrate, configure, and trim your smart instruments. All three protocols can be enabled simultaneously.

HART COMMUNICATION PROTOCOL

PROFIBUS®

READ MORE ONLINE
BEAMEX.COM

# Calibration Pumps

**Beamex hand-operated calibration pumps** can be used to generate pressure and vacuum. The extremely accurate volume control provides excellent fine adjustment of pressure.

**Beamex PGM calibration pump**
0 ... 20 bar /
0 ... 300 psi

**Beamex PGC calibration pump**
-0.95 ... 35 bar /
-13.7 ... 510 psi

**Beamex PGHH calibration pump**
0 ... 700 bar /
0 ... 10 000 psi

**Beamex PGL calibration pump**
–400 ... 400 mbar / –160 ... 160 iwc

**Beamex PGPH calibration pump**
–0.95 ... 140 bar / –13.7 ... 2 000 psi

## Beamex **ePG Electric Pressure Pump**

The Beamex ePG is a portable, battery-operated electric pressure pump and controller for industrial pressure calibration applications in ranges from -0.85 to 20 bar (-12.4 to 300 psi). It provides an effortless way to generate pressure or vacuum and can be used together with any existing pressure calibrator.

**SHOP.BEAMEX.COM**

# Popular Accessories

**Pressure fittings**
Bx G1/8" male (for 40 bar hoses), Bx 1215 male (for 630 bar hoses), pressure fitting sets and tube fittings.

**Pressure hoses**
40 bar / 600 psi pressure T-hose set 1.5 m (5 ft) with NPT fittings and seals. The hoses have Bx G1/8" female threads in all ends.

**Test leads**
Test leads (black and red) with stackable 4 mm banana male plug in both ends, cable length 1 m (3 ft).

**Inserts for MC6-T**
Replaceable inserts with different sized holes, to allow calibration of temperature sensors with different diameters.

## External Pressure Modules

**The Beamex EXT** range of external pressure modules will increase your configuration possibilities and add flexibility, making it possible to calibrate even more pressure ranges with the same calibrator. We offer a wide range of external pressure modules, from vacuum up to 1 000 bar (14 500 psi).

# Smart Temperature Sensors

**Beamex RPRT**
High-accuracy reference sensor
Temperature range up to 660 °C (1220 °F).

**Beamex IPRT**
Industrial reference sensor
Temperature range -45 ... 300 °C (-49 ... 572 °F).

**Beamex SIRT**
Short industrial reference sensor
Use as a reference sensor with the Beamex MC6-T150 when calibrating short and flanged sanitary sensors.

# WORKSHOP CALIBRATION

The Beamex CENTRiCAL Workshop Calibration Solution is a central place for all your workshop calibrations. This standardized yet configurable solution is easy to use, versatile, and ergonomic. The Beamex CENTRiCAL reflects the result of decades of experience providing world-class solutions for the process industries.

READ MORE ONLINE
BEAMEX.COM

## Modular Versatility

The modular design makes CENTRiCAL versatile and easy to configure according to your needs, with the ability to add or replace modules as needed.

**Available modules include:**

- The MC6-WS workshop calibrator
- Automatic and manual pressure generation modules
- Pressure measurement modules
- Mains (AC) power supplies
- DC power supplies
- Multimeters
- Soldering stations
- Oscilloscopes
- Function generators
- and much more

## LET'S DESIGN YOUR DREAM WORKSHOP!

Our workshop calibration experts can give you advice, and we can help you define and adopt your unique solution.

**» beamex.com/contact-us**

# Choose the Right Option for You

CENTRiCAL

## CENTRiCAL Bench

The Beamex CENTRiCAL calibration and test bench is available as a straight bench or corner bench.

## CENTRiCAL Trolley

The Beamex CENTRiCAL trolley is equipped with wheels, an adjustable shelf, and a lockable drawer unit for storage.

## CENTRiCAL Tabletop

The Beamex CENTRiCAL tabletop solutions are the convenient choice if you already have tables in your workshop.

# BENEFIT FROM A FULLY DIGITAL WORKFLOW

### The Beamex MC6-WS

The Beamex MC6-WS Advanced Workshop Calibrator and Communicator is the heart of the CENTRiCAL workshop calibration solution.

It is a documenting calibrator that can connect with Beamex calibration management software, enabling a fully digital calibration data flow.

### Manage what, how, and when to calibrate

You can use Beamex calibration management software to manage what, how, and when to calibrate, as well as to execute calibrations with the MC6-WS according to your preconfigured calibration procedure – even fully automatically.

## WHY CENTRICAL?

- Modular
- Ergonomic
- Easy to configure
- Electrostatic discharge protected
- Ready calibrated

## BEAMEX POC8

**The Beamex POC8** is an accurate and user-friendly automatic pressure output controller, providing regulated output from vacuum to 210 bar (3045 psi).

The POC8 can be integrated into the Beamex CENTRiCAL workshop calibration solution or delivered as a portable desktop version.

## RELATED SERVICES

- Calibration and repair services
- Care Plan
- Service portal
- Support portal
- Training and support
- Firmware updates

# SOLUTION SERVICES

Let the Beamex team of experienced, world-leading specialists guide you throughout the solution lifecycle, from definition to daily operation, and help you get the most out of Beamex calibration technology. Our expertise is based on understanding regulations and industry best practices, and we will help you implement and continuously improve your calibration program.

EXPERT SERVICES

TRAINING

SUPPORT

## CUSTOMER STATEMENTS

In our view Beamex solutions offered the best feature set out there for the price. We were also impressed with the strength and depth of their customer support, particularly on the technical side.

**Matthew Lewis**, Project Manager, OCU Hornbill

It has been a phenomenal journey, and we have maintained an open, honest dialog and a collaborative way of working throughout, which has certainly helped the team on our side demonstrate the true value of the Beamex solution to our management team.

**Andy Barnwell**, Asset Manager Systems Owner, National Grid, UK

# SOLUTION
# ONBOARDING

The Beamex team of experienced specialists will guide you throughout the solution lifecycle, from initial introduction to daily operation, enabled by our proven onboarding model.

Solution delivery and adoption services are available for both CMX and LOGiCAL and the basic onboarding follows the same path – system introduction, design, data migration, training, and hypercare.

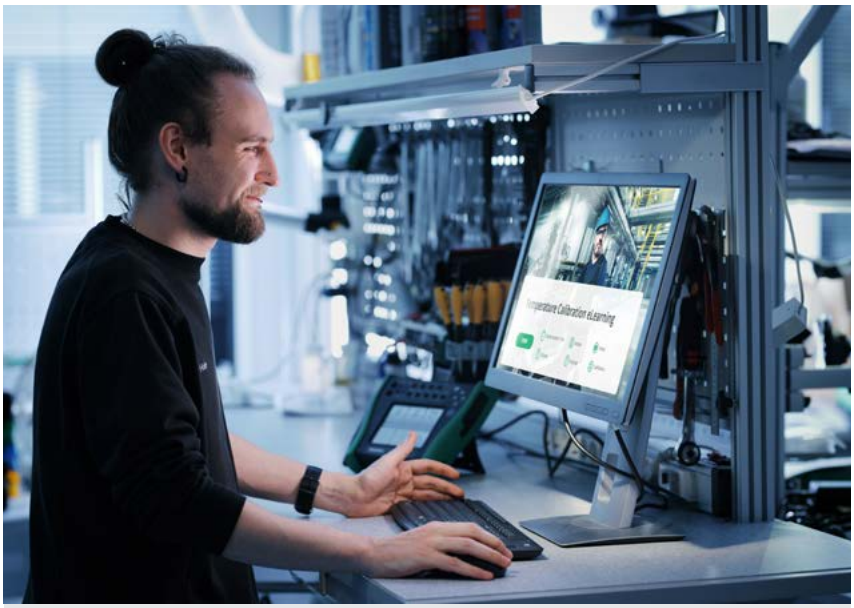
We work closely with your team to make sure you get the most out of Beamex calibration technology.

- INTRODUCTION
- SYSTEM DESIGN
- DATA MIGRATION
- SOLUTION TRAINING
- HYPERCARE

HOURS DAYS WEEKS

## TALK TO AN EXPERT
ABOUT ONBOARDING:

RESOURCES.BEAMEX.COM/
EXPERT-REQUEST



## ONLINE CONTENT, TRAINING, AND E-LEARNING

**The Beamex content hub** is filled with educational and insightful videos, and other helpful resources.

- eBooks on calibration essentials, software, temperature, pressure
- eLearning courses for pressure and temperature calibration
- Videos, blogs, and white papers that give you a deeper understanding of different areas of calibration

CONTENT HUB:
BEAMEX.COM

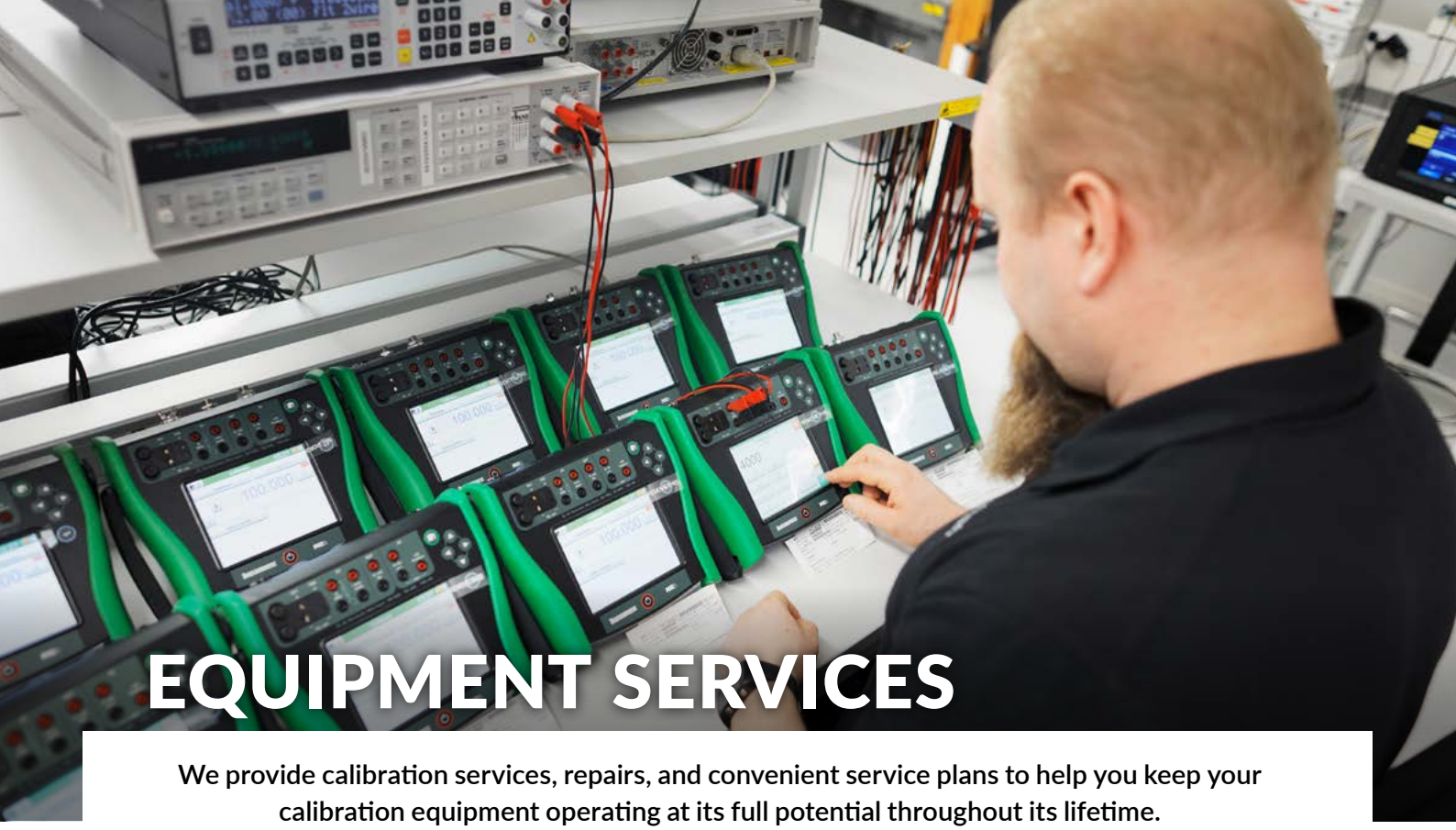
## TRAINING

Classroom and online training with Beamex calibration experts ensures you have the necessary skills to utilize your calibration solution to its fullest potential.

## SUPPORT SERVICES

Our dedicated team is always ready to support you every step of the way. The Beamex Support Portal is the fastest and easiest way for our customers to contact us for help anytime, anywhere in the world.

**» support.beamex.com**



# EQUIPMENT SERVICES

We provide calibration services, repairs, and convenient service plans to help you keep your calibration equipment operating at its full potential throughout its lifetime.

## CALIBRATION AND REPAIR SERVICES

All instruments, including calibrators, need to be calibrated regularly. Keeping your calibrator up to date with regular calibration is important to maintain accuracy and for compliance.

A traceable, accredited calibration certificate is needed if your plant operates according to a quality control system, such as the ISO 9001, ISO 17025, ISO 14001, FDA/GMP/GxP, or other systems, and/or if you must provide proof of measurements and traceability to your customers.

## SERVICE PLANS

Maintain and protect your equipment with Beamex service plans. Beamex service plans cover annual recalibrations, repairs, and much more.

| Compare the Beamex Care Plan and Beamex Calibration Plan | Beamex Care Plan | Beamex Calibration Plan |
|---|---|---|
| Annual accredited calibrations | x | x |
| Free shipping to and from the Beamex factory | x | x |
| Priority service with expedited turnaround times | x | x |
| Free repairs, even in the case of accidental damage | x | – |
| Replacement of wear parts | x | – |
| Annual email reminders when calibration is due | x | x |
| Updates to firmware and device description files | x | x |
| Free helpdesk service | x | x |

*The Calibration Plan is a good option if you don't wish to take advantage of the additional services offered by a Beamex Care Plan, or if the Care Plan is not available for your Beamex equipment.*

## SERVICE PORTAL

The Beamex service portal is an easy gateway to request calibration and repair services for your Beamex calibration equipment.

SERVICE PORTAL:
SERVICES.BEAMEX.COM

## Beamex Worldwide

**The Beamex products and services are available in over 90 countries around the world.**

**We operate globally, with our own offices in 12 locations and a worldwide network of authorized distributors.**

**Get in touch!**
Browse our worldwide contacts:
**» beamex.com/beamex-worldwide**

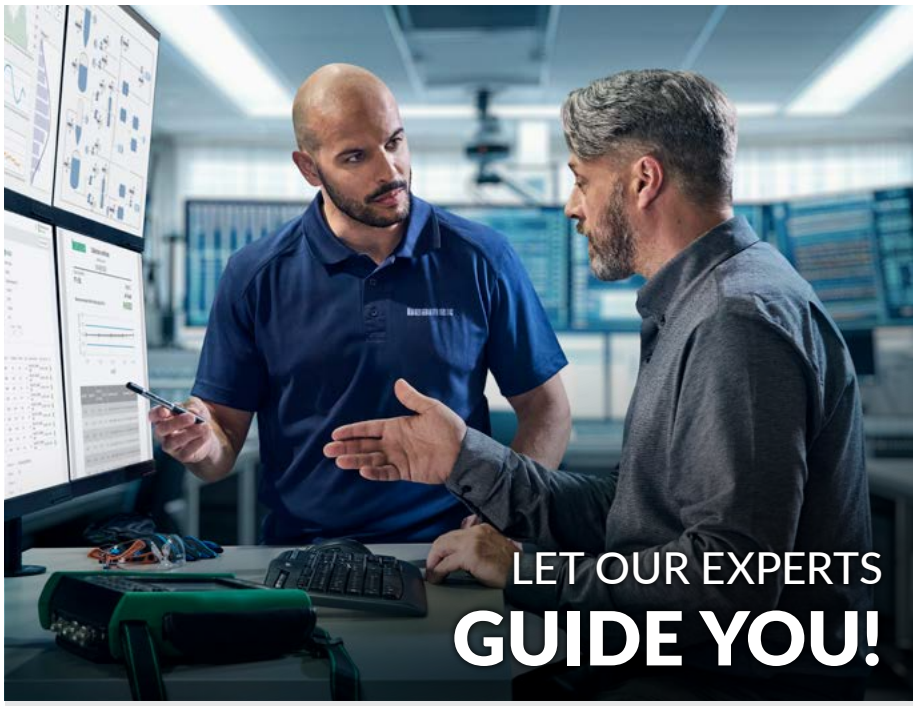
## Beamex – Calibration Excellence since 1975

Situated in Pietarsaari, Finland, Beamex is the world leader in calibration technologies and expertise, with over 50 years of experience. We are at the forefront of calibration digitalization and standardization. We support you throughout the solution lifecycle to meet your business needs.

## WEBSHOP

Buy pumps, accessories, and spare parts for your Beamex products.
**Next business day shipping.**

**SHOP.BEAMEX.COM**



## LET OUR EXPERTS GUIDE YOU!

Every business is different, and our experts will help you find the right solution while streamlining your workflows for maximum efficiency.

We are available in over 90 countries and speak a variety of languages. Get in touch!

**» beamex.com/contact-us**

## Experience a Better Way to Analyze and Improve Your Operations

The calibration process savings calculator focuses on your unique business environment and your potential OPEX savings from process optimization and digitalization, based on the experiences of Beamex customers from around the world.

In addition to OPEX savings, you can get more benefits from transforming your calibration process:

- Reduced risk of human error
- Calibration data quality and integrity
- Audit readiness and compliance
- Minimized downtime
- Employee safety and well-being

# ONLINE **CALIBRATION PROCESS**

# SAVINGS CALCULATOR

**Discover how much you could save on operational costs in just a few clicks!**

**How to use the calculator**
Go to beamex.com and click on the FREE Calibration Process Savings Calculator link. Fill in the form and answer some questions about your calibration process, from planning and work order generation to execution and documentation. If you would like an expert to help you answer these questions, complete our expert request form and we'll be in touch.

**What happens next?**
After you have answered all the questions, you will see how much you could save over one and five years. You will also receive an email summary with more information.

Together, let's unlock the full savings potential of your calibration process. Your company can join the long list of leading businesses that have transformed their calibration process with help from Beamex.

> Implementing Beamex CMX software and the MC6 calibrator to create a digital calibration workflow saves us about 65% to 75% in labor time and removes much of the human error factor in the process.
>
> **Kevin,** Instrumentation Superintendent, Water and Wastewater Facility, US

**Test the calculator today:**
resources.beamex.com/calibration-savings-calculator

beamex