CMX
PROFESSIONAL

CMX Professional

Calibration software
with wide customization
possibilities.

beamex

CMX Professional

Calibration software with unlimited possibilities.

Who calibrated? What? When? What were the results?

Plan, manage and document all your calibration information efficiently and safely using Beamex's CMX Professional calibration management software. CMX Professional is calibration management software with wide customization possibilities. It is suitable for large and medium-sized companies, which require an advanced, efficient calibration system that meets their specific needs.

Installing CMX Professional and using it to its fullest potential improves the productivity and quality of a company's calibration system. It's faster, easier and more accurate than "pen and paper" based calibration procedures. Once a calibration task has been completed, CMX Professional records the calibration history together with timestamps, electronic signatures, record status, and a complete audit trail. These functions are especially necessary in regulated industry, where routine calibration operations are required to indicate that quality-critical instruments continue to perform within the defined tolerances. The records that are produced must be stored and be retrievable upon demand to demonstrate to an auditor that the plant is being maintained to an acceptable level.

CMX Professional enables powerful and productive calibration management:

- Easy-to-use, modern software with many configuration possibilities.
- Provides traceable and auditable calibration reports.
- Meets regulatory requirements (ISO, FDA, etc.).
- Paperless documentation and calibration management.
- Can be integrated into a maintenance management system (e.g. SAP®, Maximo®).
- Built-in communication with documenting calibrators.
- Pocket PC interface for manual data entry with a PDA.

Adding optional features to CMX Professional provides you with calibration management software that meets your specific needs:

- Increase the number of positions in a database.
- Install as server version.
- Integrate to a maintenance management system (e.g. SAP®, Maximo®).
- Third-party calibrator support.
- Configurable user-interface.
- History Trend.
- Report Design.
- Pocket PC interface.
- Calibration of weighing instruments.
- Change Management.
- Professional services (e.g. installation, training, validation, database conversion).
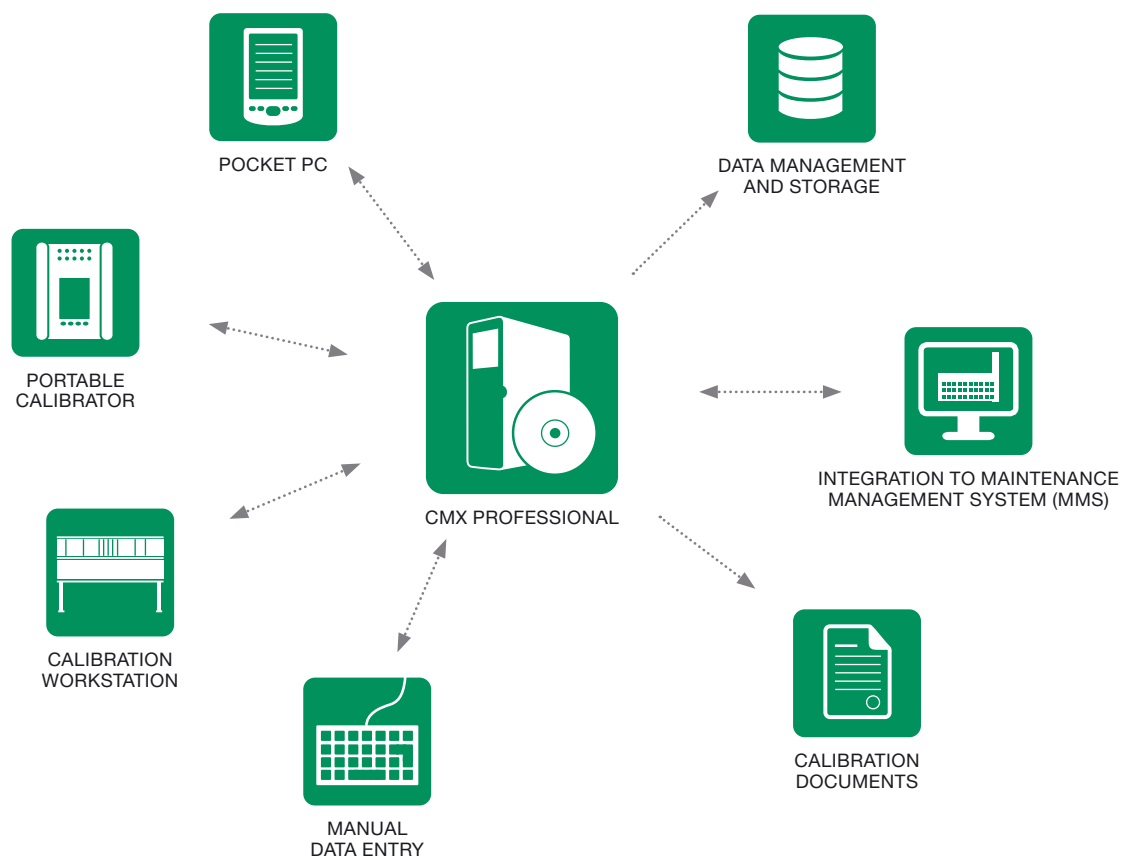
90%

of CMX customers state that using Beamex products has improved the efficiency of their calibration procedures.*

* Beamex Customer Survey 2006 (Dec 2006)

CMX Professional for increased productivity and quality

POCKET PC

DATA MANAGEMENT
AND STORAGE

PORTABLE
CALIBRATOR

CMX PROFESSIONAL

INTEGRATION TO MAINTENANCE
MANAGEMENT SYSTEM (MMS)

CALIBRATION
WORKSTATION

MANUAL
DATA ENTRY

CALIBRATION
DOCUMENTS

Upload calibration procedures from CMX Professional to portable calibrators and calibration workstations. Before performing any calibrations, you can upload all the calibration procedures that you need to do from CMX Professional to your field calibrator or workstation. No need for pen and paper.

Download calibration results back to CMX Professional. When the calibrations are done, you can download all the calibration information and results from the calibrator back to CMX Professional. It's fast and efficient.

Manually enter calibration data into CMX Professional. If you like, you can also manually enter calibration information into CMX Professional. This way you can store and manage all possible calibration standards with CMX Professional, no matter what you calibrate.

Print calibration certificates, reports and labels in electronic format, on paper or both; it's up to you.

Create, manage and store calibration information safely and efficiently. All calibration data, procedures and results are stored and managed in the CMX database. All documentation and procedures in CMX are in auditable and traceable format and it adheres to regulatory requirements, such as ISO 17025, cGMP and 21 CFR Part 11.

Integration to a maintenance management system (MMS). Plant hierarchy and work orders are stored in MMS and from there transferred to CMX Professional, which stores all calibration procedures, standards and results. When calibration work has been performed, CMX Professional sends acknowledgement of the calibration back to MMS.

Mobile calibration management with Pocket PC. Using CMX Professional's Pocket PC interface for downloading and uploading calibration information makes an entirely paperless calibration system.

Simple and easy to use

Explorer-like browser interface. The explorer-type user interface allows you to navigate through calibration records quickly and easily.

"Drag and drop" functionality. In CMX Professional, you can move equipment by simply dragging and dropping it. In addition, workflows can be created by dragging and dropping equipment. You can also drag and drop work orders directly to your field calibrator.

Adapts to your needs

A database between 1,000 and 10,000 positions. As a standard feature, the CMX Professional has a 1,000 position database, but it can be increased up to 10,000 positions.

Installed into a single workstation or on a floating server. The standard version of CMX Professional is installed into a single workstation; a server version of the software is available as an option. With the server version, the database and CMX licenses can be shared with other plants worldwide.

Report Design. The Report Design feature provides unlimited possibilities to customize calibration reports to meet company-specific requirements. The Report Design feature allows you to create completely new documents or to modify pre-designed document layouts according to the standards of the company.
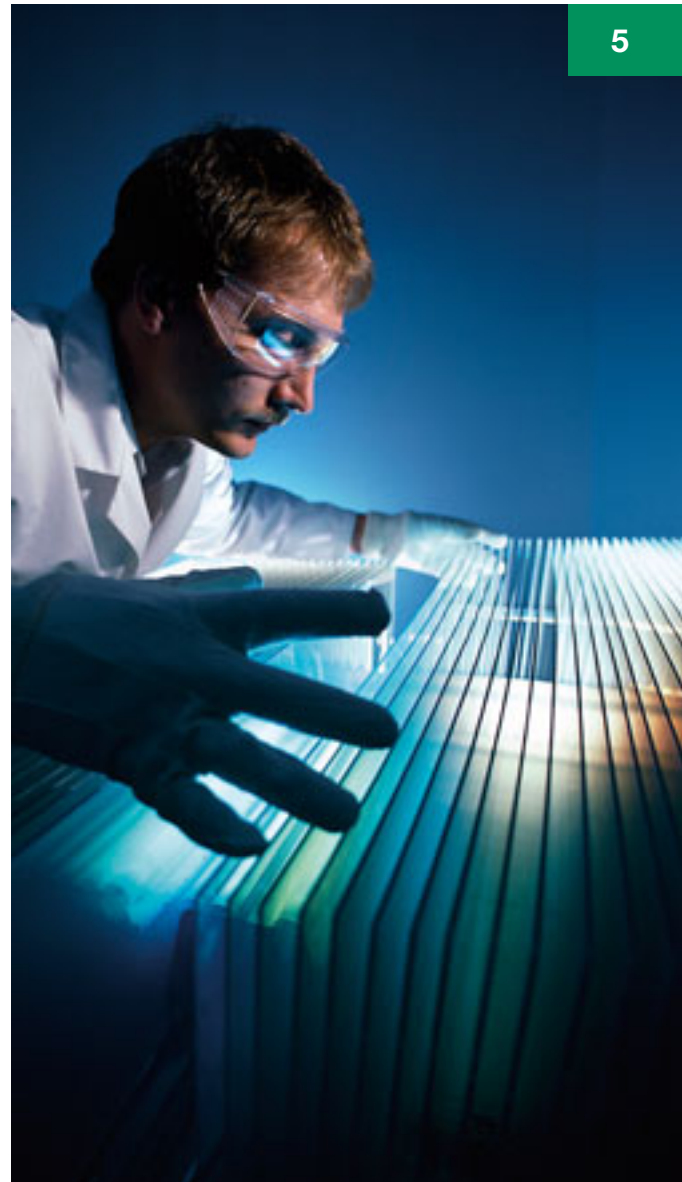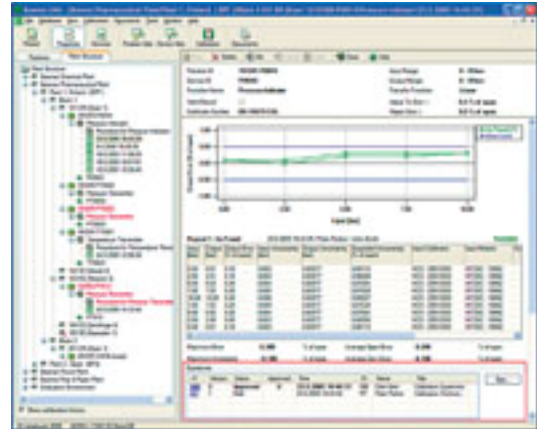
Ability to customize user-interface. CMX Professional's user interface can be modified to meet company specific terminology and standards. Adding and modifying user-definable fields and an unlimited amount of document links to an external file system is also possible.

Pocket PC interface. The stand-alone Pocket PC interface allows you to manually enter data on site, download work orders, and test procedures and routines. It stores all of the results and, after testing, uploads all of the results and notes to the central database.

Meet regulatory requirements

ISO 17025, cGMP and 21 CFR Part 11. CMX Professional stores and documents calibration information in auditable and traceable format by meeting regulatory requirements such as ISO 17025, cGMP and 21 CFR Part 11.

Change Management and Audit Trail. CMX Professional's Change Management complies with FDA requirements (21 CFR Part 11 Electronic Records and Electronic Signatures). Change Management stores record history including timestamp, record author or editor, record status and a unique key to the Audit Trail. Audit Trail tracks detailed information of what data fields have been added, modified or deleted, by whom, when and why. Audit Trail also saves illegal login attempts.

Efficient calibration asset management

Manage all calibration quantities. CMX Professional allows you to manage various calibration quantities, including pressure, temperature, electrical, indicators, recorders, mass, pH, length, flow and many others.

Automated procedures. CMX Professional's automated calibration procedures make calibration management efficient, fast and repeatable. Automated procedures minimize mistakes compared to manual methods of calibration management.

Position, device and calibrator database. CMX tracks positions, devices and their functions and calibration procedures, storing and maintaining the complete history of performed calibration tasks. No need to remember tasks, the system automatically alerts you when the defined objects require recalibration and also guides the user through the entire calibration procedure from start to finish.

Position and device sets. Create and maintain position and device sets (also known as workflows). Static sets assist users in planning calibration tasks and working with a certain group of positions and devices instead of reviewing the entire database.

Wizard for database population. Database Wizard guides you in creating new equipment.

Plant structure. The multidimensional plant structure in CMX Professional is similar to your real plant structure with uninstalled, installed and spare equipment with multiple procedures and work orders. Managing even complicated plant structure is easy.

User accounts, groups and permissions. For security purposes, you can create user accounts, user groups and permissions for various levels.

Pickup lists. These allow you to enter frequently used data into the system for later use. Whenever you need the data, you just pick it from the list of pre-entered options. No need to write it over and over again.

History Trend function. This allows you to plan the optimal calibration interval for your instruments. You can analyze the instrument's drift over a certain time period. History Trend displays numerically and graphically the instrument's drift over a certain time period.

Calibrating weighing instruments. Weighing instruments are typically very accurate, but they still need to be calibrated frequently to ensure that measurement value and uncertainty meet requirements. CMX calibration management software includes Eccentricity Tests, Repeatability Tests, Weighing Tests, and Minimum Capability Weighing Tests to assist in complying with all calibration requirements.

Documentation possibilities. All calibration documentation (certificates, reports, labels, route lists, etc.) can be printed and stored in electronic format or on paper. CMX Professional contains many different document templates as a standard feature. Storing documents in CMX database is easy, safe and efficient.

Seamless communication with documenting calibrators

Beamex calibrator support. CMX Professional offers built-in communication with Beamex's documenting calibrators for downloading and uploading calibration information. It's fast and efficient and there's no need for a notepad and pen. In addition, there will be no mistakes from incorrect data entry, as that is always possible when entering data manually.

Third-party calibrator support. CMX Professional also supports communication with all the other major field calibrator brands.

Paperless calibration for increased productivity

Standard calibration certificates, reports and labels. CMX Professional comes with a selection of ready-made standard calibration reports and certificates. All these reports can be saved in different type of electronic format (e.g. Word, HTML, .jpg, .bmp, PDF, Excel). CMX Professional allows you to create your calibration certificates and reports conveniently without pen or paper.

Paper documenting. If you want to print and store paper copies of calibration certificates, reports, route lists and other documents, just simply drag and drop a work order to a local or network printer.

Integration to other systems

CMX connector for SAP® and Maximo®. CMX Professional can be integrated to a maintenance management system (MMS) such as SAP® and Maximo®.

Feature comparison of the CMX product family

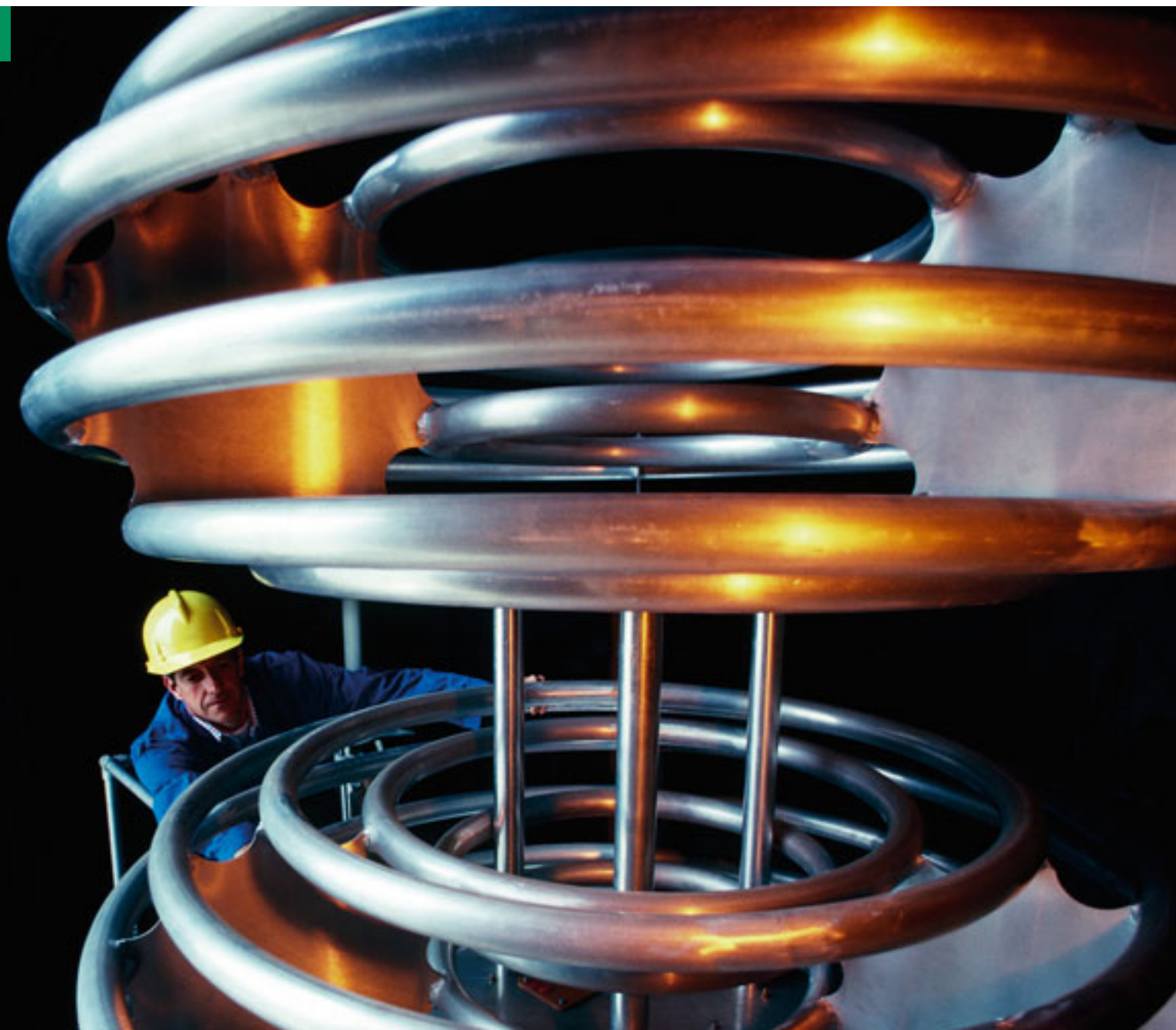| CMX Product features	Light	Professional	Enterprise
Positions/Tags in the database	1000	1000	Unlimited
Optional 5 000 positions/tags in the database		O	
Optional 10 000 positions/tags in the database		O	
Single workstation license	●	●	
Floating server licenses		O	●
Networking/multi-user support		●	●
Position/Tag and Device database	●	●	●
Position/Tag and Device sets	●	●	●
Calibrator database	●	●	●
Wizard for database population	●	●	●
Communication with Beamex calibrators	●	●	●
Manual data entry	●	●	●
Average and uncertainty calculation		●	●
Plant structure	●	●	●
User accounts, groups and permissions	●	●	●
Pickup lists	●	●	●
Saveable filters		●	●
Standard paper reporting templates	9	17	17
Importing/Exporting paper reporting templates		●	●
SQL Server 2005 Express database	●	●	●
SQL Server 2005 Express database tools		●	●
CMX Database Manager tool	●	●	●
Oracle database support		O	●
Communication with 3rd-party calibrators		O	O
Configurable user interface		O	●
History Trend		O	●
Report Design		O	●
Pocket PC interface		O	●
Change Management		O	●
Weighing instrument support		O	●
CMX connector for SAP®		O	●
CMX connector for Maximo®		O	●
Configurable CMX connector for other software			O
Integration service to other software			O
Software Service Agreement (SSA) for 6 months		●	
Software Service Agreement (SSA) for 12 months		O	●
Factory Type Validation – URS/FDS/IQ/OQ/PQ		O	●
On-site installation and user training (3 days)		O	●
QD3 database conversion (1 database)		O	●
QM6 database conversion (1 database)		O	●
Third-party database conversion		O	O
Report designing service		O	O
On-site validation service		O	O

● = Standard feature

O = Optional feature

Make the most of it with Beamex's Professional Services

Installation and training. Beamex provides worldwide services for installation and training. This way you are able to have your new calibration system up and running in no time. You also learn the capabilities of Beamex calibration equipment, how to use it and how your organization will benefit the most from it.

Software Service Agreement (SSA). Our Software Service Agreement is a valuable service package that complements your investment into Beamex's calibration management software. SSA is the gateway to automatic and regular software upgrades and Beamex's Help Desk services. Software upgrades keep the system constantly up-to-date.

Database conversions. If you want to upgrade to CMX Professional from some other calibration system, Beamex will be there to assist you.

Validation. Beamex's Validation Services provide support for pharmaceutical companies in the implementation of CMX calibration management software. A Beamex Validation Specialist performs the validation and the customer witnesses the results of the tests.

Related products and services

Portable calibrators

Beamex's range of portable MC-calibrators for field calibration is known for their accuracy, versatility and also for meeting both high and uncompromised quality standards. CMX Professional has built-in communication with Beamex's documenting calibrators.

Workstations

A workstation can be considered ideal when most of the maintenance and calibration tasks are performed in the workshop. Beamex's workstation is a modular testing and calibration system designed for use in workshops and laboratories.

Professional Services

An essential part of a complete calibration solution are our Professional Services: – service and re-calibration, implementation and training, software support, validation services and integration services. Working with you step-by-step, from implementation to support and re-calibration, Beamex's Professional Services help you to get the most from your calibration investment.

The Complete CMX Product Family

Choose the calibration software that best meets your needs.

CMX Light

Easy-to-use calibration software for a single workstation.

- Quick and easy start-up software.
- For a single workstation.
- Database for 1,000 positions.
- Wizard for easy database population.
- Communication with Beamex calibrators.
- Manual data entry of calibration results.
- Paper documentation includes standard certificates, reports and labels.

CMX Professional

Calibration software with wide customization possibilities.

- Database for 1,000, 5,000 or 10,000 positions.
- Installation options for a network server or workstation.
- New option for weighing instruments.
- Other options: History Trend, Pocket PC Interface, Document Design, Change Management, etc.
- Interface option for SAP® and Maximo®.
- Optional Software Service Agreement offers automatic software upgrades and the first 6 months of service free of charge.
- Beamex's Help Desk services.

CMX Enterprise

All-in-one calibration solution for large companies.

- Enterprise includes features, such as History Trend, Report Design, Pocket PC Interface, Change Management and Calibration of Weighing Instruments.
- One floating installation for the corporate server for sharing the same system in all locations worldwide.
- Database with unlimited number of positions.
- Optional, configurable interfacing with other software systems.
- Twelve-month Software Service Agreement free of charge keeps the system up to date.

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Portable calibrators

Workstations

Calibration software

Professional services

Industry solutions

For more information, please visit **www.beamex.com** or contact **info@beamex.com**