

# Beamex Instrument & Electrical Workshop Solutions



## High-quality, customized instrument and electrical workshops delivered as a turn-key solution

The ideal instrument and electrical workshop is designed to meet the specific needs of an industrial plant. In addition, it has high-performing, reliable measurement equipment and systems that deliver improved efficiency and quality.

Beamex is a world-class specialist when it comes to supplying complete instrument and electrical workshops for new industrial plants and for existing plants that are looking to modernize their workshops. Whether it is a single workstation or a complete workshop, Beamex takes responsibility of the entire project covering design, planning, detailed specifications and documentation, installation, training, supplying of high-quality equipment and accessories, and finally after sales services.

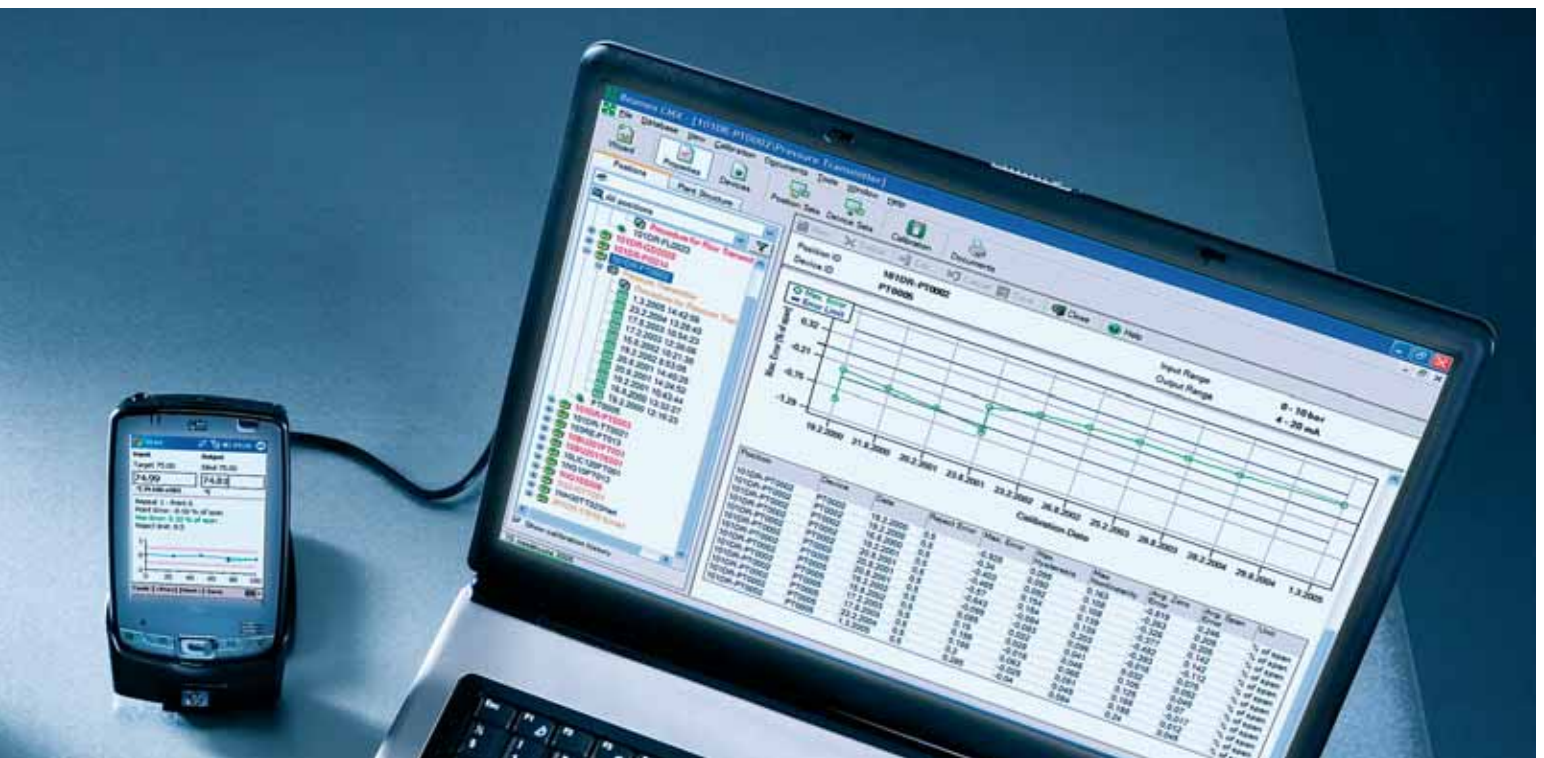
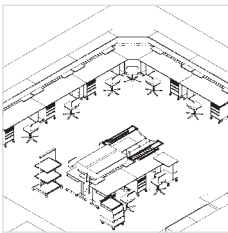
There are hundreds of Beamex workshops installed and in use in more than 50 countries. Our workshops are highly popular especially in oil, gas, petrochemical and chemical plants, offshore platforms and thermal and combined power plants.

- Total supplier, turn-key solutions
- Efficient and reliable partner
- A combination of workstations, portable calibrators, calibration software, accessories and professional services
- For calibration, electrical and electronic maintenance, and motor testing



# Beamex – your partner in every phase of the instrument & electrical workshop project

- 1 Design and planning.** Visualize your future workshop.
- 2 The Beamex Workshop Solution: Equipment & Software.** High-quality, customized system to improve efficiency and quality.
- 3 Project documentation.** Complete vendor drawings and data are available to meet project requirements.
- 4 Implementation and start-up.** Fast and efficient implementation.
- 5 After sales services.** Support when the system is in use.

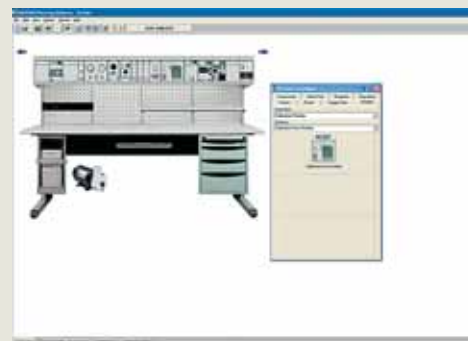








## SINGLE WORKSTATION LAYOUTS



The available sample layouts include:

- Calibration workstations
- Electrical workstations
- Motor testing workstations
- Soldering workstations
- Power plant workstations

*Beamex has the tools for developing application-specific MCS100 Workstations.*



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## 02 The Beamex Workshop Solution: Equipment & Software

High-quality, customized system to improve efficiency and quality.

- Total supplier, turn-key solutions
- The most automated, integrated system available
- Modular design allows user-specific configuration
- Suitable for demanding applications (e.g. potentially explosive environments)
- Many different types of applications
- Safe, ergonomic and reliable

## WORKSTATIONS

# Beamex<sup>®</sup> MCS100 Workstation

### The calibration workshop solution.

- Available as a test bench, desktop cabinet or trolley
- Modular construction
- Documenting - communicates with calibration software
- Calibration, electrical measurements, electronics, testing of 1- and 3-phase electric motors, education, soldering of surface-mounted and other components
- System can be equipped with multifunction calibrators for pressure, temperature and electrical signals; AC and DC power supplies; digital multimeters; oscilloscopes; etc.



## CALIBRATION SOFTWARE

# Beamex<sup>®</sup> CMX Calibration Software

### Maximize quality and productivity of calibration asset management.

- Store and manage all calibration assets and information
- Improve cost-efficiency and quality of the entire calibration system
- Communicates with calibrators, integration to a maintenance systems (CMMS)
- Plan and schedule calibrations
- Analyze and optimize calibration frequency
- Produce reports and certificates





## PORTABLE CALIBRATORS

# Beamex® Multifunction Calibrators

### All you need for field calibration.

- High accuracy portable calibrators
- Pressure, temperature and electrical calibrations
- Replace several individual devices and cut recalibration costs with Beamex® multifunctional calibrators
- Automated calibrations, documenting capability and automatic error calculations
- ATEX and IECEx certified versions available for hazardous areas
- Communication with calibration software (MC5, MC5-IS, MC4)
- HART®, Profibus and Foundation Fieldbus communication



## WORKSHOP ACCESSORIES

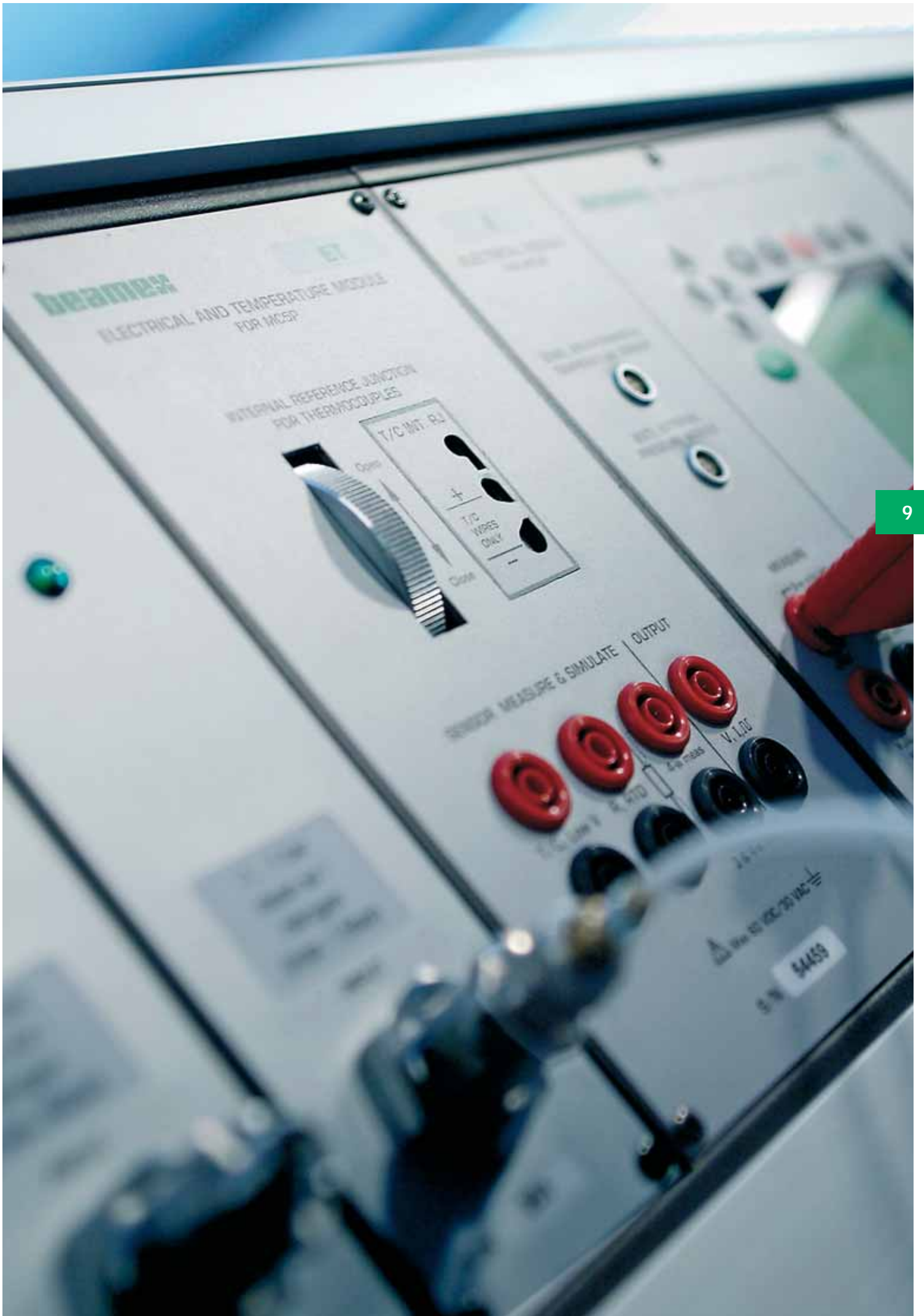
# Beamex® Workshop Accessories

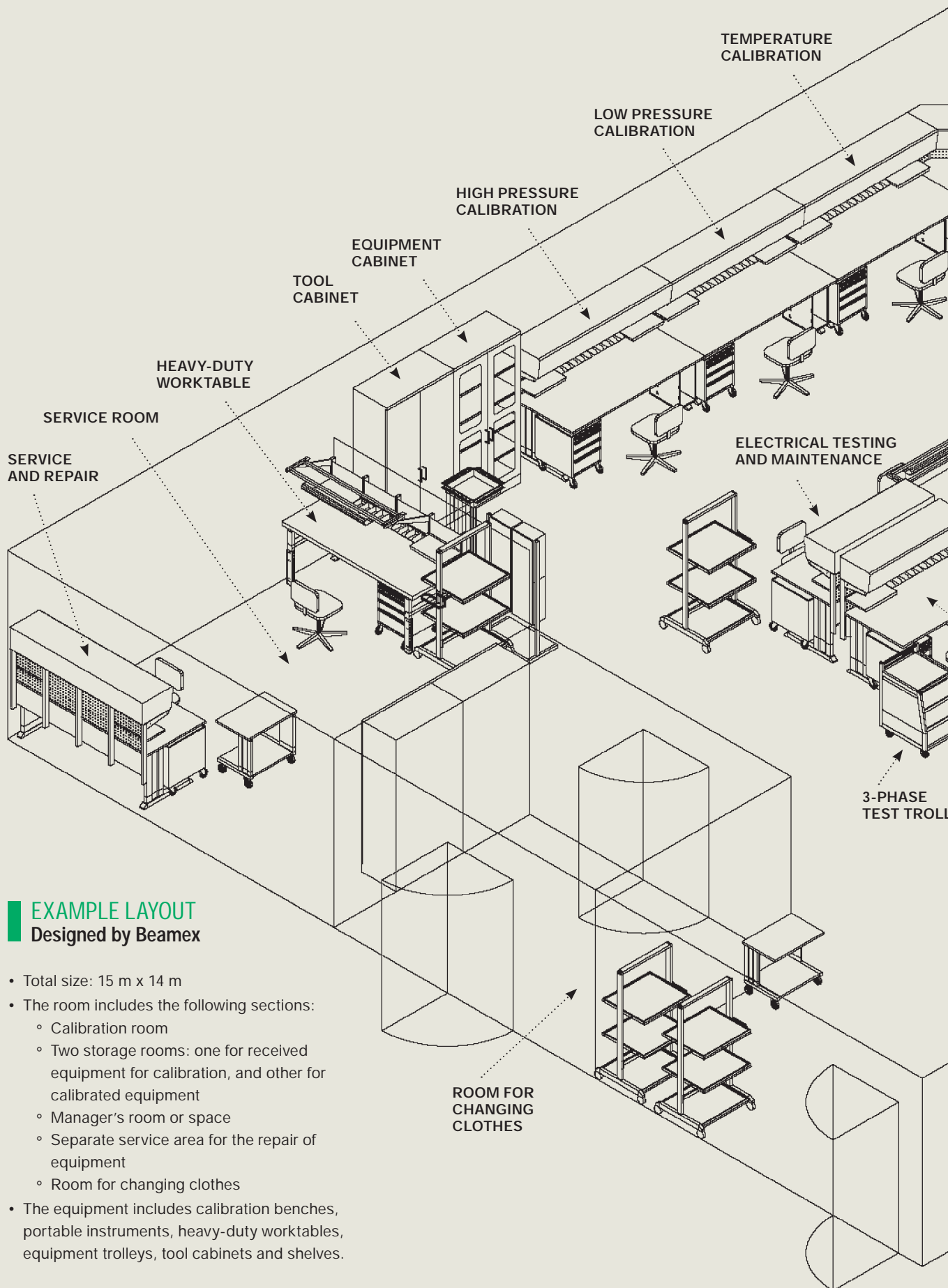
### Complete your system with necessary supplements.

- Supplements include items such as desktops, racks, cases, shelf units and cabinets.



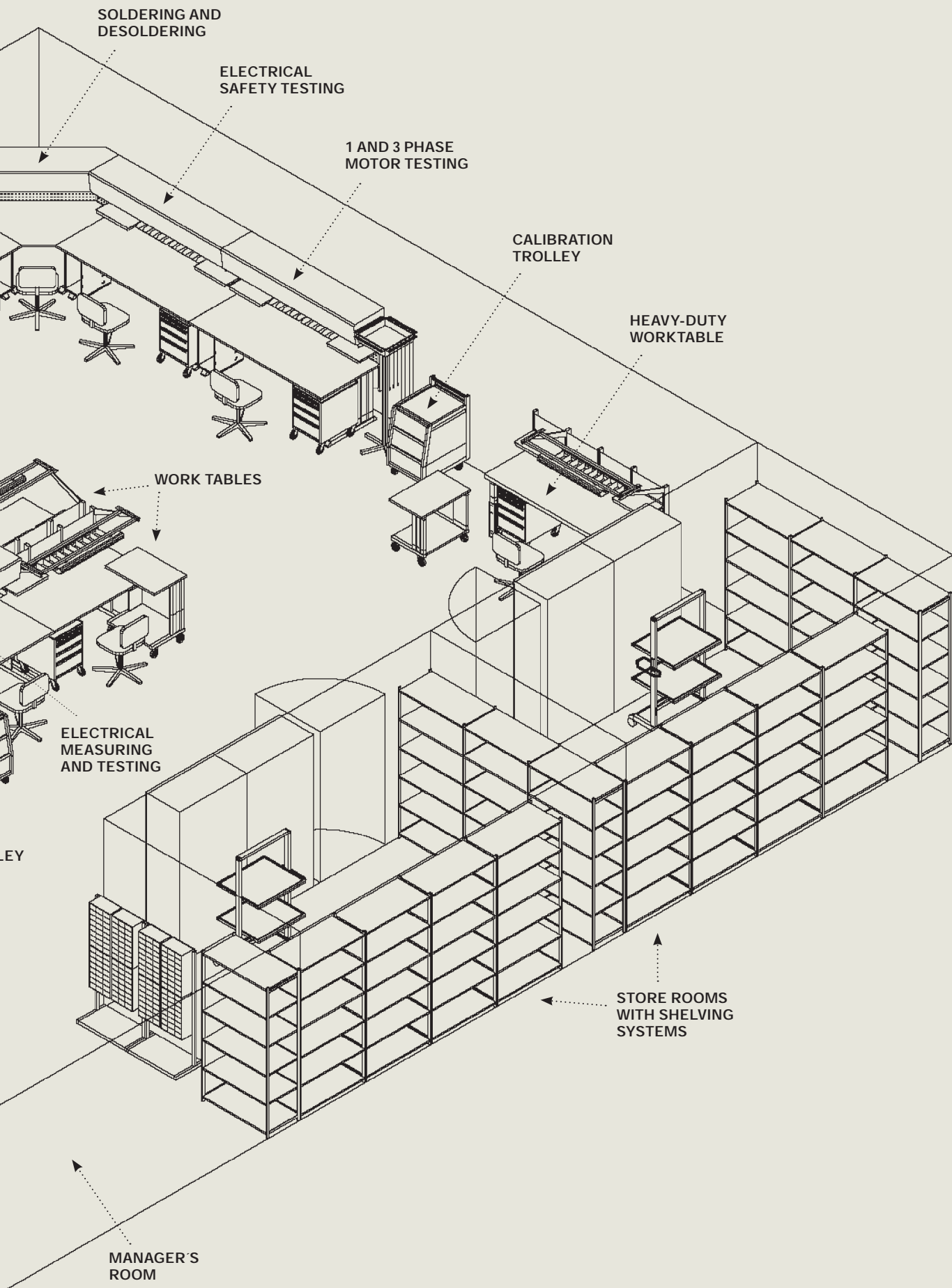






**EXAMPLE LAYOUT**  
Designed by Beamex

- Total size: 15 m x 14 m
- The room includes the following sections:
  - Calibration room
  - Two storage rooms: one for received equipment for calibration, and other for calibrated equipment
  - Manager's room or space
  - Separate service area for the repair of equipment
  - Room for changing clothes
- The equipment includes calibration benches, portable instruments, heavy-duty worktables, equipment trolleys, tool cabinets and shelves.





## Beamex® MCS100 – built to meet your specific requirements

Beamex has various sample layouts of industry-specific and application-specific MCS100 Workstations.

### EXAMPLE WORKSTATIONS



**Pressure/Electrical Calibration workstation**

#### APPLICATIONS

- Periodic calibration of process instruments, such as
  - Pressure transmitters, sensors, gauges, switches, recorders
  - Differential pressure transmitters
  - I/P converters
  - HART, Profibus, Foundation Fieldbus instruments

#### FEATURES

- Highly accurate pressure calibration facility for ranges from vacuum to high pressure
- Improved productivity through automated calibration procedures
- Fully automatic pressure calibration with pressure controller module

#### BENEFITS

- Quick and easy start-up
- Calibration equipment within a hand's reach
- Easy and safe documentation of calibrations



**Temperature/Electrical Calibration workstation**

#### APPLICATIONS

- Periodic calibration of process instruments, such as
  - Temperature transmitters, sensors, indicators, switches, recorders
  - Thermocouples and RTD's
  - HART, Profibus, Foundation Fieldbus instruments
  - Electrical limit switches
  - Frequency meters, tachometers, pulse meters

#### FEATURES

- Versatile calibration facility for temperature and electrical instruments
- Fully automatic temperature calibration with dry blocks
- Seamless communication between calibrators and calibration software

#### BENEFITS

- Flexible maintenance, as device modules can be easily removed for service
- Ergonomic and efficient work environment



### Electrical & Electronic workstation

#### APPLICATIONS

- Testing and maintenance of electrical and electronic devices
- Soldering and desoldering of surface-mounted and traditional electronic components

#### FEATURES

- ESD protection enables safe handling of delicate components
- Isolation transformers, fault current and overload protections and emergency stop-switch

#### BENEFITS

- Quick and easy start-up
- Test equipment within a hand's reach
- Safe facility for testing and maintenance tasks



### Calibration trolley

#### APPLICATIONS

- Periodic calibration of process instruments, such as
  - Pressure transmitters, sensors, gauges, switches, recorders
  - Differential pressure transmitters
  - I/P converters
  - Temperature transmitters, sensors, indicators, switches, recorders
  - Thermocouples and RTD's
  - HART, Profibus, Foundation Fieldbus instruments
  - Electrical limit switches
  - Frequency meters, tachometers, pulse meters

#### FEATURES

- Movable trolley with accurate and versatile calibration modules
- Automatic pressure and temperature calibration with pressure controller and temperature dry block

#### BENEFITS

- Calibration equipment ready for use in the workshop or transportable out in the plant
- Improved productivity through automated calibration procedures
- Easy and safe documentation of calibrations

## 03 Project documentation

Complete vendor drawings and data are available to meet project requirements.

An important part of a workshop project is documentation. Beamex can provide complete vendor documentation, including specifying, layout planning, general assembly drawings, electrical drawings and diagrams, production and delivery progress, tagging of equipment, quality plan, calibration certificates, factory acceptance tests (FAT), commissioning, instruction guides, training programs and training certificates.

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## 04 Implementation and start-up Fast and efficient implementation.

### ▶ Training

Training ensures that both the users of the equipment and the managers will obtain the necessary skills to use the calibration system to its fullest potential. The training courses combine hands-on workshops with classroom lectures and presentations. Training increases your knowledge and productivity and it can be provided by a Beamex professional or by a Beamex's authorized partner who is able to offer training courses in your local language.

#### Training workshops:

- Lasts from 1 to 5 days, depending on the amount of different equipment
- Starts with demonstrations made by the instructor
- Hands-on, supervised learning
- Questions & Answers sessions
- All training material available on paper
- A certificate after the training is completed

### ▶ Delivery, Installation & Commissioning

Beamex's installation services ensure that your new instrument & electrical workshop is up and running in no time.

#### Installation services available for:

- Beamex® MCS100 Workstations
- Beamex® CMX Calibration Software
- Database installations
- CMX integration to a management system (CMMS)
- User-specific customizations for CMX (e.g. certificates, user-interface)



## 05 After sales services.

### Support when the system is in use

#### ▶ Program updates

Regular program updates to calibrators and calibration software keep the system constantly up-to-date with new added features.

#### ▶ Spare parts

Beamex provides spare parts for all their products.

#### ▶ Recalibration and repair

Regular re-calibrations maintain a high quality of specifications. Beamex offers service and re-calibrations through its Accredited Calibration Laboratory.

#### ▶ Helpdesk

Beamex's dedicated support staff of highly competent professionals deliver technical solutions quickly and efficiently. Help Desk support services by email, fax and telephone.

#### ▶ Support from local Beamex Partner

Local Beamex support is available through Beamex's global and competent partner network.



## What the customers say

- 96% will probably recommend Beamex to a colleague.
- 90% of software customers say that using Beamex products has improved efficiency.
- 3 out of 4 say that using Beamex products has resulted in cost-savings.
- 4 out of 5 say that investment in Beamex products pays itself back.

Beamex Customer Survey 2006

“The quality, accuracy, technical features and ease-of use made Beamex a strong alternative when assessing the different suppliers and calibration equipment. Beamex was able to meet our demanding requirements.”

KEYUR G. VORA, GENERAL MANAGER OF INSTRUMENTATION, PATALGANGA MANUFACTURING DIVISION,  
RELIANCE INDUSTRIES LIMITED, INDIA

## Beamex workshops customers are typically from these industries

- Oil & Gas
- Petrochemical & Chemical
- Offshore platforms
- Power plants



## Why is Beamex better

### **Total supplier providing turn-key solutions**

From start to finish, Beamex takes care of the entire instrument and electrical workshop project. This includes planning, delivering equipment and software, implementation and after sales services.

### **Customized solution**

Maximize the benefits by having the instrument and electrical workshop tailor-made to your needs. Beamex's workshop solution is very modular.

### **World-class equipment and software**

Beamex calibration equipment and software are known for accuracy, reliability and high quality. Using the system results in improved efficiency. It is the most integrated, automated system available.

### **Industry pioneer with global presence**

A forerunner in developing high-quality calibration equipment and software, with global customer base and partner network.

### **High customer satisfaction**

Constantly improving understanding of customer needs and developing solutions to meet them.





## About Beamex

### World-class supplier of complete instrumentation and electrical workshops.

- One of the world's leading providers of calibration solutions.
- Develops and manufactures high-quality calibration equipment, software, systems and services for the calibration and maintenance of process instruments.
- Certified in accordance with the ISO 9001:2000 quality standard.
- Comprehensive product range includes portable calibrators, workstations, calibration software, accessories, professional services and industry-specific solutions.
- Products and services available in more than 60 countries. More than 10,000 companies worldwide utilize Beamex's calibration solutions.
- Customers from wide range of industries, such as automotive, aviation, contractor engineering, education, food and beverage, manufacturing, marine, metal and mining, nuclear, oil and gas, petrochemical and chemical, pharmaceutical, power and energy, and pulp and paper.
- For customers with requirements for accuracy, versatility, efficiency, ease-of-use and reliability.



# WORKSTATIONS



# PORTABLE CALIBRATORS



# PROFESSIONAL SERVICES



# CALIBRATION SOFTWARE



