



COMPANY PROFILE



CEIA HISTORY

1962



The activity began with the production of a patented Metal Detector for the **textile industry** capable of detecting very small metal contaminants in fabrics in order to protect the production machinery.

1968



The company is incorporated as CEIA and begins development and production of **industrial metal detectors** for food inspection, and **ultrasonic cleaning machines** and galvanic power supplies for the gold and silversmith sectors.

1975



The growing demand for security at entrances to airports and banks inspires CEIA to start a major research and development program. This leads the Company to become a major manufacturer of **walk-through and portable Metal Detectors**.

**1979
1982**



CEIA patents the **first walk-through Metal Detector (1979)** with microcomputer-based DSP analysis and **the first column type gate (1982)**.

1988



CEIA introduces the PMD1, first multi-zone walk-through Metal Detector with full body height alarm location display.

CEIA 02PN20 is selected and certified for installation in North American Airports following the tightening of security standards in response to the events of **September 11, 2001**.



CEIA is selected by the **United Nations** as the Metal Detector supplier **for humanitarian demining in Afghanistan** and other conflict regions.



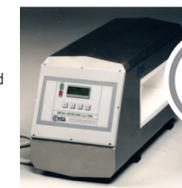
2002 CEIA's in-house EMC testing laboratory is governmentally accredited as a **"competent body in the matter of electromagnetic compatibility"**.



1998 CEIA patents the **elliptical column walk-through Metal Detector**.



1996 CEIA starts production of the **new THS series of industrial Metal Detectors**, characterized by state-of-the-art performance and standard all-stainless-steel construction.



1994 CEIA begins development and production of solid-state **induction generators for no-contact heat treatment of metals**.

2003



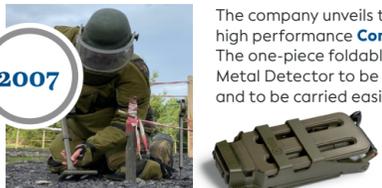
The company presents the **THS/PH21® Metal Detector**, designed to comply fully with **FDA regulations** on the criteria of construction and of electronic management of records and signatures.

2005



CEIA introduces the **SAMD® Shoe Analyzer Metal Detector**, specifically designed to overcome the inconvenience currently experienced in examining passengers' shoes in security checkpoints.

2007



The company unveils the **CEIA CMD**, a very high performance **Compact Metal Detector**. The one-piece foldable design allows the Metal Detector to be deployed quickly and to be carried easily.

2009



The THS 21 Conveyor Inspection Systems revolutionize the food market with multi-spectrum technology, maximum flexibility, enterprise class performance and breakthrough value.

2010



CEIA EMA automatic bottled liquids scanner is certified for use in Airports.

2011



EMIS, automatic screening for non-metallic cargo, is approved by Governmental Security Authorities for use in Airports.

TDU. Thermal Detection Unit, anti-Covid advanced embedded sensor for CEIA Security Walk-through Detector Gates.



2020 CEIA introduces the **new multi-sensor models** for ground search detectors equipped with **GPR, Metal and IED detector**.



**2015
2019** **EMIS, automatic screening for non-metallic cargo**, meets ECAC Performance Standard.



2016 CEIA introduces the **SAMDEX, Shoe Scanner Metal and Explosive Detector**. SAMDEX compliance to operational requirements is successfully verified by Government-Authorized Laboratories in 2016.



2015 **EMIS-MAIL letter bomb and IED detector** is certified for mail security inspection.



2014 CEIA introduces the **SA/80 series, the first 25, 50, 75, 100 kW High Efficiency Green Generators** with integrated Process Quality Data Logger and Web Server.



Consistently with the integration and control features of existing series, CEIA expands the range of induction heating generators with the **new medium-high frequency generator SA/400**.

2021



The company presents the **OPENGATE®**, automatic screening of people with luggage, backpacks, and bags **for the detection of Mass Casualty Metal Threats** in high-throughput public places.

2022



CEIA introduces the **JANUS®, High Security Scanner**, aimed at the inspection of passengers and at the automatic detection of metal, ceramic and explosive threats. Is ECAC certified for use in Airports.

2022 **60 years after the first solid state textile metal detector**, CEIA introduces the **new TE/MTZ** model which provides multi-zone indication of metal fragments position.

**2024
2025**



The company presents the new very high performance **THS/PH210** and **THS/PH210-FFV** Pharmaceutical Metal Detectors series.

2025



CEIA introduces the **THS/210-MB9** and **THS/210-MB5**, next generation metal detection systems designed to meet the rigorous demands of the wet industry and dry food processing.

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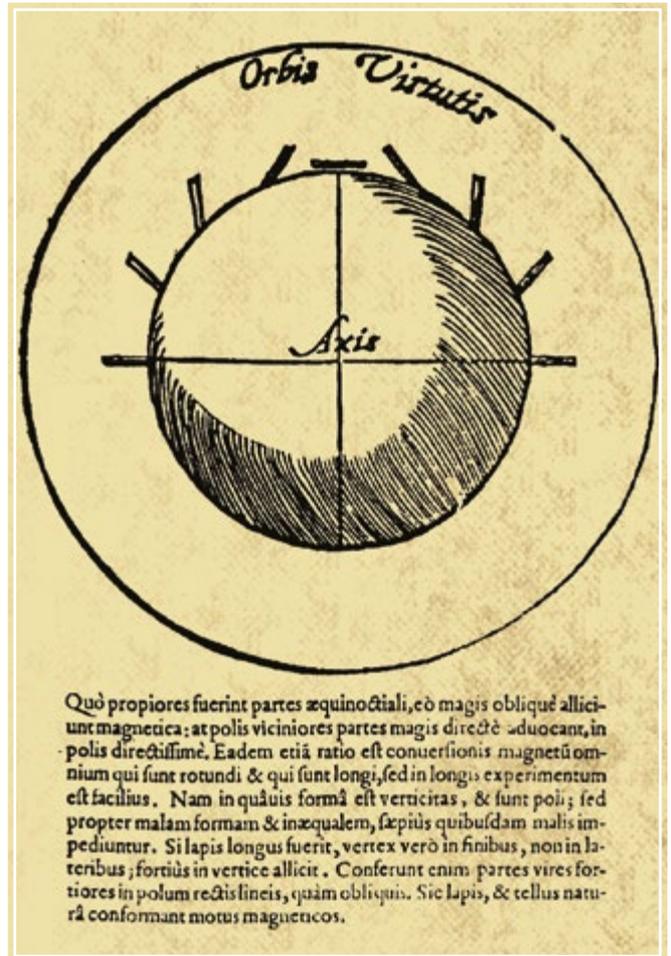
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34

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38

40



Demonstration of the behaviour of the magnetic poles through the "Terrella", a miniaturized model of the Earth and the field generated by the same, created by William Gilbert (1544-1603), the first magnetism scholar



SECURITY

THREAT DETECTION THROUGH MULTIPLE ELECTROMAGNETIC-SENSING TECHNOLOGIES

Today's continuously advancing threats and the ever-stricter regulations related to individuals screening require equipment with **the highest security and operational performance.**

With over **50 years of experience** in designing and manufacturing electromagnetic security screening instruments, **CEIA has developed a series of devices with superior sensitivity and throughput.**

The key to combine high security and throughput is the **use of multi-sensing technologies:** instruments based on multiple sensors simultaneously measuring different physical properties to distinguish between benign items and threats.

CEIA security equipment can be networked for centralized access to statistics, automated monitoring of critical calibration settings, and much more.

NETID ANYWHERE®

This is a **cloud-based network management solution for CEIA walk-through metal detectors (WTMD) and OPENGATE® weapons detection system** that centralizes access to important statistics, automates monitoring of critical calibration settings, and much more.

Designed for simple and easy implementation with limited infrastructure, NetID Anywhere **allows for individual or multiple site management and is accessible from any smart device or computer with web access ensuring maximum data security.**

**Data available upon request*

**CERTIFIED by
Governmental
Laboratories***



APPLICATIONS



▶▶ AVIATION SECURITY AND CRITICAL INFRASTRUCTURE



▶▶ CORRECTIONAL FACILITIES

▶▶ EVENT SECURITY



▶▶ LOSS PREVENTION

▶▶ CARGO SECURITY

AVIATION SECURITY AND CRITICAL INFRASTRUCTURE

In response to the continuous demand for higher security standards, CEIA offers screening equipment designed to detect a wide range of threats using state-of-the-art electromagnetic technologies.

CEIA Walk Through Metal Detectors (WTMD), with dual sensor technology capability for the detection of multiple threats, and Security Scanners (SSc) for the detection of metallic and non-metallic materials ensure standards compliance, **accurate access control, easy access and high throughput.**

CEIA screening equipment provide a modern design that fully integrated in the most sophisticated architectures of current airports and critical infrastructure.



02PN20 ELLIPTIC
ECAC standard 2.1, TSA qualified
Enhanced Walk-through Metal Detector.

JANUS®
ECAC standard 2.1
Ultrabroadband security scanner aimed at the inspection of people and at the automatic detection of metallic and non metallic threats (like ceramic and explosive).



SAMDEX® (Shoes Metal & Explosive Detector)
STAC certified, DfT approved, BPOL certified, NCTV certified
Is the first equipment with double technology for the simultaneous detection of metallic and explosive threats concealed in shoes without the need of divesting shoes.



EMA SERIES
ECAC Type B Standard, ECAC Type A Standard, TSA qualified
Compact multi-sensing device designed for the screening of bottles and their contents with the goal of detecting the presence of combustible, flammable and explosive liquids. When the operator places the bottle in the inspection cavity, the measurement process starts automatically.



CORRECTIONAL FACILITIES



CEIA Metal Detectors **fully comply with the requirements of the Law Enforcement NIJ0601.02 Standard for all Security Levels**, therefore they can be applied from the inspection of visitors and inmates in top-security checkpoints, even in areas presenting challenging electrical and mechanical interferences.

CEIA SMD600 Plus-MI2™+ is a complete and efficient solution for the high-sensitivity detection of **metal weapons** and **cellphones/smartphones** carried by visitors and inmates in correctional facilities.

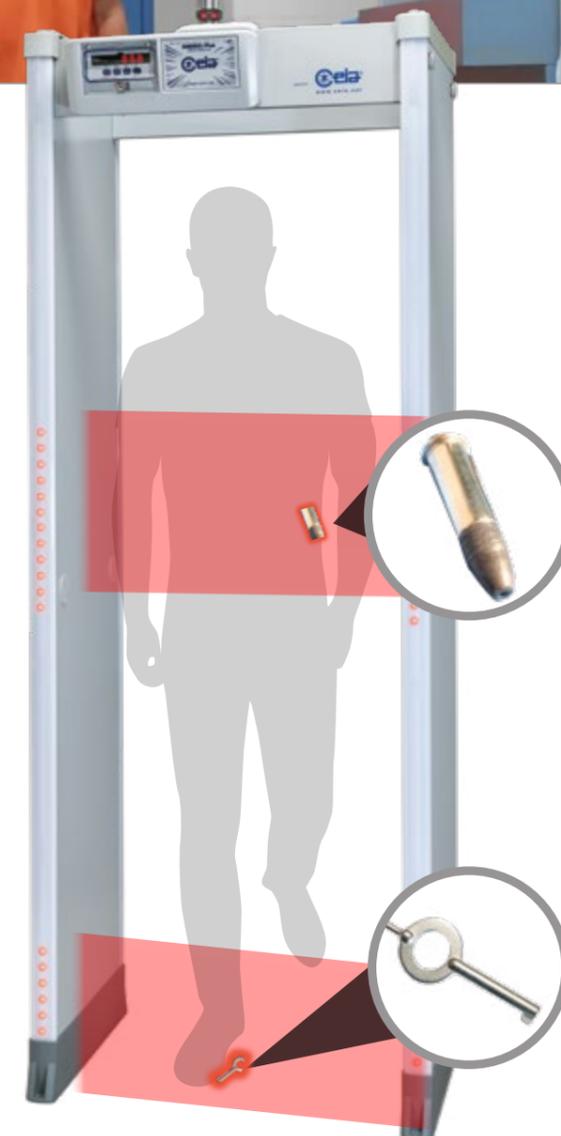


SMD600 Plus-MI2™+
Dual-sensor walk-through detector.



SMD601 Plus
Most Sensitive Multi-Zone Metal Detector for Law Enforcement and Correctional Facilities.

EMIS-MAIL
Provides multiple pre-defined security programs allowing its use in a variety of prison applications, such as inmate mail screening versus staff mail screening.



MSD Plus
Highly portable multi-zone ferrous detector.

The illegal use of cell phones is a growing and dangerous problem in correctional institutions worldwide. The **MSD Plus** is specifically designed to detect all cell phones and ferrous contraband concealed on the person or in body cavities (including key fob cell phones, smart phones, radio transceivers, etc.) quickly and easily. The one-piece design allows the **MSD Plus** to be easily transported and operational in 10 seconds.



PD140ND
Lightweight portable metal detector to localize threats and miniaturized cell phones concealed or carried on a person, while discriminating the metals contained in bras and in personal clothing. This allows effective inspections without requiring the removal of clothing.



EVENT SECURITY

The considerable task of planning a major event security requires the most reliable weapons detectors for security checkpoint installations.

Through its research and development laboratories, CEIA is continuously investing in the design of screening equipment that provides the **best compliance with the security requirements in public events** while guaranteeing high technology and great visitor experience.



OPENGATE®

This is the first wire-free, open screening portal consisting of two independent and self-powered pillars, with each pillar equipped with a support base and electronic analysis system.

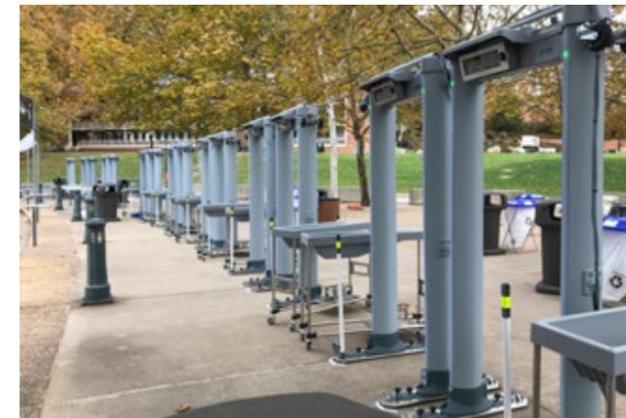
OPENGATE®'s Applications:

- Stadiums / Arenas / Ballparks
- Theme parks / Museums / Theatres
- Hospitals
- Convention centres
- Schools / Colleges / Universities
- Transportation hubs
- In general, all places open to the public characterized by the need to screen large crowds



PMD2 Plus

Elliptic, Multi-Zone and heavy duty enhanced metal detector. It detects firearms and knives, even when hidden within body cavities, and accurately indicate the position of the threat, its intensity and its prevalent composition.

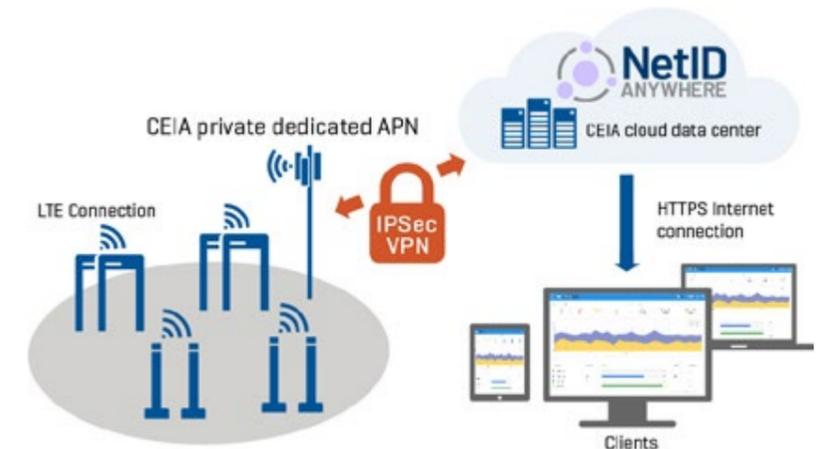


NetID Anywhere® is a network management system for CEIA WTMDs and OPENGATE provided as a SaaS (Software as a Service).

OPENGATE and the metal detectors communicate to the CEIA server via an LTE/WiFi connection that operates on low power and does not effect the battery life.

Data security is provided by end-to-end encryption.

There are no capital costs associated with the system and no installation of software is required.



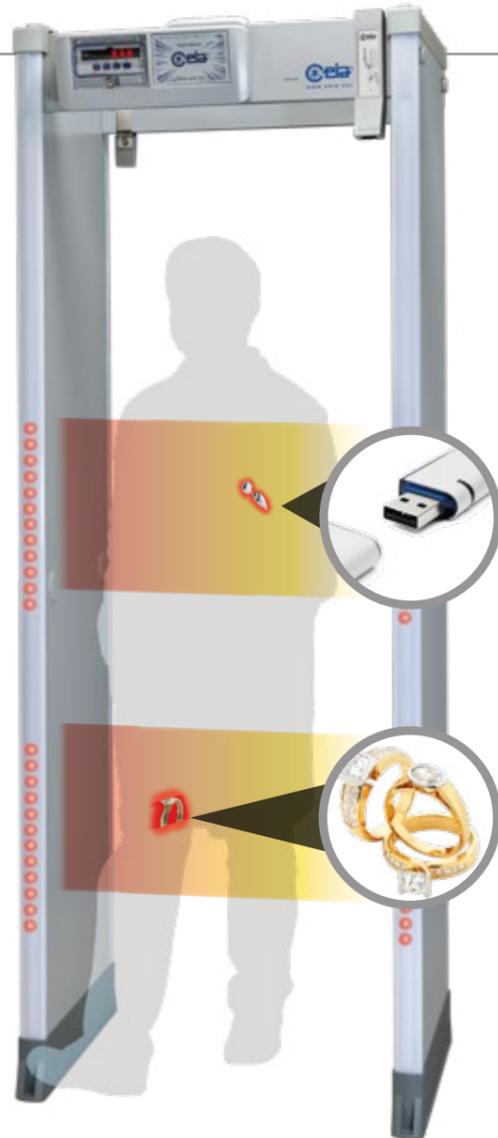
LOSS PREVENTION

The superior uniformity of the electromagnetic field of the **SMD601 Plus Metallic Signature** Metal Detector provides very consistent metal detection readings on every transit. This ground-breaking capability allows for individual creation of accurate personal metallic signatures taken from individuals wearing non-removable metallic items, like dental works, medical implants, wedding rings and piercings. Metallic signatures are stored in the SMD601 Plus embedded data-base and are used as a reference for every transit carried out by the same individuals, allowing detection of small targets while ignoring non-removable personal objects.



As people transit the system, their metal content is compared to a saved personal metallic signature.

CEIA SMD601 Metallic Signature allows the detection of very small quantities of precious metals and electronic components with performance exceeding by far any traditional metal detection device.



For applications requiring the detection of objects containing magnetic or magnetised components, such as mobile phones, miniaturised smartphones, and data storage devices. CEIA has introduced a dual-sensing integration of active metal and ferromagnetic detection.

Even miniaturized cellphones are detected thanks to a state-of-the-art magnetostatic 18-axes detector that provides unparalleled detection uniformity and immunity against interferences.



Adding M12+ option
Dual-sensor walk-through detector.



PD240CB
Hand Held Metal Detector that combines high reliability and ergonomics with advanced detection sensitivity and operator signalling features, high detection range for weapons and minimum metal targets, effective sensitivity to all metal alloys, high immunity to external metal masses exceeding strictest Security Standards specifications.



CARGO SECURITY

The *EMIS* is designed to automatically detect detonators and metal components of explosive devices inside paper, newspaper, perishable goods such as produce, fish and meat (fresh or frozen) and organic material in general.

EMIS SERIES

The EMIS (Electro-Magnetic Inspection Scanner) equipment are security screening devices designed to inspect non-metallic cargo.

Using CEIA exclusive Electromagnetic Profile Analysis technology, these devices ensure automatic detection of detonators and electronic circuits from IEDs (Improvised Explosive Devices), ammunition and weapons composed of metal (knives, firearms). In case of detection, the scanner gives an audible and visual alarm.

The advanced electromagnetic technology employed in the EMIS minimizes the interaction with the goods themselves and does not depend on visual interpretation of an image by an operator.

Electromagnetic inspection is the most suitable, accurate and quickest method for checking non-metallic cargo.



EMIS 8075 for package inspection.

Inspection of:

- Perishable goods and flowers
- Paper products
- Textiles and Clothing
- Plastic and wooden products



Meet ECAC
Performance
Standard

TSA
Qualified



EMIS 130200 for palletized cargo.

Detect automatically detonators and metal components of explosive devices:

- Low cost of ownership
- No dedicated operator
- High throughput
- No ionizing radiation
- Completely solid-state construction (no periodic maintenance or calibration required)



GROUND SEARCH

GROUND SEARCH ELECTROMAGNETIC MULTI-SENSING DETECTION

With decades of research and innovation, CEIA has become a global benchmark in the development of high performance Ground Search Multi-Sensor Detectors. Our mission is to provide cutting-edge, multi-sensor solutions that guarantee maximum reliability and precision in every field operation, from humanitarian demining to security missions worldwide.

Why CEIA Ground Search Detectors:

Multi-sensor technology: CEIA equipment allow the detection of metallic threats (such as mines and UXOs) and non-metallic IED components, explosive substances, command wires and conductive non-metallic materials like carbon rods.

Advanced electronics: CEIA detectors delivers outstanding accuracy, and detection depth even in the most challenging soil conditions.

Ergonomic and user-friendly design: CEIA detectors are lightweight, intuitive, and ready to deploy in seconds.

Comprehensive certified trainings courses: each CEIA detectors supply is supported by effective training course to ensure the operator's full proficiency and maximum safety on the field.

CEIA Detectors are trusted by Governmental Bodies and Humanitarian Organizations worldwide, combining a long tradition of engineering excellence with field-proven reliability.



CEIA HUMANITARIAN CLEARANCE TEAM WORK

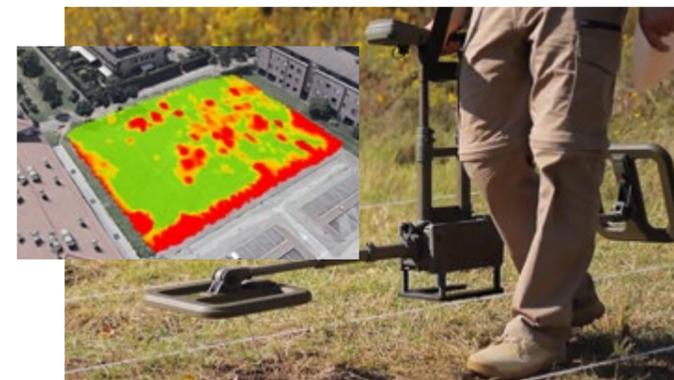
CEIA has developed a series of detectors to deal with Mines, EOD, IED and Command Wire clearance requirements.

CMD series

(NSN: 6665-15-0161820, 6665-15-195-2879, 6665-15-019-1908)

Lightweight, Compact Metal Detector for Mines, IEDs and UXOs

- Extremely easy to compensate and operate
- Built in Battery Charger, Fully Digital Design
- Immune to EMI, Continuous self-Calibration



DSMD

(NSN: 6665-15-0195506)

Digital Deep Search Metal Detector for UXO and Cluster Munitions Detection

- Easy Detection and pin pointing capability
- Absolute and differential GPS with Data Tracking and Logging capability
- Single person operation with built in Battery charger and easy to understand display
- Integrated GPS or External **DGNNS** (NSN: 6665-15-019-5506) operations



MIL-D1

(NSN: 6665-15-1871766)

Dual Tone, Digital Metal Detector

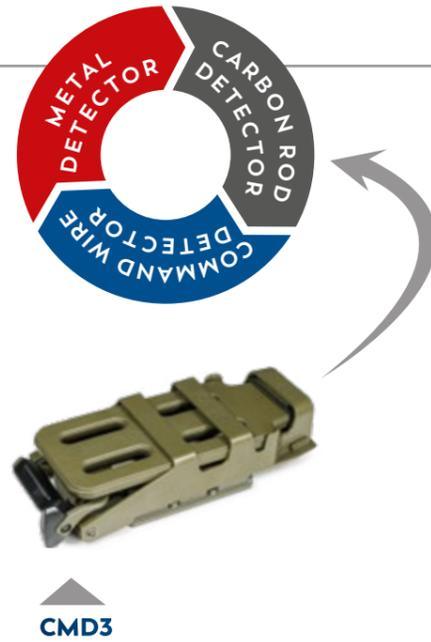
- Effective detection of magnetic and non-magnetic metal masses
- Accurate pinpointing of the target's position
- Compensation for mineralized and high natural metal content soils

MULTI-SENSOR TECHNOLOGY

Thanks to decades of in-depth research in the field of Electromagnetics Designing and Manufacturing, CEIA has developed a complete range of devices with superior detection capabilities addressing traditional and new requirements.

CMD3
(NSN: 6665-15-019-1908)
COMPACT TRIPLE-SENSOR METAL, CARBON ROD AND COMMAND WIRE DETECTOR

- MD** • **HIGH DETECTION SENSITIVITY** of magnetic and non-magnetic **LOW METAL CONTENT MINES** in all soil conditions
- CRD** • **ENHANCED IED DETECTION** of targets such as electrically conductive, non-metallic devices (i.e. graphite switches), short wires and high resistivity metals
- WD** • **COMMAND WIRE DETECTION** of conductors of any diameter and type with no nuisance alarms due to other metal targets and clutter



ALIS-RT
INTEGRATED PRECISION GPR, METAL AND CARBON ROD DETECTOR

- GPR** • **GPR SENSOR** for the detection of Dielectric Anomalies and discontinuities of the soils such as jars filled with explosives, crates and cavities
- MD** • **HIGH SENSITIVITY TO DETECT LOW METAL CONTENT MINES** containing magnetic metal, non-magnetic and mixed alloys in all soil conditions
- CRD** • **ENHANCED CAPABILITY TO DETECT A WIDE RANGE OF UNCONVENTIONAL TARGETS USED IN IEDs** such as electrically conductive, non-metallic devices (i.e. graphite switches), wires (even of limited length and in a wide range of diameters) and high resistivity metals



EMVS-TL is a complete system, aimed at the detection of metallic UXOs and ERWs, designed to be installed in front of tracking loaders.

Overlay image, remote display unit inside the vehicle.



CEIA TRAINING FACILITY

COMPREHENSIVE TRAINING SUPPORT

- CEIA provides comprehensive support for technical and operational training programs, delivered by certified CEIA Trainers either **on-site** or at our dedicated **Training facility**, "the Test Pit" at the headquarters.
- The Training courses includes **first- and second-line maintenance, operator certification and instructor certification courses.**
- A proven purpose-designed **Test Pit** further improves our existing infrastructure. It features expanded **outdoor lanes** for **practical exercises** on diverse terrains and a specialized building equipped for **theoretical instruction** and advanced **maintenance training**, ensuring the highest standards of operational competence and technical excellence.



First and second line maintenance

PD240CBM (NSN:6665-15-020-5465) Hand-held Urban Clearance Tool

Detection of:

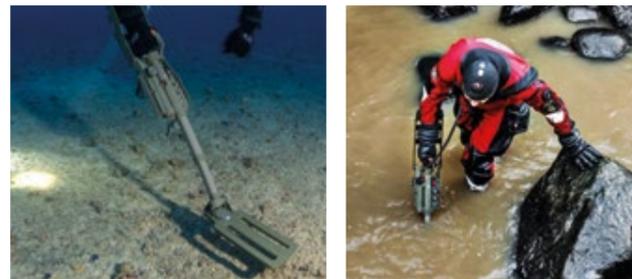
- Crush wires
- Carbon Rods
- Other conductive IED Components
- Even in urban metal contaminated environment
- People Screening



UNDER WATER SOLUTIONS

CMD-DW V2 (NSN:6665-15-003-4188) for Amphibious Operations

The CEIA CMD/DW V2 is a very high performance, high sensitivity Compact Metal & Carbon Rod Detector designed to detect metal, minimum-metal content and conductive non-metallic targets with universal use on all grounds and in deep water down to 100 m.



MDA3-DT for Submarine Operations

The MDA3-DT is a metal detector that can be used to locate metal masses in underwater operations in combination with a ROV.



CEIA Headquarter's Training Area



Operator training

Train the trainer programs



CONVEYOR INSPECTION SYSTEMS



THS 21 SERIES WITH MULTI-SPECTRUM TECHNOLOGY

Exclusively developed by CEIA, this is a unique metal detection technology that both optimizes sensitivity to all metal contaminants and minimizes product effect in a very wide range of possible products

By recognizing the different frequency response of conductive products and metals, **this innovative technology cancels product effect and maintains high performance levels for all types of metal contaminants, both magnetic and non-magnetic.**

The autolearn function used by CEIA Multi-Spectrum Metal Detectors equates to the repetition of hundreds of conventional transits. It explores the whole spectrum of available frequency bands in order to determine the best operating conditions resulting in unique detection performance.

THS PRODUCTION 4.0 SOFTWARE

The THS Production 4.0 software provides acquisition and report capability for THS 21 Metal Detection Systems

It connects and Acquires Data from Multiple THS Detectors via wireless LAN (requires IXC module). It also enables Database Management, Back-Up of Metal Detector events and it reports Data Exportable in HTML, CSV and PDF formats.



THS/FFV21
Free-fall Integrated system with metal detector and ejection valve.



THS 21 Conveyor Inspection Systems for vertically oriented products.

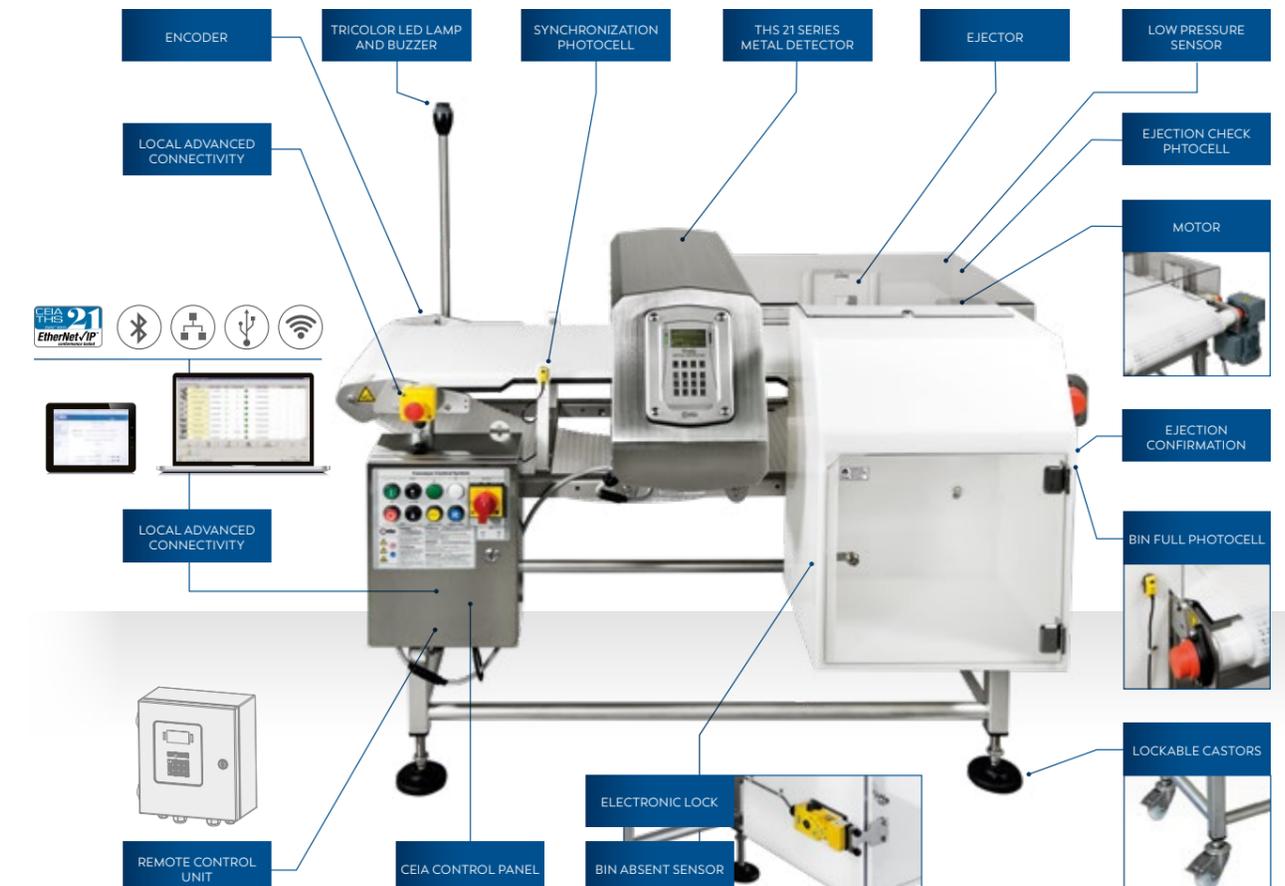
CEIA THS 21 Conveyor Inspection Systems satisfy the most stringent requirements for functionality, compact construction, accuracy and reliability of response in dealing with accidental contamination in food products.

CEIA's THS 21 is available in a **wide range of sizes covering the different application requirements.** The supporting structure, the Metal Detector and the belt control box are in stainless steel.

The conveyor belt is certified as fully compatible with food product handling (**FDA/USDA compliant**) requirements, as it is the protective cover of the ejection area and the container for rejected products.



STATE-OF-THE-ART INTEGRATED I/O AND COMMUNICATION CONNECTIVITY PERFORMANCE



PIPELINE INTEGRATED SYSTEMS

CEIA integrated systems are especially designed for metal contaminant detection in products transported by pipeline especially meat, soup, preserves...

As a priority, the manufacturing process of this equipment is based on certified food-compatible materials, such as AISI 316L stainless steel and FDA/EU approved plastics, which ensure no interaction with the product in contact. The design of these systems incorporates a fast valve to accurately reject the contaminants without slowing down the product flow and minimizing the wasted product.

A special design guarantees quick and easy cleaning of the system components that are in contact with the product and allows to disassembled them with minimum down-time production.



Supermarket Specifications Compliant

CEIA THS/210[®]-MBH9 cutting-edge metal detection system for heavy washdown food-processing areas

Next-generation of metal detection system developed to meet the rigorous demands of the **wet food industry, including meat, poultry, and seafood processing environments**. Built on advanced multi-spectrum technology and a **FULLY DIGITAL ARCHITECTURE**, this platform delivers high detection accuracy, fast startup, and long-term reliability, even under the most challenging washdown conditions. Designed for integration in **hygienic production zones**, the THS/210[®]-MBH9 features **IP69K-rated construction** and components, **AISI 316L stainless steel housing**, and **FDA-compliant materials**, ensuring resistance to high-pressure, high-temperature cleaning procedures.

CEIA THS/210[®]-MBH5 State-of-the-art metal detection system for dry food-processing areas

Next-generation of metal detection system designed to meet the ever-changing needs of the **dry food processing and packaging industry**. Based on advanced **multi-spectrum technology** and a **fully digital architecture**, the system delivers high detection sensitivity, rapid setup, and reliable performance in environments with complex product characteristics and high throughput demands.

THS/PLVM 21 series
Integrated System for applications on meat vacuum filling machines.



THS/PL21 Series
Pass-through piping Integrated system for liquid and viscous products.



THS/PLV 21 Series
Pass-through piping integrated System with ejection valve for liquid and viscous products.



THS/PLV-MEAT 21 Series
Pass-through piping Integrated System with ejection valve for applications on meat vacuum filler filling machines.



CEIA THS/210[®]-MBH9
CEIA THS/210[®]-MBH5



PHARMACEUTICAL QUALITY CONTROL



THS/PH210 Pharmaceutical Metal Detection Systems feature extremely high detection sensitivity towards contaminating metals, whether ferrous, non-ferrous or stainless steel, even when present in tiny quantities.

The design and construction of the THS/PH210 Metal Detection Systems comply with FDA Title 21 CFR 210-211 requirements. The carefully-selected materials used in construction do not interact with pharmaceutical products, and thus do not modify or alter their composition. The mirror finished surfaces guarantee quick, easy cleaning of the components that are in contact with the product. The technological choices made by CEIA allow the parts in contact with the product to be disassembled and maintained in a short time and without the use of machine-specific tools.

CEIA's Metal Detector Series are high-sensitivity, high-precision, measuring instruments. The output from the devices directly drives the ejection of the contaminated products while dedicated sensors perform closed-loop verification that they have in fact been eliminated.

In terms of detection of metal contaminants and confinement of the contaminated drugs, CEIA's Metal Detector are state-of-the-art solutions with high and consistent performances in time and automatic compensation of all thermal, mechanical and electromagnetic environmental changes.



THS/PH21N-WIP
Wash-in-Place Metal Detection System.



THS/PH210®
Integrated System for capsules and tablets.



THS/PH210®-FFV
Integrated System for granular and powder products.



THS/MBB for vertically oriented products.



THS/FBB for plastic tubes and sanitary packages inspection.



THS/FBB for effervescent tablets inspection.

TEXTILE AND RECYCLING



TE, TE-RC & TE/MTZ DIGITAL METAL DETECTORS

TE Digital Metal Detectors are the ideal means of protection for production lines against accidental damage caused by fragments of metal which can enter the manufacturing process along with the material.



- Ultra high Sensitivity to all magnetic and non-magnetic metals, including stainless steel
- Compact and robust construction
- Durable detection surface
- High electrical and mechanical immunity
- Wide Detection Speed range, from 1 up to 600 m/min
- Easy installation and setting
- Multi-Zone model available (TE/MTZ)

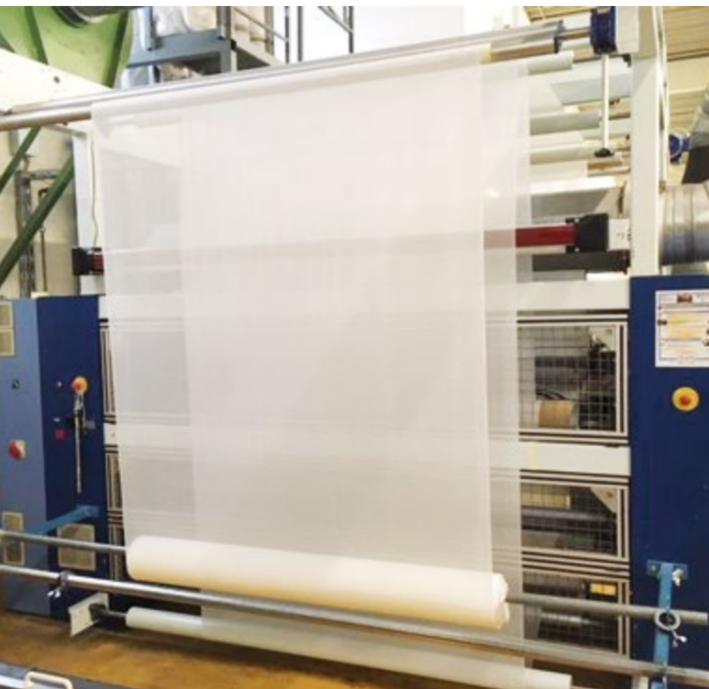
Examples of detectable metal fragments



SDT DIGITAL METAL DETECTOR

The **SDT digital Metal Detector** detects magnetic and non-magnetic metal fragments of small to medium dimensions in recycling industrial, textile, chemical, mining, foodstuffs and other products, both for quality control and machinery protection.

- High sensitivity to all metals
- Openable AISI 316 stainless steel construction system
- Compact and robust construction
- High immunity to environmental interference
- Wide Detection Speed range, from 1 up to 600 m/min
- Easy installation and setting on existing conveyor without belt opening



INDUCTION

INDUCTION HEATING SYSTEMS

For more than 40 years CEIA has been working on the design and manufacture of no-contact Induction Heating Devices for metal treatment. High and medium-frequency generators, control units, optical sensors for measuring temperature and automatic solder-alloy wire feeder devices make up the line of products known as the **Power Cube Family**, which are ideal for industrial processes of heat treatment and braze welding.

CEIA's unique technological solutions allow the manufacturing of power equipment with compact size, calibrated output power, extremely high-energy efficiency and long-term reliability. The high performance they offer contributes to the widespread use of **CEIA systems in the most important industrial fields**, where they have received the approval of end users and final-product manufacturers.



POWER CUBE® SYSTEM 900
Precision Induction Heating Generator & Controller.



POWER CUBE® SA/80 SERIES
Wideband Low-Medium Frequency 200, 150, 100, 75, 50, 25 kW Generators.

CEIA's unique technological solutions allow the manufacturing of power equipment with compact size, extremely high-energy efficiency and long-term reliability.

APPLICATIONS

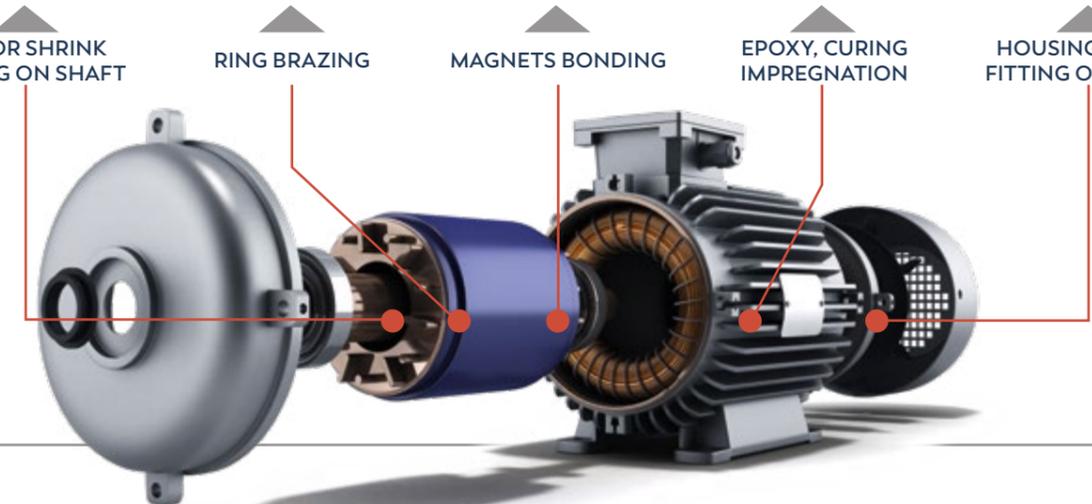
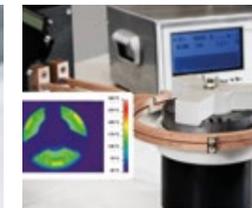
▶▶ BRAZING / SOLDERING



▶▶ ACCURATE METAL HEAT TREATMENTS



▶▶ ELECTRIC MOTORS ASSEMBLY



GENERATORS

THE CEIA SYSTEM'S ADVANTAGES

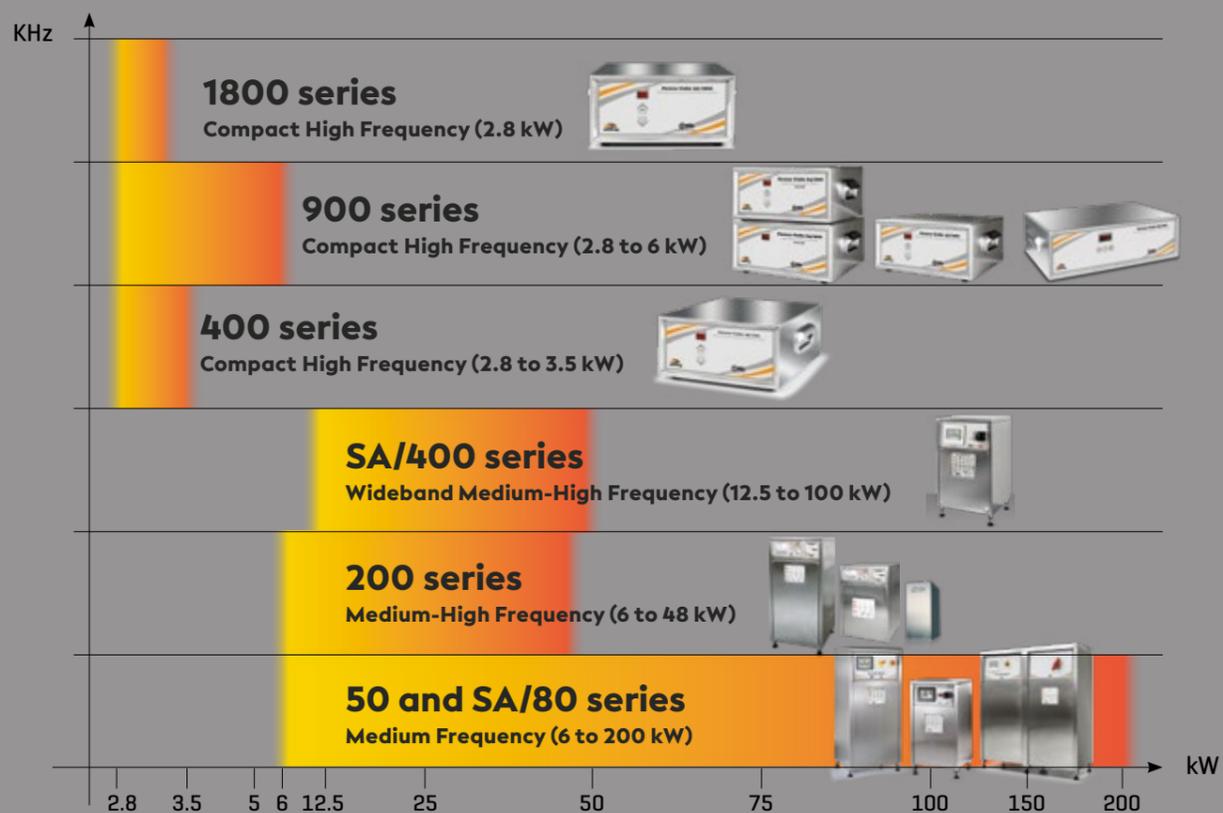
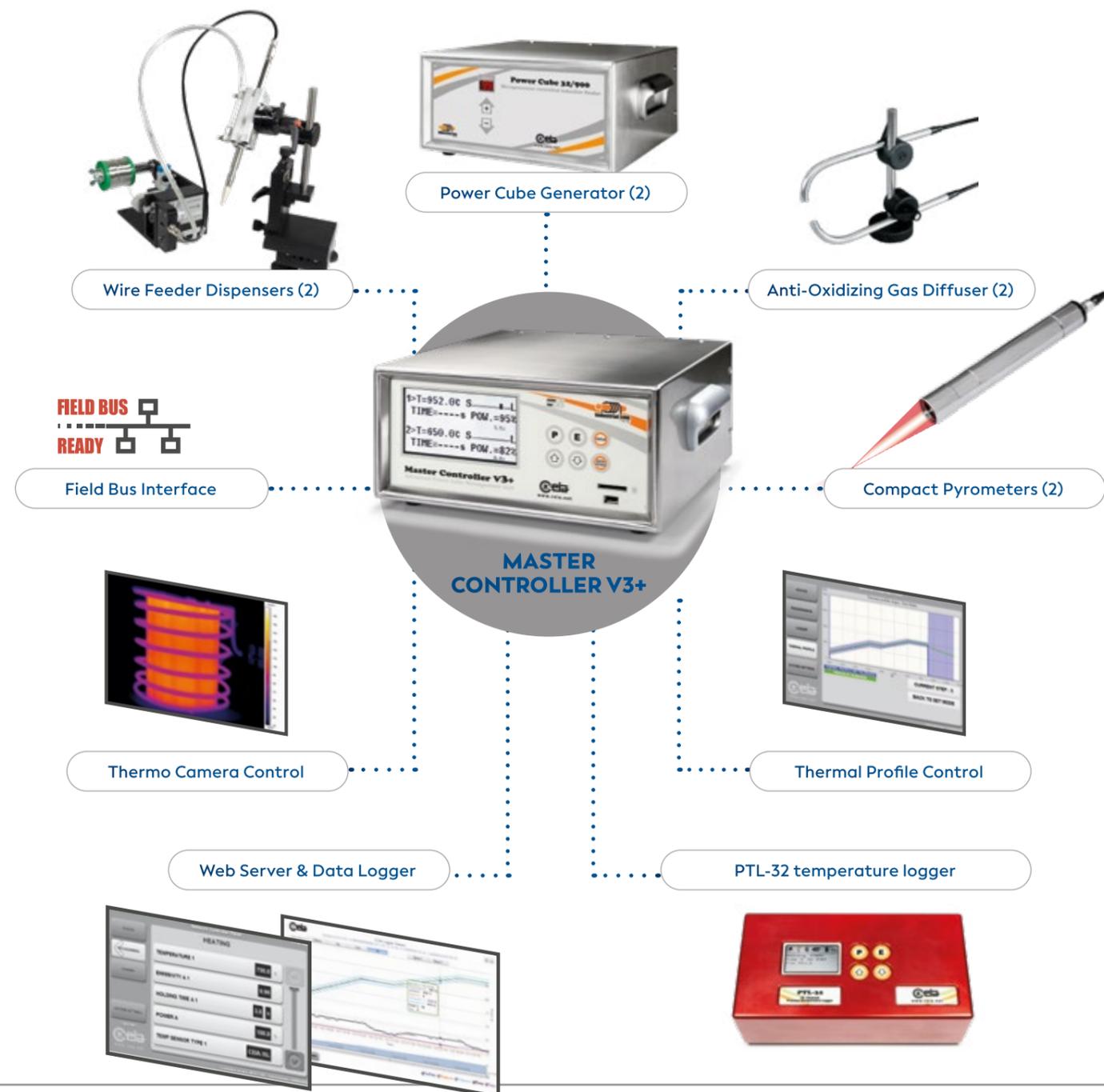
- **EFFICIENCY AND COMPACTNESS**
 - ▶ High level of performance with minimal operating costs
 - ▶ Lower energy consumption
- **COMPLETE OPERATOR SAFETY**
 - ▶ EMC and CE certified
 - ▶ Standard Galvanic isolation
- **PROCESS CONTROL AND REPEATABILITY**
 - ▶ Auto frequency tuning for optimal energy transfer to any load
 - ▶ Certified stability of power output
- **RELIABILITY AND FLEXIBILITY**
 - ▶ MTBF certified



POWER CUBE® 25SA/400 SERIES
Wideband Medium-High Frequency 12,5 to 100 kW.

CONTROL UNITS

The Master Controller V3+ is a multifunction industrial control unit, designed for automatic management of programmable heating processes. All operating parameters for each phase of the heating cycle can be programmed within a wide range of values.



TEMPERATURE SENSORS



SH/SLE COMPACT OPTICAL PYROMETERS

CEIA offers a wide range of infrared optical sensors, equipped with low-intensity LED pinpointing, which covers an **operating temperature range from 80°C to 2000°C**.

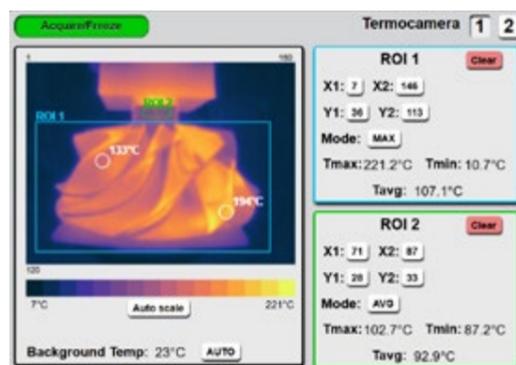
- **SH15/SLE**
 - ▶ Single-color Series from 80°C to 2000°C
- **SH2C/SLE**
 - ▶ Dual-color Series from 600°C to 2000°C

SH/SLE PYROMETER
Pyrometer mounted on ES3M micrometric optical sensor base.

CEIA also offers a **compact thermal camera** to display the operating temperature in a region of interest (ROI) in real time.

- **SHTC/SLE-350**
 - ▶ Thermal Camera Series from 10°C to 350°C.

SHTC/SLE-350
Example of thermal camera display.



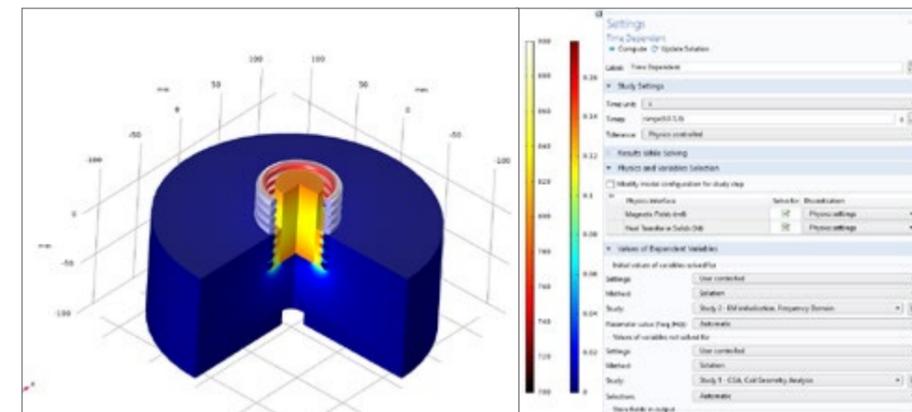
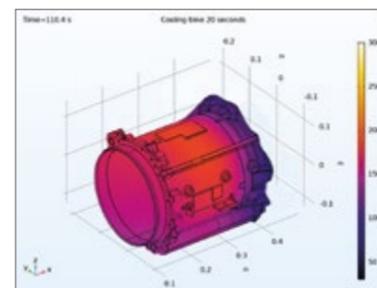
CALIBRATION CERTIFICATE

Digital Factory Testing, accurate automated calibration and final individual report of the delivered equipment, according to certified references.



ELECTROMAGNETIC COIL DESIGN AND ENGINEERING CAPABILITY

CONCEPT



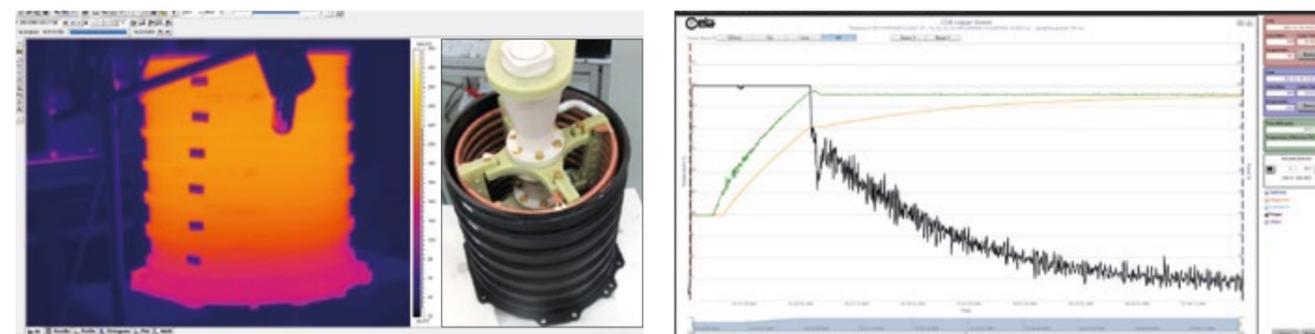
Detailed electromagnetic modeling and analysis to achieve the customer's heating requirement

DESIGN



Development of coil design by advanced CAD-CAM software

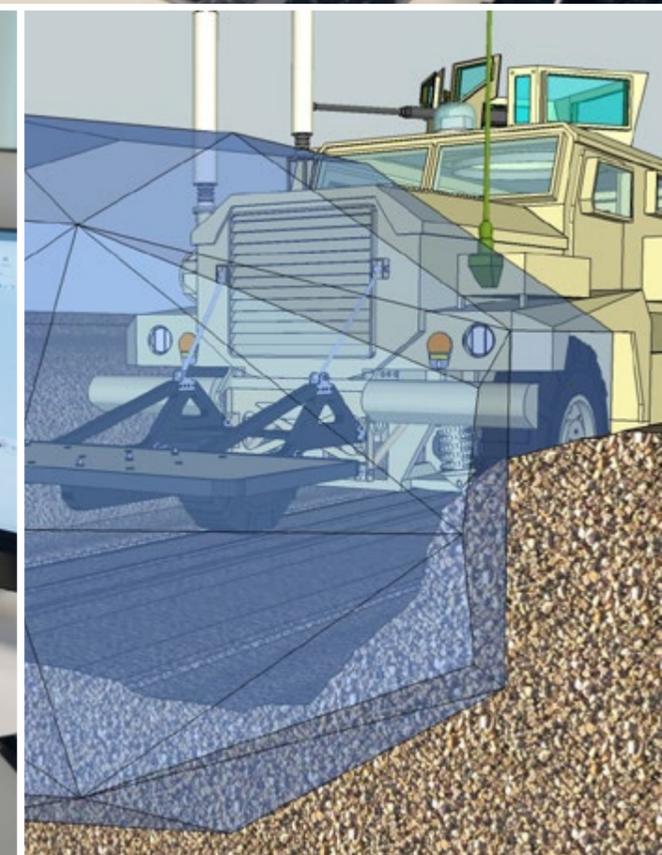
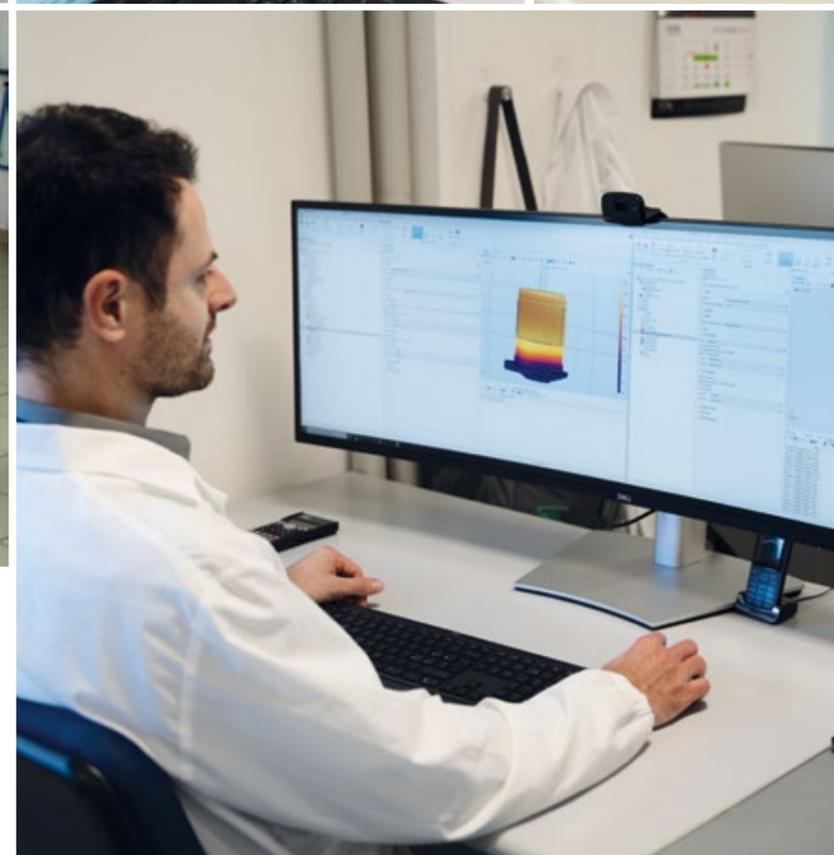
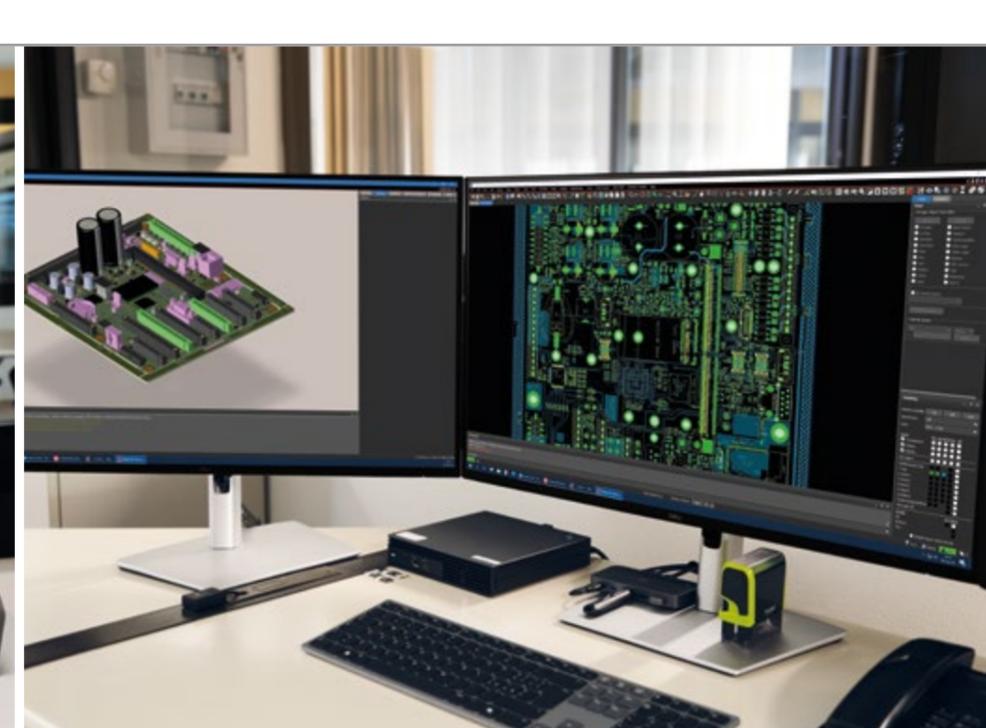
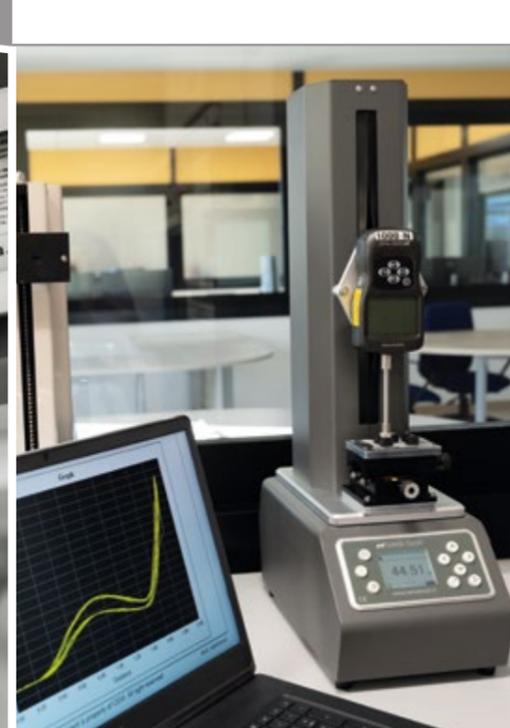
VALIDATION



Dedicated laboratory for final testing and validation

RESEARCH AND TECHNOLOGY

Professional Qualifications, Experience and Advanced Technology Production Systems

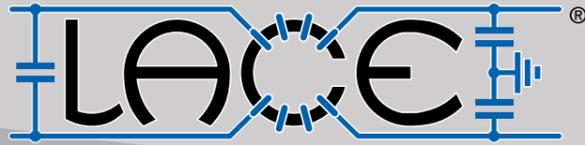


CEIA maintains its dedication to cutting edge electromagnetic research. 20% of CEIA's staff is focused on researching tomorrow's targets detection technology using electromagnetics.

MANUFACTURING

The quality and reliability levels of CEIA equipment are recognized throughout the world by private companies and governmental institutions, who have chosen it following stringent comparative testing. This objective has been achieved by using the most advanced technology in all phases of production.





LACE, Laboratory of Electromagnetic Compatibility, is a Department of CEIA SpA carrying out measurements and testing activities.

The LACE laboratory is accredited by Accredia as a testing laboratory (Accreditation No. 01402 TESTING) in accordance with the requirements of UNI CEI EN ISO / IEC 17025. UNI CEI EN ISO/IEC 17025 specifies the general requirements for the competence, impartiality and consistent operation of laboratories.

The accreditation is internationally recognised thanks to the Mutual Recognition Agreement (MRA) within the ILAC (International Laboratory Accreditation Cooperation).

The list of accredited tests is available on the website www.accredia.it



LACE laboratory includes two areas of activity: **Electromagnetic Laboratory** and **Metal Detector Laboratory**.

Electromagnetic Laboratory has specific expertise in electromagnetic compatibility radio equipment testing and in human exposure to electromagnetic fields measurement.

Electromagnetic compatibility (EMC) and radio equipment testing is required to ensure that electronic products placed in the market operate without causing interferences to other devices or services and without being affected by external sources of disturbance. The European Directives 2014/30/EU (EMC) and 2014/53/EU (Radio) establish requirements finalized to the CE marking of products.

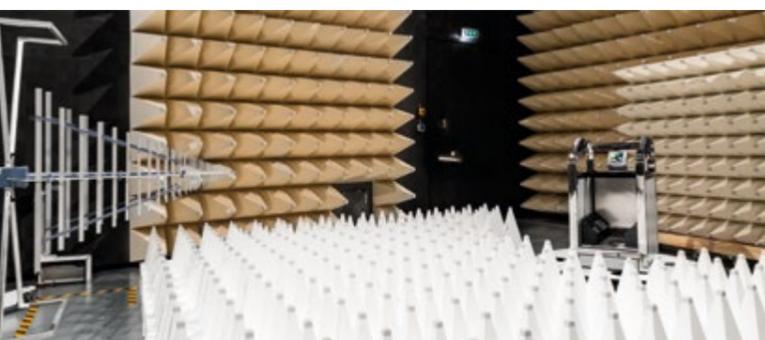
Electromagnetic field measurements are required for the assessment of human exposure levels in public spaces and workplaces, in accordance with current health and safety regulations. In the European context, for the protection of workers, Directive 2013/35/EU and national legislation establish limits for human exposure to electromagnetic fields. The measurements performed by the laboratory allow the assessment of possible direct effects of human exposure to the electromagnetic fields, due to interaction with biological material, and indirect effects, such as interference with active and passive implantable medical devices (e.g. pace-makers, prostheses).

Metal Detector Laboratory is testing the walk-through metal detectors performances.

Security standards are defined by regulations for access control in public places or for the protection of sensitive environments, such as EU Recommendation 1468/2023, ASTM F3566 and NIJ 0601.02. Walk-Through Metal Detectors are mainly evaluated in terms of their ability to detect metal threats and to discriminate innocuous metal stuff.

Tests for both areas can be performed at the laboratory facility or in the actual operating environment.

LACE's measurement and testing activities are designed to support CEIA products throughout their entire life cycle, from development to after-sales, verifying compliance with legal requirements and ensuring long-term reliability.



COMPLIANCE AND QUALITY CONTROL

UNI EN ISO 9001 standard

CEIA adopts a Quality Management System, certified since 1996 in accordance with the **UNI EN ISO 9001 standard**.

Through the application of the Quality Management System, CEIA guarantees rigorous control of every stage of the process, from design and production to final testing and delivery to the customer. All activities are planned and monitored to ensure maximum product quality and reliability and compliance with technical, regulatory, safety and contractual requirements.



UNI EN ISO 9001 standard



In-line automatic optical inspection (AOI) of electronic boards



X-ray inspection of electronic boards and components



Dimensional verification by high 3D scanning



Plastometer for performing rheological tests

NATO AQAP-2110 standard

CEIA has extended and received certification of its Quality Management System to the **NATO AQAP-2110 standard** (NATO Quality Assurance Requirements for Design, Development and Production).

This standard guarantees the organisation's ability to meet the contractual, regulatory and technical requirements of customers in the government and defence sectors.

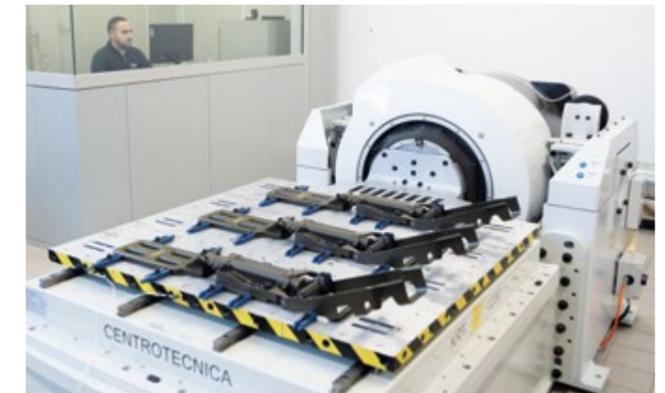
ATEX Directive 2014/34/EU

In response to safety requirements for workplaces and environments with potentially explosive atmospheres, CEIA has implemented a Quality Management System compliant with **ATEX Directive 2014/34/EU**.

Thanks to careful control of production processes, traceability of materials and attention to technical and regulatory documentation, CEIA manufactures equipment for explosive atmospheres (Zone 0, 1, 2 / Zone 20, 21, 22) compliant with ATEX standards and certified by notified bodies.



Electronic Boards Functional Burn-In



Mechanical shock test on CMD3 Metal Detector.

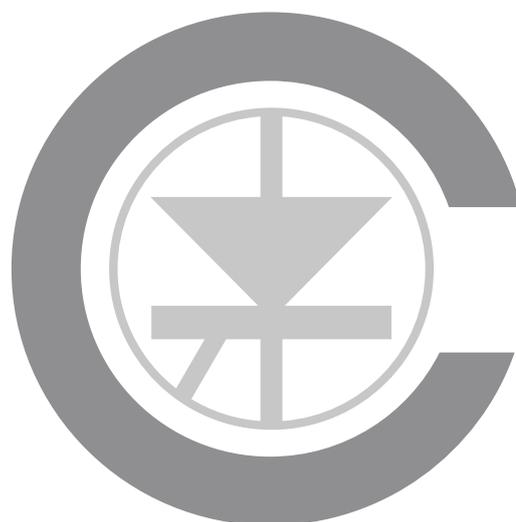
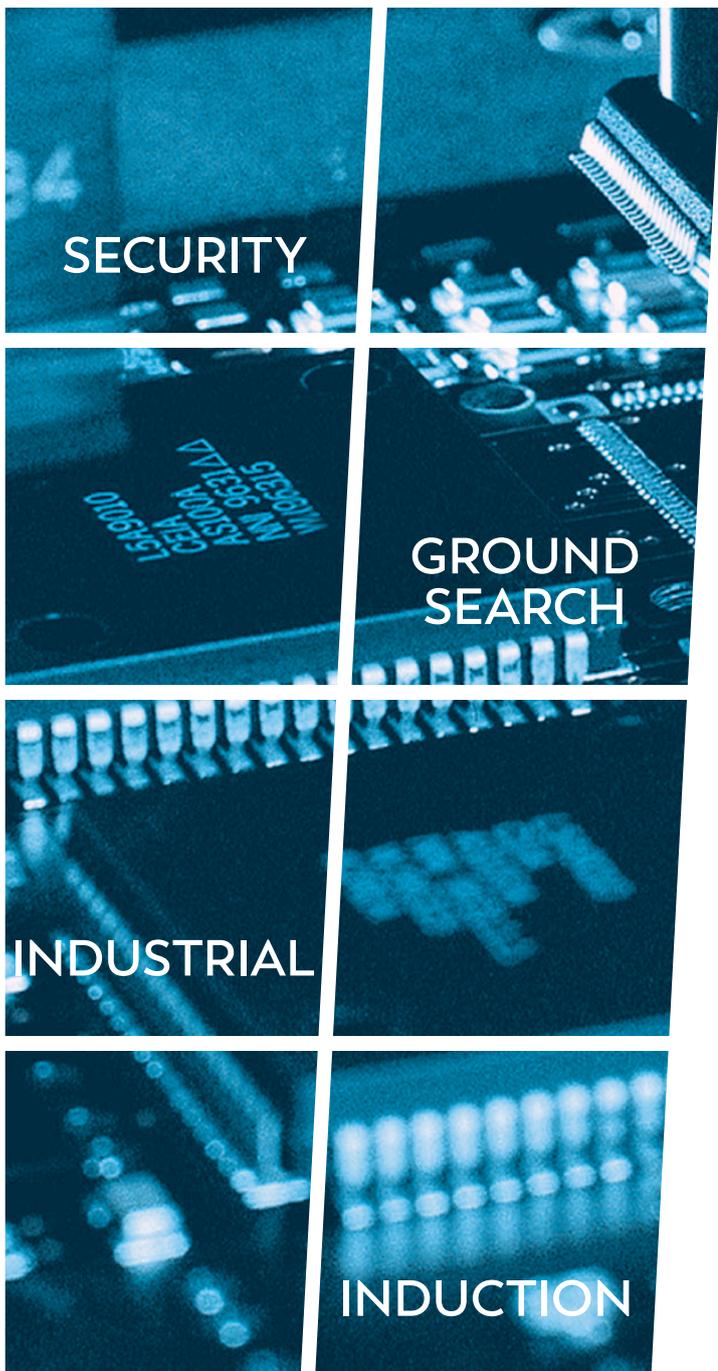


NATO AQAP-2110 compliance



ATEX Directive 2014/34/EU compliance

COMPANY PROFILE



DP000K0012v1000hUK - 148270
Edition 2025/2026



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APPLICATIONS

SECURITY

Airports and Ports, Embassies, Military Installations, Industry, Penal Institutions, Government Buildings, Banks, Stadiums, Public Events, Distribution Centers, Data Processing Centers, Hospitals, Schools, Colleges, Universities

GROUND SEARCH

Humanitarian Demining, UXO Clearance, Underwater Detection, Crime Scene Investigation, Vehicle Protection

INDUSTRIAL

Food, Pharmaceutical, Textile, Mining, Chemical, Manufacturing

INDUCTION

Brazing, Cap Sealing, Forging, Hardening, Localized Heating, Melting, Metal Glass Sealing, Sintering, Tempering, Tin Soldering



SINCE 1996



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CEIA S.p.A., Vicenza (Italy)



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