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OUR MISSION

METAL DETECTION

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CEIA USA's mission is to sell, distribute and service the Worlds Most Advanced technology in the electromagnetic fields manufactured by CEIA to the Federal Government, State and Local Governments and Corporations.

CEIA USA strives to educate our current and potential customers on the proper deployment of Metal Detector Security Technologies with the aim of achieving the best operational response.

CEIA USA will continue to increase its operational base of customers through education, seminars and trade shows and with continuous improvement in the technology offered.

CEIA USA, Cleveland, OH



1962



The founder of the company patents a micro-sensitive solid-state Metal Detector, which uses the first semi-conductor devices available on the market. Used in the textile sector, it detects metal fragments which can accidentally find their way into the textiles being processed, thereby preventing damage to the manufacturing machinery and avoiding production delays.

1968



CEIA is founded as a manufacturer of industrial Metal Detectors and ultrasonic cleaning machines for the gold and silversmith sector.

1975



The growing demand for security at entrances to airports and banks stimulates CEIA to start a major research and development program. This leads CEIA to become a major producer of walk-through and portable Metal Detectors for the detection of weapons carried on a person.

1982



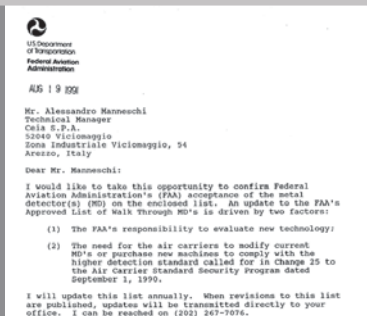
CEIA patents the first walk-through Metal Detector using a column type antenna and helicoidal windings.

1988



CEIA 02PN6 is selected by the U.S.S.S. "Department of the Treasury (DY) U.S Secret Service, 1310 "L" St, N.W, Washington, DC 20223 ... sole source contract for model 02PN6 outdoor metal detectors ..."

1991



CEIA Metal Detectors are certified by FAA according to the new Security Standard "3-gun-test"

1994



CEIA patents an innovative gate control that provides combined metal detection and access control for the identification of persons passing through the point of access.

1996



CEIA takes part in the selection of walk-through metal detectors by the Canadian Department of Transport and achieves the top technical assessment following stringent comparative tests carried out by that organization's laboratories.

Model 02PN10 was subsequently installed in all Canadian airports.

1996



CEIA patents the elliptical column walk-through Metal Detector. This efficient, aesthetically pleasing device can easily and unobtrusively be used in high level government agencies and private corporations.

1996



The CEIA Quality System is awarded ISO 9001 Certification.

1997



CEIA USA foundation.

1997



CEIA develops technology for Underground Metal Detection at the request of several international agencies.

2002



Afghanistan: CEIA is selected by the United Nations as the Metal Detector supplier.

2002



CEIA is selected to be the major supplier of Enhanced Metal Detectors (EMDs) for the majority of airports in North America.

2004



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

2004



The company presents the SMD601 Multi-Zone Walk-Through Metal Detector, specifically designed to comply with the new NIJ Standard-0601.02 (U.S. Dept. of Justice).

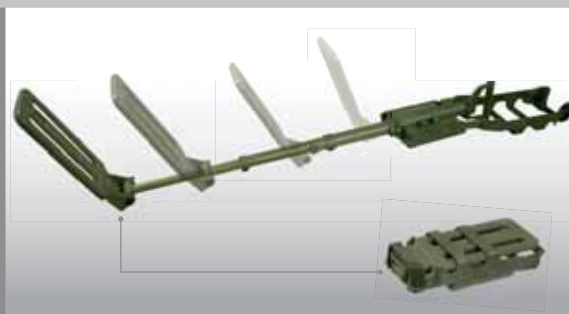
The Standard establishes new requirements for sensitivity, discrimination and immunity for Law Enforcement and Correctional Facilities.

2005



CEIA USA new building.

2007



The company presents the CEIA CMD, very high performance Compact Metal Detector. The One-Piece Foldable design allows the Metal Detector to be operational in a very short time and to be carried easily everywhere.

METAL DETECTION



SECURITY
METAL DETECTORS



GROUND SEARCH
METAL DETECTORS



INDUSTRIAL
METAL DETECTION
SYSTEMS



CEIA is a manufacturing company specialized in the design, engineering and production of **METAL DETECTORS**

STATE-OF-THE-ART SECURITY METAL DETECTORS

Today's Security sector and the ever-stricter regulations relating to Metal Detectors for inspecting people in transit require equipment with the highest operational and functional performance.

With over 40 years of experience in designing and manufacturing Metal Detectors, CEIA has developed a series of devices with superior performance.

In high-sensitivity applications CEIA is able to detect small metallic objects, such as a razor blade, while still providing optimal immunity to environmental interference.

For high flow-rate accesses, CEIA offers Walk-Through Metal Detectors with extremely high discrimination regarding personal metal effects.



COMPLIES WITH NEW STANDARD NIJ-0601.02*



PD140SVR
The PD140SVR Enhanced Hand Held Metal Detector is a high sensitivity device designed to detect magnetic and non-magnetic metal masses

SMD601
The most advanced Multi-Zone Metal Detector for Loss Prevention, Law Enforcement and Correctional Facilities

* NIJ IS NATIONAL INSTITUTE OF JUSTICE - U.S. DEPARTMENT OF JUSTICE

CEIA USA PROVIDES FULL OPERATIONAL AND TECHNICAL TRAINING SUPPORT; ON SITE OR AT HEADQUARTERS BY CEIA USA CERTIFIED PERSONNEL

Comprehensive operational and technical support

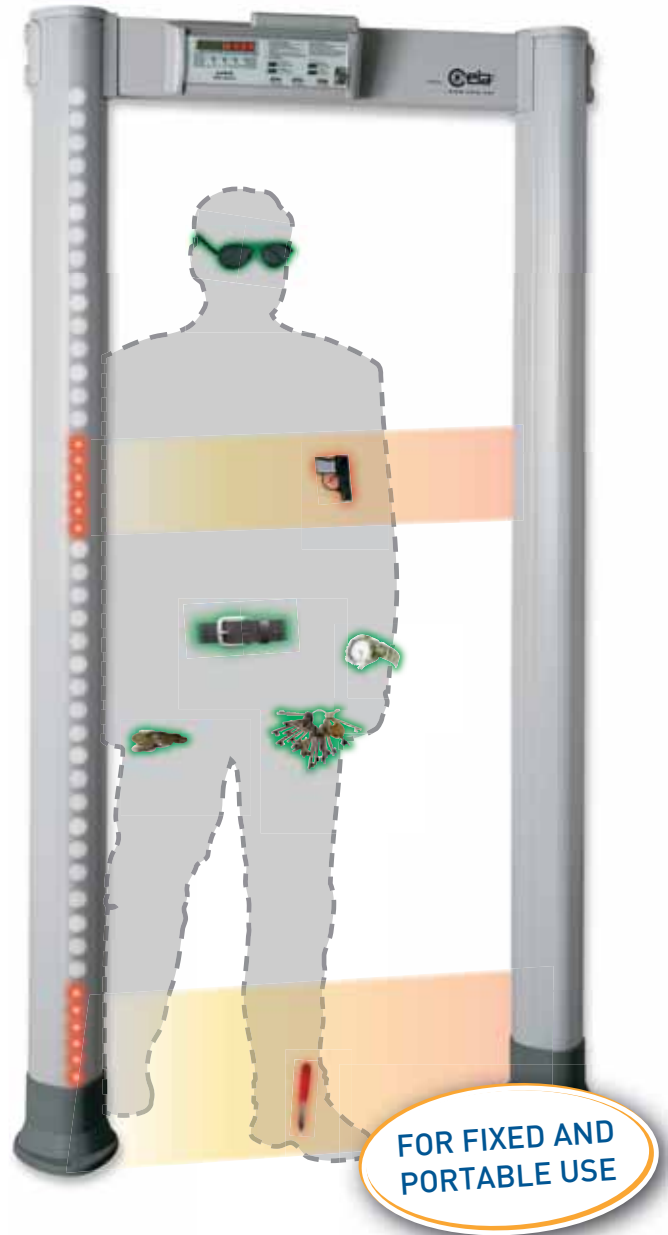
- phone technical support
- in-house repair/replacement of parts
- technical/sales support for:
 - product demonstrations
 - field comparisons



STATE-OF-THE-ART **EMDs** FOR PASSENGER SCREENING

Sophisticated threat detection and high passenger flow rates today require advanced **Enhanced Metal Detectors**

- Fully compliant with the most advanced Security Standards on weapons detection
- High Throughput at all Security Settings
- Exceptional Immunity to Environmental Interference
- Stylish and compact column version only available from CEIA (patented)
- Highly Portable and Durable for flexible deployment anytime and anywhere with years of reliable service
- Long Life Battery Supply Units for deployment where no electrical power is available
- Networking Capability for centralized remote performance management of multiple checkpoints



02PN20 ELLIPTIC

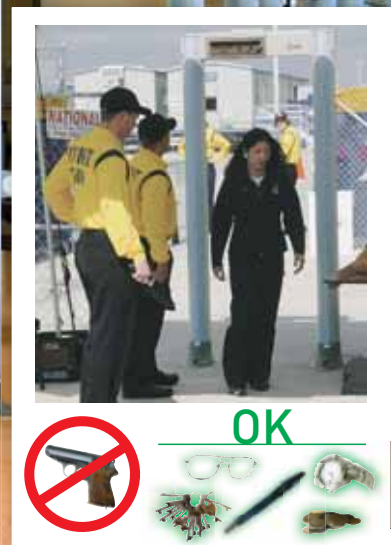
The CEIA 02PN20 Elliptic is an Enhanced Walk-Through Metal Detector for the inspection of people in transit, designed for all applications with stringent aesthetic and functional requirements. The technology used provides compliance with the strictest Security Requirements for EMDs, still maintaining a high flow rate.



AIRPORT SECURITY



The choices made by top-level, security-conscious public and private bodies **confirms the position of CEIA as market leader** in the manufacture of Metal Detectors



PUBLIC EVENTS

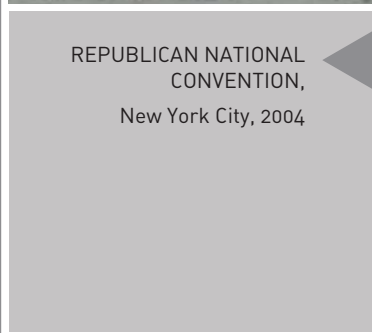
The considerable task of planning a major security event requires specifying the most reliable metal detectors for security checkpoint installations.

Through its Research and Development laboratories, CEIA is continuously investing in the design of equipment that provides the best compliance with the requirements of the Security sector.

The results of this effort are Metal Detectors that have extremely high immunity to outside interference and very high discrimination of personal objects. This allows for a higher flow rate which improves processing times.



WRIGHT BROTHERS
100TH ANNIVERSARY,
North Carolina, 2003



REPUBLICAN NATIONAL
CONVENTION,
New York City, 2004



DEMOCRATIC NATIONAL
CONVENTION,
Boston, 2004

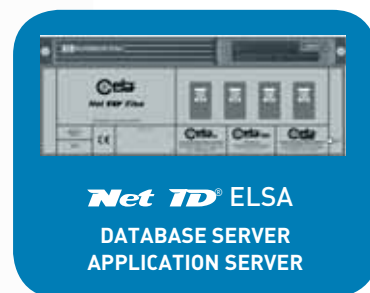


METAL DETECTOR NETWORKING

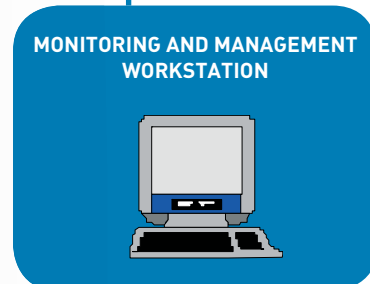


BENEFITS OF THE USE OF THE CEIA **Net TD**® NETWORKING PLATFORM FOR ETHERNET CONNECTED METAL DETECTORS

- Network management of EMDs
- Real-time devices monitoring
- Passengers flow monitoring
- Passenger transits and EMD events logging
- Monitoring of the EMD working parameters
- *MetCard TD* Checkpoint, High Security Verification System



ETHERNET TCP/IP



GROUND SEARCH METAL DETECTORS

Thanks to many years of in-depth research in the field of Metal Detection, CEIA has established itself as a primary international manufacturer of high-performance Ground Search Metal Detectors.

CEIA's approach to the development of its Detectors has been to employ the most advanced electronic and



CEIA CMD

The CEIA CMD is a very high performance, high-sensitivity Compact Metal Detector.

The One-Piece Foldable design allows the Metal Detector to be operational in a very short time and to be carried easily everywhere.

mechanical technologies to become available: Surface Mount Technology (SMT), microprocessor control, Digital Signal Analysis, software upgrade capability and the use of High-Quality materials for the search probes and for the other mechanical parts.



COMPLETE SUPPORT FOR TECHNICAL AND OPERATIONAL COURSES

CEIA provides complete support for technical and operational courses, given by certified personnel, either on site or at its own premises. The curriculum includes **First and Second Line Maintenance, Training for operators and a Course for operator Instructors.** The teaching activities are backed up by full documentation, and are divided between classroom seminars and practical work in the field.

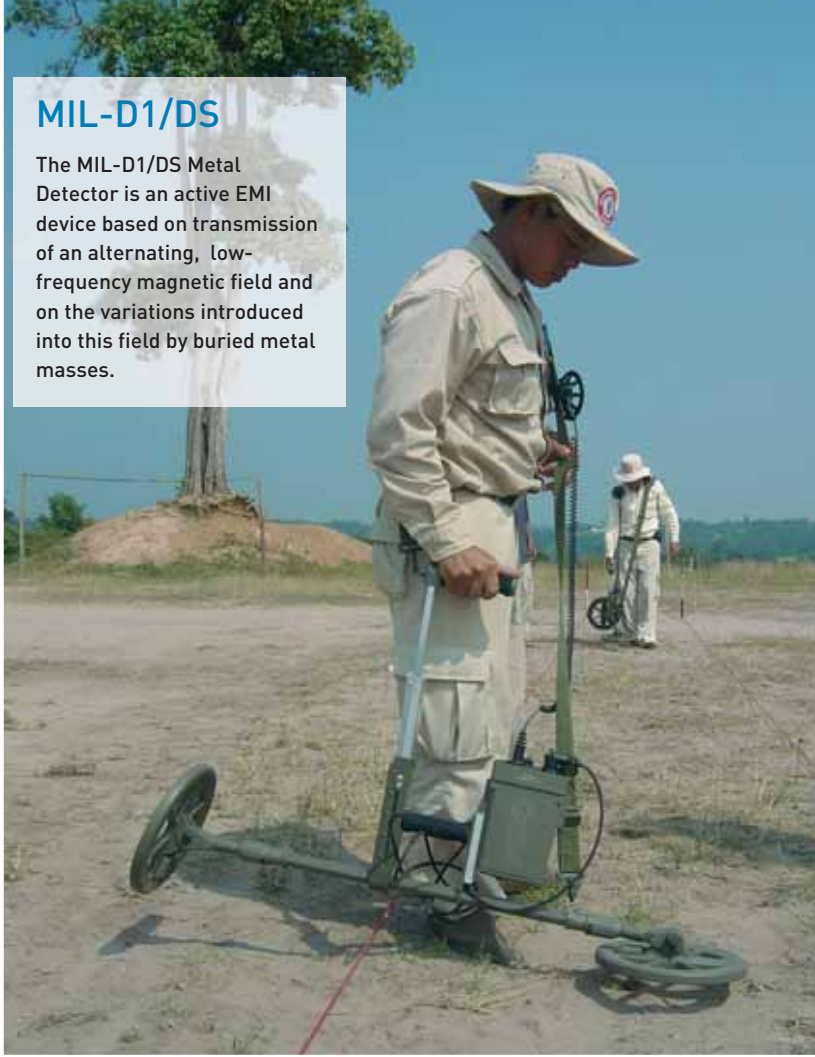
CEIA MIL-D1: LEADER IN PERFORMANCE AND RELIABILITY

Tests carried out under controlled conditions by Authoritative International Bodies demonstrate that the MIL-D1 provides overall superior performance in the areas of detection distance, soil compensation capability and immunity to external interference.

Several countries around the world have selected the MIL-D1 as their in-service detector.

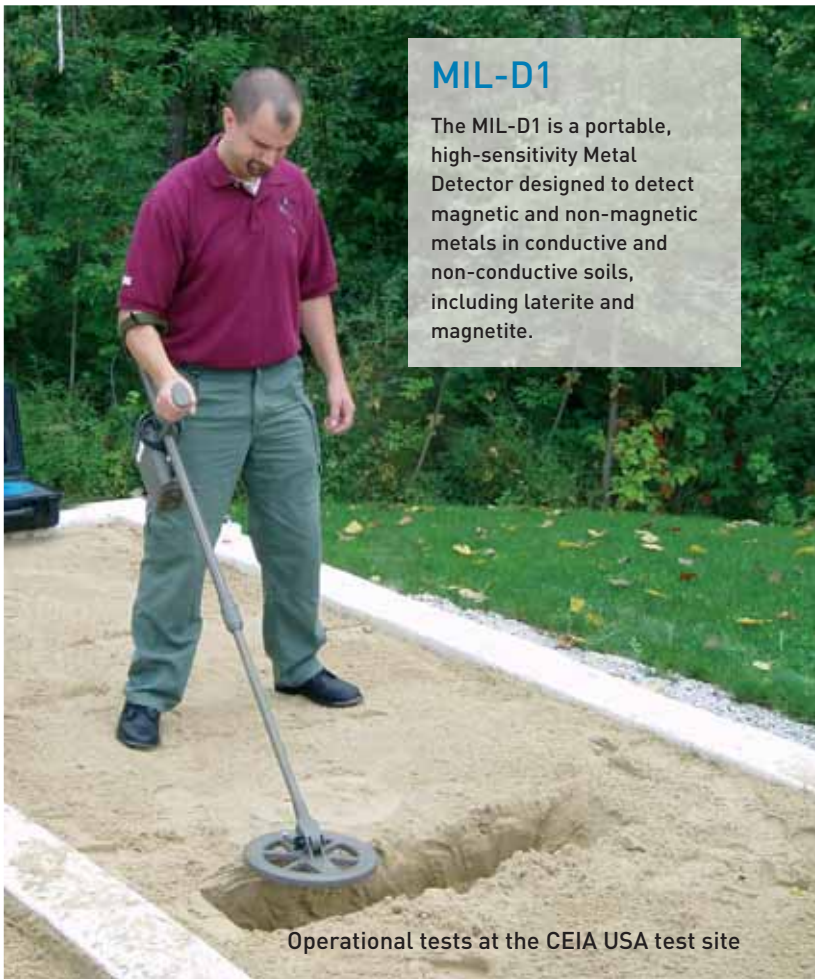
MIL-D1/DS

The MIL-D1/DS Metal Detector is an active EMI device based on transmission of an alternating, low-frequency magnetic field and on the variations introduced into this field by buried metal masses.



MIL-D1

The MIL-D1 is a portable, high-sensitivity Metal Detector designed to detect magnetic and non-magnetic metals in conductive and non-conductive soils, including laterite and magnetite.



Operational tests at the CEIA USA test site

- | | |
|------------------------|-----------------------|
| THE CEIA MIL-D1 | ➤ DETECTION |
| METAL DETECTOR | ➤ EASE OF OPERATION |
| OBTAINED THE HIGHEST | ➤ RELIABILITY |
| MARKS IN CONTROLLED | |
| COMPARATIVE TESTS FOR: | ➤ EASE OF MAINTENANCE |



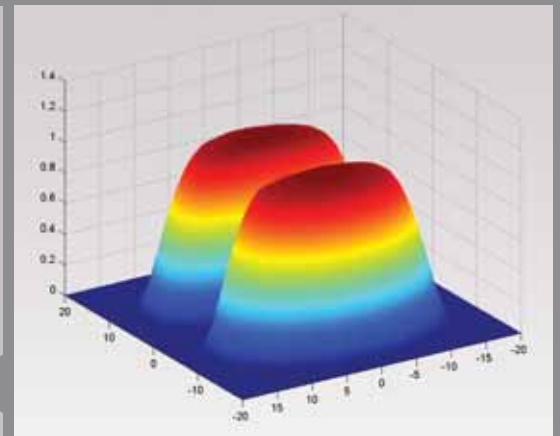
QUALITY MEANS SAFETY

Thanks to the extensive use of robotic and automated production systems, CEIA is able to offer to the commercial market equipment that satisfies military quality and reliability standards at extremely competitive prices.



A metal detector antenna measurement being performed by a triple-axis robot.

Robot mapping of the magnetic and detection field.



Proprietary Engineering consisting of a powerful analytical engine designed exclusively by CEIA specifically for metal detection.

Operational test after assembly: 168 hours of continuous operation



INDUSTRIAL METAL DETECTION SYSTEMS

CEIA THS Metal Detectors detect metal contaminants accidentally present in industrial products with levels of sensitivity, immunity to interference and response speeds exceeding the strictest Quality Control Standards.

THS Detectors allow the interception of magnetic and non-magnetic metals, including high-resistivity stainless steel. An automatic tracking function cancels

out any variation in product effect caused by the product under inspection.

The THS Metal Detector's wide bandwidth allows maximum sensitivity operation at both high and low transit speeds.

This line of metal detectors has been adopted by the leading companies in the food, chemical, textile and pharmaceutical fields.



CEIA THS/PL
Industrial Metal Detector
for liquid and viscous products



The **THS/PL** System is designed for metal contaminant detection in products transported by pipeline, especially meat, soup and preserves.



The **THS/MN** Metal Detector has been especially designed for the inspection of products in aluminum foil trays and wrappings.



The **THS/3F Multi-frequency** Metal Detector is recommended for use on multi-product lines, where the individual products have very different conductivity characteristics.

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



INDUSTRIAL

CEIA THS/MB

Integrated THS/MB system, complete with THS Metal Detector, modular conveyor belt, ejection system and supermarket-compliant peripherals.



FULLY HACCP COMPLIANT, CEIA INDUSTRIAL METAL DETECTORS ARE CONSTRUCTED OF FDA AND USDA APPROVED MATERIALS

CEIA THS/G-ATEX series Industrial Metal Detectors are certified according to EC Directive 94/9/CE "relating to equipment designed for use in a potentially explosive environment".

The equipment is designed for use in Class II, Division 1 (dusts) Hazardous Locations according to the "National Electrical Code" (NEC) classification.

CEIA THS/G-ATEX series Metal Detectors have an IP66 IP69K protection rating





CEIA THS/PH21 Metal Detection Systems feature extremely high detection sensitivity towards contaminating metals, whether ferrous, non-ferrous or stainless steel, even when these are present in tiny quantities

**STAINLESS STEEL AISI 316L
AND FDA-APPROVED PLASTIC
MATERIALS FOR ALL PARTS IN
CONTACT WITH THE PRODUCT**



CEIA THS/PH21/FFV

is especially designed for the inspection of granular and powder products.

The ejection system is fitted with an innovative deflector that features quick response, precise ejection of the contaminated product and high production flow rate.



PHARMACEUTICAL



DEVELOPMENT OF ANTENNAE

Triple-axis robot for computerised measurement of the magnetic field

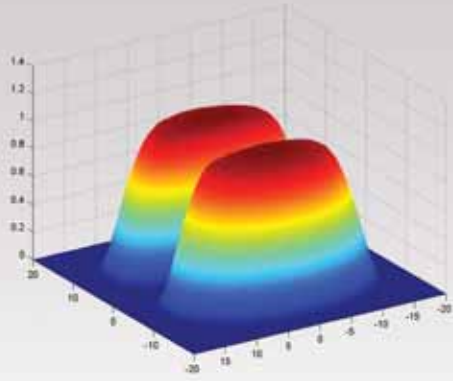


CEIA is staffed by personnel specialized in the various operational sectors.

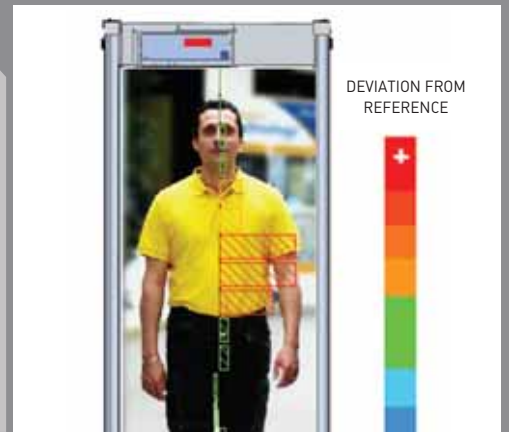
Production is carried out and supervised by electronics and electrotechnology graduates. The Research Department is subdivided according to specific expertise, into specialized laboratories dedicated to the hardware and software development of the devices.

RESEARCH

TOP



QUALIFICATIONS

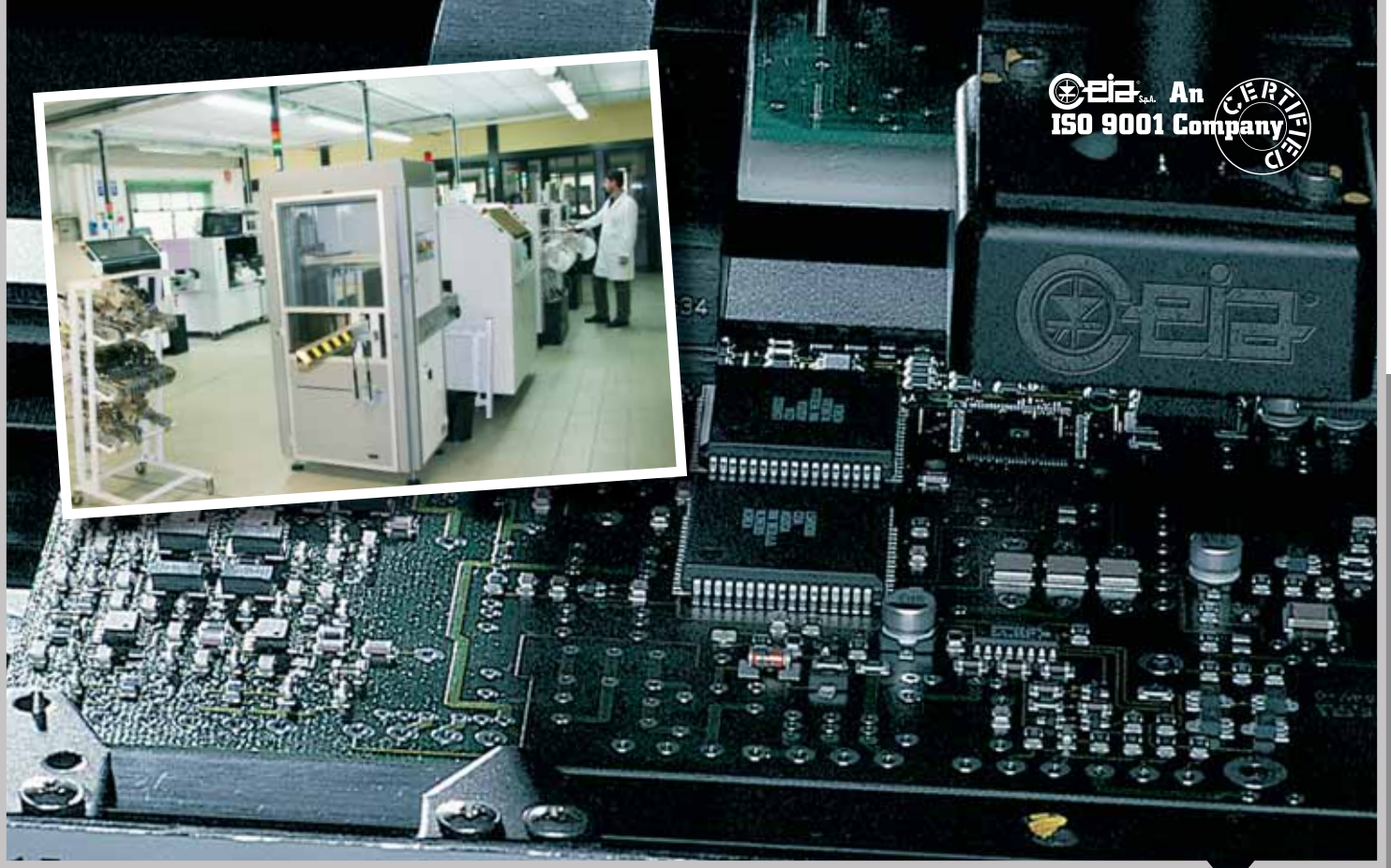


AND EXPERIENCE



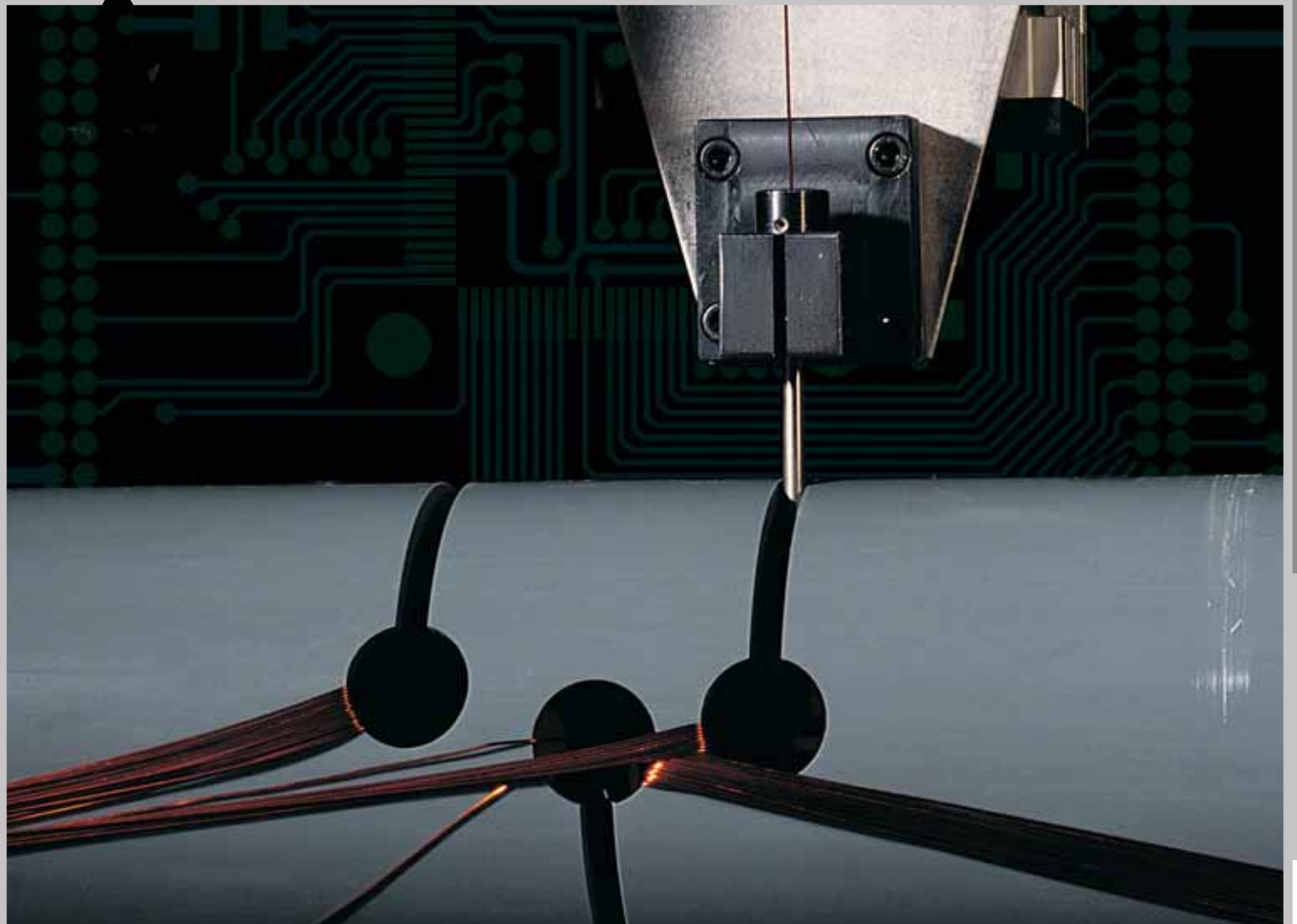
The laboratories, headed by engineers and graduates with top qualifications and extensive experience, are directly co-ordinated by the Technical Administration.

Research is targeted in areas set by General Administration, which has always pursued separate, specific lines of development according to original product orientations (metal detectors, magnetic field generators, measuring systems). The company intends to continue with this policy.



Detail of the winding phase in production of the column antennae for Walk-Through Metal Detectors, carried out by robots

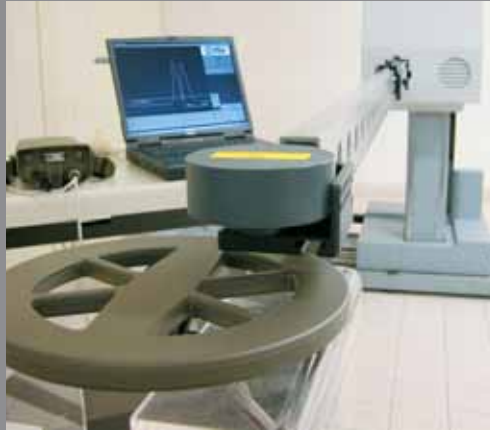
Automated assembly of electronic components using Surface Mounting Technology (SMT)



TECHNOLOGY



ADVANCED



TECHNOLOGY



SYSTEMS

The qualitative level of CEIA equipment is recognized throughout the world by Private Companies and Governmental Institutions, who have chosen it following stringent comparative testing.

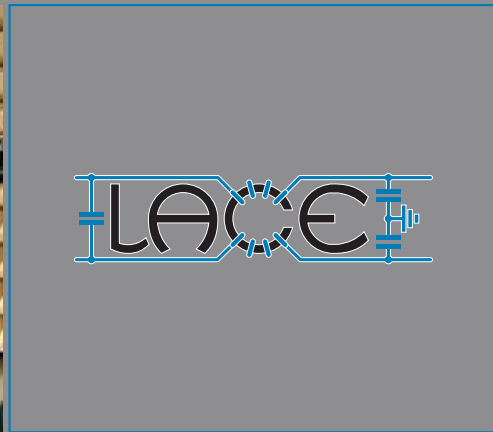
This objective has been achieved by using the most advanced technology in all phases of production.



LACE, internal view
of the screened chamber

CEIA has been carrying out electromagnetic compatibility measurements on equipment it manufactures since 1987, and since 1994 has been recognized as a “highly-qualified laboratory authorized by the Ministry for Universities and Scientific Research to carry out research of an applied nature on behalf of small and medium-sized businesses”.

COMPATIBILITY



LABORATORY OF

ELECTROMAGNETIC

COMPATIBILITY

Since November 1998, CEIA LACE has been accredited as a “competent body in matter of electromagnetic compatibility” by the Ministry for Communications.

LACE can carry out emission and immunity measurements within the **following sectors**:

- › Industrial equipment
- › Medical and scientific equipment
- › Information technology equipment
- › Electrical appliances and electrical equipment for household use
- › Illumination equipment and fluorescent lights

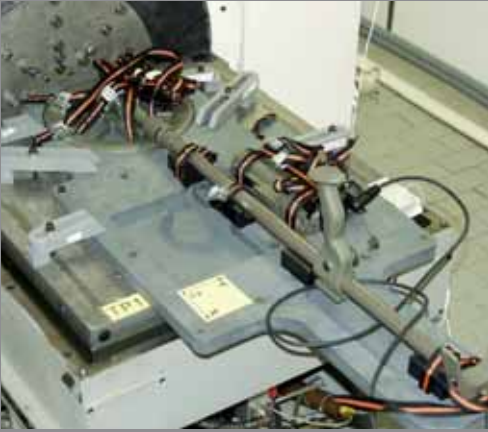
CEIA's Quality System extends throughout the company, from the design stage through production, Quality Control and after-sales service



Walk-Through Metal Detectors
Final assembly and Factory acceptance test station

CEIA follows ISO 9001 Standard guidelines, for which it has been certified since 1996

QUALITY SYSTEM



Mechanical shock test on CEIA MIL-D1



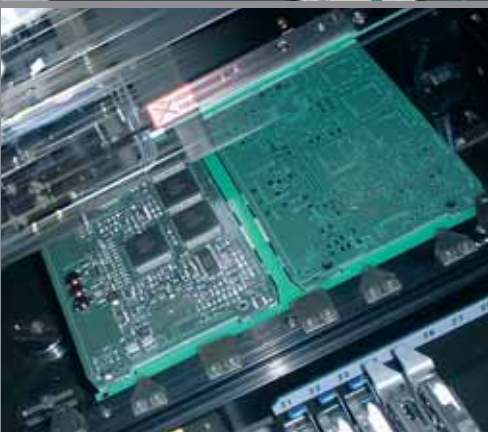
Equipment Functional Burn-In: 168 hours minimum



Management software: THS Production for statistical and operational management of networked THS systems



Incoming AISI 316L sheets check



Automated assembly of electronic components using Surface Mounting Technology (SMT)



CEIA supplies metrological samples certified for diameter and electromagnetic signal issued by LACE, CEIA's Electromagnetic Compatibility Laboratory

The guiding principle of CEIA has always been to strive for technical and production perfection, in order to provide a quality reference standard for anyone purchasing one of our products.



CEIA SpA Headquarters,
Vicinomagno (Arezzo-Italy)



CEIA USA, Cleveland, OH



CEIA International, Paris (France)



APPLICATIONS

SECURITY APPLICATIONS

Airports and Ports, Embassies,
Military installations, Industry,
Penal Institutions, Government
Buildings, Banks, Stadiums,
Distribution Centers, Data
Processing Centers, Hospitals

INDUSTRIAL APPLICATIONS

Food, Textile, Mining, Chemical,
Manufacturing

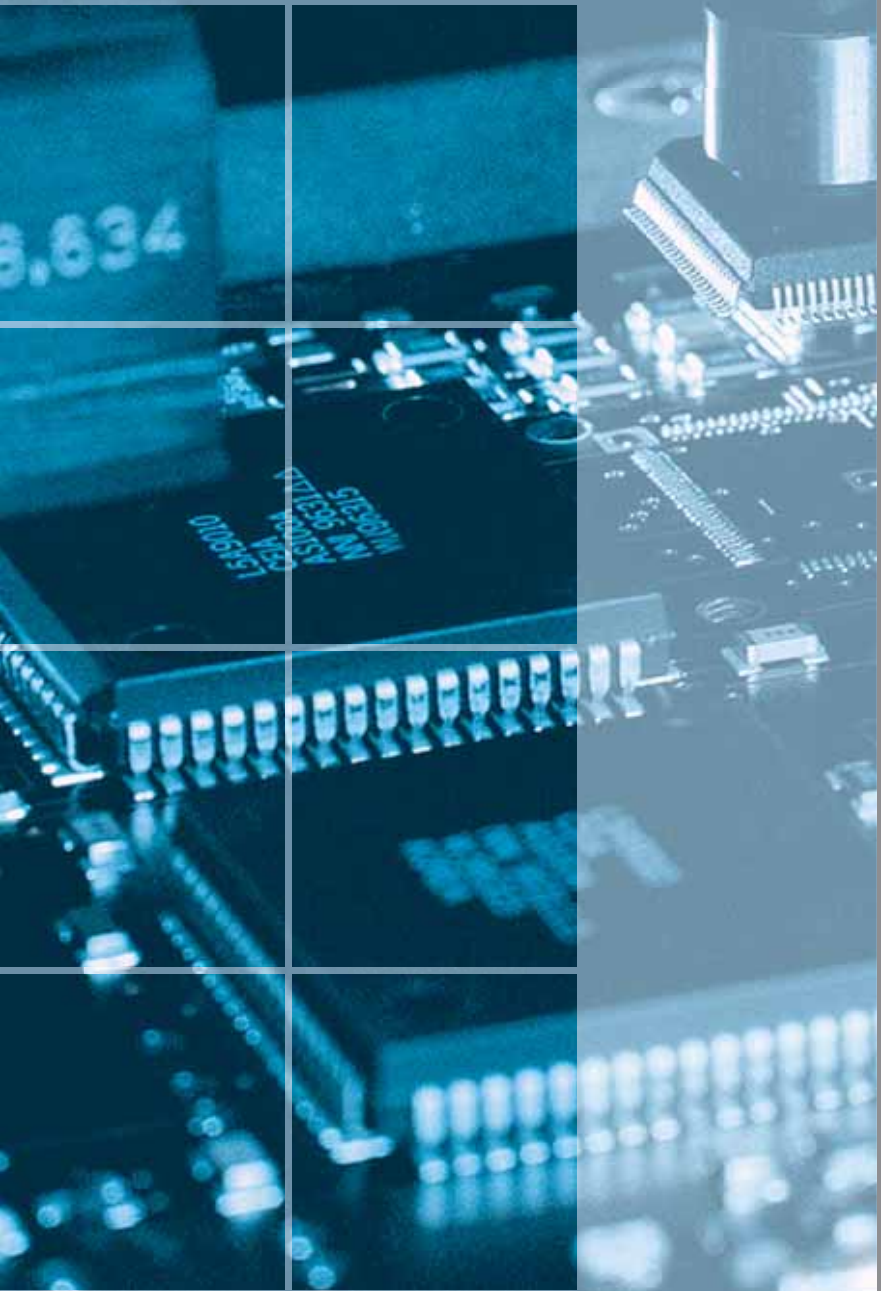




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