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Center for Testing and  
European Certification



**CENTER FOR TESTING AND EUROPEAN CERTIFICATION**



**EUROPEAN PASSPORT TO YOUR PRODUCT**

**CE**  
1871



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*The future is in the hands of creative and always forward looking managers, ready to go to great lengths,*

**IN ORDER TO SUPRISE YOU AND GET BEYOND YOUR EXPECTATIONS!**

dipl. eng. Blagovesta Shineva, Manager of CTEC:

*I'm proud of everything we have created during the last 7 years!*

*I wouldn't have reached this success without the young and creative team of professionals who put all their hearts in obtaining the goals, following the company philosophy.*

*To be a leader you should possess an enormous persistence, dedication to the work and a huge intuition.*

*To be always first in the mind of your clients in the way they choose you, you should prove yourself a hundred percent.*

*To put your name under your words, you should be certain of your rightness.*

**THANK ALL OUR CUSTOMERS, PARTNERS AND WELL-WISHERS WHO WE DARE CALL OUR FRIENDS.**

**THANK YOU THAT YOU BELIEVE IN US, YOU ARE THE SMALL WHEELS THAT ACTUATE THE MECHANISM OF THE MOTIVE POWER, CALLED BUSINESS.**



*I follow the examples of the business LEADERS. When I set an aim, I pursue it to the end.*

# CTEC HISTORY



- 2002 Establishing CTEC as a body for testing and certification of technical products with two own laboratories.
- 2003 Developing and introducing a quality system according to requirements of standards series BDS EN 45011 and BDS EN 45012.  
Receiving an authorization for construction products conformity assessment.  
Obtaining license for technical inspection of high risk equipment.
- 2004 CTEC is the first authorized body by SAMTS in Bulgaria for machinery conformity assessment.
- 2005 Expanding the activities by energy efficiency audits and certification. Qualified personnel. Authorization by the Energy Efficiency Agency for buildings certification. Authorization for testing of machines, equipment and devices.
- 2006 Receiving an authorization for electrical equipment conformity assessment.  
Obtaining certificate by the Energy Efficiency Agency for industrial systems energy auditing.  
Receiving laboratory equipment for machinery testing, granted by the PHARE project of the total value of 140 000 Euro.



- 2007 Obtaining the first Notification for Bulgaria acknowledged by the European Committee for electrical equipment, machines and construction products.  
Expanding the scope of the license for high risk equipment.  
Establishing type A Inspection body.  
Constructing new testing laboratory for machines, equipment and devices.  
Moving to modern, certificating office.  
Investing in modern equipment for the construction laboratory.
- 2008 Obtaining the first Notification for Bulgaria acknowledged by the European Committee for noise emission in the environment by equipment for use outdoors.  
Obtaining license for vocational training.  
Expanding the scope for construction products conformity assessment.  
Developing and introducing management system according to BDS EN ISO 17021  
Expanding the scope with two more departments– „Management systems“ and „International programmes and projects“.  
Taking part in EUROPEAN COMMISSION workshops on Directives MD, CPD and Noise emission by machinery.
- 2009 The first 6 months – a period for accreditation and pre-accreditation of four of the departments of CTEC.  
Receiving equipment under PHARE Project for the two testing laboratories.  
Developing and submitting documents for playgrounds and playground equipment inspection.

**EVERY BEGINNING IS DIFFICULT ...  
OUR MOTIVE POWER ARE OUR  
INEXHAUSTIBLE IDEAS  
DIRECTED TO  
YOUR BUSINESS!**



# COMPANY STAFF



Our customers will be gently served by the qualified, competent staff of assessors, auditors, experts, testers and lecturers CTEC has.

Our advantage is the young and ambitious team, on which we rely.

## CTEC KEY PERSONAL



P.D. G.O.  
Head external centrally  
assessor manager



Types & B. and technical inspection of  
M&E&B assessor manager



Macario  
assessor manager



D.T. centrally  
assessor manager



Carolina  
assessor manager



Diego  
offices manager



Trina  
manager



Julian  
resources



Account



Financial system  
control manager



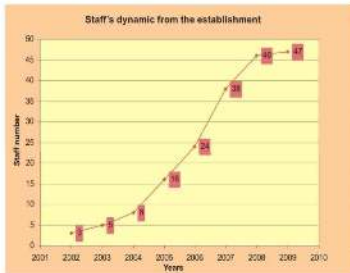
Project manager



Training manager



Marketing, sales and  
marketing manager



# WHAT OUR AIMS ARE?



## Our mission

Continuous improvement.  
Ambition to be above the level of our effective competitors.

## Our principles

Not-discriminative, neutral, independent and impartial methods of work;  
Transparent, public, generally accessible procedures and schemes for conformity assessment in the field of regulated and non-regulated market for the public benefit for free movement of goods;  
Proven competitive, authentic and well-grounded conformity assessments;  
Confidentiality and etiquette.

## Our business goals

To create confidence in our customers and to become leaders in the sphere of certification services and testing of construction products, machines and electrical equipment on the Balkan, European and Asian markets;

To provide services in a way our customers confide in CTEC as a permanent and reliable partner who guarantees success of their business..  
Maintaining stable policy for high profitable company.  
Company identity.  
Loyalty.

**WHEN YOU EXPECT TO RECEIVE ONE THING,  
WE GIVE YOU MORE.**

Confidence  
Certainty  
Public acknowledgement  
Increased insurance limit for its activities



# INTERNATIONAL PARTNERSHIP / MARKETING



Declared as a notified European Body and a fast growing company as well, it is explicable the interest of CTEC towards international markets – producers, partners, importers and all others aiming to enter the European market with their products.

For the last two years our marketing efforts have been oriented towards the Balkan countries, Asia, Russia, Turkey and the new members of the European Union.

## International partners and partnership with organizations from:

China – Shanghai,

Turkey – Istanbul, Izmir

Russia – Moscow

Macedonia– Ohrid

Portugal – Lisabon

Our aim regarding the international market is reaching new customers, cooperation with qualified and recognized on the world market consultants, researchers and other partners in order to support the successful business and establish their products on the European market.

**Our advantage** – we offer our customers all-round services completing the cycle for production certification – testing, conformity assessment, training, technical inspection, certification of management system for regulated and non-regulated sphere.

## Aims

The Marketing Department of CTEC sets itself a short-term aim to open a company representation in Sofia, Turkey, Serbia and Macedonia.





## CONFORMITY ASSESSMENT ACCORDINT TO NATIONAL TECHNICAL SPECIFICATIONS

CTEC is authorized by MRDPW and possess Authorization N° POCCTI – 12/27.12.2007 and Expansion N° N° 1/03.11.2008 to the authorization to carry out construction products conformity assessment and factory production control systems - for assessment of products complying with Bulgarian technical specifications.

The scope of authorization and its expansion involves the following type of products:

- Concrete, made in factory conditions
- Steel for the reinforcement of concrete
- External thermal insulation composite systems (ETICS)
- Non load bearing permanent shutterings: kits/systems based on hollow blocks or panels of insulating materials or concrete;
- Prefabricated chimneys
- Elements for metal constructions and connecting means for them

Construction products conformity assessment department to CTEC concluded over 350 contracts (for certification and recertification) for conformity assessment systems 1, 1+, 2 and 2+ with constructions products manufacturers and importers from entire Bulgaria. The center carries out and works with manufacturers from Turkey, Serbia, Russia and other European countries.



## CONSTRUCTION PRODUCTS TESTING LABORATORY /CPTL/

CTEC construction products testing laboratory /CPTL/ has implemented and working management system in compliance with BSS EN ISO/IEC 17025. A procedure for accreditation has been started by EA „BAS”.

CPTL performs laboratory testing for initial type testing and factory control of a large scope of construction products and characteristics to national and European harmonized standards:

- Building lime - slack and caustic;
- Chemical analysis of air caustic building lime;
- Steel for the reinforcement of concrete and construction;
- Welded grid;
- Aggregates and sand;
- Building solution;
- Concrete, simple and light-weight; hard concrete;
- Pavement concrete slabs;
- Concrete slabs for road trench;
- Concrete products for road drainage trenches;
- Floor plasters and solution for them;
- Ceramic tiles;
- Cement adhesives;
- Gyps and plasters;
- Concrete slabs and exterior paving blocks;
- Concrete blocks for masonry - hollow clay;
- Concrete units for chimneys;
- Concrete and reinforced concrete pipes;
- Clay and concrete roof tiles;
- Ceramic blocks and slabs for masonry;
- Waterproofing sheets;
- Extruded polystyrene;
- Building soil - related and unrelated;
- Kits/systems non load permanent shuttering;
- Products and systems/kits for thermal insulations;
- External thermal insulations systems/ plaster kits;
- Bitumen mixture;
- Physical-mechanic and chemistry testing of aggregates Micro Deval, Los Angeles in compliance with EN and US (ASSHTO) standards;
- Building chemistry;
- Sink /polymer – marble/.



The laboratory performs testing of the following characteristic:

- Freeze-thaw resistance
- Compressive strength of concrete
- Bending tensile strength of steel
- Yield strength of steel
- Content of fine fractions
- Determination of particle shape - /Shape index/
- Flakiness Index
- Abrasion
- Water absorption
- Watertightness
- Bending tensile strength and destructive load
- Peel resistance of joints
- Determination of wear resistance-Bohme
- Determination of bulk density of bituminous specimens
- And other characteristic in compliance with national and European harmonized standards.



#### LABORATORY CONTROL ON THE SPOT AT THE CONSTRUCTION SITE PROJECTS:

In the construction of TPP Maritsa East 1:

TJO, Bulgaria branch

Takraf, Sofia, TPP 1

KNAUF, TPP 3

Totema, TPP 3

BIN MAT 1, TPP 1

Stroitelstvo i montaj, Radnevo

Totema engineering, TPP Maritsa East 3;

Eurobild, TPP 1

Geotexmin, TPP 3

Promet safe, Sofia, Kazanlak project

Interprom, Troyanovo 3 coal mine

Galleria, Stara Zagora

Stara Zagora project, Stara Zagora

CITY MOL, Stara Zagora

J & AVAX – laboratory control at motorway „Marica“ construction, Orizovo - Stara Zagora section

KEN, Stara Zagora – soils



# NOTIFIED BODY UNDER DIRECTIVE 98/37/EC MACHINERY CONFORMITY ASSESSMENT

CTEC has been notified under Directive 98/37/EC machinery and authorized by SAMTS with Authorization N° 045 - OC/27.02.2007 to carry out machinery conformity assessment for procedures:

- EO type examination
- Receipt technical file storage
- Certification of adequacy for the technical file



## Notification scope:

### EO type examination, Receipt technical file storage and Certification of adequacy for the technical file procedures

Band-saws with a fixed or mobile bed and band-saws with a mobile carriage, with manual loading and/or unloading, for working with wood and analogous materials or for working with meat and analogous materials;  
Single- or multiblade circular saws for working with wood and analogous materials or for working with meat and analogous materials;  
Sawing machinery;  
Hand-fed surface planning machines for woodworking (planer);  
Thicknessers for one-side dressing with manual loading and/or unloading for woodworking;  
Combined machines of the types referred to in 1 to 4 and 7 for working with wood and analogous materials;  
Presses, including press-brakes, for the cold working of metals, with manual loading and/or unloading, whose movable working parts may have a travel exceeding 6 mm and a speed exceeding 30 mm/s.;  
Injection or compression plastics-moulding and rubber-moulding machines with manual loading or unloading;  
Hand-fed vertical spindle moulding machines for working with wood and analogous materials  
Hand-fed tenoning machines with several tool holders for woodworking.



Receipt technical file storage and certification of adequacy for the technical file procedures:  
Electro-sensitive devices designed specifically to detect persons in order to ensure their safety (non-material barriers, sensor mats, electromagnetic detectors, etc.);  
Falling-object protective structures (FOPS);  
Guards and detachable transmission shafts with universal joints as described in section 3.4.7. /art.90 from OERSC/machinery;  
Logic units which ensure the safety functions of bi-manual controls;  
Portable chainsaws for woodworking.

**Certification of adequacy for the technical file procedures**  
Machinery for underground working of the following types:  
a) machinery on rails: locomotives and brake-vans  
b) hydraulic-powered roof supports  
c) internal combustion engines to be fitted to machinery for underground working

Manually-loaded trucks for the collection of household refuse incorporating a compression mechanism  
Vehicles servicing lifts  
Devices for the lifting of persons involving a risk of falling from a vertical height of more than 3 metres  
Machines for the manufacture of pyrotechnics  
Automatic movable screens to protect the presses referred to in 9, 10 and 11, section I.  
Roll-over protection structures (ROPS)

### Corporate customers:

- DITEK Ltd.
- Huskvarna, Bulgaria
- Mitsui Power Projects LLC
- ALSTOM Power Generation AG, Bulgaria branch
- ASTRA BIOPLANT Ltd, Rouse Region
- Chinese manufacturers





The laboratory is accredited in compliance with BDS EN ISO/IEC 17025 by Executive agency „Bulgarian Accreditation Services“ and possess accredited certificate N° 101AM(17).

The laboratory possess modern testing equipment for electric safety, noise, vibration and other safety parameters testing.

#### WOODWORKING MACHINERY AND MACHINERY FOR SIMILAR MATERIALS:

- Planing machinery EN 859; One side planing machinery EN 860;
- Combined one side planing and planing only machinery – EN 861
- Combined circular saws with working table for longitudinal and transversal lower cutting – BDS EN 1870-1; BDS EN 1870-5;
- Single circular saws for round timber with mechanical feeding of the table and manual load/unload – BDS EN 1870-7
- Horizontal cutting out circular saws with damping beam and vertical cutting out circular saws- BDS EN 1870-2
- Circular saws for domestic heating woods and combined circular saws with manual load/unload workpieces – BDS EN 1870-6
- Multitwheel circular saws for longitudinal cutting with manual load/unload of work pieces - BDS EN 1870-4
- Band saws. BDS EN 1807

#### METALWORKING MACHINERY

- Drilling machinery BDS EN 12717
- Milling and drilling-milling machinery BDS EN 13128
- Single – and multisindle lathes with manual, automatic and numerical control - BDS EN 12840 , BDS EN 12415 , BDS EN 12478
- Machining centres - BDS EN 12417
- Agregate machinery BDS EN 14070
- Cutting machinery EN 13898
- Grinding machinery BDS EN 13218
- Pneumatic presses BDS EN 13736
- Hydraulic presses BDS EN 693
- Hydraulic bending presses BDS EN 12622
- Mechanical presses BDS EN 692
- Guillotine type shears BDS EN 13985



#### MACHINERY AND EQUIPMENT FOR FOOD INDUSTRY

- Machinery for washing, dozing and packing
- Circular saw machinery – BDS EN 12267
- Bulk milk coolers on farms - BDS EN 13732
- Pre-formed rigid container packaging machinery - BDS EN 415-2
- Molding, filling and sealing machinery - BDS EN 415-3
- Palletisers and depalletisers - BDS EN 415-4
- Labeling machinery - BDS 16206:85
- Fruit and vegetable cutting machinery - BDS EN 1678, BDS 6058-84
- Cooking kettles equipped with powered stirrer and/or mixer - BDS EN 13888
- Corn mixturs cleaning machinery according to dimensions and aerodynamical properties – BDS 5533-73, BDS 5726-73
- Crushing machinery (by impact and milling), milling rolls, hammer millers, breakers, desintegrator BSS 6391-90
- Refrigerated display cabinets, Freezers, Cooling chambers - BDS EN ISO 23953-2

#### ELECTRICAL EQUIPMENT INTENDED FOR USE ALTERNATIVE CURRENT LESS THAN 1000 V AND DIRECTIVE CURRENT LESS THAN 1500 V

- Household and similar electrical appliances - BDS EN 60335-1, BDS EN 60335-2-2 2-108
- Automatic electrical controls for household and similar use - BDS EN 60730-1, BDS EN 60730-2-1 2-19;
- Audio, video and similar electronic apparatus - BDS EN 60065
- Electrical luminaires - BDS EN 60598-1
- Fixed general purpose luminaires- BDS EN 60598-2-1
- Recessed luminaires - BDS EN 60598-2-2
- Luminaires for road and street lighting - BDS EN 60598-2-3
- Portable general purpose luminaires- BDS EN 60598-2-4
- Floodlights - BDS EN 60598-2-5
- Luminaires with built-in transformers or convertors for filament lamps - BDS EN 60598-2-6
- Portable luminaires for garden use - BDS EN 60598-2-7
- Handlamps - BDS EN 60598-2-8
- Photo and film luminaires (non-professional) - BDS EN 60598-2-9
- Portable luminaires for children - BDS EN 60598-2-10
- Aquarium luminaires- BDS EN 60598-2-11



Ground recessed luminaires - BDS EN 60598-2-13

Luminaires for stage lighting, television film and photographic studios- BDS EN 60598-2-17

Luminaires for swimming pools - BDS EN 60598-2-18

Air-handling luminaires - BDS EN 60598-2-19

Lighting chains - BDS EN 60598-2-20

Luminaires for emergency lighting - BDS EN 60598-2-22

Extra low-voltage lighting systems for filament lamps - BDS EN 60598-2-23

Luminaires with limited surface temperatures - BDS EN 60598-2-24

Luminaires for use in clinical areas of hospitals and health care buildings - BDS EN 60598-2-25

Ship luminaires - BDS 4851-91

Transport luminaires - BDS 4704-84; BDS 10916-84

Electronic flash apparatus for photographic purposes - BDS EN 60065

Luminaire elements set - BDS EN 61347-1, BDS EN 61347-2-1 2-13 , BDS EN 60155 , BDS EN 60432-1, BDS EN 60432-2, BDS EN 60570 , BDS EN 60570-2-1 , BDS EN 60238, BDS EN 60400, BDS EN 60998-1, BDS EN 60999-1, BDS EN 61058-1, BDS EN 60669-1 , BDS EN 60669-2-1 , BDS EN 60669-2-3, BDS EN 60921, BDS EN 60923, BDS EN 60927, BDS EN 60929 , BDS EN 61995, BDS EN 61999, BDS EN 62035, BDS EN 60968, BDS EN 60969, BDS EN 60662

Electrical equipment for measurement, control, and laboratory use and for information technologies - BDS EN 61010-1, BDS EN 61010-2-010 2-101, BDS EN 60950

Power transformers, including low powered transformers for safety, welding, throttles and similar - BDS 449, BDS EN 60076-1, BDS EN 61558-1, BDS EN 61558-2-1 2-23

Switchgear and controlgear assemblies - BDS EN 60439-1 5, BDS EN 62208, BDS EN 60898-1, BDS EN 60947-1 5 , BDS EN 61008-1, BDS EN 60269-1 3

**MEDICAL ELECTRICAL EQUIPMENT** - BDS EN 60601-1, BDS EN 60601-1-2, BDS EN ISO 6875, BDS 15290

**CHILDREN TOYS** - BDS EN 62115, BDS EN 71-1, BDS EN 71-2, BDS EN 71-6, BDS EN 71-8, BDS EN 1176-111, BDS EN 1177

**PORTABLE PROCESSING MACHINERY** - (hand-held electric motor operated tools) - BDS EN 50144-1, BDS EN 60745-1, BDS EN 50260-1

Drilling machinery - BDS EN 60745-2-1, BDS EN 28662-3 , BDS EN 792-2-12-6, BDS EN 792-11

Sanders (Grinding) machinery - BDS EN 60745-2-4, BDS EN 50144-2-3, BDS EN 792-2-72-9, BDS EN ISO 8662-4,

BDS EN ISO 8662-13, BDS EN 1454

Circular saws and circular cutters - BDS EN 60745-2-5, BDS EN ISO 8662-7

Screwdrivers and impact wrenches - BDS EN 60745-2-2

Jig saws - BDS EN 60745-2-11, BDS EN ISO 8662-12

Hammers - BDS EN 60745-2-6, BDS EN ISO 28662-5

Metal sheets shears - BDS EN 60745-2-8

Electrical planers - BDS EN 60745-2-14, BDS EN 60745-2-17

Tappers - BDS EN 60745-2-9

Spray guns - BDS EN 50144-2-7, BDS EN 50260-2-7

Concrete vibrators - BDS EN 60745-2-12

Hedge trimmers - BDS EN 50144-2-15

Jig and double side denticulated saws - BDS EN 60745-2-11

Tackers - BDS EN 50144-2-16

Band saws - BDS EN 60745-2-20

Portable hand-held combustion engine driven brush cutters and grass trimmers - BDS EN ISO 11805

Portable chain saws - BDS EN ISO 11681-1, BDS EN ISO 11681-2, BDS EN 50144-2-13

Hand-held, integrally powered hedge trimmers- BDS EN 774

Electrically powered walk-behind and hand-held lawn trimmers and lawn edge trimmers - BDS EN 786

Hand - held pole-mounted powered pruners - BDS EN ISO 11680-1, BDS EN ISO 11680-2

Log splitters - BDS EN 609-1, BDS EN 609-2

Powered lawnmowers, rotation lawnmowers - BDS EN 836

Rotational pedestrian controlled lawnmowers - BDS EN 836

Rotative automotive lawnmowers - BDS EN 836

Rotational single-double or three blades garden lawnmowers - BDS EN 836



## OTHER MACHINERY, EQUIPMENT AND DEVICES ABOUT SAFETY PARAMETERS

Sewing machinery and similar for sewing industry - BDS EN 60204-31

Textile machinery and equipment - BDS EN ISO 9902-17

Leather, fur and footwear industry machinery and equipment - BDS EN 931, BDS EN 972

Compressors and pneumatic machinery - BDS EN 982, BDS EN 983, BDS EN 1012-1, BDS EN 1012-2, BDS EN 809

Mobile road construction machinery - BDS EN 500-4

Masonry and stone cutting-off machinery - BDS EN 12418

Arc welding and arc resistance equipment - BDS 7920-75, BDS 8455-86, BDS EN 60974-1

Portable motor-operated electric tools - BDS EN 61029-1, BDS EN 61029-2-1 2-11

Industrial laundry machinery, Ironing presses and machinery - BDS EN ISO 10472-1, BDS EN ISO 10472-5, BDS EN ISO 10472-6



## SAFETY PARAMETERS

Protection against residual voltages testing;  
consumed power and current; heat testing; leakage current measuring, grades of protection (IP codes);  
sound power level of noise sources by using of sound pressure;  
A sound levels, sound pressure levels in octave frequency bands; local vibrations;  
vibration speed and acceleration;  
insulation strength measuring; insulation electrical strength; wearing stability; unnormal operations; mechanical hazard protection;  
mechanical strength;  
continuity of protection circuit; insulation distances;  
climatic tests (test of high and low temperature effect, test of high humidity effect);  
vibration and impact stability; rotation frequency; illumination tests;  
heat stability tests; corrosion stability;  
ignition stability and fire spreading by incandescent wire;  
stability test against ignition and fire spreading by needleshaped flame: time, distance;  
testing for stability against creeping charges: terminals, screws and joints under mechanical load: diameter of screws in insulated material, torque; mechanical strength and elasticity of cable protectors;  
fluids pressure measuring, pressure tests; stability under mechanical load of unchangeable parts by torque; time, mass, flow, linear and angular dimensions measuring;  
moving parts twisting test;  
electromagnetic compatibility: supplying terminals (0,009 up to 30) MHz, interference capacity testing from (30 up to 1000) MHz.



## CORPORATIVE CUSTOMERS:

Elmark Holding, Varna  
The dyras, Hungary  
Nikdim, Kazanlak  
TPP Maritsa East,  
Machinery in three dimension Ltd.  
Astra Bioplant Ltd., Slivo pole, Rousse region  
Arlazone International Europe, Macedonia  
Prestige 96, Ltd.  
ZR Bulgaria, Ltd.  
OMP SRL BACAU, Calea, Rumania  
Damyanov klima, Ltd.  
Filkab, JSCo  
ATRA 96 and other.



# LVD BODY UNDER DIRECTIVE 2006/95/EC

ELECTRICAL EQUIPMENT DESIGNED FOR USE WITHIN CERTAIN VOLTAGE LIMITS  
CONFORMITY ASSESSMENT



Electrical equipment conformity assessment department to CTEC is the first notified body under Directive LVD for Bulgaria. Possess Authorization N° 036 - OC/31.03.2006 by SAMTS to carry out the conformity assessment activities.

Prepare electrical equipment expert reports in compliance with Directive 2006/95/EC, laid down with Ordinance for essential requirements and electrical equipment conformity assessment designed for use within certain voltage limits

### NOTIFICATION SCOPE:

Electrical equipment designed for use within certain voltage limits:

Appliances for control and electricricty distribution

- electrical equipment of machines
- fuses
- low voltage switchgear and controlgear
- low voltage switchgear and controlgear assemblies
- Audio, video and multimedia systems and equipment
- Luminaires and associated equipment
- Machines and appliances for household and similar purposes
- Small power transformers, reactors, supply units and similar products

Possess his own testing laboratory, equipped with modern equipment, **accredited in compliance with EN ISO/IEC 17025** by EA BAS, Sofia to carry out low-voltage electrical equipment testing in compliance with harmonized European standards supporting the **Directive 2006/95/ EC**.

CTEC performs voluntary certification of electrical equipment.

### CORPORATIVE CUSTOMERS:

- Elmark Holding, Varna
- Unisist Engineering, Sofia
- The Dyras, Hungary
- Nikdim, Kazanlak
- ST5 Electronics Ltd., Gabrovo
- Electroporcelan Ltd.



# NOTIFIED BODY UNDER DIRECTIVE 2000/14/EC NOISE EMISSION IN THE ENVIRONMENT BY EQUIPMENT FOR USE OUTDOORS



CTEC has been registered as the first Notified body under Directive 2000/14/EC since January, 2008. Authorized with license N° 008-OC/21.01.2008 by SAMTS to carry out conformity assessment of machinery and equipment for use outdoors with respect to the Ordinance on the essential requirements and conformity assessment of machinery and equipment for use outdoors laid down by the Directive 2000/14/EC to the following procedures:

- Internal control of production with assessment of technical documentation and periodical checking;
- Unit verification;
- Full quality assurance;

The equipment subject to noise limits in compliance with the notification under Directive 2000/14/EC and license under the Ordinance are as follow:

Builders' hoists for the transport of goods (combustion-engine driven);

Compaction machines (only vibrating and non-vibrating rollers, vibratory plates and vibratory rammers);

Compressors (< 350 kW);

Concrete-breakers and picks, hand-held;

Construction winches (combustion-engine driven);

Dozers (< 500 kW);

Dumpers (< 500 kW);

Excavators, hydraulic or rope-operated (< 500 kW);

Excavator-loaders (< 500 kW);

Graders (< 500 kW);

Hydraulic power packs;

Landfill compactors, loader-type with bucket (< 500 kW);

**Notification of a body in the framework of technical harmonisation directive**

Form: 008-OC/21.01.2008

Notified body: NANDO SRL

Address: Bulevardul Libertatii nr. 10, BACAU, Romania

Telephone: +40 238 512 100

Fax: +40 238 512 101

Website: www.nando.ro

Notified for: Construction machinery

Notified under: Directive 2000/14/EC

Notified on: 21.01.2008

Notified for: Construction machinery

Notified under: Directive 2000/14/EC

Notified on: 21.01.2008



Lawnmowers (excluding agricultural and forestry equipment, and multi-purpose devices, the main motorised component of which has an installed power of more than 20 kW);

Lawn trimmers/lawn edge trimmers;

Loaders (< 500 kW); Машини за уълтнйване, тип товарач с кош (<500 kW);

Lift trucks, combustion-engine driven, counterbalanced (excluding "other counterbalanced lift trucks" as defined in Annex I, item 36, second indent with a rated capacity of not more than 10 tonnes);

Mobile cranes;

Motor hoes (< 3 kW);

Paver-finishers (excluding paver-finishers equipped with a high-compaction screed);

Power generators (< 400 kW);

Tower cranes;

Welding generators;



CORPORATIVE CUSTOMERS:

OMP SRL BACAU, Romania



# TECHNICAL INSPECTION OF HIGH-RISK EQUIPMENT



CTEC Ltd. is the first for the southeast Bulgaria body, obtained license issued by State Agency for metrological and technical surveillance to carry out technical inspection of high – risk equipment.

The scope of the License № 374/23.05.2007 is for the following equipment:

## GENERATORS:

Steam generators, working at overpressure up to 0,05 MPa including.  
Water heating generators, working at heating water temperatures up to 110 °C including.

**METAL VESSELS FOR COMPRESSED, CONDENSED OR DISSOLVED UNDER PRESSURE GASES, STEAMS OR LIQUID, FOR WHICH THE STEAM PRESSURE AT MAXIMUM LIMITED TEMPERATURE IS MORE THAN 0.05 MPa OVER THE NOMINAL ATMOSPHERE PRESSURE.**

Static installed vessels for fluids from group 2 at overpressure up to 1,6 MPa and vessels' wall temperatures up to 200 °C;  
Static installed vessels for hydrocarbon condensed gases;  
Static installed bottles for storage of condensed, compressed or dissolved under pressure gases.

## WATER VAPOUR AND HOT WATER PIPELINE:

Pipeline with external diameter 76 mm and higher and transporting area temperature over 115°C up to 450°C or pressure over 0,07 Mpa up to 8,0 Mpa including.



## GAS EQUIPMENT AND INSTALLATION FOR NATURAL AND CONDENSE HYDROCARBON GAS:

Distributing gas pipelines of distribution companies for natural gas and their relevant equipment.  
Automobile gases installation for compressed natural gas or condensed hydrocarbon gas.  
Gas laboratories equipment and installation.  
Gas installation for tourism

## LIFTING EQUIPMENT UP TO 5T AND RELEVANT RAILWAY ROADS

Load – clamping devices – hooks, electromagnets, spreaders and other;  
Ropes, pliers, traverse, vacuum clamps and other;  
Pallets, baskets, containers;  
Mobil working platforms;  
Board cranes, not depending on their capacity;  
Tower cranes with capacity up to 5 tons.

## ROPE LINES AND SKI - DRAGS

## ELEVATORS AND LIFTING DEVICES

Elevators up to and including 7 floors in residential areas;  
Passenger - loading construction lifting devices;.

## ACETYLENE INSTALLATION

## CORPORATIVE CUSTOMERS:

BTC Ltd  
Teknotes Ltd, Bulgaria branch  
TJO, Bulgaria branch  
Dulger, Smolyan  
Gabrovnitsa AD  
Mitsui Power Projects LLC  
Bulgarian Municipals  
VIK Haskovo  
DPSV  
ALSTOM, Bulgaria  
Metalik AD  
IDA Trans  
Bereya Plast  
BRB Engineering  
MER Bulgaria  
Stroyrent  
Bulgarlift  
ZSK Boruj



# TYPE A INSPECTION BODY



# ENERGY EFFICIENCY



Type A Inspection Body is a separate unit in the CTEC's structure which has a developed and working quality management system according to BDS EN ISO/IEC 17020 and has proved the necessary qualification, competence and equipment.

It carries out inspection and conformity assessment of electrical installations and equipment up to and over 1000V

- Efficiency of electrical installations and equipment grounding
  - general condition of the electrical installations;
  - general resistance of the neutral conductor;
  - phase-protective conductor impedance contour.
- Protective and lightning-protective grounding installations
  - Efficiency of protective and lightning-protective grounding installations;
  - grounding device resistance;
  - impulse resistance of lightning-protective grounding installations
- Isolation resistance

## NEW ACTIVITY

The Inspection Body also carries out playgrounds and playground equipment inspection.



It carries out inspection and conformity assessment of the physical parameters of the working and living area

- Micro-climate
  - temperature;
  - relative air humidity;
  - air speed;
  - air flow rate
- Natural, artificial and mixed lighting
  - lighting
  - acoustic noise
  - living, industrial and environmental noise;
- sound pressure level;
- noise level;
- equivalent noise level;
- average weekly value of personal exposure;
- daily personal exposure to noise.
- Vibrations

## GENERAL ACTIVITIES:

### BUILDINGS ENERGY AUDIT AND CERTIFICATION

Buildings energy audit followed by type A or B category certification.

*CTEC has obtained:*

**Accreditation Certificate No CA - OCC- 0013/03.08.2005**, issued by the Energy Efficiency Agency, for accreditation of carrying out energy efficiency audits of energy consumers - buildings and of accomplishing buildings certification.

**Certificate No 00012/15.07.2008**, issued by the Energy Efficiency Agency, for entering the bodies implementing the energy efficiency audit and buildings certification in the public register.

**Compulsory certification according to the Energy Efficiency Act (OJ, issue 98/08, amendment OJ, issue 6/09, amend. OJ, issue 19/09, amend. OJ, issue 42/5.06.2009) for:**

- buildings used with unfolded built-up area over 1000 sq.m. (EEA, art. 19, par.1 and par. 2)
- new buildings within the period no earlier than 3 years and no later than 6 years from the starting date of buildings' use (EEA, art. 20, par.1).

### Certification process of buildings includes:

- Detailed audit implementation according to Regulation as per Art.15, Par.3 from the Energy Efficiency Act and recommendation of energy-saving measures upon finding discrepancy with standard characteristics;
  - Implementation of the recommended energy-saving measures;
  - Checking-up the implementation of the recommended energy-saving measures;
  - Defining the certificate category – A or B and issuing the certificate upon determining the conformity with the energy consumption corresponding class from the energy consumption classes' scale.



According to Art. 24, Par. 1, Item. 18 and Item 19 from the Local taxes and Fees Act, the following buildings are exempt from taxes:

- buildings in use before January 1st 2005 and with a category A certificate, issued according to the Energy Efficiency Act as follows:

- a) for period of 7 years reckoned from the year following the year of certificate issuing;
- b) for period of 10 years reckoned from the year following the year of certificate issuing, if measures have been applied for utilizing the renewable energy sources for energy production for meeting the building needs;

- buildings in use before January 1st 2005 and with a category B certificate, issued according to the Energy Efficiency Act as follows:

- a) for period of 3 years reckoned from the year following the year of certificate issuing;
- b) for period of 5 years reckoned from the year following the year of certificate issuing, if measures have been applied for utilizing the renewable energy sources for energy production for meeting the building needs.

#### Audited and certified buildings:

Unicato Hotel, Stara Zagora  
Ellegance Hotel, Stara Zagora  
Forum Hotel, Stara Zagora and others.  
Trade buildings and complexes in the country.

The Energy Efficiency Department participated together with the *Center Novem, the Netherlands*, in European Project intended for potential scanning for energy efficiency improvement of the Bulgarian Industrial enterprises.



#### Energy efficiency audits of kindergartens in Stara Zagora Region

The Department carried out energy audits of many kindergartens, creches and social homes during 20008 year in the region of Stara Zagora.



#### ENERGY EFFICIENCY AUDITS OF INDUSTRIAL SYSTEMS

CTEC is authorized by the Energy Efficiency Agency with Accreditation Certificate No CA- OEE- 007/21.4.2006, to carry out energy efficiency audits of energy consumers – industrial systems.

The centre is entered in the public register of bodies implementing the energy efficiency audit of energy consumers with Certificate No.00008/29.04.2009, according to Art. 34, Par. 4 from the Energy Efficiency Act.

Compulsory certification for energy efficiency according to Regulation No. PD-16-346/02.04.2009 applies to every industrial system with annual energy consumption over 3000 MWh. The audit is carried out at least once per each three years, as the first audit should be done till 31.12.2011.

#### ENERGY PASSPORTS CREATION FOR EXISTING BUILDINGS

CTEC meets the requirements of Art.23, Par.1 and Par.4 from the Energy Efficiency Act and has a right to compose an Energy passport for an existing building on the basis of the report data (summary) for energy efficiency building audit held upon observing the regulation requirements as per Art.15, Par.3 from the Energy Efficiency Act. The Energy passport of the existing building is created according to Regulation No. 5/28.12.2006 for the technical passports of the construction sites (published State Gazette No. 7/2007, amended and supplemented No.38/2008).

#### IMPLEMENTING CONFORMITY ASSESSMENT as per Art.169, Par. 1, Item 6 of the investment projects in technical and working phases

CTEC is entitled to carry out conformity assessment as per Art. 169, Par. 1, Item 6 from the Law on Territory Planning: energy efficiency – energy saving and warm-conservation of the investment projects in technical and working phases.

#### Industrial systems, audited and in process of auditing

Slance Stara Zagora – BT PLC, Stara Zagora  
Koprivlen Mramor LTD, Koprivlen Village, Blagoevgrad region  
Caproni PLC, Kazanlak  
Progress, Stara Zagora





In times of the world globalization the supplying of quality and safe products made in a favorable environment, in compliance with the principles of security and confidentiality should be main goal of every organization.

Implementation and effective functioning of the management system, whether of the quality, of the environment, occupational health and safety (OH&S) management system, food safety and information security and verification of its compliance with the internationally approved standard is an efficient tool for achieving this goal.

Verification the compliance by third part relating to products, processes, systems or persons is called **certification**.

Accreditation bodies verify the compliance by issuing a certificate.  
Possession of internationally recognized certificate provides lots of benefits:

- *market competitiveness and tendering;*
- *rise the trust of the customer;*
- *better image to the public;*
- *achievement of better financial results;*
- *continuously improving of the processes in the organization.*

Management systems certification body to CTEC Ltd. carries out certification of management systems in compliance to the following international standards:

- ISO 9001: 2008;
- ISO 14001: 2004;
- BS OHSAS 18001:2007.



### THE VOCATIONAL TRAINING CENTER (VTC)

is a specialized qualification unit in the CTEC structure and is licensed as a vocational training center by National Agency for Vocational Education and Training with a license No 200812605/16.07.2008. for the following professions:

**Welder**

**Turner**

**Fitter**

**Electrical equipment and installations fitter**

**Computer services fitter**

**Builder**

**Chambermaid**

**Porter**

**Cook**

**Waiter-barman**

*VTC carries out training in the following professional activities:*

- Building and geodesy;
- Metal-working and machine-building;
- Hotel and restaurant management, catering;
- Electronics and automation.





## VTC goals

- Ensuring conditions for continuous vocational training;
- Improving and updating professional qualification in accordance with labour market demands.

## VTC tasks

Through vocational training CTEC aims to provide:

Professional qualification of employed; unemployed;

Professional qualification of managers of micro, small, medium and large-size companies for getting new knowledge and improving the acquired one, and skills for increasing the efficiency and competitiveness of the companies.

*VTC disposes of training halls equipped with modern audio-visual equipment and training bases for all professional activities offered.*

CTEC also organizes trainings in the scope of its competence concerning New Approach Directives.

**The trainings are held by qualified and acknowledged in their field experts, lecturers and specialists.**

CTEC uses modern equipped halls that provide comfort and convenience for the participants.

During March 2009 the reconstructed hall started to function provided with 70 seats and modern equipment for holding seminars and trainings, press conferences and other public activities – desk computers and laptops, a multimedia, a video screen, a flip chart, a printer and wireless internet.

**The team of the Business Training Center has organized and held more than 20 specialized seminars, trainings and conferences.**

**The total number of participants in the activities held is over 500.**

**At customers's request CTEC organizes individual trainings at the applicant's place.**





The young and ambitious International Programmes and Projects Department was set up as an independent section in the structure of CTEC at the end of 2008.

Till that moment CTEC had a successful participation as a beneficiary in several PHARE projects receiving free modern European equipment for technical products testing under several Directives at the amount of 950 thousand euro:

**Machines**, during 2006 year;

**Construction products and electrical equipment**, contracts concluded at the end of 2008 year and in process of implementation.

The Department for Conformity assessment of machines and electrical equipment, as well as the machine laboratory participated in international projects together with SAMTS acquiring knowledge and skills in the field of technical products conformity assessment and testing.

Lectors for these projects were representatives from **ISQ, Portugal**, a leader in the filed of conformity assessment, testing, training and technology.

#### Future projects:

Application forms for **Leonardo da Vinci Training Programme** have been worked out and submitted to the Human Recourses Development Centre. The project beneficiaries are experts from the two laboratories of CTEC who will be trained for electromagnetic compatibility and reaction to fire in the Technical Research Institute of Sweden in the town of Boras - SP Sveriges Tekniska Forskningsinstitut, in their specialized laboratories.

The department develops projects proposals for European grants.

