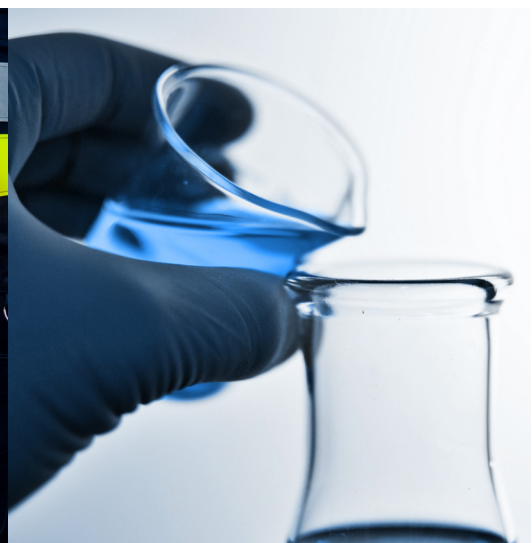




YOUR PARTNER IN
SAFETY



CNBOP-PIB

Scientific and Research Centre for Fire Protection
National Research Institute

Visit www.cnbop.pl

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ABOUT US



About CNBOP-PIB

Scientific and Research Centre for Fire Protection – National Research Institute (CNBOP-PIB) is a research institute of the State Fire Service supervised by the Minister of Interior.

For over 40 years CNBOP-PIB has been performing tasks which are important for planning and the implementation of state policy in the field of fire protection, civil protection and crisis management.

The Institute provides scientific and research as well as expert support by applying technical, scientific and organi-

sational knowledge along with experience in technology, testing and certification of products which are to ensure safety of rescuers and of the rescued as well as fire safety of buildings.

The Institute carries out important tasks reported by Provincial Headquarters and National Headquarters of the State Fire Service as well as those recommended by the Research Council of the Chief Commandant of the State Fire Service. This approach guarantees solving practical problems defined as the most important and strategic.

Scope of activities

CERTIFICATION

ADMITTANCE

**TECHNICAL
ASSESSMENTS**

**RESEARCH
AND
IMPLEMENTATION**



**TRAINING
WORKSHOPS
CONFERENCES
PUBLICATIONS**

Fields of activity

In accordance with Statute the main tasks of the Institute involve i.a.:

- issuing and controlling certificates of admittance for products used in fire protection and rescue operations,
- testing, certifying products and services, as well as issuing European and national technical assessments,
- developing and evaluating requirements and technical criteria; participating in normalisation works,
- consulting services, procuring expert opinions, e.g. for courts, performing experimental and technical works,
- conducting publication, training, scientific and technical activities in the Institute's scope of activity.

These tasks are carried out especially by the following departments:

- Laboratory of Fire Alarm Systems and Fire Automation,
- Laboratory of Fire Extinguishing Agents and Equipment,
- Laboratory of Fire Protection Units' Technical Equipment,
- Laboratory of Combustion Processes and Explosions,
- Certification Department,
- Services Certification Department,
- Technical Assessment Department.

Accreditation, authorisation and notification

CNBOP-PIB accreditation of Polish Centre for Accreditation, authorization of the Minister responsible for construction and Minister of Economy, along with notification of the European Commission all confirm a high level of service, as well as impartiality with regard to the assessment of conformity of products.

Our Institute is a European Union notified body. Competences in this scope were acknowledged by the Minister of

Infrastructure and Construction under the Decision No. 1/JOT/WB/16 of 22 June 2016.

CNBOP-PIB carries out certification of admittance of products used in fire protection based on Polish Regulation of the Minister of the Interior and Administration on the list of products used for ensuring public safety or protecting health, life and property, and the principles of issuing admittance to use these products.

Our specialists

Institute has highly educated personnel with years of experience. Our professionals were trained, e.g., in the Main School of Fire Service (Fire Safety Engineering and Civil Safety Engineering), Warsaw University of Technology (Automation and Aeronautical Systems).

Our employees also participate in various European committees such as Sector Group of Notified Bodies SG07 (Fixed Fire Fighting Systems), one of many European Committee for Standardization CEN/TC 72 which is responsible for fire detection and fire alarm systems. At the same time our staff members are authors of many scientific articles in journals which are listed on the Philadelphia List of Scien-

tific Journals. CNBOP-PIB also hosts multiple training courses where the lectures are presented by the Institute's specialists as well as specialists cooperating closely with our Training Department. Annually we are capable of training over 1500 people who are representatives of various branches of the fire protection system.

Every year our employees supervise more than 200 production plants around the world including Europe, Asia, North and South America delivering auditing services within the scope of fire automation equipment, technical fire protection equipment and personal protective equipment.



**CERTIFICATION,
ADMITTANCE, TECHNICAL
ASSESSMENT**

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CERTIFICATION, ADMITTANCE, TECHNICAL ASSESSMENT

United Arab Emirates
 Ministry of interior
 Civil Defense G.H.Q
 Fire intentional Lab & House
 of Expertise & Training Center
 Approval Committee



دولة الإمارات العربية المتحدة
 وزارة الداخلية
 القيادة العامة للدفاع المدني
 لجنة اعتماد المختبرات العالمية
 وبيوت الخبرة



JEDNOSTKA NOTYFIKOWANA / NOTIFIED BODY 1438

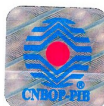
Centrum Naukowo-Badawcze Ochrony Przeciwpożarowej

im. Józefa Tułszkowskiego

Państwowy Instytut Badawczy

ul. Nadwiślańska 213, 05-420 Józefów

Polska / Poland



CERTYFIKAT STAŁOŚCI WŁAŚCIWOŚCI UŻYTKOWYCH
 CERTIFICATE OF CONSTANCY OF PERFORMANCE

1438-CPR-0448

Reference Test Report Page No.
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Zaodnie z Rozporządzeniem Parlamentu Europejskiego i Rady

In compliance with Regulation 305/2011/EU of the European

Certification and Technical Assessments

CNBOP-PIB carries out activities related to generally understood conformity assessment of products, especially those used in fire protection. What is more, it certifies services, personnel, installations and safety in buildings. Conformity assessment is realised in obligatory and voluntary forms. Through voluntary certification, tests of innovative products and technical opinions CNBOP-PIB confirms characteristics of goods which are not subject to obligatory conformity assessment.

CNBOP-PIB Certification Department (also called DC) has a certificate of accreditation No. AC 063 issued by the Polish Centre for Accreditation. In addition to the above accreditation, DC CNBOP-PIB also has authorization of relevant ministers and notification of the European Commission within the scope of Regulation (EU) no 305/2011.

EU notified body number – 1438.

Conformity Assessment Processes carried out by CNBOP-PIB

Admittance of products for use in fire protection

- admittance and testing of products used in fire protection according to technical and user requirements, enlisted as products which are to ensure public safety or health and life and property safety, as well as rules for issuing certificates of admittance



National certificate of conformity of construction products

- according to the requirements of national standards and technical assessments
- granting technical assessments for products for which no national standards have been issued



Assessment and verification of products' constancy of performance

- according to the requirements of standards harmonised with the Regulations of the European Parliament and of the Council
- European certification and testing of construction products on the basis of requirements harmonised with Construction Products Directive
- European technical assessments for products without harmonised standards (hEN)



Voluntary certification of products within the scope of fire protection

- according to the requirements of technical specifications mutually agreed upon by the client and the Certification Department



Voluntary certification of services in fire protection, fire installations, competences, evaluation and verification of fire safety of buildings

- according to the technical requirements and own certification programmes



Technical opinions

- provides technical opinions for products for which technical properties and performance of the product are not subject to mandatory assessment or the properties surpass the level of the essential requirements



Voluntary conformity assessment of construction products for the UAE market

- according to the accreditation granted by United Arab Emirates Ministry of Interior Civil Defence G.H.Q



Voluntary certification of unmanned aerial vehicles – BSP

- verifying technical parameters of unmanned aerial vehicles with the use of specialist apparatus



Testing of innovative products used in fire protection

- Procedure of testing innovative products is aimed at verifying utility in firefighting and rescue actions of products that are not subject to obligatory admittance procedure
- If testing results are positive, producer obtains:
 - Recommendation for use in fire protection (relates to the products which are not subject to obligatory admittance procedure). Recommendation is issued for an indefinite period, or
 - Opinion on the product's utility in fire protection (relates to the products which are subject to obligatory admittance procedure). Opinion is issued for 3 years with the stipulation that the product is subject to obligatory admittance for use procedure.



Testing and conformity assessment of products used in fire protection

Products/Tests	Scope of test:	Standard/test procedure
Fire alarm systems	control and indicating equipment, sound signalling devices, batteries, heat detectors, smoke detectors, flame detectors, manual call points, line detectors, voice alarm and indicating equipment, circuit isolators, input/output devices, aspiration smoke detectors, fire alarm signal transmission systems, optic detectors, loudspeakers, components using radio links, autonomous smoke detectors, line smoke detectors, multisensor detectors	PN-EN 54-2, PN-EN 54-3, PN-EN 54-4, PN-EN 54-5, PN-EN 54-7, PN-EN 54-10, PN-EN 54-11, PN-EN 54-12, PN-EN 54-16, PN-EN 54-17, PN-EN 54-18, PN-EN 54-20, PN-EN 54-21, PN-EN 54-23, PN-EN 54-24, PN-EN 54-25, PN-EN 14604, PN-EN 54-22, PN-EN 54-27, PN-EN 54-29, own research procedure
Smoke vent systems	control panels, manual buttons for smoke vent systems, power supply equipment for fire protection equipment	PN-EN 12101-8, PN-EN 12101-10, national technical assessment and own research procedures
Luminaries and safety signs	emergency lighting and evacuation safety signs	PN-EN 60598-2-22, PN-EN 60598-1, ISO 7010, PN 92/EN 01256/01, PN 92/EN 01256/02, PN 92/EN 01256-4
Portable firefighting equipment	extinguishers and fire blankets	PN-EN 3-7+A1, PN-EN 1866-1, PN-EN 1869 and own methods
Fire extinguishing agents and sorbents	qualification tests of foam-extinguishing agents, sorbents and extinguishing powders	PN-ISO 2591-1, PN-C-04532:1980, and own methods, PN-EN 1568 parts: 1, 2, 3, 4, PN-EN ISO 3675, PN-EN 1262, PN-EN 14370, PN-EN 120585-1, PN-78/C-83603/07, PN--78/C-83603/09, PN-78/C-83603/05 and own methods
Corrosion tests	corrosion resistance of materials in aggressive environments	PN-EN ISO 9227, own method
Firefighting vehicles, containers, trailers	size, outline turning circle, noise, illuminance of field work of vehicles, tilt angle, weight and axle load, dynamic parameters, stability and strength of lifts and ladders	PN-EN 1846-2+A1, PN-ISO 612, PN-ISO 10392, PN-EN 1777, PN-EN 14043 and own methods

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CERTIFICATION, ADMITTANCE, TECHNICAL ASSESSMENT

Rescue, evacuation equipment, personal protection of fire fighters	flame resistance, resistance of PPE samples at low and elevated temperatures, resistance of clothes to leaking, hydraulic tools and ladders	PN-EN 1147, PN-EN 443 and own methods
Pumps and monitors	water-foam system in the range of: hydraulic, tightness, strength properties, accuracy of readings	PN-91/M-51270, PN-EN 13565-1+A1 and own methods
Firefighting fixtures	hoses in the range of: tightness, strength, elongation, angle of rotation, disruption, delamination; suction fire hoses and firefighting fixtures in the range of: tightness, strain, flexion; resistance of fittings and hoses to low temperatures	PN-EN ISO 4671, PN-EN ISO 1402, PN-EN 14540, PN-EN ISO 8033, PN-91/M-51031, PN-91/M-51038, PN-91/M-51042, PN-91/M-51024, PN-86/M-51152, PN-91/M-51048, PN-93/M-51068, PN-93/M-51078, PN-79/M-51153, PN--87/M-51156, PN-M-51069, PN-92/M-51029, PN-93/M-51074, PN-EN 13565-1+A1 and own methods
Fixed firefighting systems and internal hydrants	sprinklers in the range of: response temperature, water flow, dispersal of water, water allocation, strength of glass-bulb sprinkler opening element, tightness, action of heat, water impact of sprinkler, corrosivity of firefighting equipment, thermal sensitivity of sprinklers, resistance to impact, evaluation of the sprinkler coatings; test of internal hydrants in the range of: resistance to impact, torque, scattering angle of jet nozzle, intensity of flow, stream-line coverage, physical strength, resistance to impact and load, internal pressure resistance, operating pressure, tightness, determining the constant K	12094-1, 12094-3, PN-EN 671-1, PN-EN 671-2, PN-EN 12259-1+A3 and own method
Pillar fire hydrants	load resistance; durability	PN-EN 14339, PN-EN 14384, PN-EN 1074-6, Annex C, PN-EN 1074-2, Annex A, PN-73/M-51154
Tests of reaction to fire	construction products	PN-EN 13823, PN-EN ISO 9239-1, PN-EN ISO 11925-2, PN-EN ISO 1182, PN-EN ISO 1716, PN-EN 13501-1
	cables, electrical and fibre optic wiring	PN-EN 50399, PN-EN 50267-2-3, PN-EN 50575, PN-EN 60754-2, PN-EN 61034-2, PN-EN 60332-1-2, PN-EN 13501-6

Tests of external fire impact	roof involving combustible materials, roof lights, skylights, noise reducing devices, external walls containing combustible materials, insulation	PN-ENV 1187, PKN-CEN/TS 1187, PN-EN 13501-5, PN-EN 1794-2, PN-B-02867
Assessment of material and other products' flammability	flat textile products; flexible materials; upholstery fabrics and fillings; stadium seats; plastic or other non-metallic materials, vehicles equipment, aerosol products test of ignition and autoignition temperatures, vapour pressure	PN-EN ISO 6940, PN-EN ISO 6941, PB/BW/1, PN-EN 1021-1, PN-EN 1021-2, BS 5852, PN-EN 60695-11-5, PN-EN 60695-11-10, PN-EN 60695-11-20, PN-EN 60695-2-10, PN-EN 60695-2-11, PN-EN 60695-2-12, PN-EN 60695-2-13, ISO 5660-1, PN-ISO 3795 PN-EN 2719, ASTM D93, PN-EN 50281-2-1, PN-EN ISO 2592; PN-EN ISO 13736, PN-EN 13016-1, PN-EN 14522, PN-EN 15188
Assessment of resistance to fire, flame spread	cables, electrical and fibre optic wiring	PN-EN 50200, PN-EN 50362, PN-EN 60332-3-21, PN-EN 60332-3-22, PN-EN 60332-3-23, PN-EN 60332-3-24, PN-EN 60332-3-25
Explosiveness tests	substances that may pose a risk of explosion	PN-EN 13821, ASTM E2019, PN-EN 14034-1, PN-EN 14034-2, PN-EN 14034-3, PN-EN 14034-4; ASTM E1226, PN-EN 1839, PN-EN 15967



LABORATORIES



Laboratory of Fire Alarm Systems and Fire Automation (BA)

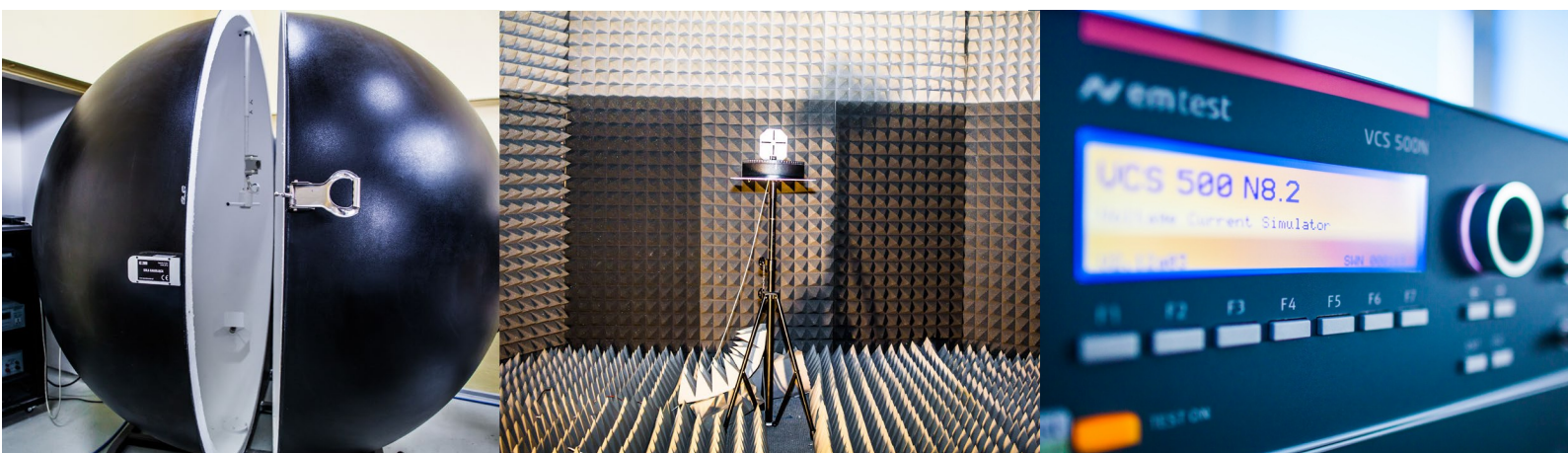
Laboratory of Fire Alarm Systems and Fire Automation (BA) is accredited by the Polish Centre for Accreditation since 1998. Accreditation Certificate no. AB 207 confirms that the laboratory meets the requirements of the EN ISO/IEC 17025 *General requirements for the competence of testing and calibration laboratories*, which guarantees the highest quality, impartiality, independence and adequate personnel competence.

BA Laboratory is accredited for mechanical, electric, acoustic, electromagnetic compatibility and physical specification tests of:

- Elements of fire signalling systems:
 - central units
 - power supply equipment,
 - sensors,
 - manual call points,
 - optical signalling device,
 - fire alarm sounders,
 - short circuit isolators,
 - input/output devices,

- Elements of fire alarm sounders:
 - central units,
 - power supply equipment,
 - loudspeakers,
 - short circuit isolators,
- Elements of heat and smoke control systems:
 - control units,
 - power supply equipment,
 - actuators,
- Luminaires for emergency lighting.

Tests are performed pursuant to the requirements of Standards (EN 54 series, EN 12101, EN 60598-2-22), Technical Assessments and in the Regulation of Ministry of Interior and Administration of 20 June 2007 (Journal of Laws 2007, no. 143, item 1002; Journal of Laws 2010, no. 85, item 553) setting out a list of products which promote public safety or protect health, welfare and property, and rules for the issuing of authorisations for use of such products.



Laboratory of Fire Extinguishing Agents and Equipment (BU)

BU Laboratory was established on the foundations of Laboratory of Fire and Chemical Testing (BC), which obtained its accreditation in 1996. On 1 February 2016 BC laboratory changed its name to Laboratory of Fire Extinguishing Agents and Equipment and expanded its scope of activities. Accreditation Certificate no. AB 060 confirms that the performed activities are based on regulations pursuant to EN ISO/IEC 17025 *General requirements for the competence of testing and calibration laboratories*.

The laboratory holds accreditation for testing:

- sorbents,
- extinguishing powders
- extinguishing foams,
- portable fire extinguishers
- wheeled fire extinguishers,
- fire blankets,
- products with elements made of metal,
- standpipes,
- underground and pillar fire hydrants,
- hydrant valves,
- sprinklers,
- nozzles (open sprinklers),
- foam chambers,
- high-expansion foam generators,
- foam nozzles and foam generators,
- water-foam monitors,
- foam nozzles,
- foam proportioners.

BU Laboratory performs testing of portable devices which is significant for their effective use. It defines the scope of application and usability of modern chemical extinguishing agents used in rescue and fire-fighting operations. The Laboratory also performs research on the structure and parameters of extinguishing agents and sorbents. The spectre of research carried by BU Laboratory covers also fixed firefighting systems, internal and external hydrants. It issues expert opinions and provides consultation services in the area of proper construction solutions and correctness of work and effectiveness of fixed firefighting systems.

BU Laboratory performs quality assurance of production batches of extinguishing agents supplied to users and verifies the quality and effectiveness of further use of the extinguishing agents, the date of appropriate use of which has expired.

Laboratory also tests **materials' resistance to the influence of the environment**. Testing subjects are materials that may get damaged (mechanically or due to the atmospheric impact) like tanks, devices or installation exposed to the aggressive liquids like extinguishing agents or operational fluids.



Laboratory of Fire Protection Units' Technical Equipments (BS)

Laboratory of Fire Protection Units' Technical Equipments (BS) is accredited since 1996. Laboratory Accreditation Certificate no. AB 059 confirms that all activities of the Laboratory are performed in compliance with the rules covered by EN ISO/IEC 17025:2005.

BS Laboratory performs tests of:

- firefighting vehicles,
- rescue, evacuation and personal firefighter protection equipment,
- fire pumps, firefighting suction and delivery hoses,
- elements of fire fittings.

The Laboratory prepares opinions and expert analyses, performs technical advisory and consultative activities in the scope of construction correctness, correctness of performance and efficacy of fire-fighting equipment (excluding the area and products being subject to assessment of conformity carried by CNBOP-PIB Notified Body).

BS Laboratory performs research, development and scientific works related to fire service equipment and issues opinions on the projects of technical standards.

A significant mission of the BS Laboratory is to introduce new, compatible with the European standards, testing methods within the scope of activities mentioned above.



Laboratory of Combustion Processes and Explosions (BW)

Laboratory of Combustion Processes and Explosions (BW) holds accreditation since 2011. Laboratory Department Accreditation Certificate no. AB 1280 confirms that all activities of the Laboratory are performed in compliance with the rules covered in EN ISO/IEC 17025. BW Laboratory is notified within 4 decisions of European Commission in system 3 and 6 horizontal specifications.

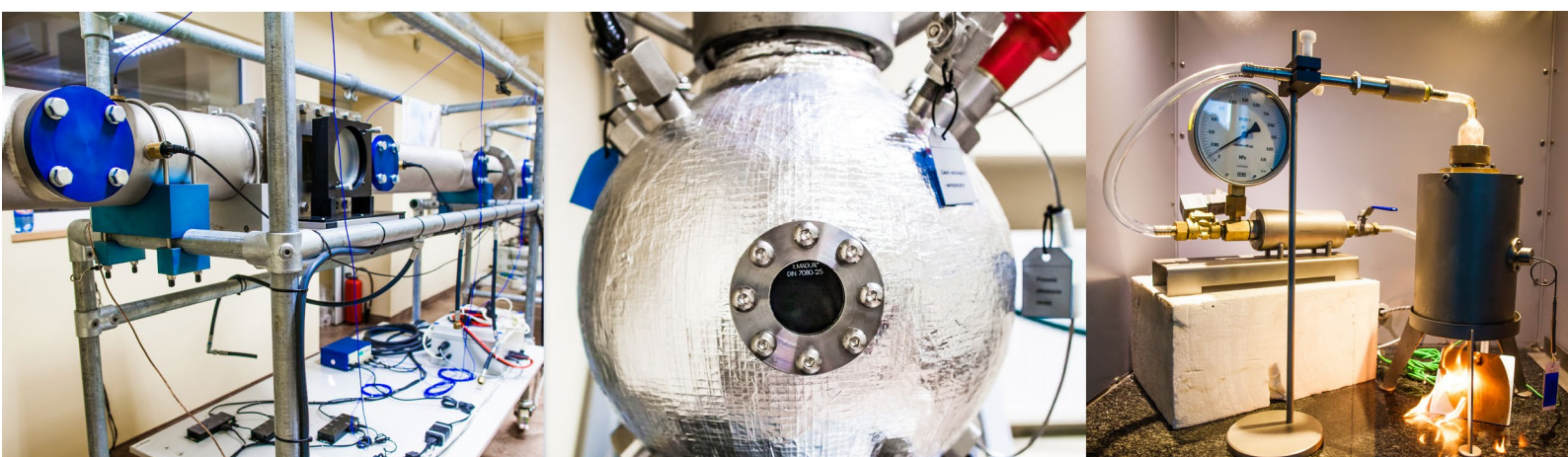
BW Laboratory performs:

- tests of fire parameters of construction materials,
- tests of explosiveness of selected flammable substances,
- thermo-dynamical analyses of combustion and explosion processes,
- numerical assessments of fire spread in rooms and constructions.

The Laboratory performs individual experimental works (including development and goal-oriented projects) related to the processes of combustion and explosion. It also prepares documentation of preventing severe industrial accidents (SEVESO).

One of the main activities of the Laboratory is issuing opinions and expert analyses on risk of explosion (e.g. ATEX), assessment and inspection of fire threat in buildings and objects as well as developing guidelines for the increase of fire security level.

The BW team performs **risk assessment for industrial objects** using professional calculation software like ALOHA and RIZEX.





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National Research Institute

For more information visit:



www.cnbop.pl

Or contact us:



cnbop@cnbop.pl



+48 22 7693273



ul. Nadwiślańska 213
05-420 Józefów
POLAND