INDUSTRIAL INSULATION

GOOD QUALITY IS THE BEST REFERENCE
Corporate Social Responsibility

Corporate Social Responsibility is an effective management strategy that takes into account the impact of economic activity on the environment and shaping the conditions for sustainable social and economic development.

More and more companies operating industrial plants are becoming aware of their responsibility for social and environmental concerns.

The effect of increasing focus of enterprises on CSR is the creation of modern industrial facilities, taking into account not only economic and legal, but also environmental needs.

Insulation saves money

Climate protection and energy efficiency optimisation are high on the agenda of every European country.

Thermal insulation can help to achieve these goals, and its proper selection and execution can reduce energy losses and greenhouse gases emitted to the environment.

For this reason, it is extremely important to optimise the necessary insulation and to replace old insulation with new one.

One of the basic indicators that determine the decision to choose insulation is its economic thickness. It is the effect of one-off investment costs related to the installation of insulation and the annual reduction of heat costs lost over many years of operation of a device or facility. The economic thickness of insulation is a minimum of the sum of investment costs and lost heat costs, as shown in the diagram below.

![Diagram showing insulation thickness vs. costs](chart.png)
“TIPCHECK” - insulation efficiency test and more

With the “TIPCHECK” test, other important aspects such as safety (protection against burns), failures, e.g. of anti-corrosion protection or failure of electric heating or system leaks can be identified in addition to the possibilities to increase energy efficiency.

“TIPCHECK” means to you:

Interview with system operators.
Explanation of the necessary indicators for the installation, arrangement of the partners for the inspection of the installation, the necessary safety measures while on site.

Specifying the active state.
The quality of insulation on pipelines, valves and tanks, including thermal bridges, is tested directly on the installation. Measurements of external surfaces are performed with the use of a thermal camera, and in cold insulation installations with the use of a humidity sensor.

List of measurements made and calculation of thermal losses.
Transferring the results obtained from measurements to our thermal insulation efficiency calculation program, preparing a report for each tested device and installation, including the determination of thermal bridges, summarizing the results and preparing a list of the calculated thermal losses.

Preparing proposals for improvement.
Proposals for optimal changes, such as additional insulation, dismantling of old and installation of new insulation with a changed thickness, or reduction of thermal bridges through appropriate insulation techniques, will be tested and counted. The potential economic effects during the operation of the installation will then be calculated.

Transmission and presentation of results.
The “TIPCHECK” report shall be forwarded with a detailed explanation of the obtained calculations. Therefore, such a test is not only an indication of the state of insulation in the installation, but above all a reliable calculation of efficiency and economic savings by improving the condition of insulation.

CAN WE SUPPORT YOU IN IDENTIFYING AND REDUCING HEAT LOSSES?

Our certified professionals will be happy to prepare for you a quotation for performing the ‘TIPCHECK’ test.
Technical insulation

Appropriately selected insulation techniques, types and thicknesses of insulation materials, proven connection systems and assembly organization make up a well-made insulation.

We use technologies that meet the requirements of Polish, German (DIN, VDI, AGI), Dutch (CINI) and European standards. Appropriate solutions of the supporting structure reduce to a minimum the unfavourable phenomenon of thermal bridges and ensure proper installation of the protective insulation jacket.

We supply a full range of external protective insulation jackets, depending on the degree of environmental aggressiveness and client requirements.

Properly selected technology is a guarantee of the best service. Our engineers use their experience gained on domestic and foreign projects to provide services in the field of:
- development of basic technical solutions,
- engineering,
- execution of the technical design.

Application:
- power boilers,
- waste incineration plants,
- biomass incineration plants,
- desulphurisation plants and DeNox plants,
- electrical precipitators,
- process tanks and equipment,
- pipelines and ducts,
- heating and technological installations,
- turbines,
- chemical installations.

Cold insulation:
- process equipment,
- pipelines,
- tanks.

Acoustic insulation.
We manufacture sound-absorbing casings for industrial machines and equipment emitting excessive noise, such as:
- fans,
- turbines,
- filters, ducts,
- sifters, blowers,
- other devices.

Insulation for process interior equipment.
We insulate installations in buildings meeting the requirements of environmental protection, and the materials used have PZH (National Institute of Hygiene) approvals, e.g:
- insulation of ventilation and air-conditioning ducts,
- insulation of central heating and fire protection systems,
- insulation of water and sewage system,
- insulation of process installations.
**Completed Projects**

**Construction of new power units at the Opole Power Plant**

 Ordering party: General Electric Power, Alstom Power, Mostostal Power Development

 Project name: Construction of units 5 and 6 in the Opole Power Plant

 Completed work:
- supply and installation of insulation for boilers, pipelines, ducts, tanks, absorbers, DeNox (SCR), RAPH (LUVG) and fans,
- engineering,
- the total insulated area was 167,350 sqm.

**Fitting insulation on the flue gas cleaning plant at Kronospan in Mielec**

 Ordering party: Kronospan Mielec sp. z o.o.

 Project name: UTSW plant - Kronospan Mielec

 Completed work:
- delivery and installation of insulation on flue gas ducts,
- the total insulated area was approx. 6,040 sqm.

**Fitting insulation on Utrecht power plant**

 Ordering party: Vyncke N.V.

 Project name: Eneco Utrecht

 Completed work:
- installation of insulation on pipelines and fittings,
- the total insulated area was 4,850 sqm.

**Construction of a new LNG facility at the Neste Oil facility in Rotterdam**

 Ordering party: Bilfinger Industrial Services Nederland B.V.

 Project name: Bio Propaan - Neste Oil

 Completed work:
- delivery and installation of insulation of tanks and exchangers,
- fittings and pipelines,
- the total insulated area was 10,030 sqm.
Electric auxiliary heating

We provide comprehensive services in the field of electric auxiliary heating. Modern design studies with the calculation of the necessary power and selection of the optimal type of heating cable, top-class materials, installation, commissioning, measurements, start-ups and regular service ensured by our specialists allow us to provide optimal solutions, guaranteeing the satisfaction of our clients.

Areas of application:
- frost protection,
- maintenance of process temperatures,
- heating of media,
- savings in production for reduced losses.

Electric heating systems have a wide range of applications and are mounted on such elements of the system as:
- pipelines,
- tanks,
- chute hoppers,
- conveyors,
- pumps,
- control and measurement equipment and automation,
- tankers,
- loading arms,
- driveways,
- industrial scales.

The universality of the technology allows for its application in many branches of industry, including:
- chemical,
- petrochemical,
- energetic,
- heating,
- food,
- coking.
Production and Trade

In our headquarters in Krapkowice we have three production workshops:
- steel sheet prefabrications workshop,
- insulation supporting structures workshop,
- insulation mattresses sewing shop.

In our workshops we produce prefabricated elements and components for industrial insulation from various types of metal sheets, supporting and carrying structures, and we sew insulating mattresses. The production takes place both for the needs of the insulation services provided by our company and our business partners.

We manufacture support structures and guards made of sheet metal, including:
- pipelines,
- flat surfaces,
- tanks,
- ducts.

We produce mattresses dedicated for indoor and outdoor conditions. Mattresses for fittings usually consist of two elements connected by special locks or welts. Our mattresses are made of various types of durable materials, so they can be repeatedly disassembled without risk of damage.

Supply of materials and prefabricates

We carry out orders related to the preparation and dispatch of materials and prefabricates, as well as provide packaging of cargo prepared for sea freight.

Mineral wool on pallets:
- 21 mineral wool rolls on one pallet (height 250 cm),
- 120 cm x 120 cm pallets, made of wood with IPPC / ISPM-15 certificate,
- protected by foil,
- manufactured and protected by an experienced external company.

We have shipped to countries such as Ecuador, Bangladesh, Ghana and South Africa.

Engineering

The Industrial Insulation industry has many years of experience in designing technical insulation and sheet metal coverings.

For our clients we prepare professional technical documentation, taking into account all the necessary technical and environmental parameters.

We have experience in working on such programs as Autodesk AutoCAD, ZWCAD, AutoDesk Robot
Mechanical assembly

We specialize in the assembly of various types of equipment and industrial installations.

In particular, dust extraction systems, pneumatic transport systems, silos, electric precipitators, cyclones, economizers, medium size biomass boiler systems, ducts, fan stations, pipelines, compressed air systems, screw conveyors, trough conveyors, bucket conveyors, scraper conveyors, cellular conveyors, etc.

We also provide services related to comprehensive relocation of equipment and production lines.

We provide our services mainly for the following industries:
- wood,
- cement and lime,
- chemical,
- mineral resources,
- energy,
- founding.
Assembly of industrial facades

We offer optimal implementation of facades of high technical quality.

For us, the term “façade” covers all areas of the structure’s shell, i.e. all elements in contact with air. Our team creates designs mainly in the area of industrial facades.

Thanks to our many years of experience in the installation of industrial facades, our employees have the knowledge that enables us to meet the high requirements for the construction of industrial facades at all times. Thanks to comprehensive quality management, we can maintain a consistent standard of workmanship and high safety of work in the long term.

Creative planning and assembly solutions are a prerequisite for meeting the individual requirements of each project.

Our company specializes in the comprehensive execution of facades and roofs in the following systems:

- Facade system in sandwich panel technology, trapezoidal sheet technology,
- Facade system in the “ventilated façade” technology (cassette-wool-trapezoidal sheet),
- Roof system in sandwich panel or trapezoidal sheet technology,
- Roof system in the technology with thermal and hydro insulation layers on steel sheet or concrete substrates.

References

- Aquaplaning HT-Anlagenbau GmbH
- Abwasserverband Schwaich
- ACCURO Brandschutzanlagen GmbH
- Alfred Ballaue Multiservice NV
- Alfred Profix BVBA
- ANDRITZ Maeser GmbH
- Aplora R&M Ausbau GmbH
- AUNGER GmbH ISOLIERUNTERNEHMEN
- Bausta
- Bafor Austria GmbH
- Bittinger Chemsew GmbH
- Bittinger Industrial Services Belgil
- Bittinger Industrial Services Nederland
- Bittinger Industrial Services Norway
- Bittinger Industrial Services Schweiz
- Bittinger Industrial Services Spain
- Bittinger Industrierm Norge
- Bittinger Industrietechnik Salzburg GmbH
- Bittinger OK I Isoliertechnik
- Bittinger Porfl Isolimentos Termicos Lda.
- Bittinger Salamis UK Limited
- Brand Energy Services
- Budimex S.A.
- C.T.M. Termodeco S.P.A.
- C.I.P. Industriabau Freiberg GmbH
- DES Dutch Energy Services
- DNA Dak- en Gevelmanagement BV
- EEXEB Sp. z o.o.
- Energomontaż Zachód Wrocław Sp. z o.o.
- FAMELUX Sarl
- G+H Isolierung GmbH
- GE Power Sp. z o.o.
- IEA Process Engineering
- Grupa Zarmen Sp. z o.o.
- Implenia Fassadentechnik GmbH
- INTEGRAL Engineering und Umwelttechnik GmbH
- INTEGRAL Gebäudetechnik GmbH
- Integral Montage Anlagen- und Rohrtechnik GmbH
- Interpan Faipari Kft.
- Isolierungen Leipzig GmbH
- Kronenmüler Industrieanlagenbau KG
- Kronospan Ltd
- Kronospan Mielcz Sp. z o.o.
- Kronospan Szczecin Sp. z o.o.
- Krygtip Group Dy
- LAB S.A.
- Lühr Filter GmbH & Co. KG
- MAIR-MELNHOF KANTON AG
- Miart Anlagenbau GmbH
- Mostostal Kraków S.A.
- Mostostal Power Development Sp. z o.o.
- Mostostal Zabors Realizacje Przemysłowe S.A.
- MSZ Alexander Schräpp Peinture
- NG Constructions
- DRTNER GmbH
- PEVARO S.A.
- Polimex Energetyka Sp. z o.o.
- Polimex Mostostal S.A.
- PIONER Sp. z o.o.
- Przedsiębiorstwo Modernizacji Urządzeń Energetycznych REMAK S.A.
- Ratako S.A.
- Schuch GmbH
- Schuch Service GmbH
- SiP’s United Hot
- Sistemas Tubulares Al Andalus S.L.
- Südbrucher Polska S.A.
- Tecnicas Reunidas S.A.
- TitanX Engine Cooling Sp. z o.o.
- voestalpine Schienen GmbH
- voestalpine Stahl Donawitz GmbH
- Vyncka N.V.
- Vyncka s.r.o.
- Wagon Service Ostróda Sp. z o.o.
- Walbrzychie Zakłady Koksownicze „Victoria” S.A.
- Wien Energia GmbH
- Zarmen Sp. z o.o.
In order for our employees working on various construction sites to return home in good health, it is also necessary to have continuous cooperation with our clients’ occupational health and safety services in areas such as:
- definition and recognition of risks on site,
- cooperation in collecting and analyzing information on near misses and dangerous situations,
- providing on-job training at each post,
- control of appropriate working behaviour and use of personal protective equipment.

We base our relations with our clients on openness and broad cooperation in the field of HSEQ.

**Health**
Health is one of the most precious valuables. We are particularly responsible for it, therefore we create working conditions that allow us to preserve and protect the health of our employees.

**Safety**
We are responsible for our own and our employees’ safety. There is nothing more important than ensuring that workers work safely so that they do not lose their health or their lives. We strive for accident-free work because we know that it is possible to organize any position so as to avoid risks and accidents.

**Environment**
The management system we use takes into account the long-term protection of the environment: we comply with both the requirements of the law and the rules adopted by our company.

**Quality**
Quality is very important; we always keep it in mind, striving to meet the requirements of Clients. All our processes are continuously monitored for quality. “Good quality is the best reference.”

For many years, we have had the following certificates:
- OHSAS 18001
- SCC
- ISO 9001
- ISO 14001

**Multiserwis Sp. z o.o.**

The company employs over 3800 people. The main office of the company employs about 120 people dealing with contract management, efficient execution of settlements on contracts, administration and marketing.

**We are at your service**