

Concepts

Products

Service

Innovations that set the seal on efficiency.

Lindner Insulation Engineering and Industrial Services.



Lindner

Building New Solutions

Building new solutions.

Lindner undertakes major worldwide projects in all areas of interior finishes, insulation technology, industrial services and building facades. From pre-planning through to project completion Lindner is your partner of choice.

The Company's extensive manufacturing capability enables quality to be strictly maintained whilst allowing maximum flexibility to meet individual project requirements.

Environmental considerations are fundamental to all Lindner's business principles.

Through partnerships with clients Lindner turns concepts into reality.

Choosing Lindner you have:

Lindner Concepts:
Tailored solutions specifically geared to satisfy individual project requirements

Lindner Products:
Quality materials and systems to the very highest industry standards

Lindner Service:
Comprehensive project management services

All Round Protection.

Unique concepts for
all requirements.

See the benefits for yourself:

- Financially strong company
- Many years of experience
- Top quality
- Meeting customer deadlines at all times
- Fully trained staff
- Ownership of subcontracting and installation companies

Ensuring that what belongs inside remains inside. Lindner Insulation Engineering and Industrial Services.

Whether you require an efficient sound insulation solution or whether you are looking for suitable heat, cold or fire protection as part of a complex special project, we offer innovative systems for all your needs. Your sophisticated ideas are a welcome challenge for us – we can develop the perfect solution for your project; just talk to us.

Innovation for both people and the environment.

With our state-of-the-art technology and our many years of experience we make an economically and ecologically valuable contribution to the insulation engineering sector – maximum efficiency for our customers and for nature.

We are your partner of choice wherever complex, technical equipment requires customised solutions for insulation engineering.



The Intradel waste-to-energy facility in Herstal, Belgium

At Lindner it is only our insulation that is closed. We provide:

- Consultation and planning
- Thermal imaging
- Engineering
- Project support
- Maintenance
- Heat protection
- Cold protection / Cryogenic protection
- Sound insulation
- Fire protection
- Clearance of harmful substances
- Insulation for ships

We grow with your requirements.

For us, "Building New Solutions" also means delivering a tailored service of the highest possible quality. We guarantee you complete support tailored to your needs including a detailed breakdown of costs and will gladly analyse where you can make your greatest savings, both in energy efficiency as well as financially.

You can rely on our advice just as much as you rely on our solutions.

Are you looking for a partner who will react quickly and flexibly to your individual requirements?

This is a challenge we like to take on. In collaboration with yourself, our Engineering and Construction department, Insul-Engineering, develops solutions which are tailored exactly to your needs. Procedures intelligently coordinated with each other guarantee you made-to-measure solutions, efficient construction and fewer interfaces with other trades.

From calculating the density of insulation layers to consultation regarding the correct type of insulation, you can rely on us for cooperative advice and planning as early as the pre-construction phase. Just ask us. We will answer all your questions relating to seemingly unsolvable problems – we particularly enjoy the challenge of complex requirements.



Highly qualified project leaders optimise our scheduling to ensure that your deadlines are met.



Sound insulation cover of an actuator station
at the lignite opencast pit in Schleenhain

No complex is too complex for us.

Thanks to our own manufacturing facilities we can react quickly and unerringly to all on-site situations. We can also adjust the number of technicians required at any time to correspond with the progress of your project, thus ensuring its efficiency and guaranteeing adherence to deadlines. Any additional requirements which you might have pose no problem; with production facilities in various countries we can implement special solutions within the shortest possible time frame.

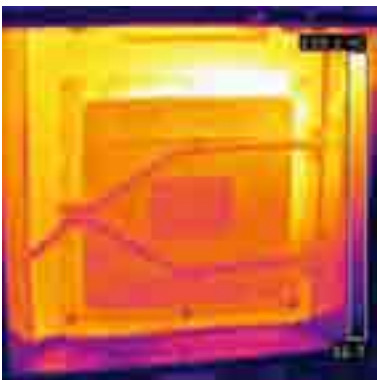
We bring your equipment up to an ecologically and economically acceptable standard.

We put all our energy into your projects. We can advise you on the following topics:

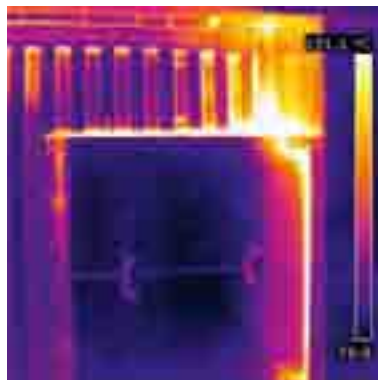
- Layout and construction of technical insulation
- Thermodynamic and sound calculation and measurement
- Structural calculation for measuring the load and support construction of insulation lagging
- Insulation specification and capacity index including a quantity survey
- Construction of building facades and/or improvements to the energy balance of industrial buildings

Take a look at your energy. With Lindner Thermal Imaging.

With our extensive 360° back-of-house support we can offer the right service for every concept. In the insulation engineering division we determine possible losses of energy from your facility using thermal imaging. By using these thermal images we can identify any possible weak points and can thus rectify any hidden defects in a targeted manner.



Thermal image of an un-insulated boiler door



Thermal image of an insulated boiler door where hot air is escaping from the top



Our thermal imaging service is certified to DIN EN 473

Make losses visible. Areas of application:

- Building services
- Thermal imaging of buildings
- Cooling systems
- Industrial plants
- District heating technology
- Industrial thermal imaging
- Development and quality assurance

Efficiency can be planned. Lindner Engineering and Planning.

To enable us to supply you with a solution that meets all your requirements, our own Engineering and Construction Department, Insul-Engineering, plans your construction project down to the smallest detail – from the creation of detailed sketches and isometric and overview drawings through to the planning of the exact insulation construction design as well as structural and technical heat calculations. We will also take on the engineering of heat, cold and sound

insulation as well as structural fire protection for operational equipment, both at home and abroad. During installation of our technical insulation you will benefit from our comprehensive service; we will undertake complete supervision of the construction site ensuring that you always have a reliable partner at your side who knows your requirements best.

Our services include the generation of:

- Construction drawings
- Parts lists
- Assembly instructions
- Packing lists
- Final documentation for exterior and interior insulation, insulation blankets and boards
- Project documentation

We stick to the plan for operational equipment right from the beginning:

- Large-scale boiler facilities
- Fresh air and flue gas ducts
- Flue gas cleaning plants
- Tanks, equipments and pipelines
- Gas turbines
- Sound enclosures and cabins
- Enclosures for gas turbines
- Supply and exhaust-air systems
- LNG, LPG & CNG facilities
- Sea water desalination facilities
- Chemical and petrochemical facilities
- Food industry facilities such as breweries



Hygienic, flawless insulation in a brewery in Bavaria



Oil tank insulation with profiled sheeting in Great Britain

How do we make people happy? With safety.

As part of our integrated safety system our staff provide excellent workplace safety and thus a high degree of customer satisfaction. We don't just guarantee high quality products and efficient processes which meet your specifications and safety guidelines, we also provide a responsible service for the people who work for us – whether in our workshops or on your construction site.



The Lindner Group's Integrated Management System includes certification to Safety Checklist Contractors SCC** 2006

We provide the best possible homemade results. Lindner Production.

With our large production capabilities we can offer quick response times, a high level of accuracy and efficient processes.

From system solutions to special solutions, the majority of our products are made in-house. With production facilities in numerous countries we ensure that our products are available quickly and that we can carry out all necessary sheet metal forming for you in our workshops within the shortest period of time.

Advantages you can easily assemble, develop, integrate or even convert.

- Maximum flexibility
- No intermediary trade
- Complete cost control
- Financially strong company



Production of an acoustic protection cover at our production facilities in Saarbrücken.



The most up-to-date machinery, such as that used in our production facilities in Holleben, provides maximum flexibility and quick response times.

The perfect interplay of knowledge and flexibility. Lindner Project Support.

At every phase of your project we provide you with tailor-made, all-round support which is committed to pursuing one objective – implementing your requirements. Our competent company representatives bring our combined knowledge to your construction project – before, during and even after installation of your insulation. During this process it is particularly important to us that you are satisfied in every way – with flexibility, excellent quality at competitive prices and with the security of having a financially strong partner at your side.

Tailor-made benefits:

- Engineering before construction site work commences
- Project preparation
- Scheduling of works
- Project management if required
- Flexible installation management
- Safety and quality management





Paulaner Brewery, Munich

We would love to come back. Lindner Maintenance.

Even after your insulation has been installed you can still count on our all round service.

Our nationwide presence in Germany and our worldwide partner network enables us to react to your needs within the shortest possible time and to actively support you in planning and carrying out maintenance measures – you can always rely on us.

Warmly recommended for your facilities! Lindner Heat Protection.

For your heat protection needs we also manufacture specialised solutions.

When it comes to specialist facade construction we can give you comprehensive advice and can also provide valuable assistance in improving the energy balance of your industrial buildings. Just ask us – we will be glad to tell you about our alternative offers and solutions.

Are your facilities running at full speed?

Then we will ensure that they have optimal heat regulation so that you can maintain your facility at the predetermined surface or room temperature. We work with you to create an insulation solution exactly tailored to meet your requirements, allowing you to protect neighbouring equipment and avoid loss of energy.

Are you looking for something visually sophisticated?

Then the best thing to do is let us advise you on your choice of industrial facades. We manufacture and install visually and technically sophisticated facades for all industrial buildings to your exact specification. Of course we take all requirements into consideration – yours, legal requirements and those of the architect.



We have the right solutions for when things start hotting up:

- Industrial insulation systems
- Insulation for high temperatures
- Industrial facades
- Interior insulation
- Metal cassettes etc.

Fresh new solutions. Lindner Cold Protection.

If you are looking for efficient insulation for pipelines, equipments, air ducts or plants, then simply rely on fresh solutions from Lindner – with our cold insulation you can keep condensation and potential energy losses at bay. We also make your facility more efficient, fulfilling the current legal requirements of sustainable environmental

protection. Even when your facility is subjected to outside temperatures we provide you with a suitable solution which protects your facility against freezing, keeping it at an optimal mid-range temperature with the help of electronically powered complementary heating.



The appropriate solution for every requirement:

- Insulation systems for air separation facilities
- Insulation systems for LNG, LPG & CNG facilities
- Mobile cooling systems
- Anti-condensation insulation
- Frost protection for pipelines and equipments
- Constant optimal medium temperature
- Insulation systems for cryogenic industrial facilities

In harmony with the surroundings. We supply sound insulation for:

- Engineering
- Vehicle construction
- Wood work
- Sheet and metal work
- Chemical plants
- Power plants
- Waste-to-energy facilities
- Industrial plants



Sound insulation cover, lignite opencast pit in Schleenhain

Effectively noiseless. Lindner Sound Insulation.

To effectively insulate against sound transmission the insulation must be suited to its specific conditions. We are your experienced partner of choice wherever sound insulation requirements are mandatory because of noisy facilities such as presses, dies, mills, planing machines or bottling plants. Our experienced and qualified members of staff develop a perfect solution to suit your specific requirements and install it on schedule.

We walk through fire to protect your facilities. Lindner Fire Protection.

Thanks to our extensive know-how in the area of fire protection, we can provide you with efficient solutions and maximum safety.



Lindner has been awarded the RAL Gütezeichen Brandschutz (RAL Fire Protection Quality Seal) for construction and is a member of the Wirtschaftsverband Brandschutz e.V. (Registered Trade Association for Fire Protection).

With the correct structural fire protection you reduce potential risks, thus taking important precautionary measures. Our effective insulation products fulfil the highest safety standards and slow down the spread of fire.

We apply special solutions for industrial facilities and any type of buildings, hard and soft barriers in building services and spray coatings in operational facilities. At the same time our project management team provides you with everything in terms of passive fire protection for operational and mechanical services. Why not get some advice from our trained, experienced fire protection specialists. With Lindner fireproofing, you benefit from a maximum level of safety.

Traditional safety. Our range includes:

- Fire protection for ventilation systems
- Fire protection for combustible/non-combustible pipelines
- Cable barriers
- Electric cable conduits
- Fire protection for steel structures
- Fire protection for solid ceilings

An example of excellence. See the results for yourself.

BioWanze S.A., Belgium:

On this project we carried out all the insulation work on pipelines, equipments, tanks and columns, at the same time satisfying requirements regarding environmental protection, energy efficiency and cost-effectiveness. In the main we used stainless steel and therefore we implemented sheathing in AS quality as well as blankets stitched on stainless steel wire. All connections and any penetration in the surface which were externally exposed were made rain-proof and contact-corrosion proof. For complementary electric heating installed on-site we supplied and assembled an aluminium heating shield.

In addition to this we undertook sound insulation measures to reduce the sound level on fans and filters. This required a special sub-construction with omega springs as well as a 5mm strong Terodem coating to protect the surface. To ensure water-tightness for the existing roof we made rain deflectors which we fitted individually on-site.

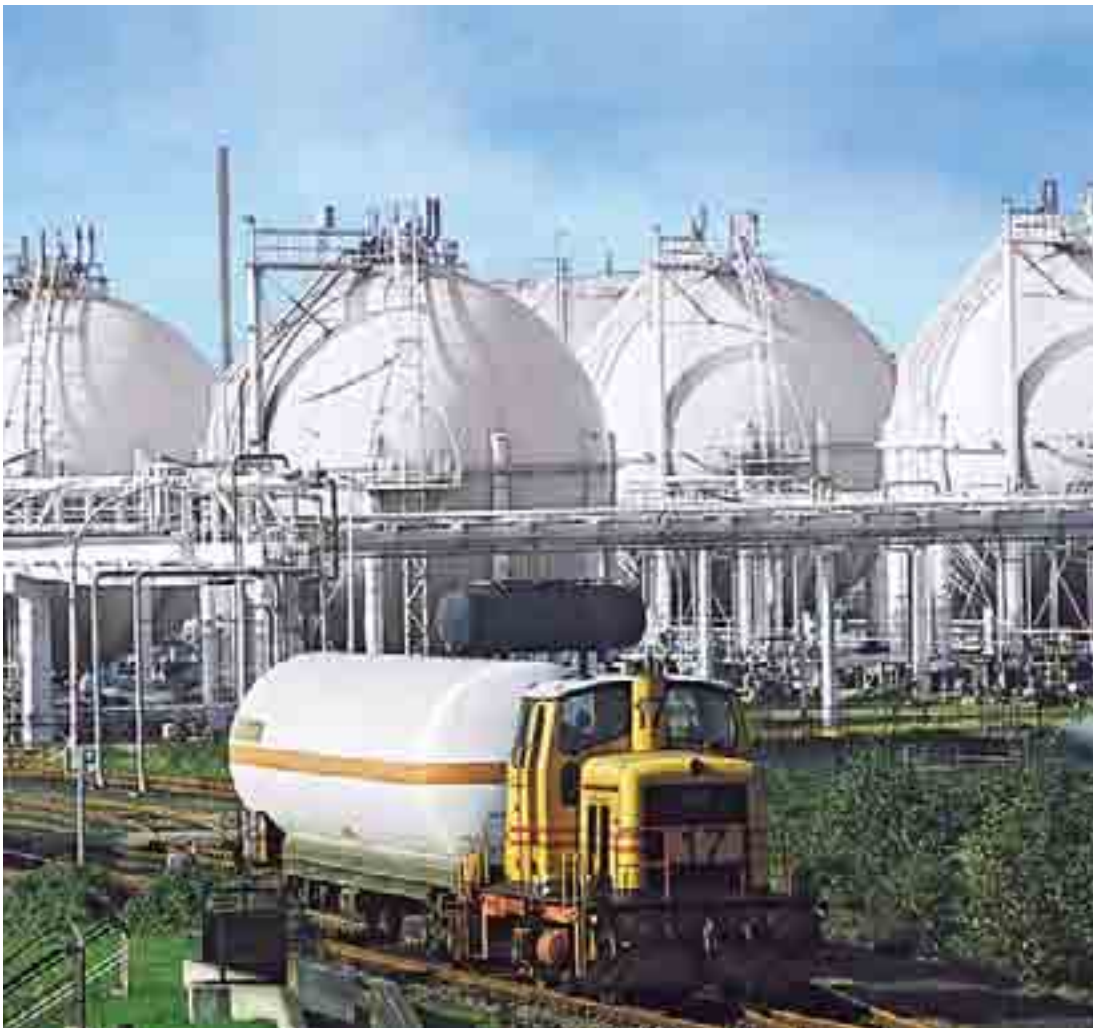


Around 50% of all our services were carried out during the normal course of business.

Marl Chemical Park in the Ruhr area:

This project was full of challenges which we responded to with as much flexibility as possible. As the risk of fire is very high in an industrial chemical plant we installed non-combustible cellular glass insulation, building material class A1, tested to DIN 4102, which successfully slows down the spread of fire and provides the tanks with external protection in the case of a fire.

For this specific project we installed single layer insulation adhered with a special glue to make the joint seal between the individual insulation segments impermeable. We developed a unique device which allowed us to cut out a sphere-shaped opening on the insulation so that it would fit perfectly onto the tanks. For visual reasons the customer chose a sheet-metal jacket (alu-zinc) to protect the surface. To affix this jacket we installed a substructure which enclosed the spherical tank much like a tailored corset and which also withstood strong wind suction power.



The aim was to redeploy two spherical tanks on this industrial chemical plant.



The first reading showed that we were far below our target of 6dB sound reduction.

MIBRAG, opencast pit in Schleenhain:

On this project we carried out all the sound insulation to reduce the noise created by the actuator station. The customer wanted a maintenance-friendly solution that could also be used as “free hanging” temperature-controlled ventilation. In the case of a malfunction then access to motors, transmission and deviating rollers is vital; our insulation covers therefore need to be removable at any time. To fulfil these requirements we supplied solutions for the side walls and the roofs using a coffered construction method. We were also able to easily satisfy the high standards of work safety by creating accessibility, escape routes and other safety features. For the small cover we produced and installed sound insulation of 8.7m in length, 9.5m in width, 4m in height and a combined weight of approx. 27,000kg. The large cover was installed with sound insulation of 8.7m in length, 10.2m in width, 9.4m in height and weighing approx. 38,000kg. By insulating the actuator in such a way we defined a whole new level of quality in the area of sound insulation.

The Intradel waste-to-energy facility in Herstal, Belgium:

To be successful in this project we needed to develop an insulation solution for boilers, ducts and pipelines. All areas of the interior of the plant were insulated with mineral fibre mats on galvanised, stitched wire mesh and the surfaces were protected with either smooth or profiled aluminium sheeting. On the boilers and ducts we used profiled sheeting; on the pipelines and flue gas ducts we installed smooth sheeting with stainless steel screws. Around the electrical precipitator the ceilings were installed with a reinforced substructure, with accessibility via a 3mm strong aluminium stud plate.

In addition to this we used a sprung, resilient substructure and a 5mm thick sound insulation panel to provide acoustic insulation for the fans and ducts. For safety reasons we installed perforated aluminium as touch protection sheeting on the compensators. Finally the insulation on the drag link conveyor was made up of individual elements from disassembled and reassembled boards with quick-release locks – for this purpose we also installed lifting brackets.



On this project we insulated an entire area of 23,500m².

We create the best solutions for ideal conditions.

Our insulation solutions confirm our long-standing in the industry. From planning and development through to ready-made insulation solutions we live according to the principle “Building New Solutions”.



The Intradel waste-to-energy facility in Herstal, Belgium

Technically sophisticated: Chemical Plants.

Our visually attractive cold insulation and heat insulation products prevent the waste of valuable resources. We also guarantee the effective sound regulation and fire protection properties of our insulation solutions.

Our proven competence and unique quality management process enable us to provide you with state-of-the-art technology, high-quality materials and fully trained specialists to meet your project deadlines.

Our range includes:

- Equipments
- Apparatus
- Columns
- Pipelines and pipeline routes
- Pressure reducing stations
- Pumps and compressors
- Process ovens
- Special cladding for areas at risk from acids and leaching

Efficiency down to the smallest detail: Power Station and Industrial Plant Engineering.

Our Technical Insulation Department offers economical and ecological solutions for modern power stations. When it comes to insulating your facilities, we provide the highest level of service. Starting with planning and development through to manufacture and installation, we provide you with everything you need to ensure that your production process runs smoothly and efficiently.

Lindner can supply you with insulation services for the following power station components:

- Boilers
- Fresh air systems
- Secondary air systems
- Flue gas ducts
- Back current agitators (reactors)
- Bag and electrical precipitators
- Induced draught fans

Coordinated all round support: Domestic Engineering and Food Industry.

For perfect insulation we provide you with everything from one source – from the planning stage to construction start-up and maintenance. During all this it is particularly important to ensure that you receive the best possible solutions in terms of heat and cold protection, fire protection and sound insulation, to keep your facilities and components going for many years to come. You can look forward to a solution that is tailor-made to suit your production processes.

We provide:

- Heated and chilled pipelines
- Air ducts
- Armatures, valves, pumps
- Heating systems
- Ventilation systems
- Structural fire protection



Innovative in the long-run: District Heating.

Environmental awareness and efficiency go hand in hand at Lindner. We supply excellent insulation and an extensive service – for an environmentally-conscious interface with nature.

We supply the following services:

- Insulation of complete district heating routes above and under floor
- Heat transfer stations with newly developed thermal barriers
- Thermal imaging with economical analysis
- Advice, planning and implementation from one source
- Coordination of adjoining works (such as corrosion protection, complementary heating, scaffolding and pipeline construction)

How do you define quality? Taking responsibility for all areas.

Projects of the highest level.

Our members of staff take on your projects with enthusiasm – that is the prerequisite for our consistent high level of quality. In addition our Research and Development Department adapts our products to suit your project needs and checks their structural and physical properties. This helps us to meet the demands of the most unusual construction projects. Thanks to our range of experience and our worldwide network, we can also implement your special requirements quickly and professionally – technically as well as creatively. As a result of regular controls as part of our integrated quality management programme, we guarantee efficient processes and innovative services. Thus you can enjoy the best quality all the time. This is something we are very proud of – ultimately our solutions are the basis of our success.



Thanks to our LEED competence we enable certifications by the US Green Building Council (USGBC)



We are founding member of the German Sustainable Building Council (DGNB)

Build sustainably with the environment:

How do we combine success and responsibility? Easy. By keeping a considerate and forward-looking eye on nature. For this reason, we only use ecologically tested and approved materials. Additionally our Environmental Management Department ensures the reduction of emissions and unnecessary use of energy. For us the term "Building New Solutions" also means implementing ideas with environmental consciousness – sustainability in all areas.



With our first-class quality management programme we fulfil the ISO 9000 standard



Berlin State Library



The Lindner division for the Clearance of Harmful Substances is a specialist for the removal of hazardous materials, certified to SCC, DIN ISO 9001 and, from 2009, to DIN ISO 14001.



We are a founding member of the Fachverband für Asbestsanierung (Professional Association for Asbestos Decontamination).

Contaminant free with diligence:

We are one of the first businesses in Germany to have successfully involved ourselves in this area and have developed innovative working technologies and contaminant guidelines. State-of-the-art technology and fully trained members of staff ensure that your buildings are decontaminated safely and responsibly. For the benefit of everyone – our customers, staff and the people who use the building. Over the years this has made us a leading and certified specialist for the removal of hazardous materials.

Removal of an air duct containing asbestos



In the best of company: The best of services combined.



Demonstrable
high quality plays
a superior part in
all our business
sectors.

This claim is mirrored in our association activities. We are a member of the WKSb Verband – Heating, Cold, Sound and Fire Protection Association – which itself is a member of the Main Association of the German Construction Industry and DIN. In addition to this we are an active member of the Güteschutzgemeinschaft Hartschaum e.V. – the European Association of Manufacturers of Thermal Insulating Products (EPS, PUR, VIP and Thermal Insulation/Light Concrete Association). With our membership of the Fördergemeinschaft Dämmtechnik (Association for the Promotion of Insulation Technology) we have set ourselves the task of promoting quality skilled labour and of sustainably improving the image of the heat, cold, sound and fire protection insulation trade in the public eye.



Our Headquarters in Arnstorf, Germany

| We are always near by.

Wherever high quality projects are being constructed with new solutions we are not far away. From our Headquarters in Arnstorf in Germany we coordinate all our offices – both domestic and worldwide. In Arnstorf we also produce our main products – ceilings, walls and floors as well as high quality facade elements. Our offices are as international as our projects; we have an international presence with numerous branches, subsidiaries and partners. And that's not all; on average we open two new offices every year. You will find Lindner personnel trained on innovative insulation solutions not only in our main branches in Germany but also in Poland, Croatia, Luxembourg, the Netherlands, Austria and Saudi Arabia. We attach great importance to being available almost everywhere so that we can react to our customers' needs as quickly and as flexibly as possible.

We can do it all for you.

Lindner Concepts:

- Insulation Engineering and Industrial Service
- Clearance of Harmful Substances
- Clean Rooms and Laboratories
- Airports and Airlines
- Railways and Tunnels
- Studios and Concert Halls
- Interior Fit-out and Furnishings
- Cruise Liner and Ship Fit-out
- Hotels and Resorts
- General Contracting

Lindner Products:

- Facades
- Ceiling Systems
- Lights and Lighting Systems
- Partition Systems
- Doors
- Floor Systems
- Heating and Cooling Technologies
- Dry Lining Systems

Lindner Service:

- Green Building
- Development and Design
- Delivery
- General Planning
- Installation
- Maintenance
- Public-Private Partnership (PPP)

Lindner

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