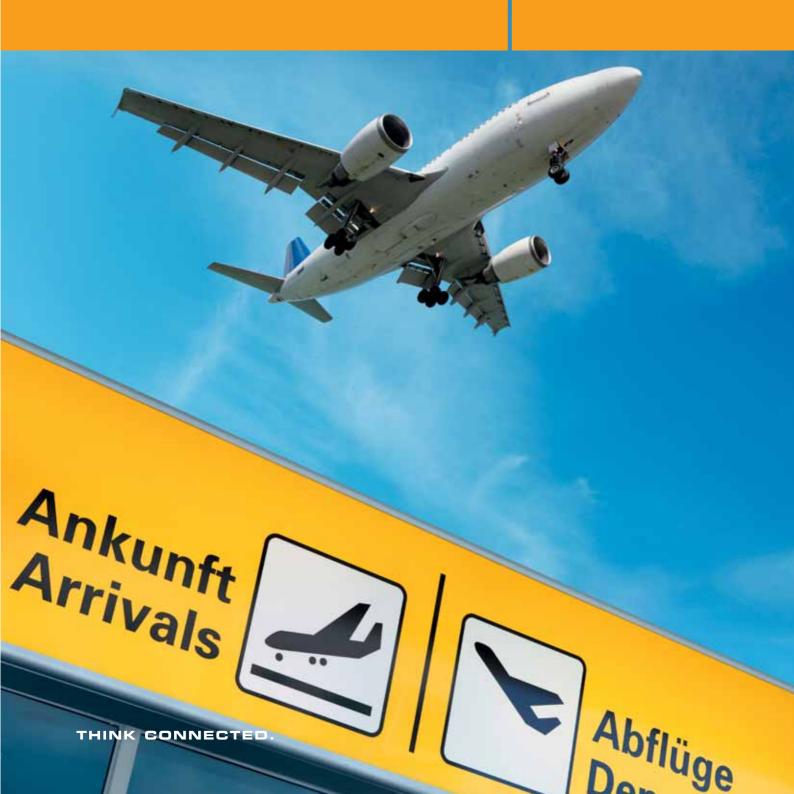
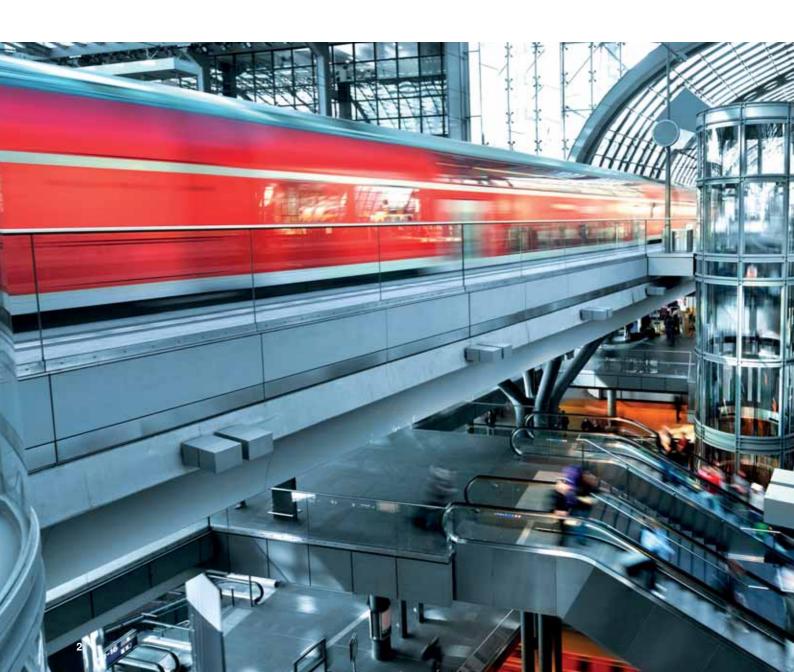
Solutions for airports and railway stations





Solutions for airports and railway stations

Airports and railway stations aren't just places where countless people pass through every day. They also provide attractive areas to shop, eat and enjoy other services. Within these complex infrastructures, OBO solutions ensure that electricity and data flow smoothly. And if things get serious, they fulfil the highest safety standards with tested systems for fire protection, lightning protection and surge protection.



Contents

Cable support systems

Fire protection systems

Function maintenance systems

Transient and lightning protection systems

Underfloor systems

Cable routing systems

Think connected.

OBO means thinking in networks and acting systematically. We combine our products to produce solutions for your particular project in industry, commerce and infrastructure facilities – worldwide.





Planning to build a station in a city or an airport in a desert? You can rely on OBO. We have been assisting in complex projects for decades, and our staff can help you with the electrotechnical equipment for your building wherever you are in the world. Every project has its own demands. With OBO at your side, you can expect everything to go smoothly, from the planning stage right through to the details of installation on the building site. Our sophisticated logistics ensure that our products arrive quickly and reliably where they are needed. Our closely knit service network covers more than 50 countries. Why not get in touch?





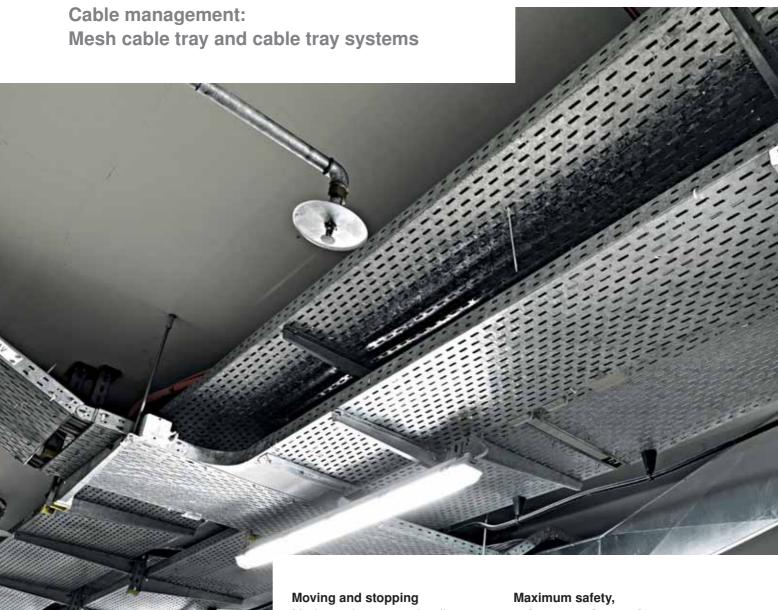
A selection of our reference projects:

Rail projects

- Rail yard, Dannenberger Bahnbogen, Uelzen
- CE airport station, Cologne/Bonn
- Deutsche Bundesbahn, Neubau, Krefeld
- Deutsche Bundesbahn works, Hamburg-Langerfelde
- Reception hall at the central station, Dresden
- ICE service yard, Hamburg
- ICE service yard, Hanover
- ICE service yard, Munich
- Lehrter Bahnhof VP11 north-south link, Berlin
- Lehrter Bahnhof-TGA, Berlin-Tiergarten
- Main-Airport-Center, Frankfurt/Main
- Metro, Athens
- S-Bahn, Hamburg
- · S-Bahn station, Munich Airport
- U-Bahn, Dortmund
- U-Bahn, Hanover

Airport projects

- · Airport, Athens
- Charles de Gaulle Airport, Paris
- · Airport, Düsseldorf
- Airport, Frankfurt/Main
- Airport Frankfurt/Main, modernisation
- Harare International Airport, Zimbabwe
- Leipzig Airport
- Munich Airport
- Stuttgart Airport, Terminal 3
- Zürich Airport
- · Munich airmail administration



Cable tray system

Modern airports and railway stations combine logistics areas with shopping and leisure facilities. An invisible network of power and data cables keeps these highly complex infrastructures up and running. One of the challenges involved is how to safely route such large numbers of cables and wires. OBO cable support systems offer a comprehensive range of solutions for every scenario, from lightweight mesh trays all the way to diverse cable trays.

uninterrupted operation

As one of the world's leading manufacturers of cable support systems, OBO proves its competence on a daily basis. In a range of sizes and material thicknesses, our easy-to-fit products can cope with the most difficult tasks. In a range of colours, they can blend in harmoniously with any design concept. A unique stainless steel range is available for areas with special requirements.











Cable management: Vertical ladders, cable ladder and wide span systems



For long distances and heavy loads

Whatever your requirements might be, OBO has the right cable support product in its range. Cable ladder and wide span systems can be used to bridge wide gaps and carry heavy cables.

High loads

OBO systems have proven themselves in numerous areas of industry and plant construction. The range includes various different sizes and surface finishes. OBO also offers a wide selection of system accessories such as fittings and fastenings.

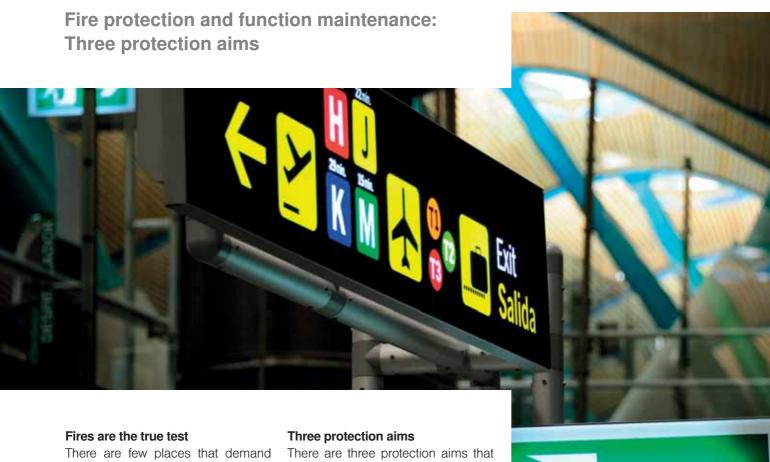




Wide span system



Wide span system

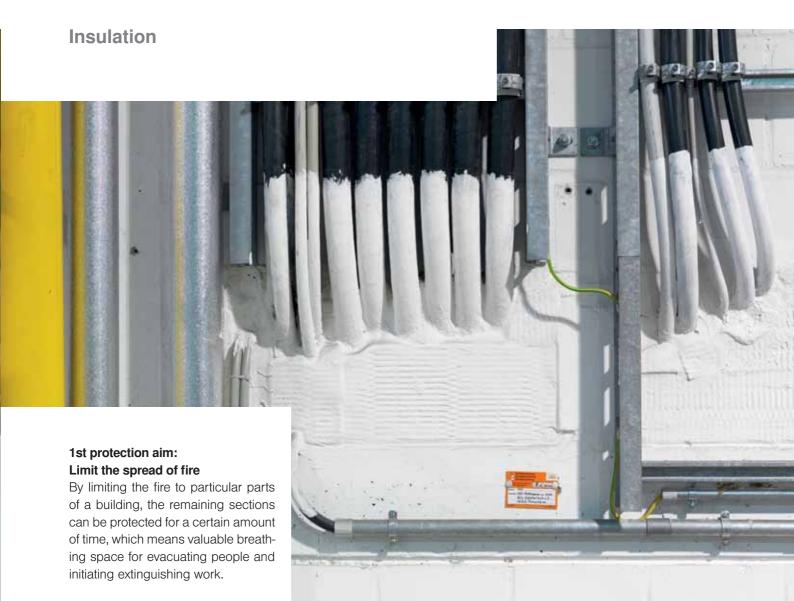


There are few places that demand such stringent safety measures in the event of a fire as railway stations and airports. Safety-relevant systems have to work for as long as possible in order to protect people. Catastrophic fires, such as the one at Düsseldorf Airport in 1996, have led to a tightening of electrical installation regulations. With its tested systems for structural fire protection, OBO is helping to fulfil them.

There are three protection aims that have to be met in buildings where lots of people congregate frequently:

- 1. Limit the spread of fire
- 2. Safeguard escape and rescue routes
- 3. Maintain the function of important electrical systems

By using OBO systems, architects and operators can draw on optimised components for complete fire protection and function maintenance in their buildings.



OBO insulation

OBO insulation maintains the integrity of fire areas, which prevents fire and smoke from spreading quickly. This insulation is designed for a variety of wall types and for the various pipes and cables that pass through them.



Top: labelled insulation system Bottom: protecting a bridge over a firewall using fire protection bandage

Escape route installations



escape and rescue routes

When a fire breaks out every minute counts, and escape and rescue routes become a building's lifelines. The longer people can use them for, the higher their chances of escaping fire and dangerous smoke.

OBO offers a comprehensive range of tested fire protection systems with which to safeguard escape and rescue routes. The range includes collecting clamps and cable clamps made from metal, cable trays, fire protection ducting, fire protection bandages and much more. Escape route installations are fitted above false ceilings.





Escape route installation system above a suspended fire protection ceiling

Systems for electrical function maintenance



3rd protection aim: Electrical function maintenance

Function maintenance in electrical systems means that the flow of electricity is not cut off during a fire. That in turn means escape and rescue routes can still be used. Important technical facilities, such as emergency lighting, fire alarms, smoke extractors and extinguisher systems, all continue to function. The longer these systems remain in action, the greater the chances are of rescuing people.

OBO systems for electrical function maintenance

OBO systems withstand the heat of fire for a certain period of time without impairing the function of the cables. From cable trays to cable junction boxes, these products are all tested in compliance with German and international standards.



Function maintenance systems

Safe Solutions for external lightning protection and surge protection



ator can afford a lightning-induced technical equipment failure. Effective protection is ensured by skilfully and correctly installed lightning protection systems. Damage is caused just as often by electrical surges, which can be triggered by nearby lightning or by switching in large electrical systems. The results can be devastating: not only equipment damage, but network failure and data loss.

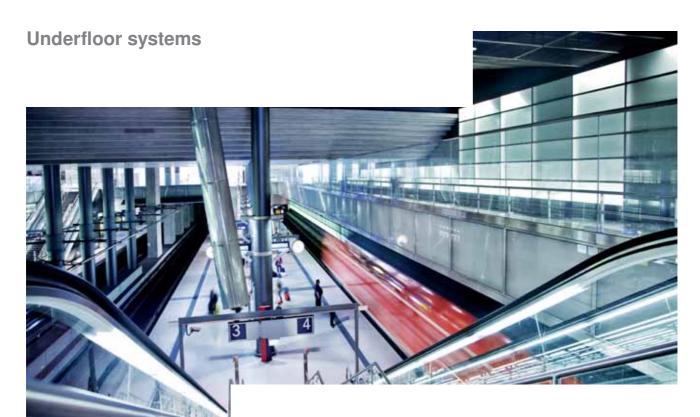


Top: combination conductor in a switchgear cabinet with Dahl wiring ducts

Bottom: equipotential bonding rail

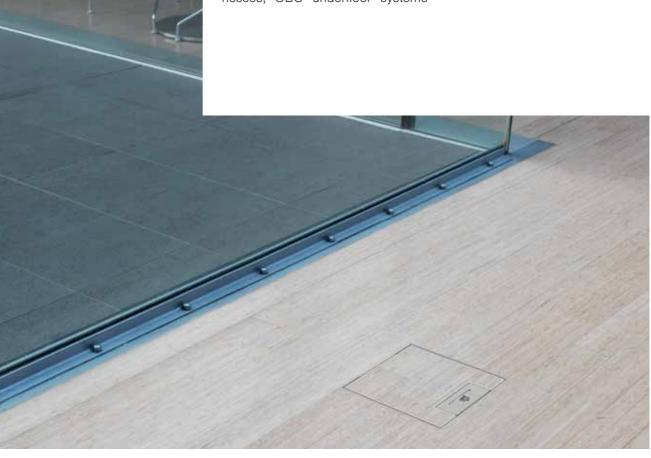
Right: interception rod





Taking the strain

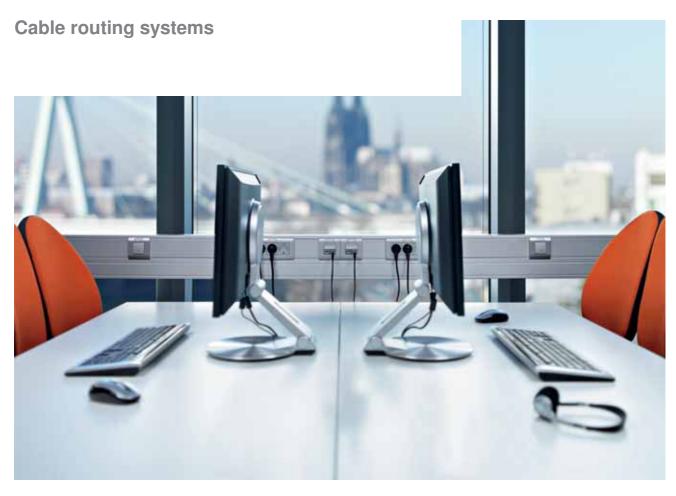
In buildings frequented every day by large numbers of people, electrical installations are subject to enormous loads. With their highquality materials and sturdy thicknesses, OBO underfloor systems can take the strain. Numerous useful special parts and ingenious accessories guarantee lasting quality. OBO will also gladly produce custom products tailored to your particular requirements.











Flexible solutions for administration

The work processes that take place in the administration centres of airports and railway stations are closely intertwined with electrical systems. OBO solutions form the basis for that. They conduct electricity through floors, ceilings and walls. Complex interior architecture benefits especially from the flexibility of our systems, since they can be adapted perfectly to every type of task and room.

Device installation trunking

Bothersome cables are a thing of the past when you supply offices with power and data via device installation trunking along the wall. Fitted at a convenient height, this trunking provides quick access to sockets and data outlets. OBO device installation trunking boasts a wide range of components, ease of combination and intelligent details.



Floor-to-ceiling pole

Service poles

Service poles from OBO are among the technical and visual highlights of our office power supply systems. These slimline aluminium or steel floor-to-ceiling poles can be supplied with electricity and data via consolidation points inside false ceilings, and they can be positioned anywhere. Floor poles are preferably connected up through raised and hollow floors.



Floor pole

www.obo-bettermann.com



OBO BETTERMANN GmbH & Co. KG

PO Box 1120 58694 Menden Germany

Customer Service Germany

Tel.: +49 (0)2373 89-1500 Fax: +49 (0)2373 89-7777 E-mail: info@obo.de