Expertise at every level

Cutting-edge solutions for a connected world

Basler & Hofmann

We are driven by a quest to provide groundbreaking solutions for a densely built-up and developing world

At Basler & Hofmann our multidisciplinary teams offer a wide range of expertise and work together to find new answers to complex questions. The picture shows a new Basler & Hofmann office building under construction. It is fully self-sufficient in terms of producing the energy required for heating and cooling. Internally, the building complies with the highest environmental standards.

We create spaces for living

We live in a densely built-up world – a world which is constantly changing. The important issues of tomorrow will be determined by how we deal with space and with our natural resources today. Construction, mobility, energy, safety and the environment – Basler & Hofmann works for its clients in all these areas. We offer consultancy, planning and engineering services.

Shaping the future

Nothing is as constant as change itself. Towns and cities are forever evolving. Sprawling industrial areas are being transformed into new spaces for living, working and recreation. Urban areas are growing. People are becoming more mobile. How can infrastructure be further developed to meet these new requirements? Both natural and man-made environments are becoming more closely intertwined. How can natural habitats be protected from mankind? Conversely, how can society protect itself from natural hazards? Our natural resources are becoming scarcer: how can we preserve them for future generations? These are the major challenges that Basler & Hofmann is working to resolve.

Consultancy – Planning – Engineering

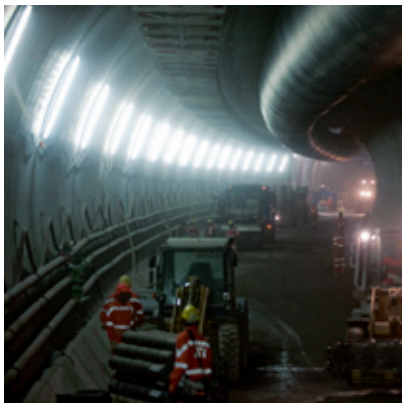
Everything in our modern world is interconnected. As a company offering services in engineering, planning and consultancy, we provide our clients with solutions that are tailor-made for the complex world in which we live. For us consultancy means understanding, interpreting and formulating the needs of society at large. Planning is the integration of diverse requirements and future developments. Engineering means designing efficient and sustainable solutions. As an independent, family-owned company we have always remained true to these three areas of activity. Our solution-oriented approach enables us to make a significant contribution to technical, environmental and social development. We create spaces for living.

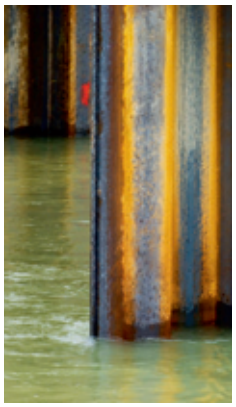
Holistic solutions

In today's complex world, few engineering challenges can be handled by a single expert. Basler & Hofmann employs specialists from more than 30 disciplines. For our clients this means more security, better solutions and greater peace of mind.

Bespoke project teams
A client's project and requirements are the focus of our business. We provide tailored teams to deliver the right expertise for each individual project. This offers our clients a number of benefits: it gives them the security of knowing that synergies and conflicts can be detected at an early stage and that all aspects of the project are well coordinated. Should new requirements in the project arise, the necessary expertise is always available. This means our clients can be assured of receiving sound advice and a highly responsive service.

Delegating responsibility
Our clients need to be able to focus on their core business. By assigning a project manager as their main contact, we allow them to do this. Responsible for budget, quality and deadlines, the project manager works behind the scenes to coordinate the work of our qualified experts to ensure everything is on track. Our technical teams work in an integrated way, so that they capture the finest detail to the broadest issues.





The new Zurich Cross-City Rail Link
Demand for new rail transport systems will continue to grow. In Zurich a new transit station will be built underneath the main railway station together with a new cross-city underground railway line. This is a highly complex and challenging construction project. How can a tunnel be built just below buildings, rivers and major roads? What are the logistics of organising such a construction project at the heart of a busy, operational main railway station? How is groundwater protected from contamination? How can floods be prevented during construction work in the river bed? At Basler & Hofmann a team of 70 experts from various disciplines ranging from geotechnical engineering to environmental chemistry are equipped with the knowledge to find answers to these and many other challenging questions.

Photo: Oli Rust

Structural engineering

- Structural design
- Façade engineering
- Glass structures
- Structural dynamics

Civil engineering

- Ground engineering and geotechnics
- Site infrastructure
- Utilities provision
- Special foundation engineering
- Landfill engineering

Tunnelling

- Underground engineering
- Cut-and-cover tunnels
- Rail tunnels
- Road tunnels

Transportation engineering

- Alignment
- Roads and highways
- Rail and light rail
- Bridges
- Track design and railway technology

Energy

- Energy efficiency
- Sustainable buildings
- Building physics
- Renewable energy
- Photovoltaic

Urban transportation

- Planning and urban design
- Masterplanning
- Traffic
- Airports
- Interchange design
- Sustainable transport

Water

- Public health engineering
- Water pollution control
- Hydraulic engineering
- Flood protection
- Hydropower

Environmental engineering

- Environmental management
- Vibration and noise protection
- Environmental remediation
- Asbestos and building contaminants
- Environmental chemistry
- Environmental technology

Safety and security

- Biosafety
- Risk analysis and safety management
- Prevention of major chemical accidents
- Occupationalhealthandsafety
- Seismic design
- Protective asset design

Building services

- Mechanical, electrical and plumbing engineering
- Building integration and controls
- Operational enhancements

Development and management

- Property management
- Facility Management
- Site development
- Educational buildings design
- Business process engineering

Operation and maintenance

- Asset management
- Land surveying
- Structural monitoring
- Geographical information systems
- Geodata management
- Technical and environmental due diligence

Consulting

- Project management
- Expert witness
- Legal services
- Communications consultancy
- Social marketing
- Media production and 3D visualisation

Basler & Hofmann provides a bespoke technical team for each project. This team consists of people with the complete range of expertise and skills required to provide the best possible service.

Our tradition: exploring new ways and fields of work

Renowned for innovative, connected thinking we have always been quick to embrace the requirements of a constantly changing world – whether they are technical, environmental or social in nature. Often we anticipate these changes and demands too. When this takes us into new fields of work we are always inspired. This expands our expertise and shapes our company's development.

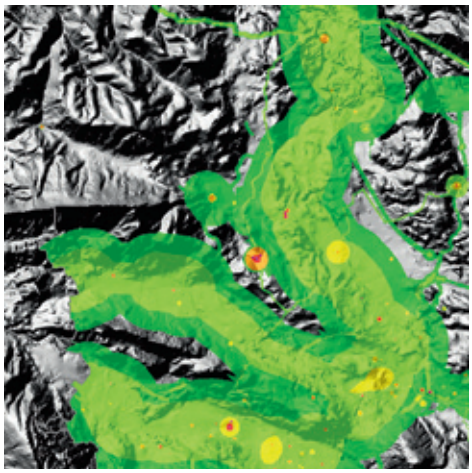
Embracing change

Basler & Hofmann was formed in 1963, quickly gaining a reputation for its cutting-edge work in traditional civil engineering. Basler & Hofmann soon faced new challenges that called for innovative solutions. The 1970s oil crisis demanded new approaches in terms of energy and building technology. In the 1980s environmental issues were highlighted when chemical spills raised the question of how best to deal with these risks. Since the 1990s it has become increasingly clear that the success of a project does not depend on technical solutions alone but also on the degree to which it is accepted by the community. That is why we now offer our clients legal advice and communications consultancy.

Contemporary solutions

We continue to develop our existing areas of activity. We share expertise, broaden our knowledge and test new methods and techniques in innovation projects, research projects and collaborative projects with universities. We are actively involved in professional bodies including the standards committee of the Swiss Society of Engineers and Architects (the SIA) and the Swiss Association of Consulting Engineers (usic). Abroad we are associated with leading engineering companies in the Europengineers network. Our clients benefit from our involvement with this global group of professionals. They can be confident that the solutions we offer incorporate the very latest thinking.

The projects we carry out for our clients provide the best proof of our expertise and performance. Our work covers a broad range of projects. They include major infrastructure projects which are unique in terms of their size and complexity; pioneering projects where interdisciplinary teams work together to develop new solutions; and small, niche projects which involve the work of only a few specialists. The project work entrusted to us speaks for itself.



A leading environmental role
HQ of the Heinrich Böll Foundation in Berlin

The office building and conference centre for this green political foundation is a beacon of environmental engineering. Its energy consumption undercuts the legal maximum by half and is far less than that of other modern office buildings. Its innovative energy concept was designed by Basler & Hofmann.

Client: The Heinrich Böll Foundation

Chemical risks at a glance
Risk register for cantons

Chemical plants and the transportation of hazardous liquids pose risks for both people and the environment. Basler & Hofmann's geographic information system (GIS) assesses these risks and provides a clear analysis of the threat. The system is an important decision-making tool.

Client: Various Swiss cantons

One-stop shop consultancy
Regenerating Baden-Nord

The industrial area of Baden-Nord is being transformed into a residential and commerc district. Basler & Hofmann, appointed as pro manager and consultant, is carefully manag the complicated planning process which inv many different stakeholders.

Client: The town of Baden, ABB Immobilien

Creating a major new Alpine village
The Andermatt tourist resort

This large-scale project involves the construction of a luxury resort in the Ursenental, comprising five hotels, about 30 villas and extensive leisure facilities. Basler & Hofmann is responsible for the project's spatial planning for six area layouts, and for producing an environmental impact assessment.

Client: Andermatt Alpine Destination Company AG

A stress-free way of getting to work
A travel plan for Credit Suisse

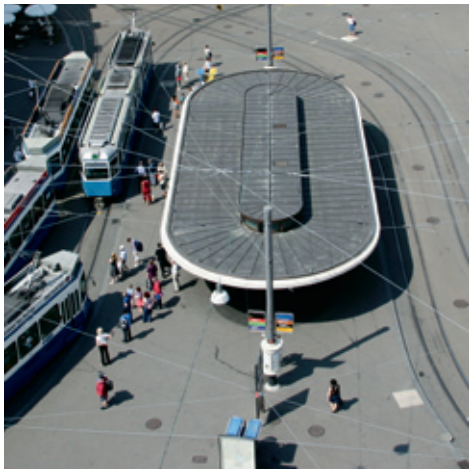
Credit Suisse has recruited 2,000 extra staff at its offices in Zurich-South. Basler & Hofmann has made an analysis of how people travel to and from work. Our company has also developed a car park management plan and devised measures to make travelling to work by public transport and bicycle more appealing.

Client: Credit Suisse

Reducing motorway noise
Refurbishing the A2 in the canton of Uri

The "Gotthard motorway" is to be totally ov hauled. This major project involves resurfac the road and refurbishing a number of engi ring structures. It also includes environmen impact reduction measures: special tarmac to make the surface quieter and a new way of treating the road run-off.

Client: ASTRA, Zofingen



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Tunnel – Bridge – Environment
The Rontal motorway approach road – construction project

Two engineering structures are the focal points of the 1.4 km long motorway approach road – an unusual glass-panelled bridge goes straight into a 900m long tunnel. Waste water treatment and environmental issues also form part of the project.

Client: The canton of Lucerne

Switzerland's largest GIS
SBB (Swiss Federal Railways) and its Rail Geo System

SBB manages a highly complex infrastructure comprising 3,000 km of rail network, 6,000 bridges and more than 30,000 signals. Basler & Hofmann's bespoke geographical information system enables SBB to manage its infrastructure even more efficiently.

Client: SBB

World class energy
FIFA Confederations Cup, South Africa

FIFA has high expectations of its host venues. Many need additional measures to meet the required standard. Basler & Hofmann designed the building services strategy and supervised its installation at the four World Cup stadiums, including floodlighting for HD TV and a media centre for journalists.

Client: Nüssli International

Uri

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Restoring a cultural asset
The Haggen Bridge, St. Gallen

The Haggen Bridge is a cultural asset of national importance. Restoring the intricate steel structure, built in 1937, requires sensitivity and expertise. As a specialist in riveted steel truss bridges, Basler & Hofmann is to analyse the bridge's structural condition and develop a restoration scheme.

Clients: City of St. Gallen, Community of Stein, AR

When the client called for corrosion
The State Museum collection centre

This collection centre houses historical artefacts. Its durable façade consists of rusting steel plates, intended to symbolise the ageing process of the items that are stored inside. Basler & Hofmann completed this project using an innovative supporting framework specifically designed for the task.

Client: The Federal Office for Buildings and Logistics (BBL)

Water, electricity and heating for the zoo
General infrastructure at Zurich Zoo

Zurich Zoo receives 1.8 million visitors every year, making it one of Zurich's main attractions. An extensive expansion programme is scheduled to take place over the next 10 years. Basler & Hofmann is responsible for organising the zoo's new general infrastructure.

Client: Zurich Zoo

Photo 1: Jan Bitter, Photo 2: Roger Frei/Burkard Meyer Architekten, Photo 3: The canton of Lucerne, Photo 4: Oli Rust, Photo 5: AlpTransit Gotthard AG

Masterplan for future expansion
Bangalore Airport, India

In the future Bangalore Airport will be a significant transportation hub for 50 million air passengers annually. Basler & Hofmann designed the masterplan for infrastructure and transport to and from the airport and Airport City – a commercial town which will provide jobs for 100,000 people.

Client: Bangalore International Airport Limited (BIAL)

A low-noise urban light rail system
Track technology for Glattalbahn

A new 13 km long urban railway now provides a link to the Glattal – a growing area near Zurich. This densely populated district needed a rail track that was quiet, with low levels of vibration. Basler & Hofmann designed five different types of technically challenging track geared to meet local needs.

Client: VBG Verkehrsbetriebe Glattal AG

High speed to the Gotthard Base Tunnel
Approach line to the Gotthard Base Tunnel

Basler & Hofmann designed the approach line to the world's longest railway tunnel. In addition to being technically very challenging the project must also comply with stringent standards relating to environmental compensation measures, architectural design and flood protection.

Client: AlpTransit Gotthard AG

A city within the city
Sihlcity Zurich

Zurich's newly opened shopping and entertainment city contains more than 90 shops, restaurants, a hotel, cinema, apartments and offices. Basler & Hofmann provided many services for this construction project from transport and environmental planning to site infrastructure and structural engineering.

Client: Credit Suisse

A major relief road for Zurich
The Zurich South Triangle

The Zurich Western Bypass takes through-traffic away from Zurich and provides fast access to central Switzerland. Basler & Hofmann planned and designed a key element of the new motorway: the Zurich South Triangle which includes the canton's largest bridge structure.

Client: The canton of Zurich

Zimmerberg, Gotthard, Ceneri
Slab track from Zurich to Lugano

Base tunnels significantly reduce travelling time by rail. The Zimmerberg, Gotthard and Ceneri base tunnels provide a transalpine rail link that is almost entirely flat. Basler & Hofmann designed the tunnel and railway technology for the Zimmerberg tunnel as well as the slab track for all three.

Clients: SBB, AlpTransit Gotthard AG

Photo 6: Lorenz Eugster Landschaftsarchitektur und Städtebau/ Markus Schietsch Architekten, Photo 7: Ralph Eichenberger

Seeing the big picture – with an eye for detail

As an engineering, planning and consultancy company our focus is always on the detail. Yet we must also have a complete overview. This is the only way in which we can produce far-sighted and workable solutions.

From planning to implementation

Our clients are guided through all phases of their project from the feasibility study through to construction. We undertake a whole variety of tasks. We take on the overall management of the project, offer consultancy services, provide technical experts and oversee the construction process, thinking at every level. This applies to all phases of the project and to any role we carry out. We see the big picture, we have an overview – and we also have an eye for detail. The details often determine whether ambitious plans and studies are feasible, and the overall context sheds light on specific construction requirements. Thinking outside the box is second nature for our staff.

1. Office building Neue Hard – Renovation of the façade
2. Hard Bridge – Traffic planning
3. Prime Tower – Surveying
4. Zurich-West Tram and redesign of Pfingstweidstrasse – Highway engineering (in engineering consortium)
5. Areal City West – site infrastructure and remediation of a contaminated site
6. Mobimo Tower – Geotechnical and structural engineering
7. Office building F 51 Fifty One – Geotechnical and structural engineering
8. Residential house E – Geotechnical and structural engineering
9. Migros – Design of new ramp bridge to parking level
10. SBB maintenance facility – Geotechnical and structural engineering, track design, remediation of a contaminated site
11. Areal Westlink – Project management
12. Office building Telekurs and residential redevelopment Kraftwerk Hardturm West – Geotechnical and structural engineering (in engineering consortium)

Zurich-West is a district which is undergoing major upheaval. This industrial area, which used to be full of factories, is now full of cranes. The area is being transformed into a residential, commercial and leisure district. High-rise buildings are going up, new tramlines are being built and integrated into the existing road network. This is a massive construction site with a very large number of stakeholders. Basler & Hofmann is involved in many different areas. We are developing transport strategies and planning the provision of public transport. We are also responsible for delivering earthquake-proof structures and producing redevelopment plans for contaminated sites. Any construction project in an urban development area requires detailed specialist knowledge. It also necessitates having a complete overview to ensure that the work runs smoothly on this major construction site and that the many different constituent projects result in an attractive new urban district.

Photo: Heinz Leuenberger / Desair AG

We expect our project managers to be committed to the project and to the people involved.

Having the right know-how – Complex projects need teams that are equipped with depth of experience and a variety of skills, as well as people who can lead and inspire collaboration.

Putting people skills first

In our projects we work with clients, partners and other stakeholders – often very closely and for long periods. Our experience shows that we achieve the best results when the actual process of collaboration is considered as important as the goal itself and when teamwork is governed by fairness and respect. Personal qualities are as important as professional skills.

Leading through collaboration
You have to be a good listener if you want to manage a project well. Only by listening can you take into account the needs and requirements of all parties so that all stakeholders are on board. This often requires a good measure of persistence. We expect our project managers to be committed to the project as well as to the people involved.

Running a project successfully also requires efficient process management. This ensures that deadlines, quality and costs are kept on track. We train our people in project management through a mix of mentoring, practical experience and participation in our advanced training programme.

Strength in teamwork
No single person can do everything. Complex projects can only be managed successfully using teams equipped with a diverse range of skills and abilities. Even engineers with decades of experience can benefit from their younger colleagues who are open-minded and have an unquenchable thirst for knowledge. The provision of inspirational consultancy relies on an efficient administration to support it. A whole variety of people contribute to the work that goes into our completed projects. All our people are very dedicated and highly motivated when carrying out their work and taking on responsibility.

Facts & figures

As engineers, numbers are part and parcel of our work. Yet when using numbers alone to describe our company they are meaningless, unless explained and given context.

01.01.1963

The date on which the company was formed

Nearly 50 years of company history may or may not be a long time. For us they are testimony to the fact that the company has enjoyed robust and organic growth. We have seen more than just one recession during this period. The company has even grown during times of economic crisis. We are still an independently financed company owned by two families who are able to think and act for the long term.

13.04.1994

The first ISO 9001 certified Swiss Consulting Engineering company

We were the first engineering company in Switzerland to hold the ISO 9001 quality management certification. Our quality management tools underpin our everyday work. Quality assurance plays a key role in the training we provide for our staff.

In 1996 we became one of the first service companies in Switzerland to receive ISO 14001 certification for our work in environmental management. Every three years we carry out an ecological life cycle assessment and use this as the basis for making improvements.

5

countries where we have subsidiaries

Basler & Hofmann has subsidiaries in Switzerland, Germany, Slovakia, India and Singapore. Our core business is in Switzerland. We have offices in Zurich, the Berne area, central Switzerland and Basle. It is important that our offices are located close to our clients. We also prefer our staff to work out of only a few sites. This means they are able to collaborate quickly, face-to-face across the various departments.

› 80

countries where we have a track record

We operate mainly in Europe and Asia. In countries where we do not have offices we often manage our contracts by working with international partners. When an existing client requires a new project, we will work wherever it is located.

500

staff in the Basler & Hofmann Group

The Basler & Hofmann Group employs more than 500 people. More important is the breadth of services we offer: our people are skilled in 30 different disciplines and about 60 per cent are university graduates. Our technical staff each has an average of 14 years professional experience. Some enjoy their work so much that they stay with us even after they retire: 25 per cent continue working for us as consultants.

27

memberships

You can only be one of the best if you learn from the best. It is important for us to share experience with other experts. We are involved in committees and governing bodies of the Swiss engineering associations, SIA and usic. Our international contacts are just as important. We are a member of the Europengineers network with seven leading European engineering companies. We work hard at nurturing this network of relationships. We are also a member of 24 other specialist organisations including the Swiss Energy Forum and the Earthquake Engineering Research Institute (EERI).

600

ongoing projects per year

The most important thing about the numerous projects in our portfolio is that they cover a vast range. These include major infrastructure projects that take several years to complete and involve large teams of people, as well as smaller projects which can be handled by a single specialist in a matter of days. What matters most, is the challenge and the variety of our work.

1 m

Swiss francs per year on innovation projects

We are investing in the future. Every year we complete a large number of innovation projects. These projects enable us to develop new approaches and improve the services we offer. They range from new construction and measuring techniques to new insights in the area of classroom design. Many departments which are now well established have evolved from one of our innovation projects.

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