Flood protection.
At a glance.

Flood protection begins locally
Flood protection.
Once-a-century events are becoming the rule.

Flood protection.
Systematic prevention.

Steel sheet piling in dike building.
Safety and cost-efficiency combined.

Sheet piling systems.
Safety from experience.

Sheet piling modules.
Robust and efficient flood protection.

Fold-up flood protection system.

TKR aluminum stop log system.
Cost-efficient temporary systems.

Stop panel system.
New approaches to flood protection.

Building protection. Gates and doors.
Keeping property safe and sound.

TKR glass wall system.
Functional aesthetics.

Aqua-Stop dam.
Safety in reserve.

Storage and logistics.
Systems for mobile flood protection equipment.

Machine technology.
Integrated solutions from a single source.

Service.
Flood protection is a matter of trust.
Flood disasters, once regarded as once-a-century events, are becoming more and more common. Experts are agreed that urgent action is required, because flood damage already tops the European loss statistics. Some of the losses are foreseeable and can be prevented by flood protection measures matched to local requirements.

A technological challenge

People have settled near rivers and coasts for thousands of years. River courses have been straightened and constricted, flood plains as natural escape routes for flood water have been reclaimed and built on, forests have been cut down and the air has been polluted.

The consequences of these human interventions are global climate change and increasing environmental disasters. Floods, once seen as once-a-century events, are becoming more frequent. The exception is almost becoming the rule.
Flood protection and prevention are therefore among the most urgent tasks facing the local communities concerned. Alongside the human tragedies and economic losses, floods often cause the failure of central services on which the population and helpers rely in just such an emergency.

Natural flood plains often cannot be restored, which is why efficient civil engineering solutions are called for.

**ThyssenKrupp GfT Bautechnik** is a world-renowned supplier of flood protection technology. We provide a broad spectrum of high-quality products and advanced technology. With our skills and experience we export our flood protection philosophy throughout the world.

We are also involved in international projects, such as the MOSE project to protect Venice.

Venice, built on wooden piles, is in danger of sinking. ThyssenKrupp GfT Bautechnik is playing a major role in constructing a gigantic flood protection system consisting of combined sheet pile wall systems and three huge barriers, normally filled with water but inflated with air when water levels increase, allowing them to rise up from the sea bed and hold back the flood.

Alongside efficiency and innovation, the most important aspect for us is cost effectiveness.

As an added benefit we offer our customers not only outstanding products but also complete installation technology for sheet piling, beams and anchors, ensuring that installation takes place under optimum conditions.
Competent flood protection takes into account all safety and environmental requirements. A basic distinction is made between permanent and temporary flood protection systems. The best solution for a specific application should be clarified in advance with our experts.

**Permanent flood protection systems**

As natural flood defenses are seldom adequate, various civil engineering measures such as dike building, bank reinforcement, protective walls, water retention basins and dike and bank raising are used. These permanent flood protection systems are fixed parts of the infrastructure and alter the visual appearance of the landscape.

The enormous costs of such major projects call for proof of safety and above all economically justifiable planning concepts. With their high cost efficiency, steel sheet pile walls from ThyssenKrupp GfT Bautechnik have proved their value throughout the world.

Where visual and aesthetic requirements are important, e.g. in resorts or recreation areas, our glass wall systems provide an ideal solution. They guarantee permanent flood protection without detracting from the view of the landscape or other attractions.

**Temporary flood protection systems**

Inner-city areas, port and industrial zones, road and rail crossings, to name just a few examples, are areas in which permanently installed structures are often a hindrance as they limit visibility and traffic freedom. If the flood hazards only occur at large intervals, our mobile flood protection systems are the perfect choice. These are installed at prepared fastening points when water levels begin to rise and returned to storage once the danger has subsided.

ThyssenKrupp GfT Bautechnik offers the TKR aluminium stop log system for applications like these. Where required, flood protection barriers or mobile Aqua-Stop dams can be supplied.
For decades, steel sheet piling has been the classic solution for flood protection. These proven products can be used as permanent or temporary systems and allow a situation-specific response to flood risks.

In a flood, dikes are subject to enormous loads. Often they are no longer capable of meeting these loads as the increasing regularity of flood disasters was not foreseen by their builders.

Here, steel sheet piling offers an efficient and cost-effective solution because it can be installed quickly and easily in both, existing and new dikes to stabilize and seal the dike and increase its load-bearing capacity. Depending on landscaping goals, the sheet piling can be installed either invisibly or as a visible dike raising solution.

The sheet piling cannot be penetrated by animals or tree roots and thus prevents damage to the dike by burrowing animals and vegetation. Installed in the soil, the sheet pile wall is also less sensitive to corrosion.

The piling is flexible and can follow the movements of the dike, ensuring long-term stability and tightness.

If necessary, the sheet pile interlocks can be sealed. Various bituminous materials are available for this. These sealants can be installed in the interlocks either at the factory or on-site. One particularly reliable sealing system is the patented HOESCH lip seal made of plastic. This seal is fitted into the interlocks at the factory and is suitable for all methods of sheet pile installation.

If the piling is used for a visible wall, the plastic seal is particularly recommended as it is heat-resistant and does not run out of the interlocks in the heat of the sun.

Naturally, all the sealing systems we recommend are groundwater-neutral and ecologically safe.

Ecological reasons also clearly favor the use of sheet pile walls. As 100% steel products they are particularly environment-friendly as they can be removed without residues and reused. This may be an advantage for example when changes have to be made to the dike installation.

**The visible parts of the pile wall can be architecturally enhanced in various ways, including**

- painting
- brick facing
- natural stone facing
- facing elements
- cladding with various materials
- greening

**Lightweight steel sections**

As well as hot-rolled sheet piling, cold-rolled piling sections are increasingly being used for flood protection.

They are cold-formed from flat material into sheet piling profiles and are mainly used for sealing purposes. They have long been proven as a low-cost solution.

In general they are used in the same way as hot-rolled sheet piling sections, taking their load-bearing properties into account. Production is cost-effective and service properties are ideal for many flood protection applications.
Steel sheet piling can be used in dike construction in various ways. Its outstanding properties make it ideal when planning new dike systems. For existing dikes that need to be upgraded to a higher safety standard, sheet piling also offers an innovative, cost-effective and efficient solution.

Sheet piling in the dike is a prerequisite for mobile dike-top systems for temporarily raising the height of the dike in the event of flooding risk.

It can also form an ideal basis for glass systems and protective walls to increase the flood protection line.

### Steel sheet piling in new dike construction

In new dike projects, the properties of the sheet piling are taken into account in planning and designing the structure. These are related to the specific tasks which the piling has to fulfill in the dike, e.g.:

- in the center of the dike as a load-bearing element
- on the water side at the foot of the dike as protection against potholes or on the land side at the foot of the dike
- assure reliable sealing of the dike and reliable protection against seepage and erosion
- as a basis for further flood protection structures such as TKR glass wall systems and mobile flood protection installations
- to protect against burrowing animals and root penetration

### Steel sheet piling in dike repairs

Steel sheet piling and lightweight steel sections are particularly effective for refurbishing existing dike installations. The installation of the sheet piling sections reliably stabilizes and seals the dike. If necessary, the height of the dike can be raised simply and cost-effectively by allowing the sheet piling to project over the top of the dike.

Sheet piling prevents dike seepage and erosion.

If necessary, groundwater levels on either side of the dike can be offset by staggered driving or slitting of the sheet piles.

Sheet piling is so flexible that it follows the movements of the ground without being destroyed.

Structures such as dike openings, sluices, pumping stations and locks can be integrated seamlessly using sheet piling solutions.

The sheet piling can project above the top of the dike and thus raise the flood protection line of the existing dike. This can often be a cost-efficient alternative to a new dike.

Sheet pile walls offer ideal conditions for the installation of different kinds of mobile flood protection systems to temporarily raise the flood protection wall when needed.

Sheet piling can be removed without residues and can be fully recycled.

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**Specific advantages of steel sheet piling**

- The sheet piling can absorb all static and dynamic forces generated by the flood. The piling is designed so that stability of the dike is guaranteed even if most of the water-side section of the dike is already eroded.
- Sheet piling prevents dike seepage and erosion.
- If necessary, groundwater levels on either side of the dike can be offset by staggered driving or slitting of the sheet piles.
- Sheet piling is so flexible that it follows the movements of the ground without being destroyed.
- Structures such as dike openings, sluices, pumping stations and locks can be integrated seamlessly using sheet piling solutions.
- The sheet piling can project above the top of the dike and thus raise the flood protection line of the existing dike. This can often be a cost-efficient alternative to a new dike.
- Sheet pile walls offer ideal conditions for the installation of different kinds of mobile flood protection systems to temporarily raise the flood protection wall when needed.
- Sheet piling can be removed without residues and can be fully recycled.
If existing dikes or flood protection installations are not high enough for extreme flood situations, steel sheet piling modules can be used as temporary flood protection. They can be used cost-efficiently as dike raising elements and dike openings to protect residential and working areas in densely populated zones.

Advantages of the system
- Low-cost fabrication from sheet piling
- High stability and reliability of use
- Delivered ready to install
- Fast and reliable installation and dismantling
- Long life and low maintenance requirements
- Low capital cost
- Low running costs

System properties
The sheet piling systems for this application consist of prefabricated sheets which are bolted on to existing sheet pile wall or concrete structures by means of flange plates or quick-clamping devices.

As a temporary solution, our flood protection systems can be easily raised by approximately 1 meter using easy-to-install top-mount structures.

Lifting equipment matching the conditions of use is necessary for installation.
Permanently installed but only temporarily needed flood protection systems need to meet high aesthetic requirements as they shape the visual appearance of their place of use. Our fold-up flood protection system doubles as an original bench which can be converted quickly and with minimum effort into a highly efficient barrier against water and debris.

Good ideas are amazingly simple. Like the fold-up flood protection system from ThyssenKrupp GfT Bautechnik.

If not enough helpers and transport capacities are available for the manual installation of a mobile flood protection system, local, rapidly deployable flood protection devices are needed. The elimination of loading and transport means that response time is significantly reduced, and many risk factors are eliminated.

Set-up is carried out manually without lifting equipment and can be done without a power supply.

Our fold-up flood protection system is used as a complement to steel sheet pile walls to temporarily raise the flood line or close off roads. The advantage is that it is already located directly on-site and is ready for use immediately.
The fold-up flood protection system is ideal for individual local solutions which we design in cooperation with clients.

Our extensive experience and technical capabilities guarantee a reliable and cost-effective solution to your flood protection problem.

### Advantages at a glance

- No storage or transportation needed. The system is also maintenance-free.
- Adjustment from rest to protection position can be done manually by one person.
- Can be retrofitted to most flood protection walls for temporary raising.
- Free view of the landscape is retained.
- Robust vandal-proof construction.

Another advantage of this system is that the fold-up elements can be added to all new or existing flood protection walls provided they can support the increased loads. The system does not require the storage and transportation of posts, wall elements or fasteners.

For new structures, the system can be used to allow sheet piling parts projecting from the dike or ground to be made 50 to 60 centimeters lower (possibly even 1.00 meter or more lower).

In normal conditions, the barriers are folded down to form an unobtrusive walk-on surface. Where the piling projects from the ground, the folded-down barriers serve as a bench, allowing an obstructed view of the water or land.

When water levels rise, the folding wall is set upright. As a rule, this requires only one person and no equipment. With particularly large fold-up elements, a maximum of two persons are needed.
Temporary flood protection is traditionally carried out by means of sandbags. Taking overall costs into account this method is often uneconomic, because as well as producing, transporting and installing the sandbags, the high cost of their disposal has to be taken into account. ThyssenKrupp GfT Bautechnik offers the perfect solution with the TKR aluminum stop log system.

The TKR aluminum stop log system has already proven itself as a temporary flood protection measure in numerous applications. A two-meter long, one-meter high stop log corresponds to the use of approximately 320 sandbags.

The TKR aluminum stop log system consists of only a few aluminum elements which can be installed at different heights. More elements can be fitted later to respond quickly and flexibly to changing conditions.

Installation is fast and requires limited manpower. The elements are easy to handle even by inexperienced users. The TKR aluminum stop log system is fully assembled on the land side, so helpers work in safe conditions. The individual elements are largely standardized and so cannot be mixed up.

Foundation
The TKR aluminum stop log system is preferably mounted on steel sheet piling structures. They ensure reliable transfer of forces into the soil and offer reliable protection against seepage and erosion. The connection with the substructure is by means of anchor plates and concrete head beams or by direct mounting on the sheet pile wall by a patented HOESCH system.

We develop individual flood protection, transportation and storage solutions customized to local conditions.

System properties
- Simple design, few components
- Robust construction, high reliability
- Easy installation
- No special tools required
- Long life
- Low repair, maintenance and storage requirements
- Resistant EPDM seal
- Stop logs and columns made of corrosion-resistant aluminum
- Stainless steel connecting elements
- Optimum storage systems

TKR aluminum stop log system
Cost-efficient temporary systems.
Innovative technology for the future

The TKR aluminum stop log system consists of a limited number of standardized parts and can be used as a barrier wall, dike opening and building protection.

It consists of the following elements:
- Stop logs
- Columns with or without backstays
- Clamping devices
- Anchor plates
- Bottom seal if required

TKR aluminum stop log systems
TKR aluminum stop log systems are available in several profile sizes.

The TKR 1 system is based on the use of standard DIN profiles for the stop logs and columns and can therefore be varied to suit local conditions.

Vertical bracing is by means of wedges made of impact-resistant plastic, and horizontal bracing by means of a threaded clamping device.

The TKR 2 system consists of specially fabricated aluminum profiles for the stop logs and columns in various sizes offering high efficiency of material usage and a continuously lockable clamping device.

Stop log load diagram

Flow velocity: 1.0 m/s
Angle of flow: 15.0°

Includes consideration of deformation at l/150, disregarding material EN AW-6060 [Al MgSi] T66 (DIN Al MgSi0.5)

Advantages at a glance
- No obstruction of traffic or views in normal conditions
- Unlimited life under favorable storage conditions
- Limited capital tie-up and minimum maintenance requirements compared with other systems
- Guaranteed high reliability

The stop logs and columns are made of aluminum profiles. Specially developed seals made of EPDM material ensure the system remains watertight. The EPDM material is weather-resistant, robust and resistant to aggressive chemicals. All components are designed for long life.
Flood protection systems have to be versatile and meet many different demands. Each application poses different priorities. We develop situation-specific solutions taking into account local requirements and cost aspects.

**A special version of the TKR aluminum stop log system is the stop panel system.**

Stop panels are fabricated from stop logs and usually inserted into the support structure as a complete wall panel using lifting equipment and then braced for sealing. They are also suitable as inspection closures for locks, weirs and inlets.

Stop panels can also take the form of large-area walls of aluminum or steel and brought from their storage position into their protection position with the lifting gear provided. Larger surface areas can thus be assembled quickly and with little effort.

Stop panels are preferably stored in the direct vicinity or integrated directly in the flood protection system.

Smaller stop panel systems, which are usually installed manually, are available in various designs for doors, windows and gateways. The panels are manufactured individually for a particular opening.

Stop panel systems provide fast, reliable and economic flood protection.

New approaches to flood protection.

Safety through speed
Enormous property damage is caused by flooding inside buildings. A reliable protection system which takes into account the specific requirements of the building is an important preventive measure in all flood-endangered areas.

We offer proven flood protection doors and gates in various styles for watertight closure of openings in buildings and flood protection systems:

- one and two-leaf doors
- sliding doors
- tilting, swivel and miter gates
- TKR aluminum stop log and stop panel systems for window and door openings

The materials used are steel or aluminum with various corrosion protection and design possibilities.

The door leaves are welded structures with plate thickness and stiffeners designed according to water pressure. High-quality, extremely weather-resistant EPDM rubber is used for the seals.

The fastening, sealing and bracing systems are proven assemblies from shipbuilding. Here we utilize our long experience in many areas of maritime structures and construction techniques.

In addition to manual operation, electric or hydraulic operators can also be supplied.

Door type, design and outer appearance are selected on a project to project basis, allowing us to exactly meet our clients’ needs and wishes.

Take advantage of our advice and the extensive experience of our specialists.

Building protection maintains value
Fracture-resistant glass wall systems made of multi-pane safety glass are an aesthetic and elegant flood protection solution. They are designed for permanent use on masonry, concrete beams or sheet pile walls. They provide ideal flood protection, e.g. for attractive central areas, without obstructing visibility.

**Uses**
- Alternative to obtrusive masonry to guarantee daylight
- Protection in tourist areas, e.g. terraces, viewing platforms etc.
- Areas which are not accessible for the installation of mobile systems
- Locations with very short warning times which do not allow the installation of mobile systems or appear too risky
- Public areas with high demands on architecture and urban design

The glass elements consist of multi-pane safety glass meeting structural requirements. The external 6 mm thick sacrificial panes perform no structural function so the safety of the system is not impaired if they are damaged.

The dimensions of the panes are variable and are chosen in line with structural and aesthetic requirements.

The perimeter frame is fabricated from a stainless steel or aluminum profile with internal EPDM rubber seal. The safety glass with frame is fastened to the welded aluminum or stainless steel column by means of EPDM profiles.

Approved structural analyses are part of the system documentation.

The visual effect of the glass wall structure can be enhanced even further by color and surface treatment of the metal frame.

**TKR glass wall system. Functional aesthetics.**
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**Enhanced cost efficiency through additional functions**

- architecturally pleasing flood control solution, particularly in densely built-up areas
- high safety against sudden flooding
- blends in well with overall architecture
- no sight obstruction
- high corrosion and weathering resistance
- varied design possibilities
- ozone-resistant rubber seal
- removable where required

As well as flood protection the TKR glass wall system also offers protection against wind and noise.

In tourist areas, glass walls can provide elegant and attractive flood protection.
The Aqua-Stop dam is a temporary dam wall which can be set up quickly in the case of flooding. It is designed so that it can be installed within a very short time in an emergency. Two people can set up 100 meters of dam in 90 minutes without the use of a crane. A special logistical advantage is that the dam elements can be transported easily and stored in a minimum of space.

The Aqua-Stop dam consists of a high-strength frame, lightweight sheeting and the necessary fasteners. The frame is made from a special plastic which makes it particularly light and strong. An aluminum support provides stability and interconnects the frames.

The Aqua-Stop dam is resistant to impact, UV radiation and saltwater. The individual elements are supplied in assembly-friendly standard lengths of 2.00 meters and heights of up to 1.30 meters. The standard heights are 1.00 meter and 0.6 meters. Other heights can be supplied on request.

The dam is kept stable and held in place by soil nails. Where present, walls, gutters or other features can be used to absorb horizontal forces.

To protect buildings, the frames can be placed directly against the house wall. The plastic frames can be cut to match the conditions of the terrain. Angles and special shapes can be made by bonding or welding.

Watertightness is guaranteed by the sheeting which covers the dam. On the water side it is weighed down by gravel sacks. The rising water presses the sheeting against the ground and makes the dam impermeable.

These advantages make the Aqua-Stop dam an effective alternative to sandbags. It can also be used in combination with sandbags.
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The Aqua-Stop dam can be stacked easily to save space. Elements for 40 meters of dam can be stored on one pallet.

As well as the standard dimensions, corner elements are available on request for any angle and shape.

These advantages make the Aqua-Stop dam a complete all-rounder, suitable for many other uses:

- barriers
- securing building sites
- road diversions

The versatility of the Aqua-Stop dam system makes it even more cost-efficient as it can put to many different uses.

The Aqua-Stop dam is ideal as an interim preventive measure until a planned flood protection structure is built. Once the structure is complete and the Aqua-Stop dam is no longer needed, it can be taken down and used elsewhere.
Most of the time, mobile flood protection equipment is kept in storage and only transported to the scene when the flood risk is acute. To guarantee rapid deployment in case of emergency, three aspects are important:

- Good storage conditions as a prerequisite for continuous availability and long life of equipment.
- Well thought-out storage and transport systems for fast and reliable installation of the equipment.
- Storage and transport systems are part of emergency planning and must function reliably under given conditions, also in unforeseeable situations.

The following main storage systems are available.

**Roll-off containers**
Roll-off container vehicles are used widely in municipal services and the building sector due to their cost advantages and flexibility. For ThyssenKrupp GfT Bautechnik this is the preferred transport and logistics system for flood protection. The interior layout and fittings of the containers are based on the flood protection equipment to be stored as well as specific customer requirements. On request, shelving systems, lockable doors, interior lighting and further accessories can be installed.

**Mesh box pallets**
We supply mesh box pallets in various sizes. They can be stacked two or three high, have removable sidewalls and on request are separately lockable.

**Special storage systems**
For special requirements we offer further solutions such as semi-trailers, roll containers, standard sea containers, post pallets, and local storage systems. The supply of other storage systems is subject to agreement with the client.

Our service advantage
Working together with customers, our specialists can develop and offer optimum storage and logistics solutions taking local conditions into account.

Storage and logistics systems must be matched to flood defense plans as well as to locally available storage and transport facilities. We can assist in developing a clear storage regime and an inspection, maintenance and training program to create the organizational framework to ensure constant availability and rapid installation of mobile flood protection equipment.

Custom designs are also possible.
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Advantages of our storage systems
- appropriate sorting and clear packaging of flood protection equipment
- low storage room requirements
- space-saving stacking and shelving systems
- optimum protection against weather, loss and damage
- efficient loading and transport technology
- fast loading and unloading without additional handling equipment and personnel
- no closed storage room necessary
- low capital tie-up for storage
- easy relocation when storage concept changes
- limitation of risk factors through precautionary delivery of equipment to scene in case of flood risk

Transportation and storage must be closely coordinated. Our specialists will be pleased to advise you.

Every locality has specific alert and emergency plans. We help make sure everything works.

**Spare parts service**
Fast spare parts supplies are guaranteed thanks to an efficient service system. Where agreed we can keep a range of spare parts for you.

**Advantages at a glance**
- appropriate sorting and clear storage systems
- cost-effective storage with optimum protection against weather
- efficient and flexible loading and transport technology

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... additional advantages when using roll container technology
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We look after everything
Machine technology.
Integrated solutions from a single source.

In addition to flood protection materials and equipment we also provide special pile installation technology. Different site conditions call for different machinery. We offer a wide range of equipment for hire to suit particular project needs.

Installation technology
ThyssenKrupp GfT Bautechnik supplies a complete range of machinery for installing sheet piling, pipes, beams and other piling sections.

The choice of installation method depends on soil conditions, length of piling, depth of driving and type of section. Based on this we develop the optimum concept for you and offer customized solutions for successful installation.

Our know-how is the result of decades of experience. It enables us to deliver advanced sheet piling sections and driving equipment specifically matched to your project.

We offer solutions tailored to your needs.

Vibratory driving and extracting
The vibratory technique is the quickest and most effective method to drive and extract sheet piling, beams or pipes.

Vibratory drivers are mounted on excavators, suspended from cranes or guided by leaders. Even diagonal driving is possible given suitable pretensioning. Vibratory driving is low on noise, and power is easily regulated for controlled driving with minimum damage.

Pressing
The Hydro Press system and the self-moving hydraulic press are perfect solutions when it comes to minimizing noise and vibrations on building sites.

Impact driving
In certain soils and applications, sheet, beam and pipe piles have to be installed using impact driving equipment.

We can provide hydraulic or pneumatic hammers in any power class.

Mobile driving system
Our telescopic leaders allows driving, extracting, drilling and pressing jobs to be carried out with one piece of equipment. The various components are exchanged in minutes thanks to a quick-change docking system.
Service.
Flood protection is a matter of trust.

Flood prevention and protection is a highly complex task. It is about minimizing risks to people and property and maintaining services, taking specific local conditions into account. Safety and reliability are the most important requirements which a flood protection system has to fulfill, but cost aspects must also be observed.

Service makes the difference

Competent advice plays a key role.

ThyssenKrupp GfT Bautechnik has an engineering office whose engineers can provide a full range of technical services in the areas of hydraulic engineering and water management. They are available to assist and advise planning companies and clients.

Our engineering services
- structural analyses and stability tests
- special proposals
- preparation of drafts
- determination of dimensions and costs
- design drawings and detailed solutions
- advice and support for planning companies and the documentation of installations

Naturally we are certified in all areas.

Our products are designed and manufactured exclusively at ThyssenKrupp GfT Bautechnik and its partner companies. Our customers rightly place high demands on manufacturing quality, delivery performance and spare parts supplies. Thanks to our long experience in equipment manufacture, our state-of-the-art machinery and equipment and our highly qualified staff we can ensure the utmost product quality and reliable customer service.

By working together with leading hydraulic engineering and water management institutes we ensure the use of the latest methods for our customers.

Equipment made to measure.
We offer tailored solutions.

The purchase and use of heavy equipment is always costly. We therefore offer our customers financing terms adapted to their needs. Rental and leasing are almost always a possible alternative to purchase.

Our services
- sale/hire of drilling and driving equipment
- customer service
- spare parts service
- installation, dismantling, repair and storage
- Financing of machines

Service.
Flood protection is a matter of trust.