The world's leading supplier of personal safety equipment.

The leading brand names for personal safety equipment for at work and in hazardous environments are grouped together under the Bacou-Dalloz banner:

Head protection:
Eye protection, hearing protection, respiratory protection

Body protection:
Hand protection, foot protection, protective clothing

Fall protection:
PSE against falls, fall protection systems, anchorage devices

Perfect protection from head to toe.

Bacou-Dalloz offers you the whole product range for enhanced safety.
With 53 production facilities on 5 continents, Bacou-Dalloz is the right partner for you when it comes to issues of occupational safety.

Under the umbrella of Bacou-Dalloz, Christian Dalloz Holding Deutschland GmbH & Co. KG offers you a broad, highly specialized range of services.

Established by Karl Söll as an industrial foundry in 1921, the firm quickly became known for quality and efficiency under the name Söll GmbH.

The cornerstone for what has evolved into a modern hot-galvanizing plant was laid only a few years after the company was founded. We have been developing and manufacturing system components for fall protection engineering since 1969.

Today, the SÖLL brand is a leading manufacturer of fixed safety ladders and personal safety equipment for protection against falls. Fall protection systems based on ladders or guide rails are always used when work has to be performed at heights in excess of 5m and other height access systems (e.g. steps) or collective protection against falling (e.g. railings) are out of the question.

But why systems to protect against falling?
There are a large number of rules and regulations which oblige companies to take suitable protective measures against falls (health & safety rules, workplace regulations, work association rules and regulations, etc.).

Equipment preventing persons from falling must be present at all workplaces and on walkways at which there is a risk of falling from heights of more than 5m.

The majority of industrial accidents occur at heights of between 1 and 2m, with these heights being the cause of most serious and fatal injuries.
Around one quarter of fatal industrial accidents are the result of falls.

We are concerned with the protection of the life and health of all persons working at heights. On the following pages we present the various systems for protecting against falls, their components and their areas of application in more detail.

COMFORT, the completely new type of fall arrester - climbing with and without back protector, max. impact force only 3.7 kN!

Söll's fall protection system, GlideLoc®, consists of guided-type fall arresters, fixed ladder elements or guide rails (to DIN EN 353 Part 1 standard), lanyard elements, brackets and safety harnesses.

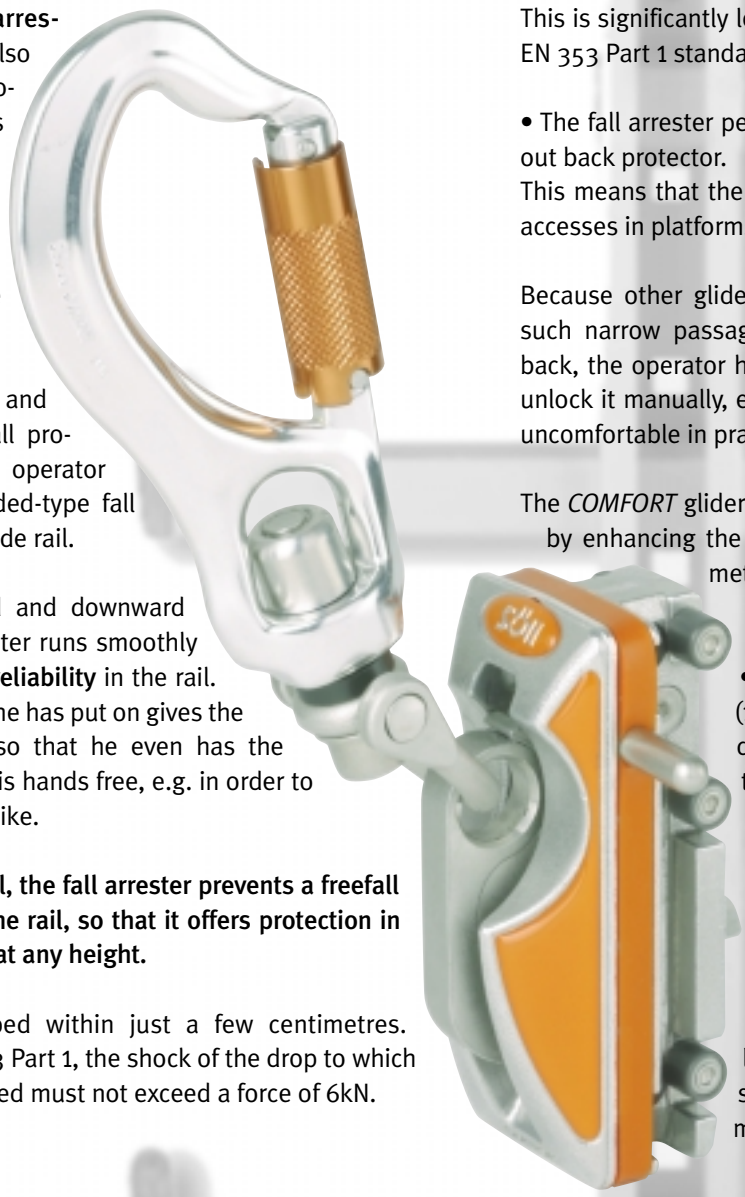
At the heart of the system is the **guided-type fall arrester.** This device, also known as a fall protection glider, is secured by means of the integrated karabiner to the eye of the safety harness which the climber has put on.

To enable ascents and descents on the fall protection device, the operator introduces the guided-type fall arrester into the guide rail.

During the upward and downward travel, the fall arrester runs smoothly and with **absolute reliability** in the rail. The safety harness he has put on gives the operator stability, so that he even has the option of keeping his hands free, e.g. in order to carry tools and the like.

In the event of a fall, the fall arrester prevents a freefall by self-locking in the rail, so that it offers protection in every position and at any height.

Any drop is stopped within just a few centimetres. According to EN 353 Part 1, the shock of the drop to which the person is exposed must not exceed a force of 6kN.



Now, the completely newly-developed *COMFORT* fall arrester combines unique gliding properties and a characteristic design with **longer life** and **maximum safety.**

• The **maximum impact force** suffered by the user in the event of a drop is **only 3.7kN.**
This is significantly lower than the limit of 6kN laid down in the EN 353 Part 1 standard.

• The fall arrester permits ascents and descents with and without back protector.
This means that the operative can easily pass through narrow accesses in platforms, shafts or on ladders with a back guard.

Because other gliders are unlocked a by back protector, but such narrow passages do not permit the necessary leaning back, the operator has to put a hand on the glider in order to unlock it manually, even though this can be very awkward and uncomfortable in practice.

The *COMFORT* glider now makes this a thing of the past, thereby enhancing the safety of the climber. The particular geometry of the glider that permits this has been patented.

• Thanks to the larger number of rollers (10 in all), the glider opens up a whole new dimension in gliding properties. This leads to a better distribution of the tensile forces into the rail so that rail joints are passed without jolting. Made from a special plastic, the large, wide rollers ensure smooth rolling movement, low running noise and high gliding performance.

• The longer life of the rollers will be particularly noticeable to the operator in the prescribed annual inspections for the equipment.

A fall protection concept for the highest safety requirements

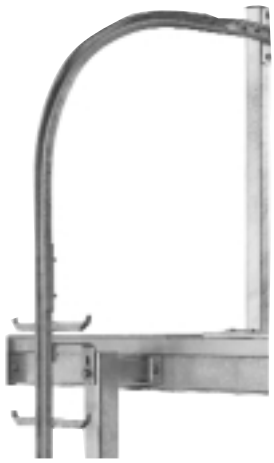
The ladders of Söll's fall protection system have already integrated **the guide rail** for the guided-type fall arrester **in the centre stile.** They are available in aluminium, hot-galvanized steel and special steel both as single-stile ladders and with side stiles. System accessories such as entry and exit devices, roof ascent or shaft entry equipment make it possible to design a system that is not only appropriate for the structure of the building or installation, but which also satisfies the very highest safety requirements.

Twin ladder

The twin ladder offers the advantage that the operator can allow his hands to glide along on the side when ascending without, for instance, having to grab hold of the rungs in what may be dirty surroundings, while it also boasts a high resistance to torsion.

Y-tree

The "Y-tree" is a cost-efficient alternative which allows the wind loads transmitted to the understructure, for instance, to be kept low.



Roof extension piece

The turned roof extension piece makes it possible to transfer from a vertical ascent to a horizontal level without having to break the safe connection to the rail while doing so.

Our sales staff and engineers will be happy to support you at any time as you plan a height safety concept for your application.

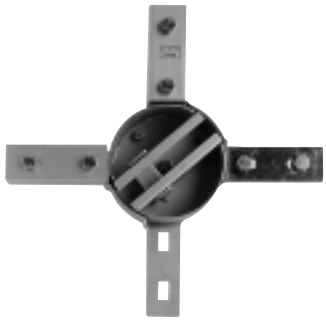
Safety for retrofitting

Söll guide rails can be assembled on pre-installed ladders, step irons etc.
An ascent route protected in this way offers the same protection as Söll's vertical ladders.

Systems based on guided-type fall arresters with fixed guides (such as those from SÖLL) offer many advantages over fall protection devices with movable guides (e.g. wire ropes):

- The climber can lean back when ascending and descending, thus keeping his hands free for tools and equipment
- Supported by the belt, this form of climbing offers ergonomic advantages, ie. the operator tires less quickly
- The fall arrester glides smoothly along the rail without having to be helped by hand
- In contrast to rope systems, Söll's guide rails allow a combination of vertical and horizontal routes without the user having to detach and then re-attach himself
- Rails and ladders are available in both straight and curved form
- Once installed, they are not subject to any annual inspection and only have to be checked even after an impact from a fall
- They can withstand the toughest of environmental conditions
- Söll's rail systems permit safe roof and platform access, whereas rope-based systems often end at the last rung so that the stresses are concentrated only on the uppermost fixing point

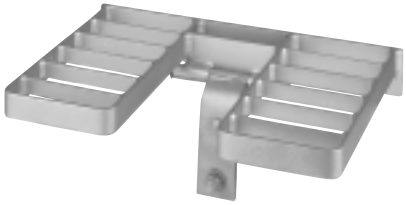
An extensive range of accessories is available to go with Söll's guide rails.
This makes it possible to adapt the system precisely to the structural conditions.



Turntable

Exit device

Brackets



Rest platform

Areas of use and application

One system - many applications

The fall protection and anchorage devices are primarily used in industries such as telecommunications, radio and TV mast construction, power supply and hydroelectric installations, windpower facilities, chimney and industrial plant engineering, building and facade work, the petrochemical industry, oil platforms, shipbuilding, crane installations, shafts and manholes, aircraft hangars and loading/unloading stations.

Fig. 1:

Fig. 2:

Fig. 3:

Fig. 4:

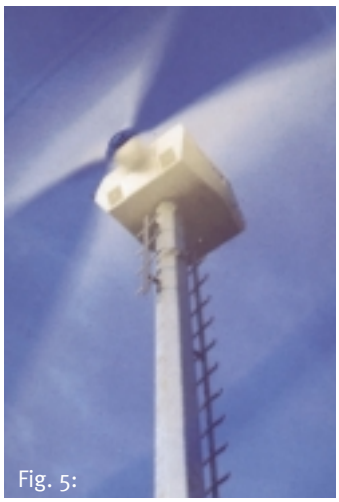


Fig. 5:

Fig. 6:

Fig. 7:

Fig. 8:

Fig. 9:

Fig. 10:

Fig.1: Floodlight mast for stadium lighting with vertical ladder made from galvanized steel and cover plate
Fig. 2: Power station cooling tower with step irons and vertical guide rail (special steel) on existing step irons
Fig. 3: Overland electricity pylon with curved vertical guide rail (galvanized steel) on existing step irons
Fig. 4: Advertising mast with vertical ladder made from aluminium and transfer device for platform access
Fig. 5: Windpower plant with vertical ladder made from galvanized steel
Fig. 6: Hydroelectric power station with special steel vertical ladder, transfer device and crane with Revac
Fig. 7: Hydroelectric power station with vertical ladder and turntable
Fig. 8: Barrage wall with vertical ladder and shaft entry device
Fig. 9: Urban railway station with laterally mobile vertical ladders made from galvanized steel and cover plate
Fig. 10: Motorway bridge with aluminium vertical ladders, turned roof extension piece and cover plate

Perfectly safe in every situation

SÖLL offers a variety of horizontal anchorage devices to DIN EN 795 standard for the safety of people working in areas presenting fall hazards, e.g. on roofs and facades.
The person to be protected wears personal safety equipment and protects himself by means of a lanyard with integrated shock absorber (according to EN 354/355).
Söll's anchorage devices can be fixed either to the **ground**, to the **wall** or **overhead**.

Glider

A glider to whose eye the lanyard is connected moves along the Söll horizontal guide rail.
The fixing interval of the guide rails is 1m. The system is licensed for simultaneous use by three persons. In the case of overhead use, a retractable-type fall arrester can, for instance, be attached to the glider, thereby protecting anyone working in an area in which he is exposed to the risk of falling.

Horizontal guide rails

The rails are available in lengths of up to 4m in either curved or straight form, made from aluminium, galvanized steel or special steel.

End block