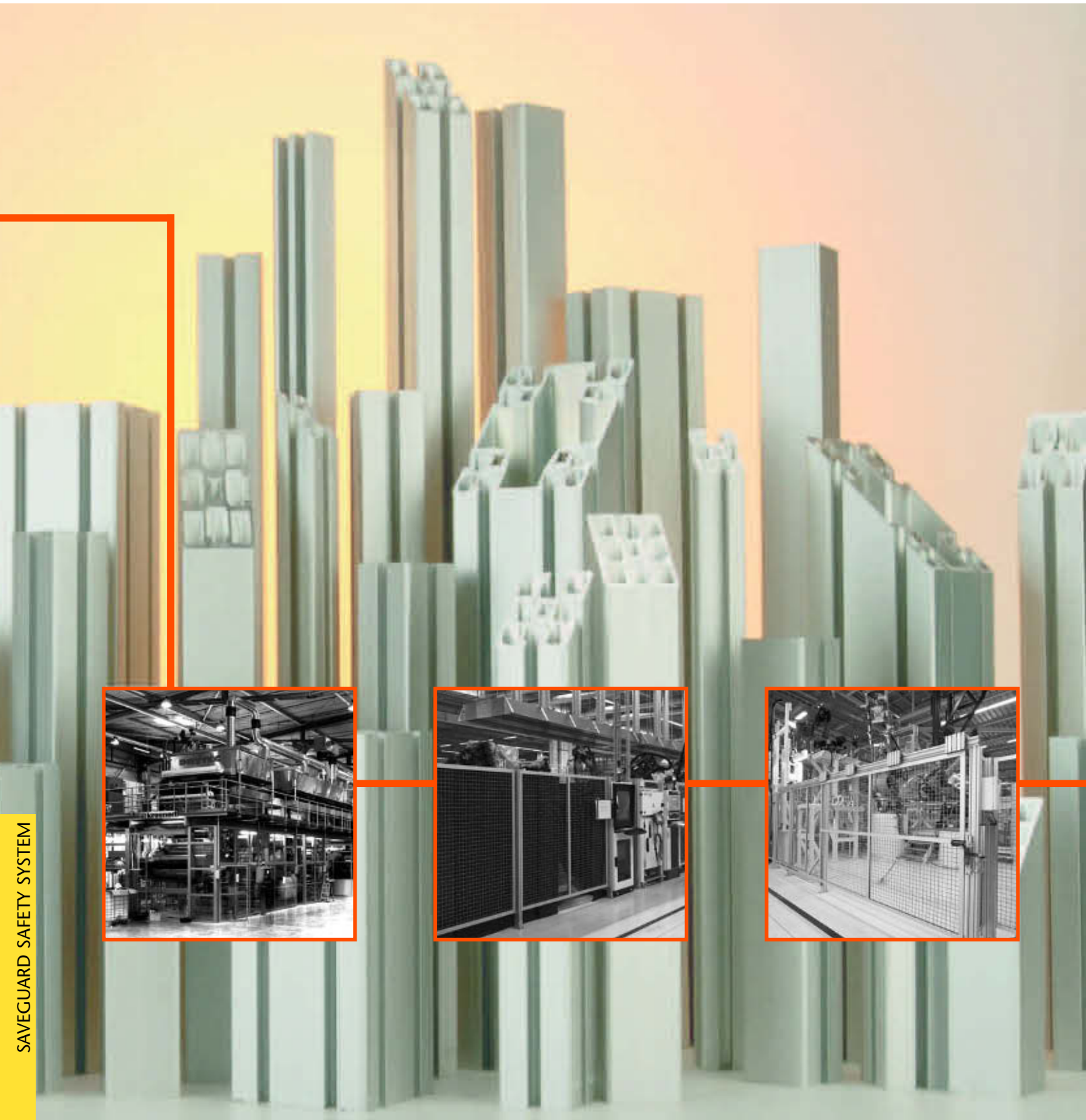


# MiniTec

SAVEGUARD SAFETY SYSTEM

*...save time!*



# **SAVEGUARD SAFETY SYSTEM**

Part. N° 95.0575/1

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## ABOUT US



### The Company

MiniTec was founded on the sales of miniature linear guides and has successfully evolved into designing complete machines and devices for many industrial processes around the world.

### The Production Program

Our linear technology combined with the Profile System is the ideal partnership for machine builders.

The components work together to provide optimum performance and the modular assembly system makes it possible to design and manufacture to unique specifications quickly and cost effectively.



### The Quality

To meet the demands of linear technology precision and exceed quality expectations, we invest in the latest machines and newest technologies and manufacturing techniques. Our quality management has been certified according to ISO 9001 since 1994.

### The Environment

Our Company mission stresses an active role in environmental protection and the conservation of our natural resources. As an example we locate our service partners in close proximity to our customers to avoid long transits. Our environment management system is certified according to ISO 14001.



### The Innovation

For us innovation means more than just new products. All our processes are constantly optimized. Continuous training of our staff and close cooperation with research and education facilities are the base for a steady innovation process.

## MiniTec CAD Support

*Our CAD tools are the logical supplement to the hardware of our construction system. All planning and assembly requirements are comprehensively considered. The combination of components and software opens up the full potential for efficient, flexible, and modern machinery construction.*

Time is a key factor in modern and economic machine construction. The time expended for a construction affects the costs to a great extent as well as the speed of implementation. It is not unusual that the expenditure for calculation, design, operation scheduling, and assembly to amount to more than half of the total costs. The ergonomic design of all the components of our system and the ease of assembly with our power-lock fastener without drilling results in a significant saving of time.

Planning and operations scheduling often offer an even greater potential for saving time. A fundamental step forward with regard to planning and avoidance of errors are our MiniTec CADmenu for AutoCAD and MiniTec iCAD design tools with more than 50 formats for all other CAD systems. The design time is reduced by more than 60% with these tools compared with conventional designing.

All components are contained in 2D and 3D in the electronic catalog. Defined insertion points facilitate positioning in the drawing. Any processing and the connectors that may be required are displayed for each of the components and can be added if desired. A parts-list is automatically created in which the overmeasurements for panel elements are correctly calculated. Identical parts are summarized in an order list. The weight of the individual items and the total weight is displayed. The parts list can be generated in German, English, or French. Interfaces to Word and Excel enable the data-transfer to planning systems and the creation of documentations or the further processing of the data.

### MiniTec CADmenu for AutoCAD\* 2004 | 2005 | 2006 | 2007

Part N° 95.0857/0



- Design tool using AutoCAD commands
- Automated design modules for
  - Linear axes
  - Safety equipment
  - Conveyor belts
  - Roller belts
  - Workplaces

° Installation routine for AutoCAD 2002 can be downloaded from our website [www.minitec.de/cadsupport](http://www.minitec.de/cadsupport)

### MiniTec iCAD 3.4 for all CAD Systems

Part N° 95.0863/0



- Autonomous design tool that can also be used without a CAD system
- Direct interfaces to all common CAD systems such as Mechanical Desktop, ProEngineer, Solid Works, Solid-Edge, MegaCAD, etc.
- More than 50 data output formats in 2D and 3D
- Automated design module for linear axes

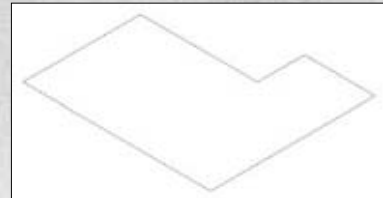
\*AutoCAD is a registered trademark of AUTODESK, Inc. - Word and Excel are registered trademarks of Microsoft

## Planning

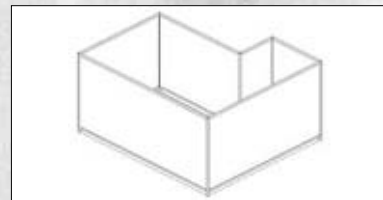


Our MiniTec CADmenu planning tool enables individual and reliable planning of any safety system within the shortest time.

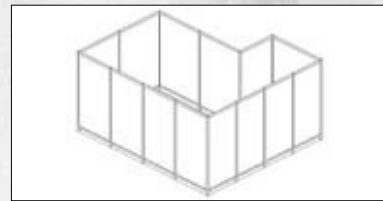
Step 1: Make a sketch of the area to be protected by drawing a polyline.



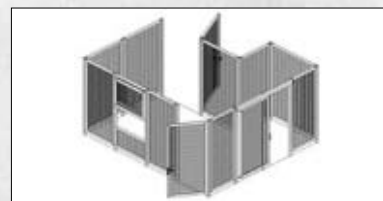
Step 2: Enter the total height HG.



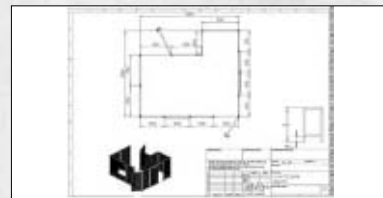
Step 3: Divide the installation into reasonable field sizes (the system automatically places the additional posts into the centre of the field selected).



Step 4: Fill the fields with the elements desired such as fields with corrugated mesh or other panel elements, swinging doors, sliding doors, windows, openings or lifting doors. The height or ground clearance of individual fields can easily be changed.



Step 5: Create the general drawing with 3D view and all connection dimensions.





**SAFETY SYSTEM  
SAVEGUARD**

0091=SH





## Safety System SaveGuard - Load capacity

The load rating of the standard protection fields was determined in empirical trials. In the centre of the field, a 200 mm x 200 mm plate was statically loaded until the corrugated mesh was pressed out of the clamping profile. The specified values apply to protection fields made of clamping profile 32 x 32 with corrugated mesh, galvanised steel, 40 mm x 40 mm x 4 mm.

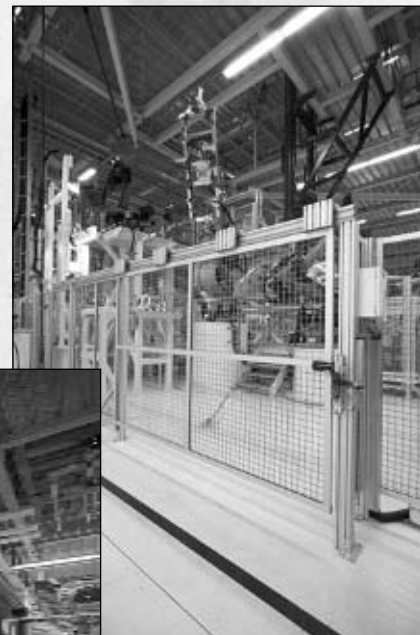
Field height HS mm	Field size B mm	Load F N
1800	500	1200
1800	750	1200
1800	1000	1000
1800	1250	1000
1800	1500	1200
1800	1750	1100
1800	2000	1000

The dynamic load rating of the protection fields was determined by TÜV-Saarland in pendulum impact tests using a mass of 100 kg. All parameters required by the machine directive 98/37 EG and DIN EN 775:1993 and DIN EN 953:1987 were complied with.



## The Grid System

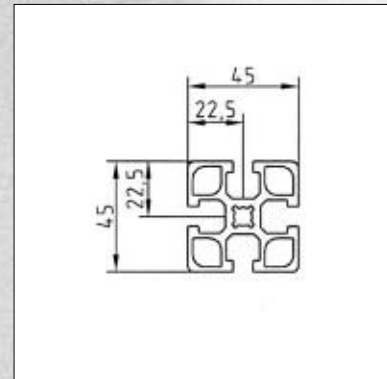
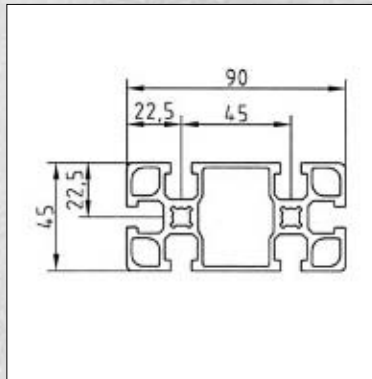
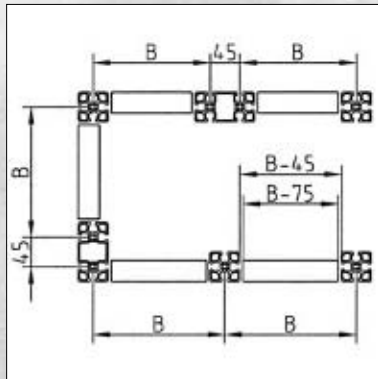
The standardised SaveGuard system is an especially economic and quick solution for most applications. Individual heights, field sizes, special designs for noise protection or splash water protection and optional fastening types are available for special tasks.



## SaveGuard Standard

### Widths Safety Fencing

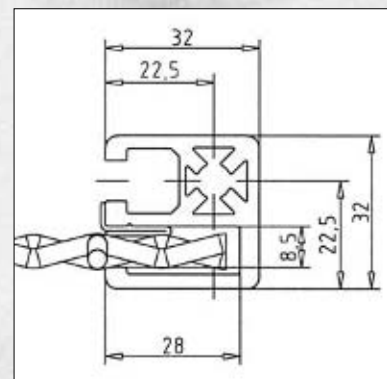
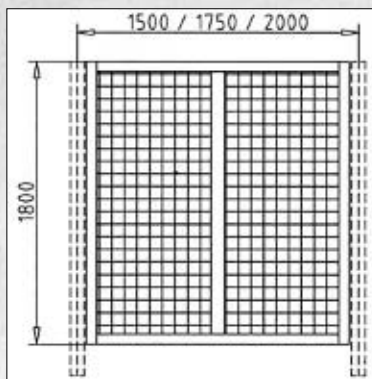
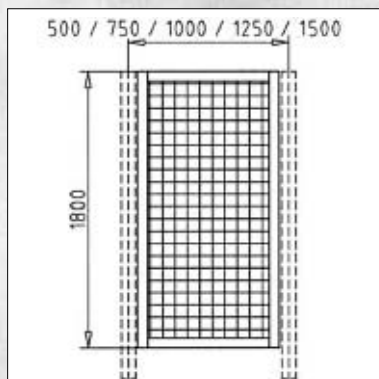
### Center To Center Distance of T-Slots „B”



**Standard width** 500, 750, 1000, 1250, 1500 mm  
1500, 1750, 2000 mm with additional vertical strut

The SaveGuard frames consist of special designed clamp-profiles 32 x 32 mm. High stability through deep T-slots for panel elements and distance profile.

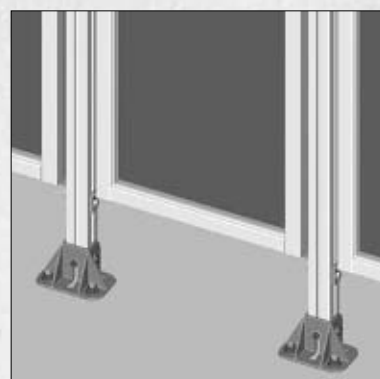
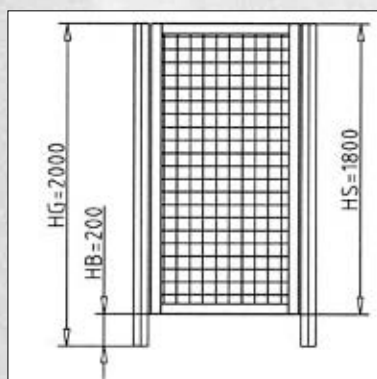
for add-on piece fastening all components of the MiniTec Profilesystem can be used.



### Height

**Standard** Total height „HG”= 2000 mm,

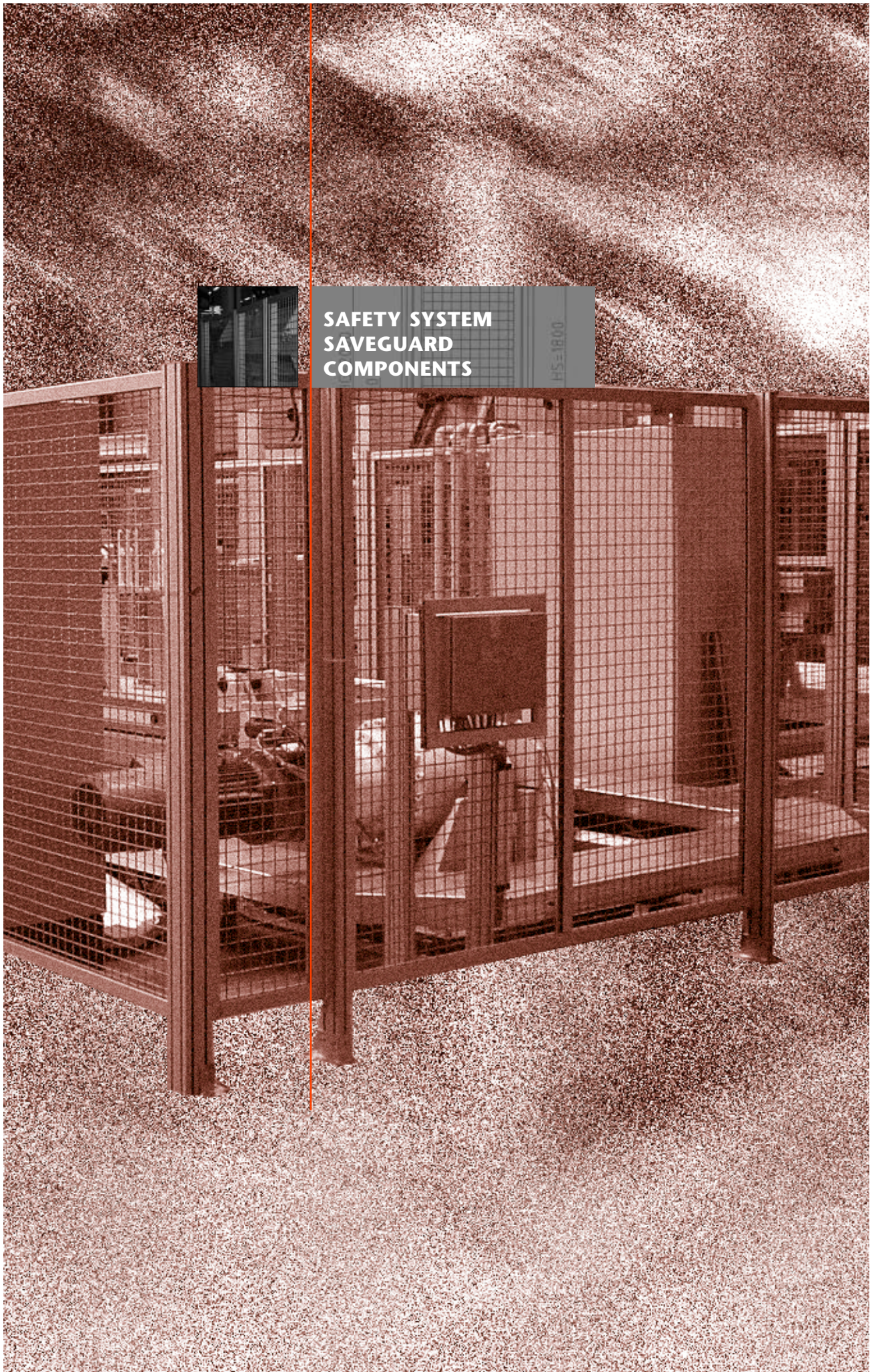
**Height Safety Fencing HS** 1800 mm, 200 mm ground clearance for easy cleaning



## Assembly

The preassembled fields can be mounted on site by just one person. With stable feet, the posts are fastened to the ground by means of heavy-duty dowels. The posts are equipped with angles into which the protection fields are hung up and screwed tight. The fields can be aligned in any direction. Oblong holes in the angles enable spacing tolerances of the posts to be equalised.



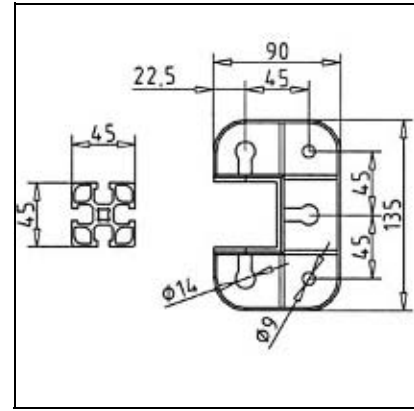
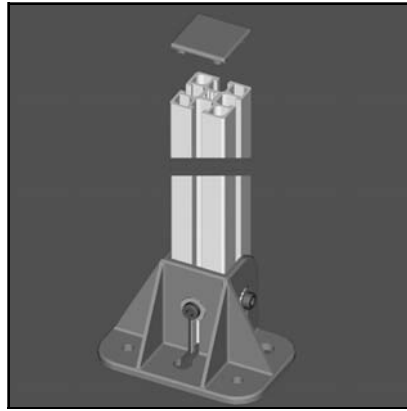
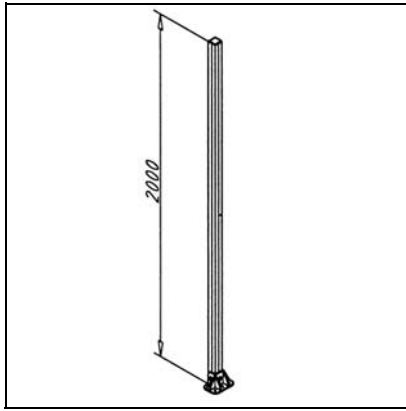


**SAFETY SYSTEM  
SAVEGUARD  
COMPONENTS**

H5=1800

## POST SG 45 X 45

Part. N° 23.0030/0



### TECH. DATA / ITEMS SUPPLIED

### APPLICATION

### ASSEMBLY

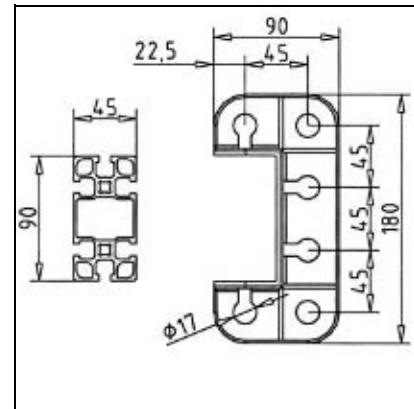
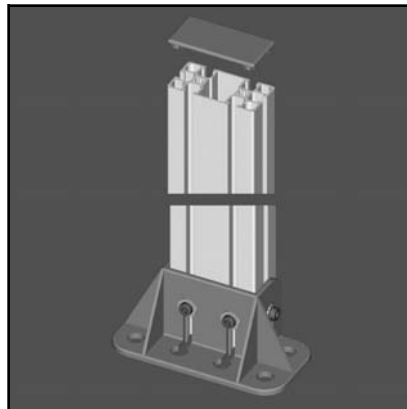
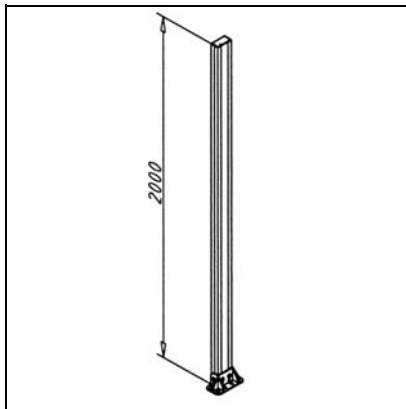
- Made of profile 45 x 45 F
- Foot 45 GD preassembled
- Without ground anchor

- As posts for protection fields and doors

- Position foot as appropriate
- Mark the position of the borings on the ground
- Install and tighten the ground anchor

## POST SG 45 X 90

Part. N° 23.0060/0



### TECH. DATA / ITEMS SUPPLIED

### APPLICATION

### ASSEMBLY

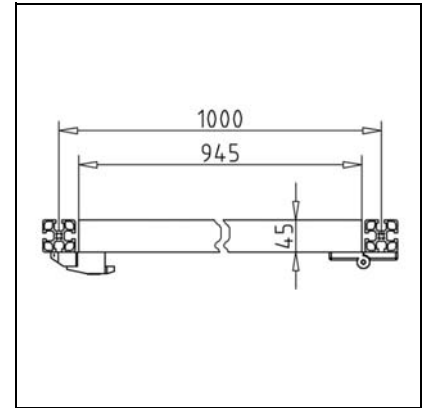
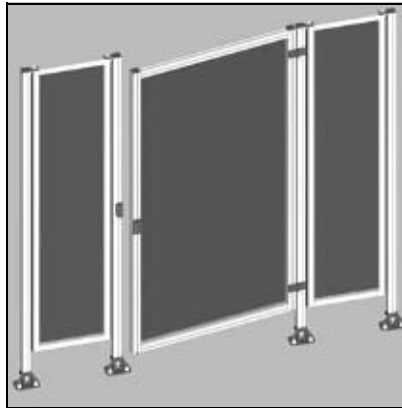
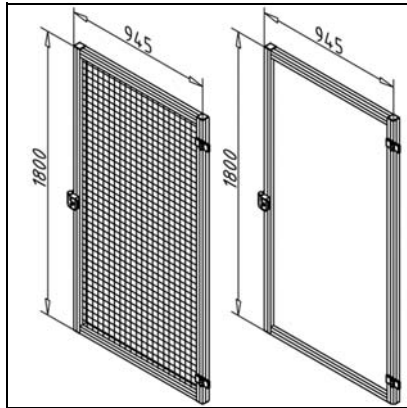
- Made of profile 45 x 90 F
- Foot 90 GD preassembled
- Without ground anchor

- As corner post for protection fields or in case of greater lateral loads of normal fields

- Position foot as appropriate
- Mark the position of the borings on the ground
- Install and tighten the ground anchor

## DOOR SG 1000

Part. N° 23.1404/0



### TECH. DATA / ITEMS SUPPLIED

- Made of profile 45 x 45 F
- Completely preassembled with lock and hinges
- With corrugated mesh 40x40x3 mm, steel Part N° 23.1404/0
- With PETGS Part N° 23.1414/0
- Further constructions on demand

### APPLICATION

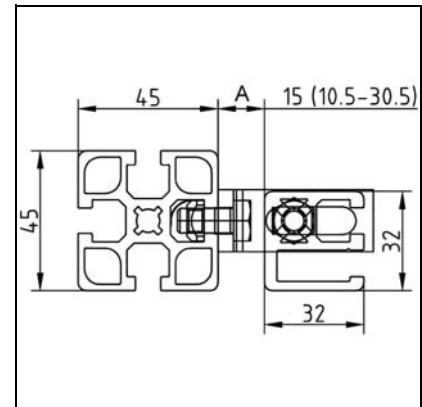
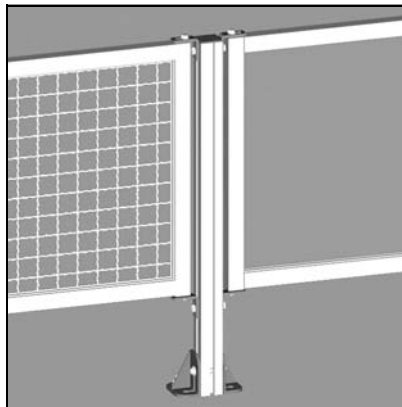
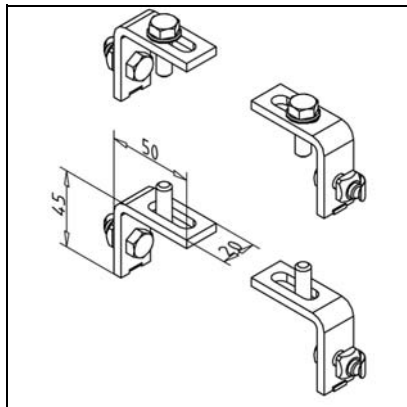
- As access to enclosures e.g. for maintenance

### ASSEMBLY

- Install between two posts with groove spacing 1000
- Install lock fitting in post with two borings

## FASTENING KIT 19 FOR PROTECTION FIELDS

Part. N° 23.0010/0



### TECH. DATA / ITEMS SUPPLIED

- 4 protection field suspensions, galvanised steel
- With fastening material
- Weight/Piece 0,091 kg

### APPLICATION

- Fastening of protection fields made of clamping profile 32x32, 45x32 or standard profiles
- Fastening of protection fields at any angle

### ASSEMBLY

- Insert protection field into preassembled suspension. Tighten with screws included in delivery
- A = 10,5 mm - 30,5 mm

## Field SG 500/750/1000/1250/1500

### Tech. data / items supplied

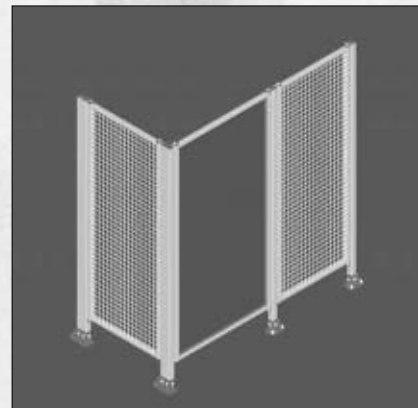
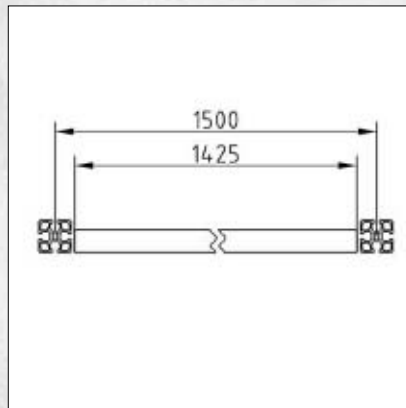
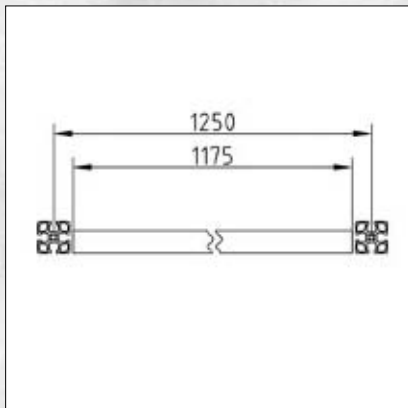
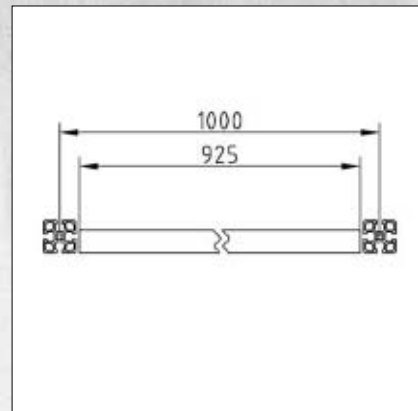
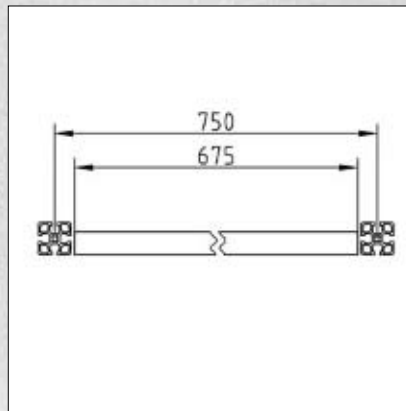
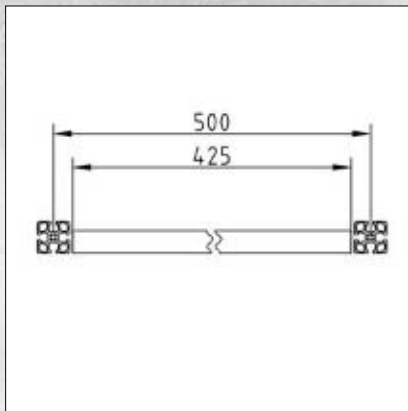
- Made of clamping profile 32 x 32 UL
- Completely preassembled
- With corrugated mesh 40 x 40 x 4 mm, galvanised steel or with PETG5
- Standard height HS: 1,800 mm

### Application

- Separation of dangerous areas
- As machine protection

### Assembly

-Mount protection field to protection field post using fastening kit 19 art. no. 23.0010/0.



Field size B	Corrugated mesh	PETG5
500	Part N° 23.0102/0	Part N° 23.0112/0
750	Part N° 23.0103/0	Part N° 23.0113/0
1000	Part N° 23.0104/0	Part N° 23.0114/0
1250	Part N° 23.0105/0	Part N° 23.0115/0
1500	Part N° 23.0109/0	Part N° 23.0119/0

## Field SG 1500/1750/2000

### Tech. data / items supplied

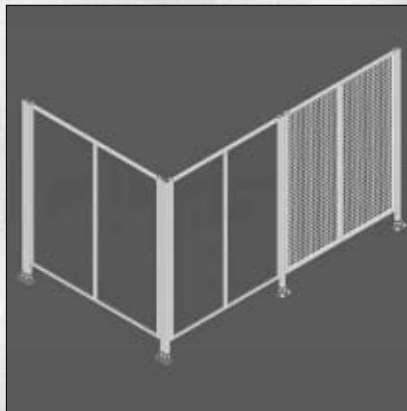
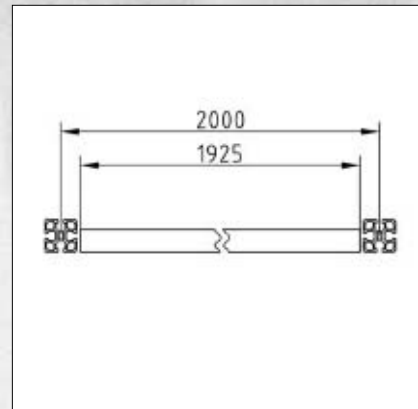
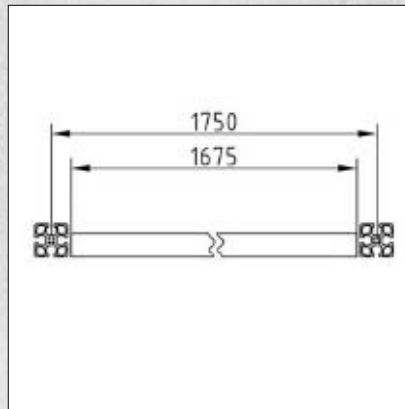
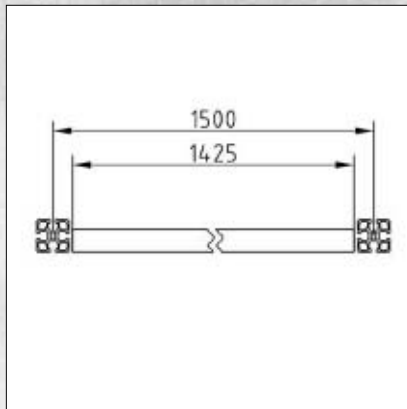
- Made of clamping profile 32 x 32 UL
- Completely preassembled
- With corrugated mesh 40 x 40 x 4 mm, galvanised steel or with PETG5
- Standard height HS: 1,800 mm
- Vertical brace, clamp profile 45x32
- Additional vertical strut

### Application

- Separation of dangerous areas
- As machine protection

### Assembly

- Mount protection field to protection field post using fastening kit 19 Part N° 23.0010/0.



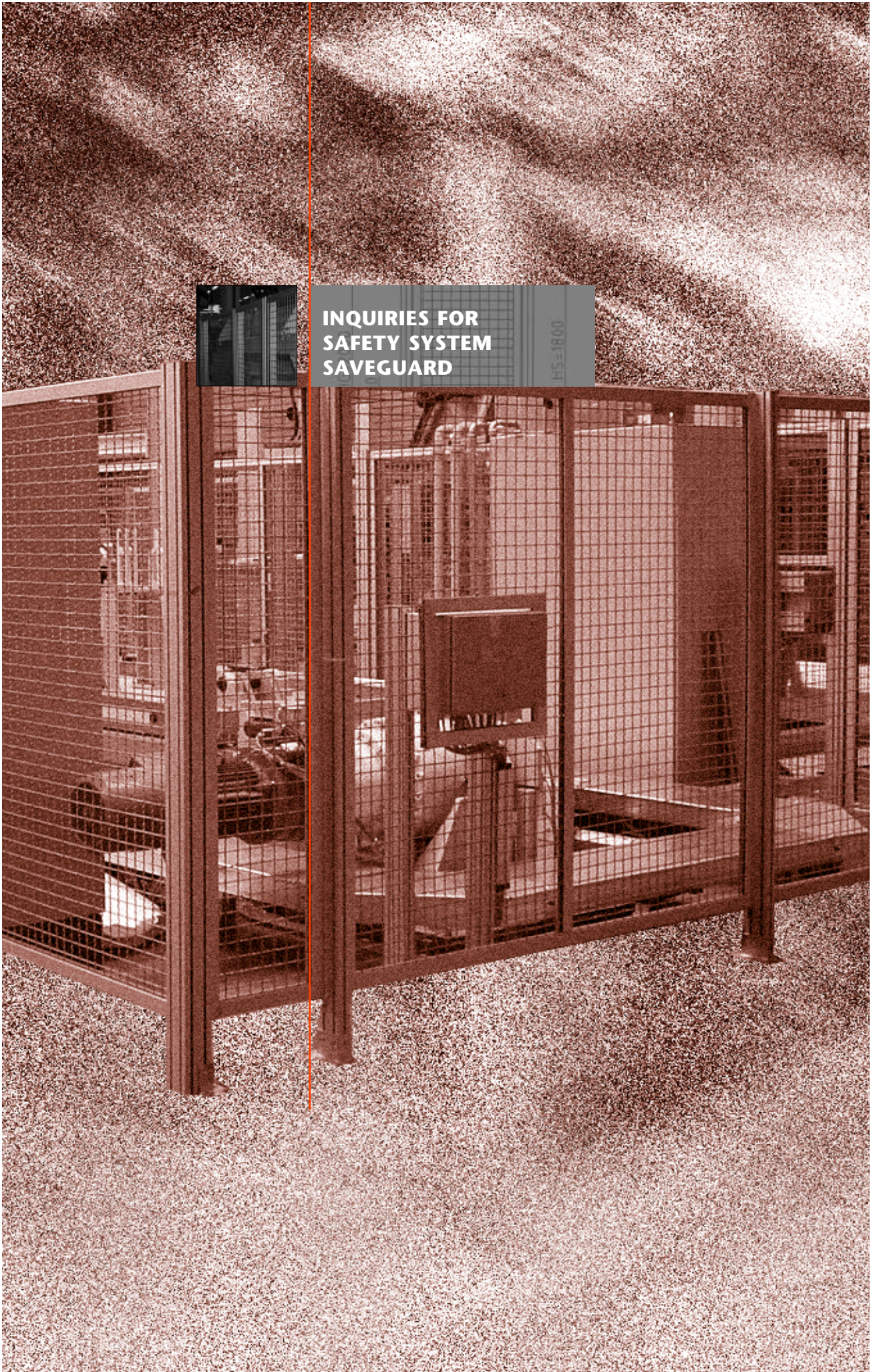
Field width B	Corrugated mesh	PETG5
1500	Part N° 23.0106/0	Part N° 23.0116/0
1750	Part N° 23.0107/0	Part N° 23.0117/0
2000	Part N° 23.0108/0	Part N° 23.0118/0





**INQUIRIES FOR  
SAFETY SYSTEM  
SAVEGUARD**

0091=SH



## INQUIRY ABOUT FITTING FIELD

Please specify ...

Height of protection field HS  mm (standard 1,800 mm)

Width of protection field B-75  mm

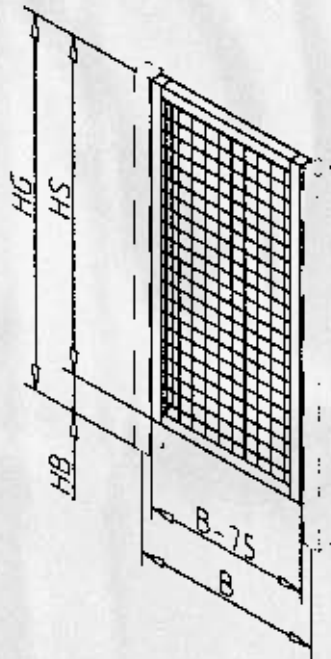
or ...

Height total HG  mm (standard 2,000 mm)

Ground clearance HB  mm (standard 200 mm)

Groove centre spacing B  mm

Panel element  Corrugated mesh  PETG5



Company   Please call me back

Name   Please send me an offer

Phone no

Fax no

E-Mail

## INQUIRY ABOUT SLIDING DOOR

Post spacing B  mm (standard 1000 mm)

Post height HG  mm (standard 2000 mm)

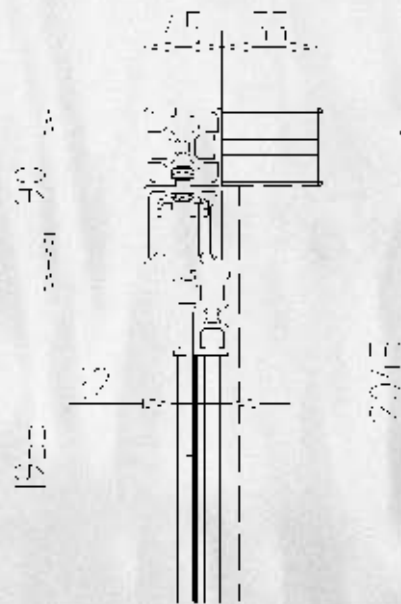
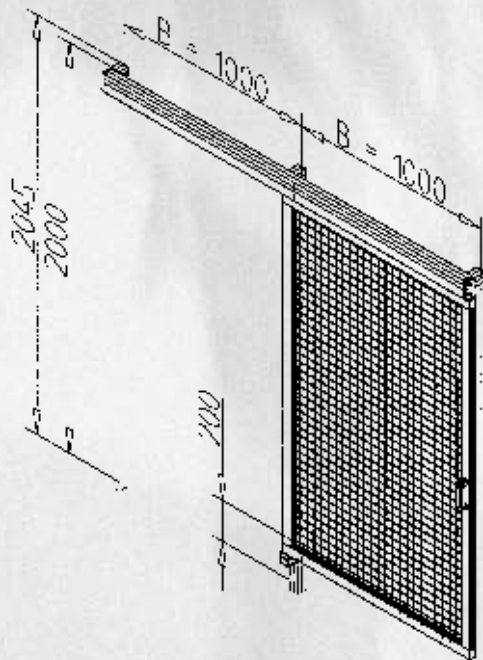
Handle  one side  both sides

Panel element  Corrugated mesh  PETG5

Additional field fixed

right  yes  no

left  yes  no



Company   Please call me back

Name   Please send me an offer

Phone no

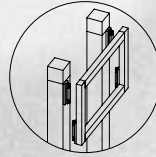
Fax no

E-Mail

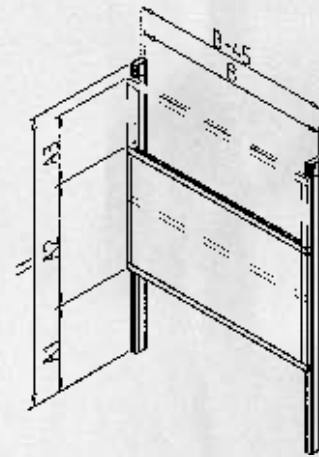
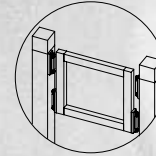
## INQUIRY FOR LIFTING DOOR

Lifting door arrangement

outside



inside



Groove centre spacing B  mm

Lifting field height A2  mm

Lift A3  mm

Stand-up dimension A1  mm

Actuation  manual  pneumatic

Panel element  Corrugated mesh  PETG5

Liftings per hour

Additional field fixed

top  yes  no

bottom  yes  no

Company   Please call me back

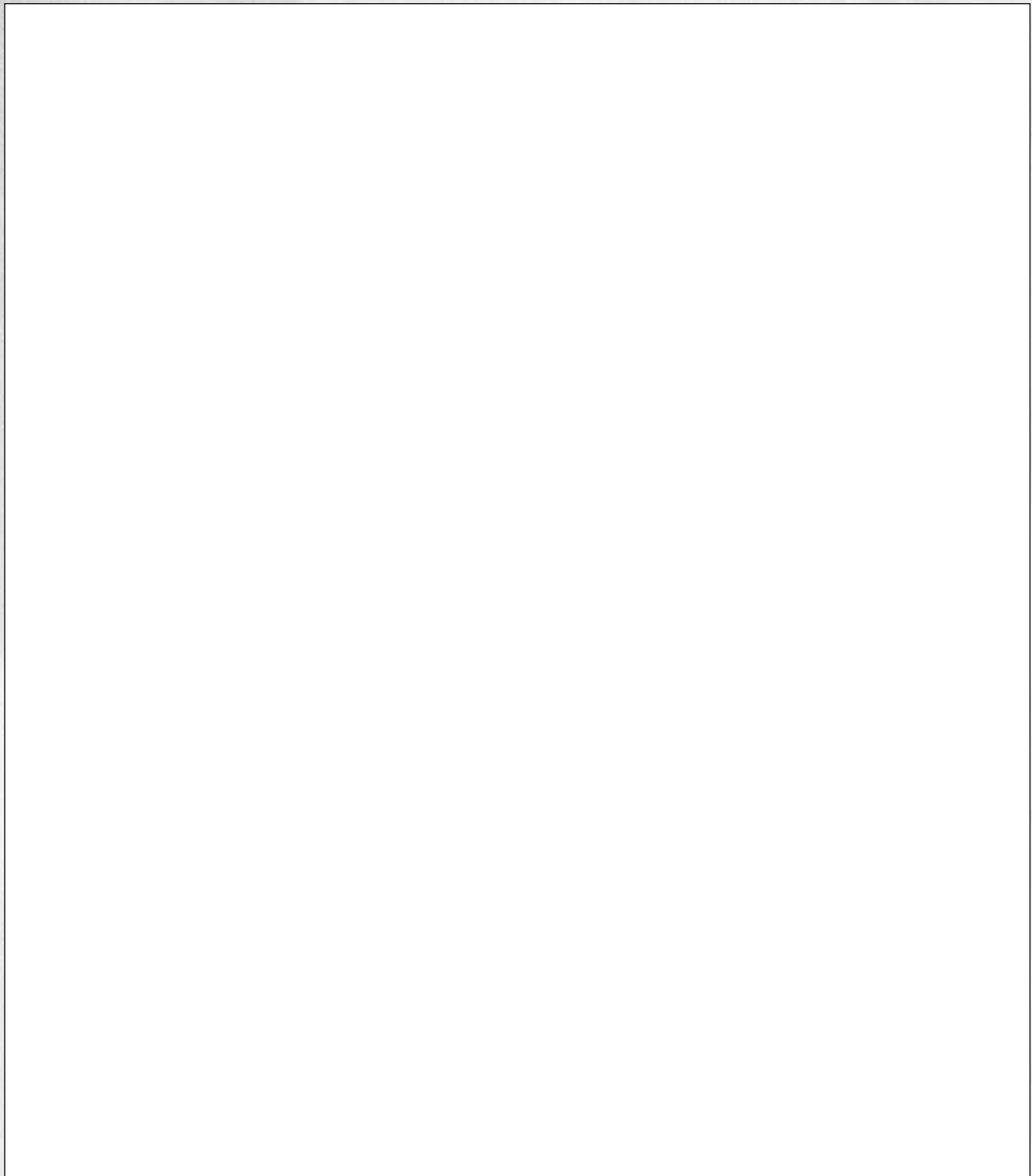
Name   Please send me an offer

Phone no

Fax no

E-Mail

## INQUIRY BASED ON DRAWING



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Company   Please call me back

Name   Please send me an offer

Phone no

Fax no

E-Mail

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