

Protective fences and modular security systems



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We are a company that was founded in 1996 with the aim of the protecting people from the risk of an accident at work through safety systems that comply with European rules.

Initially aligned only on the machine tool market with specific. Protective functions, further, developed with its own product range on the market of the plant construction with system safety fences.

Customer care

High quality products

Delivery speed

Constant innovation

has always been the distinguishing feature of PROTEC as a reference point in the Italian market.

www.protec-italy.net



Our **Services**

Special software

3D

Protec has developed special software, an automatic tool that relies on AutoCAD® to create 3D drawings and automatically organize the fence pieces needed.





Offers

Our technical office can suggest standard and special solutions In terms of compliance with applicable regulations.

Assembly Instructions

Protec has designed a user manual to provide an explanation of the system parts or kits for technical offices, direct customers or fitters.



2D and 3D drawings

By registering on the website, you can download 2D and 3D drawings that help you to best configure your security protection.



Warehouse and fast shipping

Protec has a large selection of finished products in stock (yellow color RAL1003 and scratch resistant black) to make a fast delivery possible.





Packaging

The packaging is made of wood and this construction is strong enough to ensure safe transport. It can also be ordered here wood packaging that is treated according to the ISPM-15 standard.





6 Protections and modular safety systems



The Group

Many skills for one vision

A true team is much more than the sum of its parts. Sicura offers truly complete solutions and systems thanks to an organisation in which each division is integrated with the others in terms of services, vision, customised approach, in the search for the best performance. 8 operating sites, over 280 employees, 4 specialised companies in a constant reciprocal relationship, to guarantee 360° answers in the delicate management of safety, the environment and quality.

From fire safety to machine safety to training, the group studies every specific need to protect people and the working environment, optimising the client's budget and resources. No standard solution, only tailor-made answers.

Thanks to specific divisions that are always interconnected, Sicura tackles each project with a precise method, organised and tested method and operates in the following operational segments:



System **Techno**

The Techno protective fence system, Ø3 mm wire, Ø4 mm wire was created to help all customers determine the hazardous areas to provide a solution with steel material that is cost effective and easy to install.

This product is made with self-supporting grid panels, with a mesh size that improves visibility to the machine that stands behind the fence.





The QUICK TECHNO kit is an instrument designed exclusively to reduce assembly time, it is possible to install this 3-prolongation kit by a single installer.

The system complies with the applicable regulations.

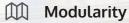
A fundamental requirement for permanent guards is their fixing, which must be obtained with systems that require the use of tools for opening them and, as far as possible, they must not be able to remain in their place in the absence of their fixing means.

Therefore at the end of the operations, the kit must be necessarily removed.



Cheap

The costs are minimized because it is made as a self-supporting fence.



All components are modular; so the same panels can be used both as fixed elements and with the help of a Kit, as a double or sliding door.

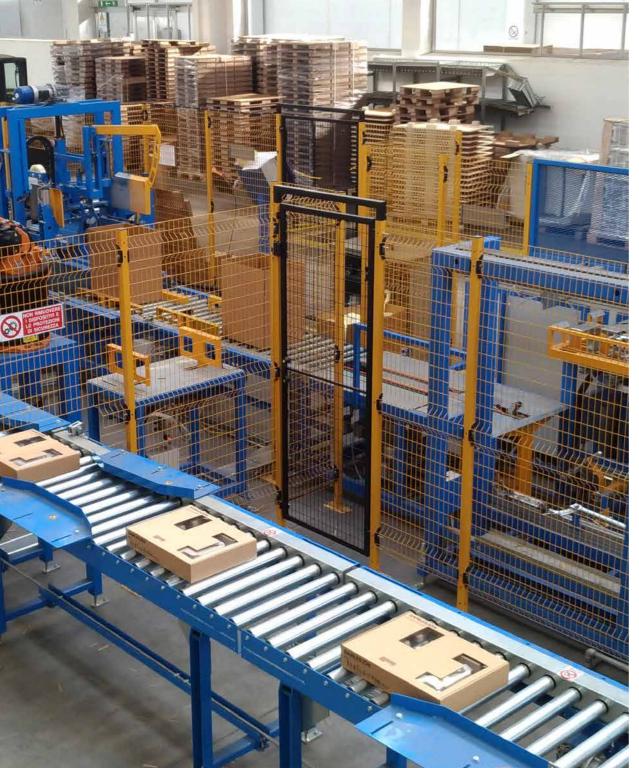
Visibility

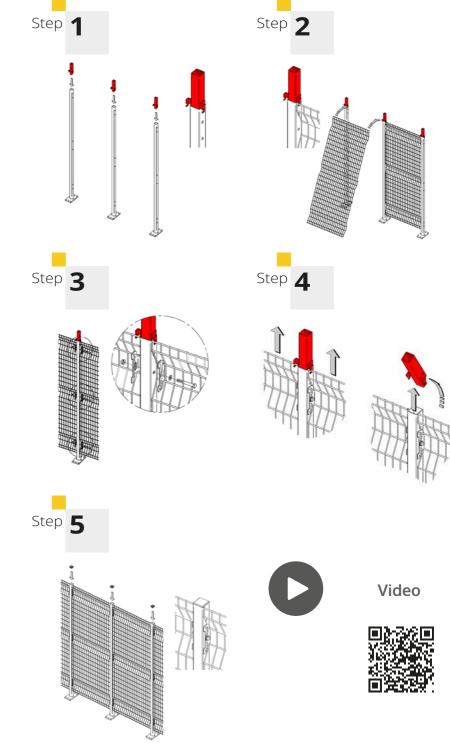
The innovative system of the 32x67 (wirenetting) improves the vision of the machinery inside the restricted area.



Modification on place during installation

This system has the big advantage to be changed on place, with the use of a few Tools and it does not have to be repainted afterwards.

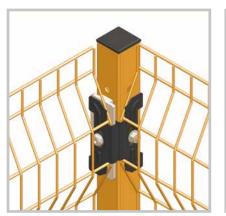






System **Techno**

Convex corners kit



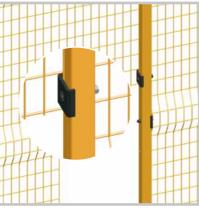
With this accessory you can realize Internal angle of 90°.

Panel inclination kit



With this accessory you can make angle connections with inclinations of 30° to 180°.

Panel fixing kit 1 fold



This accessory allows you to be able to fix the panel to the posts later, after having changed or shortened it horizontally.



and it is not possible to act on the access already provided (doors).

protective equipment, if access frequency is high (more than once a week) or if removal of the fixed guard may be

The standard EN ISO 14120 states: Movable

In accordance to current regulations, the set of non-removable screws is easy to install and it is always provided.

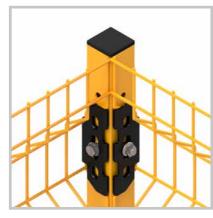
difficult, a movable guard with lock must be

Intermediate screw kit



corresponding screws for H 2000 8 plates and corresponding screws for H 2520.

Angle screw kit



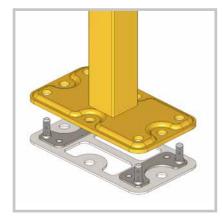
corresponding screws for H 2000 8 plates and corresponding screws for H 2520.

Terminal screw kit



This kit contains 6 plates and This kit contains 6 plates and This kit contains 3 plates and corresponding screws for H 2000 4 plates and corresponding screws for H 2520.

Leveling kit



This kit allows the leveling of the post. Ideal for setting the door posts.

Posts 40x40



Posts 50x50





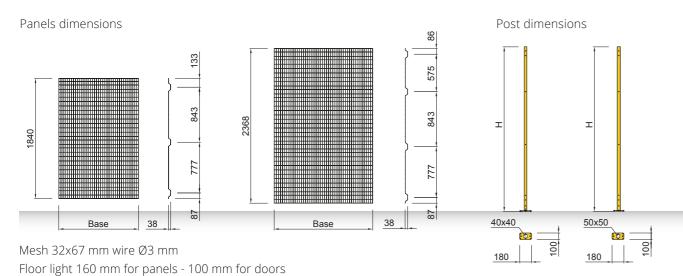
Unlosable screw set

The Machinery Directive requires that "fastening systems must remain attached to the fences or to the machine when removing the protections".

The screws must not be missed unless the panel or panels need to be removed for normal maintenance



System **Techno wire Ø3**



Panels dimensions

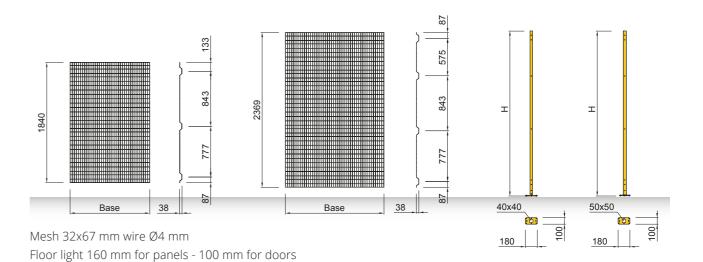
	Item No RAL 1003	Item No RAL 9005 anti scratch	Base	Height
	PNNT001	PNNT001N	259	
	PNNT002	PNNT002N	419	
	PNNT003	PNNT003N	707	
	PNNT004	PNNT004N	1027	1840
	PNNT005	PNNT005N	1219	
	PNNT006	PNNT006N	1507	
	PNNT013	PNNT013N	2019	
	PNNT008	PNNT008N	259	
	PNNT009	PNNT009N	419	
	PNNT010	PNNT010N	707	2200
	PNNT011	PNNT011N	1027	2368
	PNNT012	PNNT012N	1219	
	PNNT007	PNNT007N	1507	
	-	PNNA 015	700	
Doors panels	-	PNNA 016	1000	4000
Doo	-	PNNA 017	1200	1900
	-	PNNA 018	1500	
	-	PNNA2501	700	
Doors panels	-	PNNA2502	1000	2405
Do	-	PNNA2503	1200	2400
	-	PNNA2504	1500	

Post dimensions

Item No	Height (H)	Cross Section	Plate	Color
MT113 (intermediate)	2000	40x40	100x180	
MATEC110 (angular)	2000	40x40	100x180	
MT2500 (intermediate)	2520	40x40	100x180	RAL 1003
MATEC2500 (angular)	2520	40x40	100x180	
MT300 (intermediate)	2000	50x50	100x180	
MATEC301 (angular)	2000	50x50	100x180	
MT350 (intermediate)	2520	50x50	100x180	
MATEC351 (angular)	2520	50x50	100x180	RAL 1003
KRMT001		leveling for posts 40x40 - 50x vel plate dim.100x180 sp. 25/		

Stock colors for panels and posts

System **Techno wire Ø4**



Panels dimensions

	Item No RAL 1003	Item No RAL 9005 anti scratch	Base	Height
	PNNT116	PNNT116N	260	
	PNNT117	PNNT117N	420	
	PNNT118	PNNT118N	708	
	PNNT110	PNNT110N	1028	1840
	PNNT115	PNNT115N	1220	
	PNNT120	PNNT120N	1508	
	PNNT125	PNNT125N	2020	
	PNNT130	PNNT130N	2500	
	PNNT121	PNNT121N	260	
	PNNT122	PNNT122N	420	
	PNNT123	PNNT123N	708	2369
	PNNT204	PNNT204N	1028	2309
	PNNT205	PNNT205N	1220	
	PNNT206	PNNT206N	1508	
	-	PNNA105	700	
ors els	-	PNNA110	1000	4000
Doors		PNNA115	1200	1900
	-	PNNA120	1500	
	-	PNNA155	700	
Doors	-	PNNA160	1000	2405
Do	-	PNNA165	1200	2405
	-	PNNA170	1500	

Post dimensions

Item No	Height (H)	Cross Section	Plate	Color
MT113 (intermediate)	2000	40x40	100x180	
MATEC110 (angular)	2000	40x40	100x180	
MT2500 (intermediate)	2520	40x40	100x180	RAL 1003
MATEC2500 (angular)	2520	40x40	100x180	
MT300 (intermediate)	2000	50x50	100x180	
MATEC301 (angular)	2000	50x50	100x180	
MT350 (intermediate)	2520	50x50	100x180	
MATEC351 (angular)	2520	50x50	100x180	RAL 1003
KRMT001		leveling for posts 40x40 - 50x evel plate dim.100x180 sp. 25x		



System **Novatek**

The Novatek system is a specific solution made of steel at a low cost, aesthetically beautiful and easy to install with optimum stability; Ideal for all operations in dangerous areas that need to be isolated. The visibility of the closed off zone is the strong point of this product; the cooperation between the grid mesh and black color significantly improves the visibility of the hazardous area.

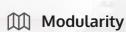
Scratch resistance is guaranteed by a special black color.





The QUICK NOVATEK kit is a tool designed to save time this kit consisting of 3 brackets, allows installation even from a single worker. The system complies with the applicable regulations. A basic requirement for fixed guards is their attachment, which must be maintained with systems which require the use of tools for opening and as much as possible they must not be able to remain in place without their fasteners.

At the end of the construction operations, the kit must be removed.



Each component has been designed to be modular. The same panels can be found both as solid elements, as kits and as a hinged door or sliding door their use.

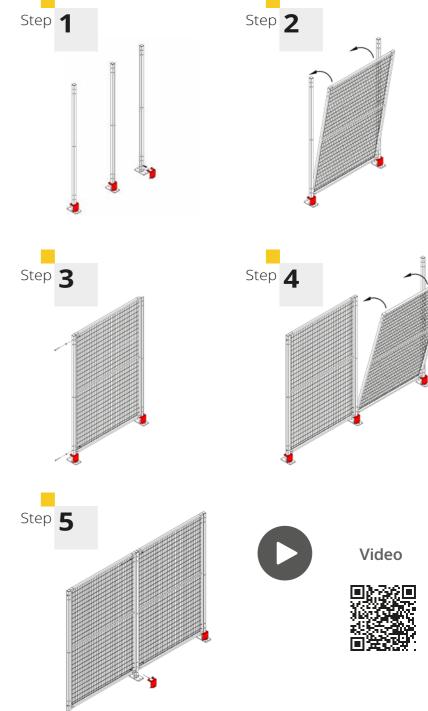
Visibility

The innovative system of 32x67 Ø3 wire combined with the black color of the panel improves the visibility of the machines inside the separate zone.



The Novatek panel has a welded grid behind the profile, it gives more elegance and stability.



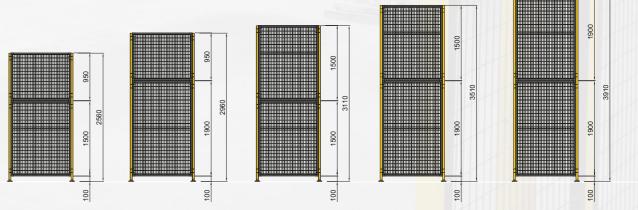


System **Novatek**

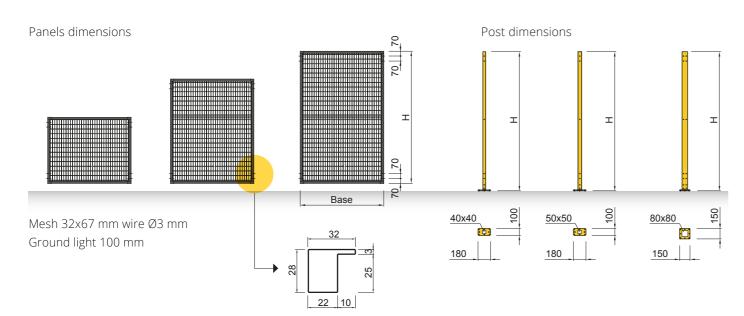


Modularity in height

The NOVATEK and ECOTEK systems combined with suitable posts, allow the construction of perimeter protections with high heights, preventing the operator from accessing the danger zone from above and any leaking of the processed material.



System **Novatek**



Panels dimensions

0	Base	Height	Color
01	250		
02	400		
03	700	050	
04	1000	950	
)5	1200		
06	1500		
30	250		
31	400		
32	700	1300	
33	1000	1300	
34	1200		
35	1500		
07	250		RAL 9005 Anti scratch
08	400		
09	700	4500	
10	1000	1500	
11	1200		
12	1500		
13	250		
14	400		
15	700	4000	
16	1000	1900	
17	1200		
18	1500		

Post dimensions

Item No	Height (H)	Cross Section	Plate	Color
MT111	1050	40x40	100x180	
MT114	1400	40x40	100x180	
MT112	1600	40x40	100x180	
MT113	2000	40x40	100x180	
MT115	2560	40x40	100x180	RAL 1003
KRMT001		ling for posts 40x40 slate dim.100x180 sp		
MT704	2000	50x50	100x180	
MT705	2560	50x50	100x180	
MT706	2960	50x50	100x180	
MT707	3110	50x50	100x180	RAL 1003
MT708	3510	50x50	100x180	KAL 1003
KRMT001		ling for posts 40x40 late dim.100x180 sp		
KRMT001 MT211				
	Level p	plate dim.100x180 sp	. 25/10	
MT211	Level p	80x80	. 25/10 150x150	
MT211 MT214	1050 1400	80x80 80x80	150x150 150x150	
MT211 MT214 MT212	1050 1400 1600	80x80 80x80 80x80	150x150 150x150 150x150	
MT211 MT214 MT212 MT213	1050 1400 1600 2000	80x80 80x80 80x80 80x80 80x80	150x150 150x150 150x150 150x150	BA 1002
MT211 MT214 MT212 MT213 MT215	1050 1400 1600 2000 2560	80x80 80x80 80x80 80x80 80x80 80x80	150x150 150x150 150x150 150x150 150x150	RAL 1003
MT211 MT214 MT212 MT213 MT215 MT216	1050 1400 1600 2000 2560 2960	80x80 80x80 80x80 80x80 80x80 80x80 80x80	150x150 150x150 150x150 150x150 150x150 150x150	RAL 1003
MT211 MT214 MT212 MT213 MT215 MT216 MT217	1050 1400 1600 2000 2560 2960 3110	80x80 80x80 80x80 80x80 80x80 80x80 80x80 80x80	150x150 150x150 150x150 150x150 150x150 150x150 150x150	RAL 1003

Stock colors for panels and posts

Post

The post is a basic element to ensure high stability, our posts are all equipped with a welded plate.

The installation of our posts is a lot faster than the traditional systems. The position of the holes allows the attachment of the post without moving it from the desired position.

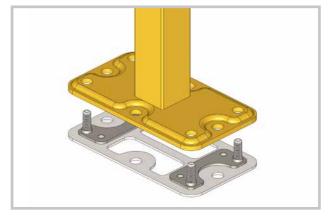




Post 40x40







Post 80x80

Leveling kit

Height-adjustable post



This post allows, under unfavorable floor conditions with large inclinations, an easy regulation. Available in 40x40 and 50x50 section.

Intermediate Post



It is ideal for long stretches and allows to place this foot in an intermediate place of a standard post, ensuring anyway good impact resistance and economic savings.

System Novatek-Ecotek



Unlosable screw set

The Machinery Directive requires that "fastening systems must remain attached to the guards or to the machine when removing the guards". The screws must not be missed unless the panel or panels need to be removed for normal maintenance and it is not possible to act on the access already provided (eg doors).

The UNI EN 14120 says: Mobile protections - when the frequency of access is high (more than once a week), or if the solid safety fence is removed It may be difficult to provide a movable guard with a latch.

In compliance with current regulations, the captive screw kit is easy to install and will be provided on request.

Panel cut set

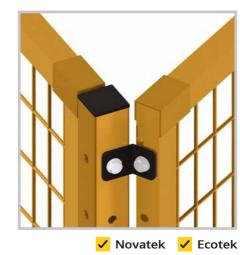


With Novatek panel cut set The framed panels can be modified and adapted on site no need to weld no need to paint them again.

Special panel fastening tool kit Panel inclination kit



This kit allows the panels to be fixed to positions of posts that are not yet drilled.



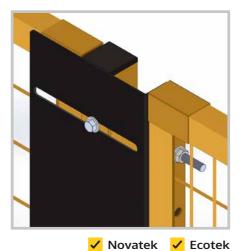
With this kit, you can get inclinations from 30 ° to 180 °.

Panels with logo



Panels can be prepared on request with custom logo, ideal for those who want to make company logo visible

Extension kit



With the help of a screw connection you can easily reach the extension of a panel from 30 to 120 mm.

Panel connection kit

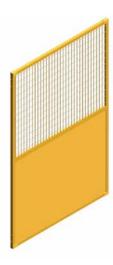


With this kit can be connected two panels to realize intermediate lengths of panels. Ideal for special sliding doors with floor guide or to make longer standard panels.

Special finishings Novatek - Ecotek

Finishing has become more and more requested, so we want to Introduce a wide range of possibilities.





✓ Novatek × Ecotek

Grid

Grid panel with smaller mesh size that 32x67 mesh panel with front finishing allows to reduce the safety distance made of PVC or polycarbonate. of the danger zone.

TEC grid with 15x105 Ø3 mesh RT grid with 11x60 Ø3 mesh

✓ Novatek ✓ Ecotek

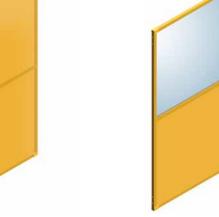
Application that prevents from the outcoming of the lubricating fluid and shaving; ideal too to reduce the safety distance.

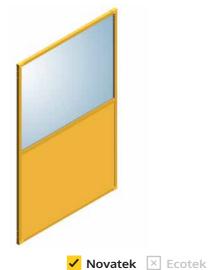
Grid + PVC or polycarbonate Grid + metal sheet

32x67 mesh grid on the upper part. Full metal thick 15/10 on the lower part.

Application that prevents the outflow of fluids and machine shaving.











Metal sheet

Novatek version. 10/10 thickness full sheet metal for the Ecotek version.

✓ Novatek ✓ Ecotek

Thick panel ideal application for welding islands, because it does not allow lightning - shedding. It can also be used to prevent outcoming of lubricating fluid and machine shaving.

Polycarbonate + sheet metal Polycarbonate

Full sheet metal, 15/10 thickness for 4 mm thick polycarbonate panel. Full sheet thickness 15/10 lower part.

> Ideal application for delimiting the big machine tools. Polycarbonate (shockproof) fixed with special glass stops, enables the vision of the island from the side of the operator and protects at the same time from the outcoming of lubricating fluid and machine shaving.

Polycarbonate thickness 4 mm.

Ideal application around the isolated zone completely visible with polycarbonate (shockproof) Supplied with special glass stops.

System **Ecotek**

The Ecotek system was created with the special purpose to deliver a framed panel at low cost.

The structure of this panel comes with a profile 10x25, that made it light and at the same time stable.

Visibility is a strength point of this product; the duo grid and black color, improves quite much the visibility of the danger zone. Scratch resistance is guaranteed by a special powder paint.



Cheap

The costs are compared to the same NOVATEK system, cheaper because it is produced with a lighter tube system 10x25.

Modularity

Each component has been designed to be modular In fact, all PROTEC modular systems are useful the same grid. The doors are created with the same Novatek series.

Visibility

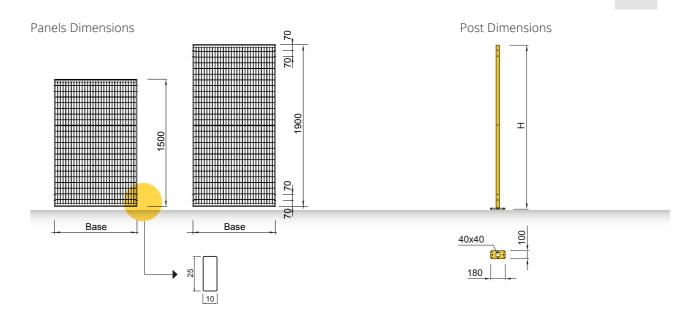
The innovative system of the 32x67 mesh, wire Ø3 combined with the black color of the panel improves the visibility of the machines in the restricted zone.



Video







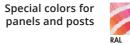
Panels dimensions

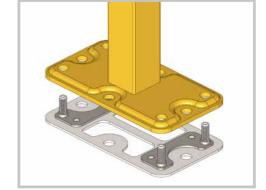
	Item No	Base	Height	Color
	PNNE010	250		
	PNNE011	410		
	PNNE012	700	1500	
	PNNE013	1020	1500	
	PNNE014	1210		
	PNNE015	1500		RAL 9005 Anti scratch
	PNNE020	250		
	PNNE021	410		
	PNNE022	700	1900	
	PNNE023	1020	1900	
	PNNE024	1210		
	PNNE025	1500		
8	PNNA009	700		
Doors panels	PNNA010	1000	1500	
Sioc	PNNA011	1200	1300	
ŏ	PNNA012	1500		
<u>s</u>	PNNA015	700		RAL 9005 Anti scratch
Doors panels	PNNA016	1000	1900	
oors	PNNA017	1200	1900	
Ğ	PNNA018	1500		



Post dimensions

Item No	Height (H)	Cross Section	Plate	Color
MT112	1600	40x40	100x180	
MT113	2000	40x40	100x180	
KRMT001	Kit leveling for posts 40x40 - 50x50 Level plate 100x180 sp. 25/10			RAL 1003





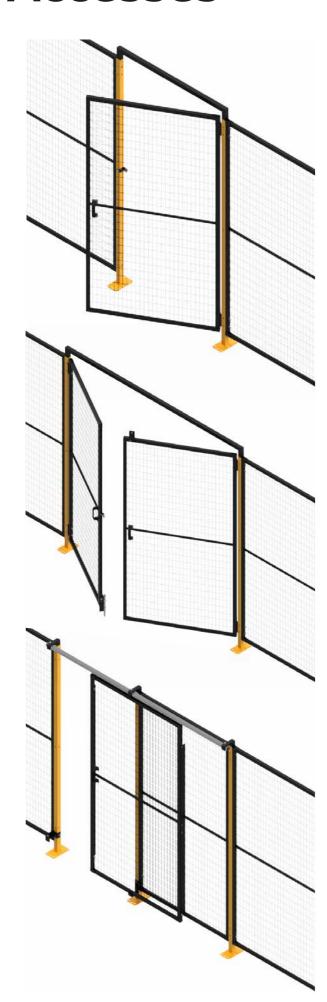






Components to the

Accesses



Single double door

The door was designed as antipanic door: through a magnet system it allows Evacuation from the isolated zone by pressing the Door panel.

- Light 735 Center distance 775 (Panel B = 700)
- Light 1035 Center distance 1075 (Panel B = 1000)
- Light 1235 Center distance 1275 (Panel B = 1200)
- Light 1535 Center distance 1575 (Panel B = 1500)

Double doors

The double-door uses the same concept of the single door but with a vertical bolt allows to anchor one of the two door panels to the ground.

- Light 1450 Center distance 1490 (Panel B = 700 + 700)
- Light 2050 Center distance 2090(Panel B =1000 + 1000)
- 2450 light center distance 2490 (panel B = 1200 + 1200)
- 3050 light center distance 3090 (panel B = 1500 + 1500)

Single hanging sliding door

The single sliding door uses, at the top, a single upper guide with a rolling rack, in the lower part there is a plastic profile (Polizene) that allows the smooth running of the panel.

- Light 865 Center distance 905 (Panel B = 1000)
- Light 1065 Center distance 1105 (Panel B = 1200)
- Light 1365 Center distance 1405 (Panel B = 1500)

Double hanging sliding door

The double sliding door allows opening from the two doors in a opposite way and uses the same single-door concept.

- Light 1223 Center distance 1263 (Panel B = 700 + 700)
- Light 1823 Center distance 1863 (Panel B = 1000 + 1000)
- Light 2223 Center distance 2263 (Panel B = 1200 + 1200)
- Light 2823 Center distance 2863 (Panel B = 1500 + 1500)

Single sliding door with floor guide

The simple sliding door uses a floor guide, upon the panel with two wheels. The same panel is guided in the upper part of a plate with nylon roller system.

- Light 792 Center distance 896 (Panel B = 1000)
- Light 992 Center distance 1096 (Panel B = 1200)
- Light 1292 Center distance 1396 (Panel B = 1500)

Option with rubber wheel

The same set can be requested as a rubber wheel option
that allows, at the top and bottom, that the light remain free from
obstacles; Example: Transpallet movement.

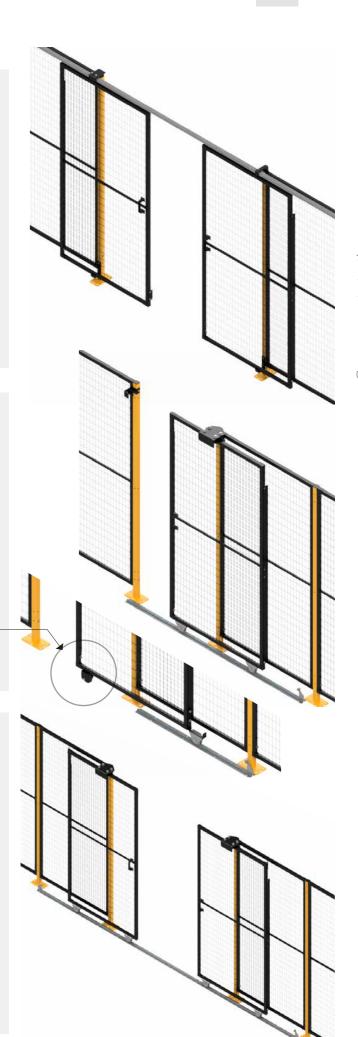
Double sliding door

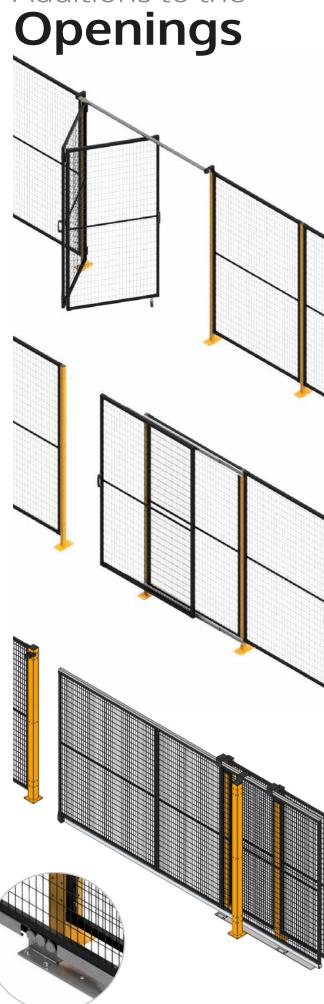
The double sliding door makes it possible to open the two doors in opposite directions and uses the same concept of the single sliding door.

- Light 1065 Center distance between 1233 (Panel B = 700 + 700)
- Light 1665 Center distance 1833 (Panel B = 1000 + 1000)
- Light 2065 Center distance 2233 (Panel B = 1200 + 1200)
- Light 2665 Wheelbase 2833 (Panel B = 1500 + 1500)

Option with rubber wheel

The option can also be requested for this kit





Folding door

The folding door allows a pack opening from all doors. The operation of this door is done by an upper guide and a rubber wheel in the lower part, so that the good stability is guaranteed. It is possible to deliver folding doors with or without floor guide.

Single or double telescopic door

The telescopic door has the advantage of having no guides in the Upper or lower part, it is ideal for these customers who may have problems with obstacles.

His operation takes advantage of the telescopic sliding guides or linear handling systems that guarantee excellent efficiency and long life.

Self-supporting door

The self-supporting door was made to eliminate the obstacles from the top and the bottom of the transit room. Using standard panels we can supply also large doors in an a cheap way and with limited delivery times.

Door light - mm	Panel - mm
725	1000
875	1200
1125	1500
1425	1000 + 1000
1825	1000 + 1500
2125	1500 + 1500
2425	1000 + 1500 + 1000
2725	1500 + 1000 + 1500
3025	1500 + 1500 + 1500
3425	1500 + 1000 + 1000 + 1500

Vertical manual sliding door

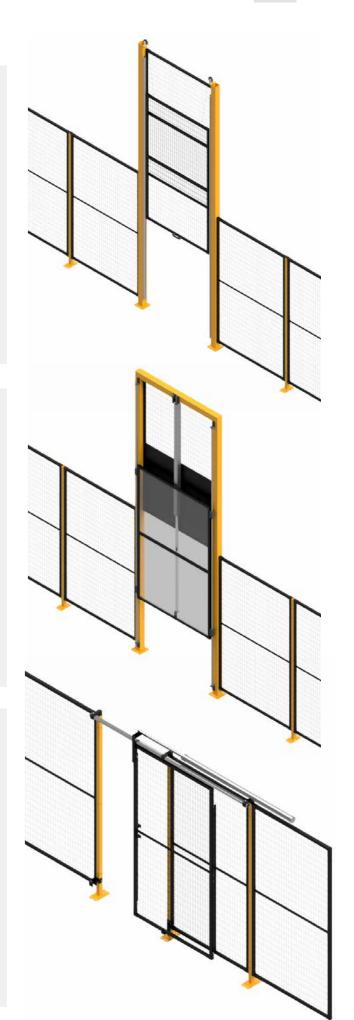
The vertical sliding door with manual movement uses a system of pulleys, linear guides and counterweights this guarantees its safety, functionality and long life.

Vertical automatic sliding door

The vertical pneumatic sliding door uses a system of pulleys, linear guides with balls circulation and counterweights that guarantee the Safety, functionality and durability. For this application we recommend, in the accessible area,

the use of a buffer made of shockproof material, to prevent the operator from shearing danger.

The suspended pneumatic sliding door uses the standard sliding door set with additional clamps and a pneumatic piston which is suitable for the requested light.



Horizontal automatic sliding sliding

Complements

Locks and microswitches



Anti-panic lock for flying doors

The anti-panic lock for flying doors are usually used in automatic warehouses. It fulfills the need to lock the door and at the same time allows the operator to exit in case of closure.

Available with:

Differents keys, Art. No .: KP050 Same key, Art. Nr .: 101020201



Lock for doors or sliding doors

The lock allows to close the flying door or the sliding door with key to avoid the access by unauthorized people and to prevent staff to remain closed inside the protected area. It is designed for use from one to three padlocks to prevent the operators intervening in the machinery remain accidently imprisoned.

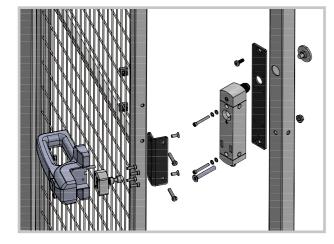
Cod. 101020021 Door lock with door (opening with right hand) Code 101020022 Door lock with door (opening with the left hand) Cod.101020150 Lock for sliding door (opening with the right hand) Cod.101020151 Sliding door lock (opening with the left hand)



Interlocking system

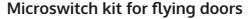
The interlocking system is a device that increases the security level

It prevents the start-up of the machine against the will of the person inside the restricted area thanks to a coded key system that cannot be duplicated.



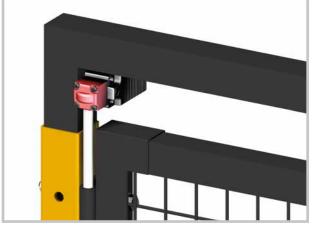
Custom-made brackets for microswitches and electromechanical locks

Our technical department is able to design customised brackets for your microswitches or solenoid locks: Pizzato, Euchner, Schmersal, etc.



Uses a safety switch fixed above the hinge, model Pizzato FR2096-L16M1 1NO + 2NC; positioned and secured he is firmly connected to the hinge.

Code: 101030100 for hinged doors without upper crossbar Code: 101030101 for hinged doors with upper crossbar



RFID switch kit with lock for turning doors

Uses a safety switch Pizzato model NG 2D1D411A-F31 Cod. 101030147 (*)

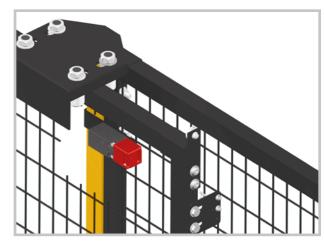


Micro-kit for sliding doors

Uses a safety switch model FR2093-D1M1 1NO + 2NC; positioned between the fixed panel and the door panel and it is compatible both for the hanging sliding doors as well as for doors equipped with a floor guide.

Cod. 101030102 (*)

Code 7030002867 Protective housing for shielding the security device (on request)



RFID switch kit with sliding door lock

Uses a safety switch from Pizzato.

Code: 101030148 (*) with NG 2D1D411A-F31 device Code: 101030191 (*) with NS D4A21SMK-F41 device



(*) Mounting systems (screws) comply with Table 3 of UNI EN 14119

Modules applications Metal sheet

The metal sheet module system was created to suit all manufacturers and users of machine tools and welding areas: a steel sheet solution at a reasonable cost, aesthetically beautiful, powerful and easy to install.

The structure can be integrated with properly laminated and sized glass windows.

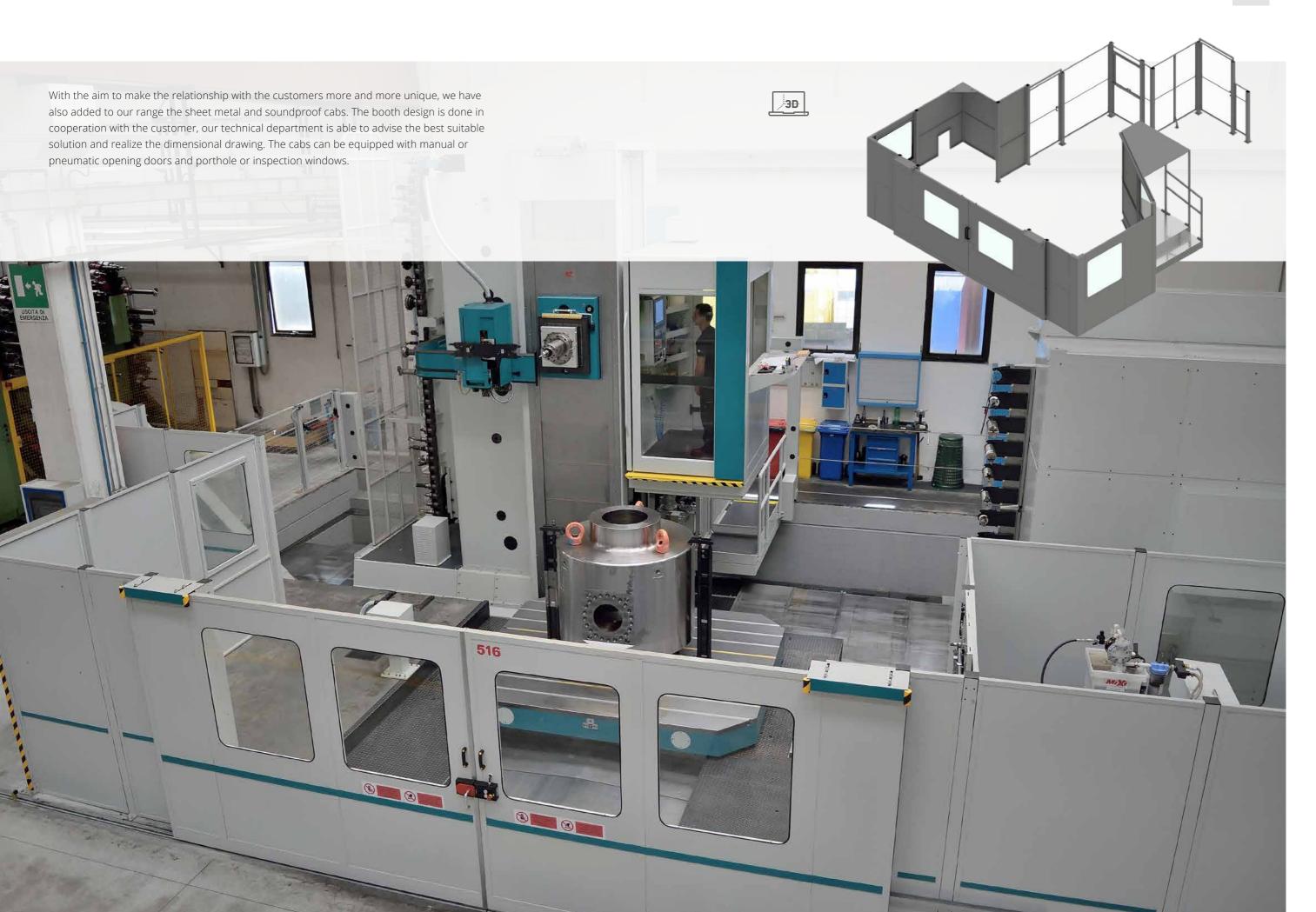




Waterproof protection

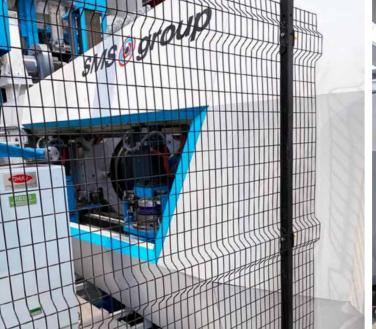
The sheet metal system can also be waterproof and so to prevent the outcoming of lubricating fluid from the protected zone.





Modules applications **Metal sheet**

















Cabins

Soundproof

We are able to solve noise related problems in accordance to the rules, as far as it is compatible with the requirements of safety and functionality. Our strength is the realization of turnkey systems for the control and industrial sound insulation of the machines in operation. The cabs, along with the function of noise protection, can protect the operator from possible outflows of splinters or leftovers of the machine in operation. The components used for the construction of the cabins always offer the best performance of Insulation / sound absorption, mechanical resistance and environmental impact. The chambers can be equipped with manual or pneumatic door opening and windows or inspection portholes. The metal profiles of doors and windows are made of anodised aluminum.



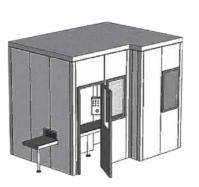
Our technical department is able to guide the customer to the best solution depending on the type of noise and the number of dB hit. Our soundproof panels are made of external steel girders pre-painted and galvanized, with perforated inner wall. The insulation will be achieved by an insulating layer of high density mineral fibers.

This particular system allows a remarkable soundproof performance. All panels have a usable pitch of 1000 mm, thickness: 50, 80 and 100 mm. The noise protection data were tested at 1 meter height and 1 meter distance from the wall in the fully closed version, listed by thickness:

50 mm = 24 dB (A) Leq

80 mm = 29 dB (A) Leq

100 mm = 31 dB (A) Leq







35

1100

Protection

Parapets

The application areas are multiples, from the boundary of pedestrian paths in the companies up to fall protection on stages and machines with walkable roof.

We have created a modular guard-rail, quick to install, very strong with the characteristic of being easily adaptable in the dockyard.

The standard guard-rail has a length of 1000 or 1500mm, a height of 1100mm from the ground.

With only components, the system allows you to make straight and angular sections.

The guard-rail is composed of posts with or without ground plate, horizontal tubes, foot stop plate and support brackets.



Fast installation

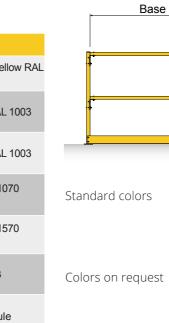


of Adjustable





Item No	Description
MT110	Post 40x40 with plate 100 x 180 H = 1100 yellow RAL 1003
CR001	Tubular current 35x35 B=1000 yellow RAL 1003
CR002	Tubular current 35x35 B=1500 yellow RAL 1003
LR001	Metal sheet to stop on foot H=100 B=1070 yellow RAL 1003
LR002	Metal sheet to stop on foot H=100 B=1570 yellow RAL 1003
7030401021	Stirrup support yellow RAL 1003
101010047	Screw kit for fixing guard-rail module













System **Screen**

SCREEN is a protection for the back wall of rack storage systems. If required, it can be used as a backstop. It was designed to prevent the fall of objects of shelves and to prevent persons and property damage.

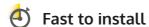
It is slightly strong and allows a fast installation of the grid and the profiles, without welding or special operations.

Screen is a product that consists of just a few elements that offers a great flexibility and economy.

The installation of the Screen System was designed to shorten the assembly times; the aluminum crossbars stand as a guide for the grid and are anchored to the frame by the mounting brackets.

Our technical office is able to provide the most suitable solutions to plan each project according to the customer requirements.

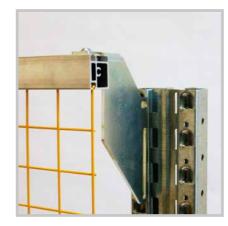


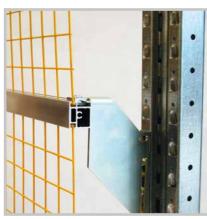


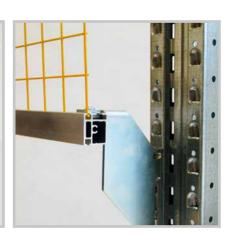












Panel connection kit

The connection set allows the use of the entire length of the aluminum profiles, possibly adapting only the final part of the same, thus optimizing any potential waste.

The connection between the panels is done quickly and easily thanks to the attachment of galvanized hooks, which gives good stability.

It is recommended to use 4 elements for each panel connection. (Included the clamping pliers).





Item No.	Type	Dimensions (mm)	Color
PNNS001	Net	B= 1503 H=1503 50x50 ø3	RAL 1003
B05020215	Aluminium profile	L= 6000 Section 37x40	Alluminium (not anodized)
101010056	Union profiles kit		Galvanized
101010053	Kit stirrups	L= 150	Galvanized
101010054	Kit stirrups	L= 200	Galvanized
101010055	Kit stirrups	L= 250	Galvanized

Possible production of panels with special dimensions



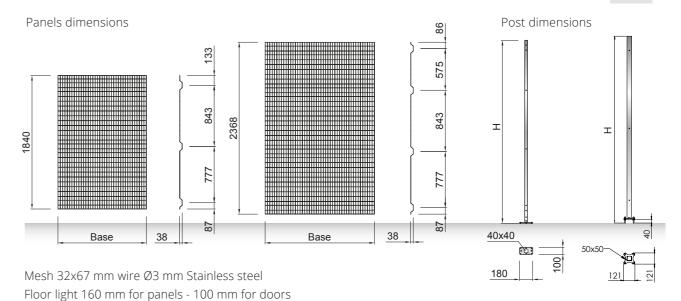


System **Inox**

The **INOX FOOD** safety system in **AISI 304 DECOATED STAINLESS STEEL** is made up of self-supporting Ø4mm mesh panels and 50x50 U-profile uprights. The system is mainly used by those who have to delimit dangerous areas in agri-food or pharmaceutical environments or where the use of a stainless steel product is required. The available doors are either swing or sliding suspended, and are completely pre-assembled to reduce installation time. All details have been designed and studied to facilitate the drainage of water from the surfaces.

The **TECHNO INOX** safety system in **AISI 304** stainless steel consists of self-supporting panels in Ø3mm mesh and 40x40 square section uprights with a welded plate. 40x40 square section uprights with a welded plate 100x180; the coupling is made by a a special bracket. The system is mainly used by those who have to delimit dangerous areas in damp or wet environments. The doors available are either swing or sliding doors and are completely preassembled to reduce installation time.





- 1

On-site modifications

This system has the great advantage of being modified on site with the the use of very few tools.

Visibility

The innovative 32x67 mesh system improves the visibility of the machinery inside the segregated area.



Toughness

The panel is solid thanks to the the particular conformation of the mesh constructed from Ø4 and Ø5 wires.



INOX FOOD

Panels dimensions Ø4

Item No	Base	Height
PNXF20201840	2020	1840
PNXF15082369	1508	2369

Post dimensions

Item No	Height (H)	"U" Section
MTXF2000	2000	50x50
MTXF2520	2520	50x50



TECHNO INOX

Panels dimensions Ø3

Item No	Base	Height
PNXT15071840	1507	1840
PNXT15072368	1507	2368

Post dimensions

Item No	Height (H)	Square section
MTXT2000	2000	40x40
MTXT2520	2000	40x40

Protections and modular safety systems

System **Inox**

Swing door

The swing door has been designed as a panic door. A magnet system, that allows evacuation from the inside of the segregated segregated area by pushing the door panel. It consists of 2 uprights 2140mm high, 3 welded hinges; It is sold fully assembled, with upper cross-piece.

Swing door size with upper crossbar

Item No	Height	Light	Section	Overall Dimensions	Opening
PAXFDX10362140T	2140	1036	50x50	1135	Right opening
PAXFSX10362140T	2140	1036	50x50	1135	Left opening
PAXFDX10362640T	2640	1036	50x50	1135	Right opening
PAXFSX10362640T	2640	1036	50x50	1135	Left opening
PAXTDX10362140T	2140	1036	50x50	1135	Right opening
PAXTSX10362140T	2140	1036	50x50	1135	Left opening
PAXTDX10362640T	2640	1036	50x50	1135	Right opening
PAXTSX10362640T	2640	1036	50x50	1135	Left opening











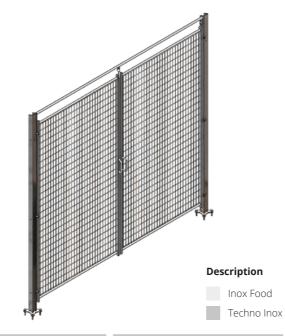


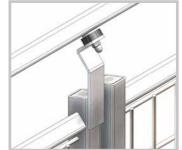
Double swing door

The double swing door has been designed as a panic door: by means of a magnet system, it allows evacuation from inside the segregated area by pushing the door panel. from inside the segregated area by pushing the door panel. It consists of 2 uprights with a height of 2140 mm, 6 welded hinges and welded handles. It is sold fully assembled, with upper cross-piece.

Double swing door size

Item No	Height	Light	Section	Overall Dimensions	Opening
PADXFDX20572140T	2140	2057	50x50	2157	Right opening
PADXFDX20572640T	2640	2057	50x50	2157	Left opening
PADXTDX20572140T	2140	2057	50x50	2157	Right opening
PADXTDX20572640T	2640	2057	50x50	2157	Left opening











Single suspended sliding door

The suspended sliding door is supplied pre-assembled; all profiles have been designed to prevent water deposits, in fact there are no flat surfaces. It consists of 3 uprights with a height of 2140 mm and 3 wheels.

Suspended sliding door dimensions

Item No	Height	Light	Section	Overall Dimensions	Opening
PSXFDX10602140	2140	1060	50x50	2300	Right opening
PSXFSX10602140	2140	1060	50x50	2300	Left opening
PSXFDX14092140	2140	1409	50x50	2684	Right opening
PSXFSX14092140	2140	1409	50x50	2684	Left opening
PSXFDX10602640	2640	1060	50x50	2300	Right opening
PSXFSX10602640	2640	1060	50x50	2300	Left opening
PSXFDX14092640	2640	1409	50x50	2684	Right opening
PSXFSX14092640	2640	1409	50x50	2684	Left opening
PSXTDX10602140	2140	1060	50x50	2300	Right opening
PSXTSX10602140	2140	1060	50x50	2300	Left opening
PSXTDX14092140	2140	1409	50x50	2684	Right opening
PSXTSX14092140	2140	1409	50x50	2684	Left opening
PSXTDX10602640	2640	1060	50x50	2300	Right opening
PSXTSX10602640	2640	1060	50x50	2300	Left opening
PSXTDX14092640	2640	1409	50x50	2684	Right opening
PSXTSX14092640	2640	1409	50x50	2684	Left opening





Description

Inox Food

Suspended double sliding door

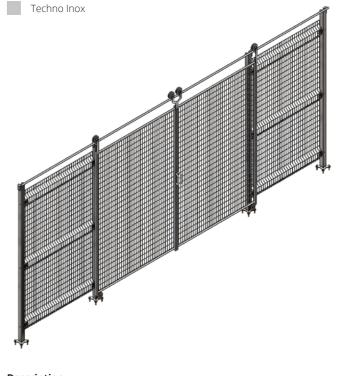
The suspended double sliding door is supplied pre-assembled. All profiles are designed to prevent water deposits. No flat surfaces. It consists of $4\,$ uprights with a height of 2640 mm.

Double suspended sliding door dimensions

Item No	Height	Light	Section	Overall Dimensions
PSDXF23002140	2140	2300	50x50	4680
PSDXF26402140	2640	2300	50x50	4680
PSDXT23002140	2140	2300	50x50	4680
PSDXT26402140	2640	2300	50x50	4680









Inox Food Techno Inox

Regulations

((

Modular guards have been developed according to the criteria of the following reference standards

EN ISO 12100	Safety of machinery - General principles for design - Risk assessment and risk reduction.
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EN ISO 13849-1 Safety of machinery - Safety-related parts of control systems - Part 1: General principles

or design.

EN 60204-1 Safety of machinery - Electrical equipment of machines - Part 1: General requirements.

EN ISO 13857 Safety of machinery - Safety distances to prevent hazard zones being reached by upper

and lower limbs.

EN ISO 13854 Safety of machinery - Minimum gaps to avoid crushing of parts of the human body

2006/42/CE Machinery directive.

EN ISO 14119 Safety of machinery - Interlocking devices associated with guards - Principles for design

and selection

EN ISO 14122-3 Permanent means of access to machinery - Stairs, stepladders and guard-rails

EN ISO 14120 Safety of machinery - Guards - General

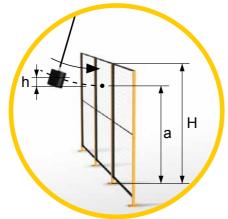
requirements for the design and construction of fixed and movable guards

H: Guard height

h: Falling down height

a: H 2/3 (≤1600)

Height of point of impact, which shall not be heigher than 1600

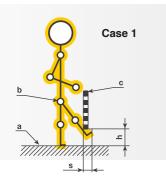


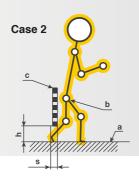
Look at the resistance TEST

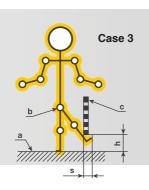


Reference tables lower limbs EN ISO 13857, Annex B

Restriction of freedom of movement under protective structures







Irregular openings and accessibility from below: Slit openings >180mm and square or circular openings, >240mm allow access to the entire body.

Height of the protective structure b	Distance s							
Height of the protective structure h	Case 1	Case 2	Case 3					
h ≤ 200	≥ 340	≥ 665	≥ 290					
200 < h ≤ 400	≥ 550	≥ 765	≥ 615					
400 < h ≤ 600	≥ 850	≥ 950	≥ 800					
600 < h ≤ 800	≥ 950	≥ 950	≥ 900					
800 < h ≤ 1000	≥ 1125	≥ 1195	≥ 1015					

Dimensions in mm

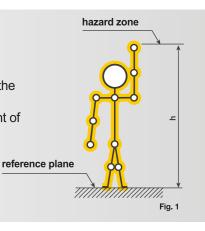
Reference table for the upper limbs

Limiting the freedom of movement over the protective structures

EN ISO 13857, 4.2.1

Reaching upwards

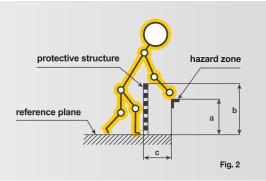
- If there is a low risk from hazard zone, then the height of the hazard zone, h, shall be 2 500 mm or more.
- If there is a high risk from the hazard zone, then the height of the hazard zone, h, shall be 2 700 mm or more.



EN ISO 13857, 4.2.2

Reaching over protective structures

- a height of hazard zone
- **b** height of protective structure
- c horizontal safety distance to hazard zone



In the following table (relevant to high risk) the protective structures with a lower height of 1000 mm, are not mentioned because they do not limit enough, the movement of the body.

Protection systems with a height below 1400 mm should not be used without additional safety measures.

If the risk situation is reduced, protection systems with a height greater than - or equal to 1000 mm are allowed. The safety distance, shown in the table below with a dash, mean that must be used the distances in relationship with the grid mesh with 32x67 mesh and $\emptyset 3$ wire or 40x40 wire $\emptyset 3$ - $\emptyset 4$, the minimum safety distance is 200 mm.

Table 2 High risk

	Height of protective structure b									
Height of dangerous area a	1000	1200	1400	1600	1800	2000	2200	2400	2500	2700
					Horizontal (distance fro	m the dang	er zone c		
2700	-	-	-	-	-	-	-	-	-	-
2600	900	800	700	600	600	500	400	300	100	-
2400	1100	1000	900	800	700	600	400	300	100	-
2200	1300	1200	1000	900	800	600	400	300	-	-
2000	1400	1300	1100	900	800	600	400	-	-	-
1800	1500	1400	1100	900	800	600	-	-	-	-
1600	1500	1400	1100	900	800	500	-	-	-	-
1400	1500	1400	1100	900	800	-	-	-	-	-
1200	1500	1400	1100	900	700	-	-	-	-	-
1000	1500	1400	1000	800	-	-	-	-	-	-
800	1500	1300	900	600	-	-	-	-	-	-
600	1400	1300	800	-	-	-	-	-	-	-
400	1400	1200	400	-	-	-	-	-	-	-
200	1200	900	-	-	-	-	-	-	-	-
0	1100	500	-	-	-	-	-	-	-	-

Dimensions in mm





www.protec-italy.net



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