

1) Working tent

Working and decontaminating tents (flexible enclosures) are a protective zone. They are used as a workplace for cleaning, inspection and maintenance works as well as an intermediate storage facility for radioactive components, products and substances during activities or handling of volatile particles or aerosols. The enclosures serve equally well as protection against infectious agents. Due to the hermetically tightly welded plastic films and by means of a vacuum, the housings effectively prevent any spread of gases, vapors, liquids and particles into the environment. Work tents are designed for indoor use and are manufactured according to customer requirements.



A typical working tent consists of a stable framework and a flexible enclosure attached to it. All structural components are located outside the tent and remain free of contamination. The interior of the enclosure is completely empty and easy to clean. The enclosure is subjected for a permanent vacuum of up to -50 Pa. This ensures that neither air nor particles can penetrate from the inside of the tent to the environment. The enclosure is fastened to the framework by means of lashing straps, keeping the enclosure in shape.

The access of persons or goods from outside is by means of zipper or solid doors with circumferential seal. Several enclosures can be connected to a locking systems. The roof and the side walls are hermetically welded tightly and are equipped with windows, exhaust sockets, cables and hoses, etc. as required.

The framework can be completely disassembled. The enclosure film is foldable and collapsible. Both can be stored in a space-saving manner when not used and can be rebuilt at any time. The processed materials are very sturdy, durable and approved for use in alpha-tight and against infectious agents protecting enclosures. A great advantage is the disposal: the enclosure film generates a minimum of waste volume.

2) Foldable working tent

A foldable working tent is used where an enclosure is only temporarily required or space is available for it. The design allows a quick and easy pulling out and merging of the framework, whereby the enclosure remains always mounted on the framework. The folding working tent can also be put into operation if it is only partially extended. The optional wheels allow a comfortable operation of the entire working tent.



3) Description

General:

- dimensions according to customer requirements
- consisting of walls and roof, without floor (standard)
- the roof and side walls are hermetically welded together
- the side walls are extended downwards and form a flap for sealing the floor
- permissible vacuum: max. 50 Pa (acceptance test: 80 Pa).

Framework:

- outside the enclosure, can be dismantled
- pipes and tube connectors are made of polished aluminum, free pipe ends closed
- no structural tubes inside or during passageways
- possibility of profile fixation on the ground
- option: docking points for fixing the structure directly to a room wall (dowel technology)
- option: profile rail for fixing / sealing the film directly to a smooth wall.

All parts are long-term and individually orderable and can be exchanged simply, quickly and safely by customer's own personnel on site.

Enclosure:

- robust polyester fabric (PES), coated on both sides with PVC
- thickness 0.55mm, color white, surface weight approx. 700g / m²
- fine (smooth) film side inside (cleaning)
- approved for use with alpha-dense enclosures and for protection against infectious agents
- flame retardant according to DIN 4102: B1
- fastening of the housing film by means of quick-release straps.

Damages such as cuts, cracks, holes, leaks, etc. in the housing film can be repaired easily, quickly and reliably on site using the repair kit (see pt. 5).

- Standards: EN 1073-1 Protection against particulate radioactive contamination
EN 14126: Protection against infective agents

Possible equipment:

- zipper door, can be operated on both sides, covered with velcro on the inside
- solid door with solid steel frame, encircling gasket, window and door closer
- roof opening (zipper) in various geometries, for the introduction of larger components or for carrying load cables of a crane
- automatic vacuum valve (weight-actuated) to maintain a stable vacuum
- visible windows in doors, side walls and roof (material: transparent PVC, thickness 0.75 mm)
- various film tubes for cable, hoses, suction lines, etc.
- the tubes will only be opened if necessary
- foil collar with zipper for connection with other enclosures, locks or smooth walls
- lining the interior with heat shields (sparks)
- fixation of lead blankets on the framework
- etc.

Acceptance test / documentation / delivery:

- each working tent is put up and checked at the site of Pedi AG
- the acceptance test is carried out at the site of Pedi AG and in the presence of a delegate of the customer
- preparation of an acceptance report
- during the inspection, the instructions concerning the installation and operation of the working tent are given
- delivery of a complete dossier with design documents, drawings, parts lists, certificates and specifications.

Warranty:

- the warranty period is 2 years from the date of delivery
- normal use, wear and improper use are excluded from the warranty obligation
- in the event of a failure, any liability for consequential damages will be excluded
- technical changes in favor to the state of the art are reserved.

4) Auxiliaries for the working tent

- Bearing tube manometer for measuring the vacuum in the working trolley (Art.-No. 114902)
- Additional vacuum flaps (Art. No. 110785)
- Heat protection cover against sparks
- Lead mats for shielding
- Filter HEPA 14
- Foil welding device (Art. No. 115287)

5) Repair on a working tent

Framework:

The repair possibilities on the framework are limited to the replacement of the damaged pipe connector resp. the replacement of the defective tube. See list of spare parts, pt. 6.

The replacement of these components can be carried out, part by part, in the assembled state.

Enclosure:

Repair of a small hole or crack in a wall or window:

- temporarily seal the opening using adhesive tape (and, depending on the size, a piece of plastic film)
- a blank is produced from the same piece of foil, which exceeds the damaged area on all sides by approx. 10 cm
- both the damaged area and the blank are cleaned and dried in the area of the adhesive by means of lukewarm soapy water (dirt, grease and oil-free)
- now apply the PVC adhesive (Balco contact adhesive) to both parts to be glued using a brush. Drying time: approx. 5-10 min. (until adhesive is hand-dried)
- then carefully place the two parts on top of each other and press them together well. Wipe excessive adhesive with a cotton cloth.

Caution: The parts can not be moved towards each other after application!

6) Spare parts

Framework:

Item no.	Description	Material
101191	Tube D 32/28 mm	Aluminium (Standard)
102675	Tube D 32/28 mm	Steel inox
101190	Tube closure	Polyethylen (PE)
100062	Tube connector single	Aluminium
100063	Tube connector double	Aluminium
100061	Tube connector 90°	Aluminium
100060	Tube connector T	Aluminium
102703	Tube connector parallel 2	Aluminium
102704	Tube connector parallel 3	Aluminium
102131	Tube connector cross	Aluminium
100064	Tube connector base plate	Aluminium
diverse	Docking pivot	Aluminium
110351	Screw cyl. M8x30	Steel galvanized
100380	Nut M8	Steel galvanized
101625	Assembly tool M8	Steel
114930	Set of screws (spare parts) (each 10 pcs. of 110351, 100380)	Steel galvanized

Enclosure:

Item no.	Description	Material
110291	Film of enclosure, white	PES tissue, PVC covered
101185	Film of windows, ransparent	PVC (roll material)
103102	Film of windows, glass clear	PVC (plate material)
101196	Film tube, opak	PVC
110745	Fixation strap, L = 0.5 m	Polypropylen (PP)
111200	Fixation strap, L = 1.0 m	Polypropylen (PP)
110798	Eyelet	PVC
115238	Set of films (spare parts) (each 1 m of 110291, 101185, 101196)	PVC
110809	Adhesive Miranit, can of 850 g	Contact adhesive for PVC
103247	Adhesive Forbo Spezial, tube of 42 g	Contact adhesive for PVC

Auxiliary:

Item no.	Description	Material
110785	Vacuum flap	Steel
111309	Connection plate D180/63 x 3 mm	PVC-hard

7.) Suction devices with filter

The suction blower creates a negative pressure in the work tent by sucking out the contaminated air. The air is filtered in several stages and leaves the blower clean.



Suction blower type	G50		G55		G100 230V 110V		G200 230V 110V		G300 230V 110V		G400	G500
	Dimensions (LxBxH) mm	525 x 390 x 390	525 x 390 x 390	770 x 410 x 410		970 x 410 x 840		1150 x 720 x 840		1200 x 720 x 1150		Blower 1180 x 785 x 955 Filter 715 x 720 x 1150
Weight incl. filter kg	18,8	19,0	27,5		55		79		105		Blower 148 Filter 63	
Air flow without filter max. m ³ /h	1'500	1'500	2'300	2'000	4'500	4'000	8'000	7'400	9'500	15'000		
Air flow with filter max. m ³ /h	1'000	1'000	1'650	1'350	3'000	2'500	5'150	4'000	7'800	12'000		
Power supply	230 V	230 V	230 V	100- 120V	230 V	100- 120V	230 V	100- 120V	400 V	400 V		
Power consumption	1,2 A	1,2 A	2,5 A	4,0 A	4 A	7 A	8 A	15 A	5 A	9 A		
Hose connection suction	Option	Option	Option		Option		Option		Option	Option		
Hose connection exhaust air	Option	Option	Option		NW 300		NW 450		NW 450	NW 450		
Filter stages	2	2	3		3		3		3	3		
HEPA filter acc. to EN 1822 class	H13	H13 / H14	H13 / H14		H13 / H14		H13 / H14		H13 / H14	H13 / H14		
Undercarriage	Option	Option	Option		integrated		integrated		integrated	integrated		

8.) Personnel and material locks

The locks serve to separate the black and white areas. They can be attached to existing doors or used together with work tents.

The airlocks can bring material as well as persons into contaminated zones and lock them out again under controlled conditions. They can be used as pure passage rooms, as checkrooms, as showers with water or air. They are suitable for work in asbestos rooms.



Personnel locks: available sizes and designs

Item no	Modell	Dimensions	Design
	900	900x900x2000	Eco-Line, with 4 stable walls
	750	750x750x2000	Eco-Line, with 4 stable walls
	1000	1000x1000x2000	Smart-Line, 2 stable door walls and 2 lateral film walls
	750	750x750x2000	Smart-Line, 2 stable door walls and 2 lateral film walls
	1000	1000x450x2000	Smart-Door, 2 stable door walls and 2 lateral film walls
	750	750x450x2000	Smart-Door, 2 stable door walls and 2 lateral film walls
	1000	1000x1000x2425	Air shower Quick-Dush, complete with air generator with filter

Other versions on request.

Material locks: available sizes and designs

Item no	Modell	Dimensions	Design
	2000	2043x1005x2050	Quick-Dush
	1000	1000x1000x2050	Quick-Dush
	1400	1800x1400x2230	Eco-Line
	900	1800x900x2230	Eco-Line

Other versions on request.