

# The TrellTent<sup>®</sup> shower and decontamination system

#### General

The TrellTent® shower and decontamination system is a spacious, quick erectable system for decontamination of chemically contaminated personnel or for normal showering. The area in the shower tent is 14 m². Fully expanded with one undressing tent type TrellTent 1/2 and one dressing tent type TrellTent 2/2 together with the 6 showers in the shower tent it offers the perfect choice when high capacity decontamination is required. The well proven rigid TrellTent® system with inflatable ribs and the possibility to quickly connect the different units are well known features of the TrellTent® system.

The water system consists of one Water Feeding pump, type VP or VPHZ, which takes the water from different public water systems or from a portable water container. One mobile heater for the water, type Flow Heater DH6, which is a diesel or petrol operated flow heater. A second pump is a drainage pump for the contaminated water, which pumps the water from the tent into a wastewater container. The two containers are of flexible design made of PVC coated fabric and they come in sizes from 1200 litres 10 000 litres. Finally one air fan, type Air Heater ZHWL, for ventilation and heating. This is a water / air heat exchanger which takes the water from the Flow Heater. All this is connected together with special hoses of length 2,5 m, 5,0 m and 7,5 m, which are heat resistant. The couplings used are of type STORZ couplings. This is a symmetrical, no male / female side, quick connection coupling for booth suction and delivery. The shower device has 6 water nozzles and on hand held shower.

Electrical contacts are according to European Standard.



# Articles which can be included in the system:

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### 1 - TrellTent® 1/2 DS

The TrellTent<sup>®</sup> 1/2 DS is a 2 rib, 2 doors tent, designed to collect the contaminated water. It is equipped with 6 jets from above and 1 hand shower. The shower area can, by using a curtain, be divided into two sections. The two windows give a bright atmosphere. The windows are equipped with mosquito nets and are possible to open for better ventilation. The tent is in less than 5 minutes inflated by a high capacity fan.

Shape: The tent has a half circle design, with a radius of 2.6 m, with

good resistance against wind, snow and heavy rain.

Dimensions: L= 2,65 m, W= 5,2 m, H= 2,6 m.

Floor area: 14 m<sup>2</sup>. Weight: 100 kg.

Fabric walls: PVC coated polyester fabric, weight 755 g/m<sup>2</sup>. Fabric floor: PVC coated polyester fabric, weight 735 g/m<sup>2</sup>.

Colour: The outside is olive green or yellow. The inside is light green

for natural, neutral colour reflection.

Floor: For optimal stability the tent has an integrated floor which is

permanently welded and sewn to the walls. The door openings

have "thresholds" to contain the water inside the tent.

Ribs: The tent has 2 inflatable ribs, diameter 350 mm which are fixed

attached to the tent fabric. The pressure is 18 kPa. The ribs

have separate inner tubes.

Spacing collar: The tent has 1 spacing collar in the centre and 2 pipes for

water distribution on the sides.

Doors: The doors have a width of 1,8 m and a height of 2,1 m. The

zippers are made of metal.

Window: The windows have mosquito net with transparent windows and

black out flaps.

Shower device: One set consists of two pieces of divisible pipes made of

aluminium. Shower strain with 45° shower angle. The water flow is 10 l/min at 4,5 bar. Ball valve for shutting off shower strain. The connection of the two pipe sections is possible to tighten without tools. The coupling on the inlet hose is of type STORZ D 1001 25 DS acc. to DIN 14301, a quick connection symmetrical suction and delivery coupling, made of aluminium. The hand shower, in metal and possible to shut off, has a water

flow of 15 l/min at 4,5 bar.

Drains: The tent is equipped with 4 drainage. Two of these with quick

couplings for connection of drainage pump.

Attachment points: Each rib has attachment points for hanging of equipment.



# 2 - TrellTent<sup>®</sup> 2/2 3 - TrellTent<sup>®</sup> 1/2

Please see separate information.

#### 4 - Flow Heater type DH6



The flow heater is a two-stage heater that at the same time supplies two different outlets with thermostatically controlled water. It can be carried by means of 4 handles or driven by means or 2 wheels. It uses either diesel oil or petrol for heating plus electricity.

Output: 70 kW or 105 kW Water throughput: 500 - 3000 l/hour Temperature increase: 30°C at 3000 l/h

Maximum temperature: 95°C

Type of burner: 2-stage oil burner with automatically regulated airflow

Type of fuel: Diesel or petrol

Fuel consumption: Min. 9,0 l/h - Max. 12,5 l/h

Exhaust characteristics: CO<sub>2</sub> – 11,5 %, Smoke spot number 0, temp. Approx. 180°C

Electrical data: 220 V 50 Hz alternatively 110 V 60 Hz,

Power consumption: Max. 600 W

Protection: IP43

Coupling: Water – D-couplings

Dimensions: L: 550 mm, W: 550 mm, H: 1300 mm (without wheels and

exhaust pipe)

Weight: 158 kg



#### 5 - Water Feeding Pump type VP



The Water pump is used for delivery of water to the showers in case a public water system not is available and when no Air Heater is used. It is of type horizontal centrifugal pump. It is pressure controlled with switch-on / off pressures at approx. 2,5 and 4,5 bar. The electric cable is equipped with safety plug.

Capacity: Approx. 5000 I/ hour

Pressure: Max. 5 bar

Voltage: 220V/230V 50 Hz or 110 V 60 Hz

Power consumption: Approx. 2.300 W

Protection: IP 55

Measurements: Approx. L= 600 mm, W= 300 mm, H= 600 mm

Weight: Approx. 36 kg Coupling: D – couplings



#### 6 – Water Feeding Pump type VPHZ



To be used when the Air Heater ZHWL is used. It has the same characteristics as the VP pump plus a circuit to operate the Air Heater.

Capacity: Approx. 5000 I/ hour

Pressure: Max. 5 bar

Voltage: 220V/230V 50 Hz or 110 V 60 Hz

Power consumption: Approx. 2.300 W

Protection: IP 55

Measurements: Approx. L= 600 mm, W= 600 mm, H= 600 mm

Weight: Approx. 52 kg Coupling: D – couplings



#### 7 - Drainage Pump type EP



The Drainage pump is used for pumping the water from the tent into a wastewater container or the sewage system if the water is not contaminated. It is of type rotation pump in stainless steel with integrated water level switch. This allows the pump to work automatically as soon as the water in the shower tent has reached a level of 40 mm.

Capacity: Max. 4000 l/h Pressure: Max. 0,8 bar

Power supply: 220V/50Hz or 110 V / 60 Hz

Power consumption: Approx. 600 W

Protection: IP55

Coupling: C-coupling at water inlet and D-coupling at water outlet

Dimensions: L=350 mm, W=260 mm and H= 300 mm

Weight: 9 kg



#### 8 - Air Heater ZHWL



The tents system can be equipped with a Hot Air Heater connected to the flow heater. The Heater is equipped with a fan and operates with the water from the flow heater.

Thermal output: 45 kW at 0°C air intake

Blower: 5 stages, air volume max. 4600m<sup>3</sup>/h

Voltage: 230V/50Hz or 110 V/60 Hz.

Power consumption: 480 Watt Coupling: D couplings

Dimensions: L= 850 mm, W= 600 mm, H= 750mm (without air conduction

device)

Weight: 65 kg (without air conduction device)



#### 9 - Water Containers



To be used for storage of fresh or contaminated water. The containers are made of PVC coated fabric and has air outlet valve and connection for hose. The following sizes are available.

Volume: 1200 litre

Size, filled: Approx. L= 2250 mm, W= 1400 mm, H= 650 mm

Coupling: D-coupling

Weight: 8 kg

Volume: 3000 litre

Size, filled: Approx. L= 2900 mm, W= 2400 mm, H= 800 mm

Coupling: D-coupling Weight: 10,5 kg

Volume: 5000 litre

Size, filled: Approx. L= 3400 mm, W= 2430 mm, H= 1150 mm

Coupling: D-coupling Weight: 14,5 kg

Volume: 10000 litre

Size, filled: Approx. L= 5500 mm, W= 2600 mm, H= 1000 mm

Coupling: D-coupling Weight: 24 kg



#### 10 - Hoses



#### 10.1

Between fresh water container, public network, natural water source or air heater ZHWL and water pump VP / VPHZ, also between drainage pump EP and wastewater container.

Length: 5 m

Diameter: 25 x 5 mm
Couplings: D-couplings
Heat resistance: Max. 100°C
Pressure resistance: Max. 20 bar

Remark: With no return valve and strainer

#### 10.2

Between flow heater DH6 and water pump VP / VPHZ and flow heater DH6 and shower system.

Length: 2,5 m
Diameter: 25 x 5 mm
Couplings: D-couplings
Heat resistance: Max. 100 °C
Pressure resistance: Max. 20 bar

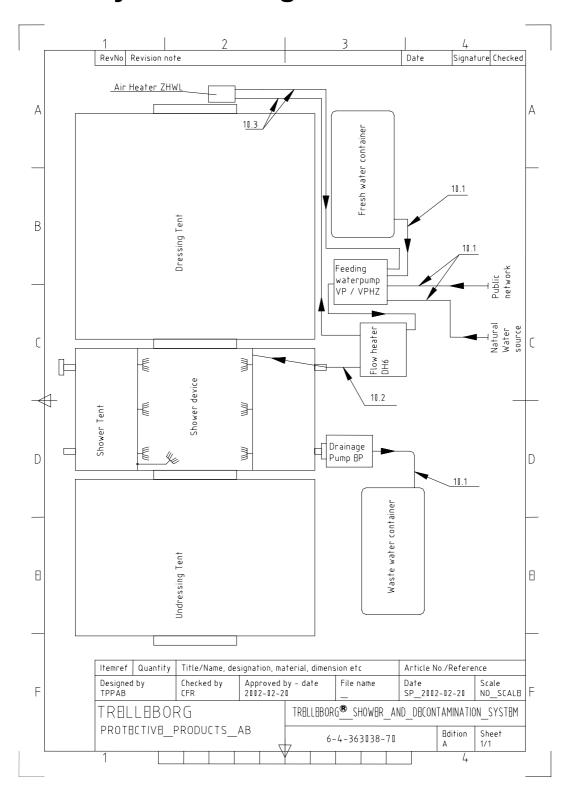
#### 10.3

Between air heater ZHWL and water pump VP / VPHZ and air heater ZHWL and flow heater DH6.

Length: 7,5 m
Diameter: 25 x 5 mm
Couplings: D-couplings
Heat resistance: Max. 150 °C
Pressure resistance: Max. 15 Bar



## 11 - Layout drawing





#### 12 - Article numbers

<ul> <li>1 - TrellTent<sup>®</sup> 1/2 DS         Olive green/Light green         Yellow / Light green</li> </ul>	484012130 484012132
2 - TrellTent® 2/2 Olive green/Light green Yellow / Light green	484022030 484022032
3 - TrellTent <sup>®</sup> 1/2 Olive green/Light green Yellow / Light green	484012030 484012020
<ul> <li>4 - Flow Heater type DH6</li> <li>5 - Water Feeding Pump type VP</li> <li>6 - Water Feeding Pump type VPHZ</li> <li>7 - Drainage Pump type EP</li> <li>8 - Air heater ZHWL</li> <li>9 - Water containers</li> </ul>	483380201 483380220 - 483380210 -
1200 L 3000 L 5000 L 10000 L	- - -
10 - Hoses Acc. to 10.1 Acc. to 10.2 Acc. to 10.3	483380232 483380230 -