

# **Four Person Decontamination Shower**

**Product Manual** 

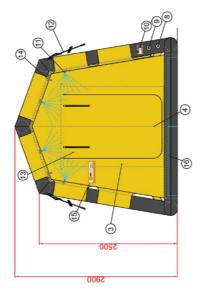


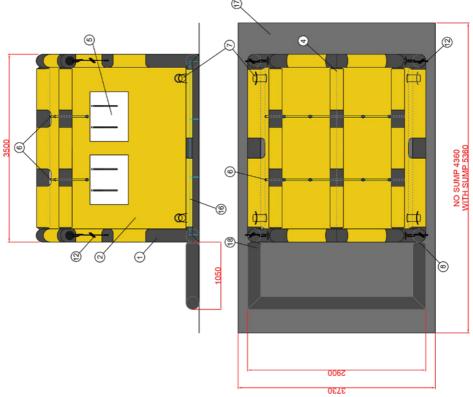
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WARNING: Carefully read this manual before operating the Four Person Decontamination Unit.

NOTICE: The manufacturer takes no responsibility for the consequences of actions not complying with the instructions given in this manual.

Technical Data	MD4 Decontamination Shower
Product Code	DSW017
Length (cm)	350
Int. Length (cm)	300
Width (cm)	290
Int. Width (cm)	250
Height (cm)	290
Int. Height (cm)	260
Working Pressure (bar)	0.37
No. of chambers	1
Air Requirements (Itr)	1370 (1630 with sump)
Reccomended Water Inlet Pressure (bar)	3
Recommended pump flow-capacity (I/min)	7 Liters/minute per nozzle
Pack size (cm)	128 x 70 x 50
Weight (kg)	55 (60 with sump)
Number of Shower Nozzles	8
Number of Connectors	4
Number of Tubing Sleeves	4
Glove	No
Window + Blind	4
Sump	Optional





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	Item	Description
1	Inflatable Frame	P.U. coated polyester - Black
2	Shower Canopy	Upper: P.U. coated polyester, Yellow Floor: P.U. coated polyester, Black
3	Door Splash Curtain	P.U. coated polyester - Yellow
4	Internal Partition	P.U. coated polyester - Yellow
5	Observation Window (& Blind)	Clear P.U Sheet
6	Shower Hose Assembly	PVC hose c/w plastic fittings, brass nozzles
7	Drain Hose Sleeve	P.U. coated polyester - Yellow
8	Inflate/Deflate Valve	D7 leafield black acetal
9	Relief Valve	A6 leafield black acetal
10	Data Label	Label with product data
11	Shower Nozzle	
12	Guy Line	Yellow reflective rope 6mm
13	'U' Style Roll-Up Door	P.U coated polyester - Yellow
14	Connector	Plated brass push fit connector
15	Logo Label	Label with MFC logo
16	Plastic Pallet	Grating top surface - 120x100x15cm (x4)
17	Outer Floor	PVC coated nylon - Black
12	Valise (not shown)	PVC coated nylon - Black
13	Repair Kit (not shown)	70ml tube polyurethane, adhesive, c/w associated repair patches

# **Operational Instructions**

#### 1. DEPLOYMENT AND USE

1.1. At deployment point, select best site, particularly if a long term use is anticipated.

The surface should be reasonably flat and level, free from stones, sharp objects or holes in the ground.

The surface must be free from oil or chemical spills.

If required, position a groundsheet (optional) under the shower unit before inflation to prevent damage to the sump.

1.2. Unpack the decon unit from its valise, and unroll it.

#### 1.3. PREPARE FOR INFLATION:-

1.3.1 Remove dust cap from inflate/deflate valve, ensure the central valve diaphragm is closed; i.e. the internal spindle is raised (push and turn to release). The other valve positioned above it is the "Pressure relief valve".

#### 1.4. CYLINDER INFLATION

- 1.4.1 Fix Regulator to cylinder and connect delivery hose to Regulator.
- 1.4.2 Connect delivery hose to inflate/deflate valve, Hold delivery hose tight into inflation valve and inflate until relief valve activates. Close cylinder valve. Do not release hose during inflation. Failure to do this may result in personal injury.
- 1.4.3 Ensure dust cap is replaced to prevent ingress of dirt and water into the valve.

#### 1.5. BELLOWS/PUMP INFLATION

- 1.5.1 Remove dust cap from inflate/deflate valve, ensure the central valve diaphragm is closed, i.e. the internal spindle is raised (push and turn to release).
- 1.5.2 Attach bellows/pump hose to inflate/deflate valve.
- 1.5.3 Operate bellows/pump until relief valve activates.
- 1.5.4 Remove hose and replace dust cap on inflate/deflate valve.
- 1.6. Guy ropes are attached to each frame upright so that it can be firmly anchored to the ground using spikes. The guy ropes can alternatively be secured to strong points such as trees or vehicles.

#### 2. SHOWER TENT

The shower tent is fitted with internal splash curtain. The bottom of the curtain should be kept inside the integral sump to prevent escape of contaminated water.

**WARNING:** To prevent possible injury from tripping, care should be taken when stepping into and out of each section of the shower tent.

The shower tent may be removed from the inflatable frame and replaced if required (Please contact MFC for further information).

2.1. Six plastic pallets (120 x 100 x 15cm) should be placed in sump area to raise the user above the level of the waste water. The pallet should have a grating top surface to allow the water to drain into the integral sump. Slip-resistant self-draining wet area matting is also available.

#### 2.2. SHOWER HOSE

The shower hose runs up the side of the tent, across the top and down the opposite side, and is fitted with 8 shower nozzles (4 on each side). The hose fittings are clamped through the tent. The water supply hose is connected to the shower hose with the Camlock connector (other connectors available as an option) fitted in the end of the hose. A cleaning brush on a hose may be connected into the push fit connector in the top corner, if required.

#### 2.3. WASTE WATER

Waste water can be pumped from the sump by passing the hose through the sleeve.

# **Packing**

- After every use, disconnect water supply hose, drain water from base of shower and reservoir and allow to dry out.
- 2. Deflate the Shower unit. This is achieved by depressing the central spindle in the inflate/deflate valve, (push and turn to lock open).
- 3. Before commencement of the folding operation, ensure that as much air as possible has been evacuated from the frame.

**NOTE:** To prevent possible damage, do not walk on the deflating shower unit to expel the air.

- 4. Lay the deflated Shower unit so the shower roof is positioned directly over the floor, and the sides of the shower are tucked in between.
- 5. From left side, fold approx one third over, on top of the main frame.
- 6. Fold the other side over on top of the first (Use carrying valise for guide to pack width).
- 7. Flat roll from the end (no valve) towards the inflate/deflate valve, expelling the air.
- 8. Lay the valise on the ground as an 'open box' and place Shower Unit into valise.
- Fold up the ends of the valise and secure the webbing straps. Complete the
  packing procedure by folding up the two remaining sides of the valise and
  secure the webbing straps.

#### On return to base:

1. The shower unit should be packed (in valise) off the ground in a cool, dry location away from direct sunlight and heat sources such as hot pipes or stoves.

Temperate Range for Storage: +5°C to +40°C.

- 2. When the shower unit is completely dry:
  - a) proceed with cleaning instructions (see cleaning procedures located on page 10).
  - b) it should be checked for wear or damage. If none is found it should be repacked in the valise.

If any damage is found it should be repaired immediately in accordance with the repair instructions (see repair instructions located on page 11).

Please contact MFC for further information on repairs.

### **Maintenance & Test Procedures**

#### 1. GENERAL

It should be noted that, due to the type of fabrics used in its construction, when the Shower unit is wet, there may sometimes be visual evidence of minuscule white bubbles, which form a line of froth at the seams and joints of the unit. This is recognised within the industry as 'lateral leakage', and is simply air that is trapped in the layer of nylon between the rubber coatings, forcing its way to the nearest available edge of the fabric. This type of leakage will not affect the performance of any inflatable product over the course of an operational procedure, and can be safely ignored.

However, if there is evidence of large, transparent bubbles, this is clearly evidence of a leak that must be repaired at the earliest convenience (Please contact MFC for further information).

The following is a recommended regime for maintenance & test.

#### 1.1. CLEANING

This should be carried out using soap and water.

**WARNING:** To prevent possible damage. Do not use strong detergents, bleach or any type of hydrocarbons.

If the shower tent or partitions become excessively contaminated, and cannot easily be decontaminated, they should be removed and incinerated. A replacement shower tent or partition can be sourced from the manufacturer (Please contact MFC for further information).

#### 1.2. SHOWER FITTINGS AND HOSES

The holes in the shower heads may become partially blocked with sediment over a period of time. This may be rectified by cleaning the parts with soap and water, thoroughly dry the parts before reassembly. Ensure any sealing washers are refitted. Check hoses and fittings for leaks and repair / replace as necessary (Please contact MFC for further information).

**WARNING:** To prevent possible damage. Do not use strong detergents, bleach or any type of hydrocarbons.

### 2. **QUARTERLY**

- 2.1. Check control equipment as per relevant manual.
- 2.2. Inflate Shower unit to working pressure.

- 2.3. Check audible relief valve operation.
- 2.4. Whilst inflation system is charged, check connections and valves using brush and soapy water.
- 2.5. When relief valve has operated, and the unit is at working pressure; it can be left to stand for a length of time that would be comparable to an operational situation (e.g. 6 to 8 hours).
- 2.6. After this time, the Shower unit should still be firm.
- 2.7. If the Shower unit has become soft, the air-loss should be located by applying a soapy-water solution.
- 2.8. Any significant leaks (See 1 above) should be marked and repaired using the repair kit provided.
- 2.9. Check shower hoses and fittings for leaks and repair / replace as necessary (Please contact MFC for further information).

#### 3. RECOMMENDATIONS

3.1. Shower units should undergo an annual test carried out by the manufacturer, or persons certified by the manufacturer. If in doubt please contact the MFC service department on +44 (0)1443 433075.

# Repairs

As a general rule, punctures and other damage will need to be assessed in two categories:

- a) that which is repairable at the base, or b) serious damage that will need to be repaired by MFC International Ltd.
  - a) Repairs that are manageable at the base workshops will be minor punctures to any area of the Decon Shower. These can normally be repaired by the application of a small repair patch (provided in the repair kit).
  - b) Repairs that should be carried out by MFC will be the more serious kind, such as damaged valves, badly torn fabric (either on the sidewalls or the flat surfaces) and the replacement of damaged fittings. Please contact MFC for further information.



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