

( STREAMLINE INSTRUCTION MANUAL

### MOBI MAXI

Hard Water Instructions

### Kit includes

FP-TR1200-02 S06W-KIT015-0113 OVA8\* Waterfed Pole V-SBF26-MD06-001 / V-SBF36-MD06-001 HRM400-SS-8-AS-PRO-HIVIZ FJ2-02 / NJ3-02

### Contents

1.	Whats Inclueded4	- 5
2.	Responsibilities	
	General responsibilities for the Mobi® filtration system	j
	Manufacture responsibilities for the Mobi® filtration system	
	Personnel responsibilities for the Mobi® filtration system	)
3.	Technical Specifications	
	Technical data	
	Parts & accessories	
4.	Safety Regulations	
	Personal safety8	;
	System safety 9	)
	Electrical specifications & safety	0
5.	Operating the Mobi® Maxi system	
	Unpacking your system	1
	Storage of your system	
	About your system	
	How to assemble your system	
	How to turn your system on	
	now to turn your system on	5 - IS
6.	Malfunctions & Troubleshooting	20
7.	Maintenance & Replacing Filters	21
	Prefilters - usage & replacing	22
	De-ionising (DI) resin filter	23
	Reverse osmosis (RO) membrane - usage & replacing	24
8.	Disposing Of Filters & Machine	25
9.	Declaration of Conformity	25

8.	Connecting The OVA8® Pole
8.	Using The OVA8® Pole
	Extending the pole
	Collapsing the pole
	Important information
	Pole maintenance
8.	Why Streamline®? 32
9.	Warranty Information



5

Whats Included



1x FP-TR2000-02

**Mobi® Maxi RODI System** 



1x V-SBF26-MD06-001

### 10 inch (260mm) Streamline® OVA8® Brush

Medium Dual Bristle, with OVA8® 90° quick release socket



1x V-SBF36-MD06-001

### 14 inch (360mm) Streamline® OVA8® Brush

Medium Dual Bristle, with OVA8® 90° quick release socket



1x Streamline® Twist & Lock Fan Jets

FJ2-02 Fan Jet NJ3-02 **Pencil Jet** 



1X SO6YW-KITO15-0113 15mtr (6mm) Streamline® Microbore Hose



### 1x Streamline® OVA8® Carbon Fibre Waterfed Pole

- OV17-24-U 17ft OVA8\* carbon fibre telescopic pole 5 section
- OV22-24-U (22ft)
  22ft OVA8\* carbon fibre
  telescopic pole 6 section
- OV25-24-U (25ft) 25ft OVA8\* carbon fibre telescopic pole 5 section
- OV30-24-U (30ft)
  30ft OVA8\* carbon fibre
  telescopic pole 6 section
- OV35-30-U (35ft) 35ft OVA8\* Carbon Fibre telescopic pole 7 section
- OV40-30-U (40ft) 40ft OVA8\* Carbon Fibre telescopic pole 8 section
- OV45-30-U (45ft) 45ft OVA8\* Carbon Fibre telescopic pole 9 section
- OV60-40-U (60ft)
   60ft OVA8\* Carbon Fibre telescopic pole 10 section

Responsibilities

**Technical Specifications** 

### Responsibilities

### **General Responsibilities**

These operating instructions allows you to use the Filterplus® Mobi® filtration system safely and efficiently. The instructional booklet must be read before setting up, starting or using your Streamline® equipment. It is an integral part of the product itself.



Please read the warning and instructions contained in this booklet carefully. They provide important information on the safe use and maintenance of the equipment. Pay particular attention to general safety instructions.

Please keep this booklet in a safe place near your Filterplus® Mobi® filtration system for future consultation.

Your Filterplus® Mobi® filtration system is constructed according to current safety standard and regulations. The latest and current edition is illustrated in this manual.

The contents of this booklet should be bought to the attention of all users.

### **Manufacturer Responsibilities**

Varitech Systems Ltd, the manufacturer of Streamline®, holds 12-months warranty on all machines and equipment from the date of purchased (see Warranty section 2)

Varitech Systems Ltd, the manufacturer of Streamline®, is in no case responsible for failures or errors caused by modifications to the unit by customer or other persons.

### **Personnel Responsibilities**

The Filterplus® Mobi® filtration equipment is designed and manufactured to be operated in industrial applications. It is important that the operator(s) of the Filterplus® Mobi® filtration equipment have read through these operating instructions thoroughly, and understand all safety instructions and regulations.

The Filterplus® Mobi® filtration equipment is not intended for use by children, adolescents, persons under the influence of alcohol / drugs or simply lacking experience and knowledge. These operating instructions are designed to educate the user, informing the operator how to carry out the task at hand successfully, whilst avoiding potential dangers that might occur.

### **Important**

If needed, training videos can be found on the Streamline® website: www.streamline.systems

### **Technical Specifications**

### **Specification Data**

Description	Mobi <sup>®</sup> Maxi
Country of Origin	United Kingdom
Maximum Height	1340mm
Maximum Length	600mm
Maximum Width	450mm
Dry Weight	54kg
Wet Weight	56kg
Inlet Pressure Requirement	2.8 bar / 40 psi
Optimum Operating Pressure	8.2 bar / 120 psi
Standard Water Inlet Connection (Male hose lock)	<sup>3</sup> /4 inch
Waste Water Outlet Connection (Male hose lock)	<sup>3</sup> /4 inch
Pure Water Outlet Connection (Male hose lock)	<sup>3</sup> /4 inch
Electrical Power Supply	230V mains
Power Consumption	1.2W
Water Quality Range	000ppm - 1000ppm
Pure Water Flow (optimum output)	6.8 Lpm
Waste Water Flow	4.5 Lpm
Operating Time	Continual

### Parts and Accessories

The Filterplus® Mobi® filtration system will include the following parts:

- 1x 3mtr length of black standard water Inlet hose with stainless steel connections
- 1x 3mtr length of red Waste Water Outlet hose with stainless steel connections
- 2x 3mtr length of blue pure water outlet hose with stainless steel connections
- SPAN3 filter spanner for changing filters



9

Safety Regulations

### **Safety Regualtions**

### **Electrical Specifications & Safety**

Please check that the installation and sockets are adequate for the maximum power of the appliance indicated on the rating plate. If in doubt, consult a qualified electrician. The correct plug should be fitted by a qualified electrician.

- Varitech Systems Ltd, the manufacture of Streamline® declines all liability for damage to persons, animals or things caused by faulty or incorrect connection.
- Before connecting the equipment, check that the specification given on the rating plate corresponds to that of the mains electrical supply.
- If the equipment is connected via an extension, use cables with an adequate cross section, never less than 1,5 mm. The plug and socket must be watertight.
- The electrical safety of the equipment is guaranteed only when correctly and efficiently earthed as specified in current electrical safety legislation (in compliance with the provisions of the IEC 60364-1 standard). This fundamental safety requisite should be verified. If in doubt, ask a professionally qualified electrician to check the system thoroughly. It is recommended that the electric supply to this machine should include a residual current device that will interrupt the supply if the leakage current to earth exceeds 30 mA for 30ms or a device that will prove the earth circuit.

Varitech Systems Ltd, the manufactures of Streamline®, declines all liability for damage caused by faulty earthing of the appliance.

- The equipment can be disconnected from the mains only by unplugging the plug from the mains socket.
- When using any electrical appliance, certain fundamental rules should be respected:
  - Do not touch the appliance with wet hands or feet
  - Do not touch the appliance with bare feet or unsuitable clothing
  - Do not pull the power cable or appliance itself to unplug the plug from the mains.

### **Personal Safety**

Stay alert, watch what you are doing and use common sense when operating the Filterplus® Mobi® filtration system. Do not use the filtration system while you are tires or under the influence of alcohol, drugs or medication. A moment of inattention while operating the filtration trolley may result in serious personal injury.

# Use personal protective equipment to avoid personal injury: Protective Gloves Safety Goggles Protective Footwear

Additional protective equipment such as a dust mask, non-skid safety shoes, hard hat or hearing protection may be required depending on the safety regulations in the operator surroundings.

The water cannot be used for human consumption.

**Operating the Mobi® Maxi Filtration System** 

### **System Safety**

The Filterplus® Mobi® filtration trolley is manufactured with the safety of the operator in mind, including some key features such as result in serious personal injury.



### **Over Pressure**

- If the water pressure in the Filterplus® Mobi® filtration system is above the standard 10bar pressure, the pressure relief valve opens on the pump allowing a greater flow through the waste water outlet, reducing the pressure in the system and through the pure water outlet
- It is important to never open the filter vessels or membrane housings during operation or whilst under pressure.



### **Over Heating**

 If the powerful booster pump overheats on the Filterplus® Mobi® filtration system, an activation switch is triggered and the system will automatically switch off.



### **Electrical Hazards**

- As the Filterplus® Mobi® filtration system is powered by an electrical source, never use the equipment in the rain, snow or strong winds.
- Never use the filtration system to clean people and/or animals.
- Before each use, undertake a visual check on all electrical cables for damage. Never use the filtration system with a damaged cable.



### Mechanical Hazards

 To avoid all mechanical hazards, place the Filterplus® Mobi® filtration trolley on an even surface only, and ensure sufficient stability.

### Operating the Mobi® Maxi Filtration System

Use only original accessories that come with the Filterplus® Mobi® filtration system, offering maximum quality and security. Failure to use original accessories absolves Varitech Systems Ltd, the manufacturer from all liability.

When purchasing the product, make sure it has an identification plate. If this is missing, notify the distributor / manufacturer where you purchased the unit from.

Use of an appliance without an identification plate absolves the manufacturer from all liability. Products without an identification plate should be considered as anonymous and potentially dangerous.



### Unpacking of the Filterplus® Mobi® filtration system

Your Filterplus® Mobi® Filtration System has been carefully manufactured, checked through QC and packaged as a kit.

Carefully unpack your new Filterplus® Mobi® Filtration System and carry out a thorough visual check on all parts. If in doubt, do not use the system. Contact your dealer and/or manufacturer.

Packaging (bags, boxes, nails, tape etc.) should be kept out of reach of children as they may represent a potential hazard. Packaging can be recycled according to your local legislation.

### Storage of the Filterplus® Mobi® filtration system

Short term and long term storage is an important issue. The Filterplus® Mobi® filtration system must be protected from algae and bacteria growth in the pressure vessels caused by stagnant water. The reverse osmosis (RO) membranes and de-ionising (DI) resin must not dry out wither.

### Important

The unit must be protected from freezing.

The following procedures should be followed to protect the unit from bacteria fouling and damage from freezing;



### Storage of your system

### Short term storage: 2-4 weeks of no use

- i. Remove the prefilter housing and pour out the excess water.
- ii. Remove the DI resin cartridge housing and pour out the excess water.
- iii. Remove the RO membrane caps and lay down the trolley unit for the excess water to drain from the membranes.
- Ensure you reinstall the top caps on RO pressure vessels. Do not allow them to dry out. iv.
- Ensure you reinstall the prefilters and DI resin cartridge. Do not allow them to dry out. ٧.

### Long term storage: 4 weeks plus of no use

- Remove the prefilter housing and pour out the excess water. vi.
- Remove the DI resin cartridge housing and pour out the excess water. vii.
- viii. Remove the RO membrane caps and lay down the trolley unit for the excess water to drain from the membranes.
- ix. Remove all filters from the trolley system, wrap in individual plastic bags and seal.
- Replace all filter housings and membrane caps without any filters inside. х.
- It is important to store the trolley system where it cannot freeze. xi.
- It is important for all filters to not be allowed to dry out when not in use.



To operate the Filterplus® Mobi® filtration system, there needs to be access to a water supply and mains electricity.

The water enters the Filterplus® Mobi® filtration trolley system through the water inlet connection, and then passes through the carbon block prefilter removing the largest particles in the water before the water enters the membrane.

The reverse osmosis (RO) membrane filters remove up to 98% of the impurities in the water, before it reaches the de-ionising (DI) resin filter where the water is polished and reaches a 000ppm result.

From the RO membrane filters, waste water is discharged through the waste water outlet. This water is not harmful to the environment or skin, however full of impurities therefore not suitable for cleaning.

The Filterplus® Mobi® filtration trolley system you have purchased, the booster pump is powered by 230V mains electricity.



### **Assembling the System**

All main parts and safety devices are assembled by the manufacture. Some other secondary parts may be supplied separately.

These parts must be assembled by the user following the assembly instructions.

### To use your Filterplus® Mobi® filtration system:

**i.** Ensure the trolley system is safely secure and stable on a level surface.



 Connect the **BLACK** hose from the mains water supply to the water inlet.



iii. Connect the RED hose from the waste water outlet and direct to a drain or nearby soakaway.



iv. Connect the 2x BLUE hose from the pure water outlet to your waterfed poles (it is possible to add a Streamline\* 100mtr hose reel)



**v.** Plug in the system to the mains power supply.



### Turning your Filterplus® Mobi® Filtration System ON:

Once the final position of the Filterplus® Mobi® filtration system has been reached, you are now ready to switch on the water supply and power up the booster pump.

 Switch on the water supply at the mains water tap and allow the Filterplus® Mobi® filtration trolley to pressurised.



ii. Inlet Pressure will show on the Pressure Gauge, when the Mobi Maxi is running, this should be registering 100-120psi. Do not exceed 125psi.



**iii.** When pure water is following from the waterfed brush, switch on the booster pump by turning the 'POWER' switch to the ON position.



iv. The pressure gauge should now be around 120 - 150 psi (8-10 bar)



ii. Disconnect the mains power supply before disconnecting the mains water supply.



You are now good to use your Filterplus® Mobi® filtration trolley system.

### Important:

Please ensure you regularly check the water quality with the inline TDS meter.

### Turning your Filterplus® Mobi® Filtration System OFF

To switch off the Filterplus® Mobi® filtration system after completing the cleaning task, simply:

i. turn the 'POWER' switch to the OFF position, switching off the booster pump.



**iii.** Remove all hoses and safely store in storage box.





### Important:

As with all technical appliances, your equipment should always be used according to the instructions.

**Malfunctions & Troubleshooting** 

**Maintenance & Replacing Filters** 

### **Malfunctions & Troubleshooting**

During the usage of the Filterplus® Mobi® filtration system, there may be some small troubleshooting to undertake:

- i. Low water pressure or water supply at waterfed brush
  - a. Check for any blockages or kinks in hose.
  - Disconnect all extension hose reels and connect the Filterplus® Mobi® filtration system directly to the telescopic pole.
  - c. Clean or replace the sediment filter.
  - d. Contact service centre.
- ii. High waste water flow and low pure water flow
  - a. Check if membrane has the plug installed if so, replace membrane.
  - b. Contact service centre.
- iii. High pure water TDS
  - a. Check membrane quality replace membrane.
  - b. Check DI filter replace resin beads in DI cartridge.
  - c. Contact service centre.
- iv. Booster pump will not start
  - a. Check fuse on mains power.
  - b. Contact service centre.

### **Maintenance & Replacing Filters**

Care and maintenance of your Filterplus® Mobi® filtration system will ensure it is well looked after and running smoothly every time.

It is recommended to run a weekly, monthly and quarterly examination on the Filterplus® Mobi® filtration system to ensure all filters are adequate and effective for producing pure OO0ppm water quality.

### Weekly inspection

Keep a check on the pure water TDS by using the inline TDS meter. This measures in parts
per million (ppm). If the output reads higher than 10ppm, it is recommended to change
the de-ionising (DI) filter, and make a note in the back of the inspection booklet.

### **Monthly inspections**

- Each month it is recommended to flush through the reverse osmosis (RO) membranes and reset the ratio between pure water output and waste water output.
- The waste water valve should be opened 100% to allow waste water to flow out for approx. 5mins. Gradually reset to 60% pure and 40% waste water.

### **Quarterly inspections**

- Depending on the usage, however, it is advised to change the carbon pre-filter at least 1x a quarter.
- Complete a check on all membranes to ensure performance is still acceptable.

### Prefilters - usage & replacing

The sediment and carbon block 10inch prefilter are the first initial filters the feed water will pass through.

### Usage

Either quarterly replacement or approx. 25,000ltrs of mains water running through, whichever comes quickest.

### How do I change the carbon prefilter?

With the use of the spanner which comes with the Filterplus® Mobi® filtration system, simply unscrew the clear prefilter housing and dispose of the used carbon prefilter. Slide in the new CF10-F-001 Streamline® 5micron prefilter into the prefilter housing and reattach to the filtration system. Ensure you safely and securing tighten up the housing to ensure the system is safe under operating pressure.





### WARNING

Ensure the Filterplus® Mobi® filtration system is not operating or under pressure when maintenance or filter replacements are being undertaken.

### De-ionising (DI) resin filter

The DI resin filter is the last polishing filter that the RO pure water will pass through.

### Usage

Either quarterly replacement or approx. 25,000ltrs of mains water running through, whichever comes quickest.

### How do I change the carbon prefilter?

With the use of the spanner which comes with the Filterplus® Mobi® filtration system, simply unscrew the membrane housing caps and remove the membranes one by one.

Replace the 1x (or 2x) membrane with the V-MRO-4040-F from Streamline®.

Please pay special attention to the flow direction on the membrane housings and on the membranes themselves.



**Disposing Of Filters & Machine** 

### Reverse Osmosis (RO) Membrane Filters - usage and replacing

The RO membranes are the core part of the water filtration - produce up to 98% of water filtration

### Usage

Either yearly replacement or approx. 250,000ltrs of pure water running through, whichever comes quickest.

### How do I change the RO membranes?

With the use of the spanner which comes with the Filterplus® Mobi® filtration system, simply unscrew the membrane housing caps and remove the membranes one by one.





### **WARNING**

Don't lose the RO membrane plugs! Carefully insert 2x in the water inlet side. If in doubt speak to your Streamline® technician.

### **Disposing Of Filters & Machine**

The Filterplus® Mobi® filtration system is classified as special waste. It must be taken apart and divided into uniform sections which should be disposed of according to current legislation.

Do not use the components removed as spare parts.

All filters are classified and disposable as unharmful general waste.



### WARNING

Disposing of resin beads can create a slippery surface. Care needed to dispose of resin beads effectively. Remove all over spill immediately.

**Declaration Of Conformity** 

25

### **Declaration Of Conformity**

EC Declaration of Conformity according to the, RoHS Directive 2011/65/EC. The Filterplus® Mobi® Filtration System has been designed and produced by Streamline® in accordance with the above mentioned EC Directives. The technical documents are complete. The complete EC Declaration of Conformity with all standards applied can be requested on the Streamline® Website or directly from Streamline®.

Signed by:

Hotel

Dean Scott
Director of Streamline® Europe

**Connecting OVA8® Pole** 

### **Connecting The OVA8® Pole**

i. Connect the hose lock connector on the end of the hose to the rectus connector on end of your pole tubing on the Streamline\* OVA8\* pole.



iv. With the option of a 26cm or 36cm brush 26cm having four jet placements and the 36cm having and option of six.



ii. Open up either your fan or pencil jets from the package or blister pack. In the pack there should be a tee-piece with a push fitting already attached. Using the tee-piece, make sure you push each one of the jets accessory into the John Guest tee-piece.



v. You can choose where you want your jets to be, which we place on the edge of the brush which you push your jet nozzles in and you simply twist and lock using the twist mechanisum, turning clockwise.



iii. It is important to make sure there is a firm seal around the hose to help protect leakage. To make sure the hose is attached correctly when you push the hose into the tee-piece you should hear a click sound and then push it in a seccond time to make sure its fully secure. You can check by trying to pull the hose out the tee-piece.



**vi.** Disconnect the extra hose from the pole tubing.



Using The OVA8® Pole

ii. To remove your brush from your pole. Pull back on the blue collar to release the jet tubing from the John Guest fitting.



**iii.** Simply push in the purple button on the brush to release it from the angle adapter at the top of the pole.





### **Using The OVA8® Pole**

### **Extending the pole**

i. Ensure the clamp lever is fully open before extending each section, extend the pole by beginning with the thinnest section first.



ii. Secure the extended section by closing the clamp lever fully. Continue to lengthen the pole by extending each section, one at a time, until the desired height is achieved.

Although the pole sections have stopper tape fitted, be careful not to over-extend each section.



### Collapsing the pole

 Ensure the clamp lever is fully open before collapsing each section in order to avoid premature wear to the sections.

Open the clamp lever and carefully control the speed at which the sections descend, so as not to jar the clamps as the pole closes.



Collapse the sections carefully in order to avoid pinching fingers when the clamps come together.

If the pole has become wet during use, e.g., underwater used or in inclement weather conditions, dry each section prior to collapsing and storing the pole.

### Important points to remember

- Always operate the pole with both feet on the ground to maintain proper balance and control of the pole (care should be taken if using the pole on an uneven surface).
- Use both hands when extending and collapsing the pole.
- To improve the pole's rigidity, and if full extent is not required, leave the thinnest section collapsed and extend the pole from the second section down. Alternatively, increase the overlap of each section, by not extending them completely.
- It is recommended that the pole is collapsed prior to moving or repositioning it.

### Caution

- Never remove the base section of any carbon fibre pole as these are manufactured from glass fibre to insulate the pole – danger of electrocution, should the pole touch an overhead wire or electrical source.
- Never use the telescopic pole if damage has occurred to any of the sections.
- Be aware of overhead obstacles and electrical cables prior to extending the pole.
- It's advised that when deploying the pole, to use the height of the pole plus an additional 10% as an horizontal safe distance from any overhead electrical wires, telephone wires, people or animals.

### **Pole Maintenance**

- Make sure that the pole is dry after use and before storing it.
- A dry PTFE spray can be used on the sections to ensure a smooth operation, if required.
- Ensure the clamp tensions are maintained sufficiently in order to prevent premature wear to the pole sections.
- Tension the clamp screws if the sections become loose.
- If the base cap of the pole becomes worn, replace it as soon as possible to avoid sections from becoming damaged and / or splitting.



Why Streamline®?

Streamline® Warranty

### Why Streamline®?

### **Flexibility**

- Steamline® systems can be built according to customers' exact requirements
- For non-standard systems, the user's needs or specifications are listened to and turned into reality.

### Quality

- Whilst price is important, quality is remembered long after price is forgotten
- We insist on sourcing brand name products from around the world, only of a reputable quality, and bring them together under the Steamline® name
- All Steamline\* products carry a full one year's warranty, according to the manufacturers' standard terms and conditions of sale.

### Service

- We have an in-house technical helpline able to answer most of your questions relating to the capabilities and functionalities of all Steamline® products
- If we get it wrong, we will put it right. If you are sent a wrong item, we will immediately
  attend to sending you the correct item and arrange a collection of the wrong item without
  any quibbles
- Steamline\* is backed by a comprehensive range with massive stocks providing you with a
  'one stop shop' for all your requirements.





Checked & Tested By Quality Control

### **Streamline® Warranty**

The warranty on all Machines and Equipment is for 1 year (12-months) from RECORDED DATE OF PURCHASE.

THIS WARRANTY EXCLUDES NORMAL MAINTENANCE ITEMS, including but not limited to HOSES, FILTERS, O-RINGS, DIAPHRAGMS, VALVES, GASKETS, CARBON BRUSHES and damage to motors and other components as a result of failure to replace normal maintenance items. THIS LIST IS NOT EXHAUSTIVE.

If Steamline® receives notice of such defects during the warranty period, Streamline® will either, at its opinion, repair or replace components which prove to be defective.

Replacement parts will only be supplied under warranty, upon the inspection and approval of the defective parts by Steamline®.

Should it be necessary to supply replacement parts before the opportunity to inspect, these will be charged at current prices and credit will only be issued upon subsequent inspection and warranty approval by Steamline\*.

The customer is responsible for the cost of return of the defective part. If warranty is approved, Steamline\* will pay for the cost of the repaired or replacement part.

This warranty excludes the following conditions and circumstances which are at the discretion of Steamline\*.

Wear and tear, misuse, abuse improper maintenance, frost damage, the use of chemicals other than those supplied or approved by Steamline\*, improper installation or repair, unauthorised modification, incidental or consequential costs, loss or damage, service, labour or third party charges, the cost of returning defective parts to Steamline\*.

This warranty constitutes the exclusive remedy of any purchaser of a Steamline® unit and is in lieu of all other warranties, express or implied, including without limitation any implied warranty of merchantability or fitness for use, to the fullest extent permitted by law. In no event shall any implied warranty of merchantability or fitness for use exceed the term of the applicable warranty stated above and Steamline® shall have no other obligation or liability.

### **Important**

Unfortunately these rights cannot be transferred to a third party.









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INSTR-MOBIMAXI-KIT