

ELW WATER SOLUTIONS



**HIGH PERFORMANCE
SYSTEMS
WATER PURIFICATION.**



ELW GLOBAL



Trust The Specialists

ELW Global Limited specialises in field support equipment intended for humanitarian, defence and emergency relief operations.

Our product range includes:

- Vehicle mounted rapid response water purification units
- Trailer-mounted reverse osmosis water purification units (ROWPUs).
- Portable water purification and desalination
- Containerised long term water purification solutions

Operator and maintenance training plus full spares support is also available.

ELW Global Limited also provides custom build solutions.



Global Projects

ELW Global Water solutions have been supplied in support of the following United Nations Programmes

- 1 **UNAMID**
- 2 **AMISOM**
- 3 **MINURCA**
- 4 **Water Affairs** - Botswana
- 5 **UNOMIL**
- 6 **UNOCI**

Locations

Contributing countries operating our water solutions are:

South Africa
Malawi
Uganda
Rwanda
Ethiopia
Senegal

Guinea
Chad
Niger
Burkina Faso
Cameroun
Mali
Gambia

We have also supported international relief operations worldwide, including Mozambique and Haiti.

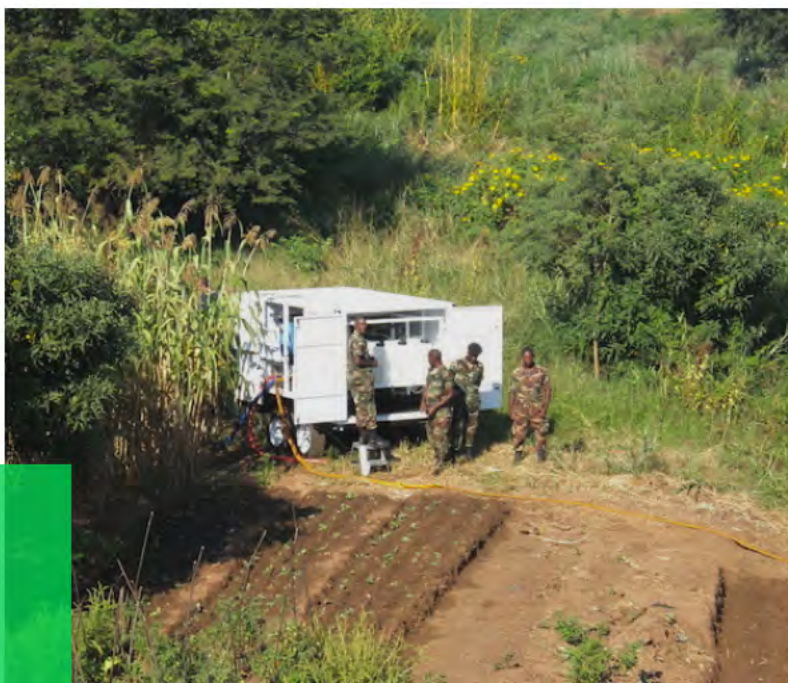
Our equipment has also supported government funded programmes of the USA, Canada and the EU

ROWPU 2K



Highly manoeuvrable, economic and effective. While surpassing levels of purity set by the World Health Organisation (WHO).

The ELW ROWPU is a compact mobile water and reverse osmosis unit that is able to purify brackish and flood water to potable water in minutes.



The **ROWPU2K** is our most popular water purification unit and, with over 200 units supplied, these units have the capacity to produce 20 million litres of potable water per day.

It is fully mobile and self-contained and is designed to be towed by large pick-up type vehicles and trucks.

The first **ROWPU2K** was manufactured in 2008, and is still operational in the field.

STEP1

Raw water is pumped into the system and passes the flocculation and chlorination dosing point into the mixing manifold.



STEP2

Activated Filter Media (AFM) removes sediment, small twigs, sand and dust particles down to 10 microns.



STEP3

Activated Carbon filtration is used to remove any taste, odours and colour from the water.



STEP4

Madox/Exfetron exposure is used to remove iron, lead, manganese and other metal particles.



STEP5

In-house designed Stainless Steel filters are used to remove remaining particles.



STEP6

The Reverse Osmosis (RO) stage, for heavily contaminated water, now begins. This is recommended in any situation where contaminants cannot be constantly monitored and quality must be ensured.



STEP7

A UV light unit is used to kill off any remaining bacteria. Which can be used to treat stored water.

The filtration and reverse osmosis process

Filtration is the removal of particles from water while purification is the removal of all non-water atom sized components. The filtration process used in the ELW Global ROWPU brings surface waters to World Health Organization (WHO) standards.

Multi Terrain and Transport Friendly

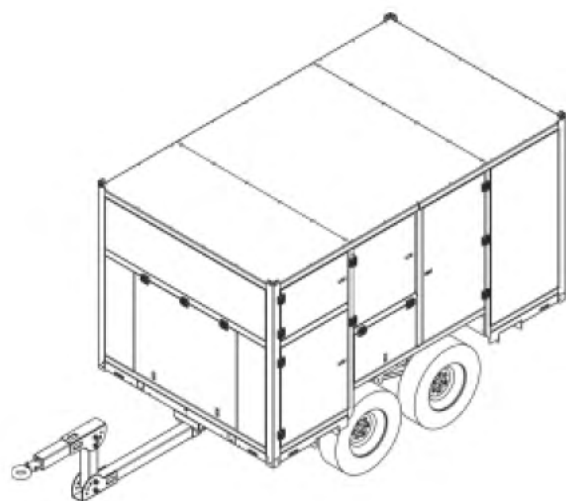


Drawbar

The ROWPU drawbar is adjustable allowing the trailers to be towed by a variety of vehicles and trucks typically found in the field. The drawbar can be removed for transport purposes by air or by sea.

Trailer

All trailers are designed and manufactured to military grade levels of durability and adaptability. They are designed for off-road use across the toughest terrain. A capability that can prove vital in accessing water sources close to rocky and sandy ground.





ROWPU Trailer

Standard Fitted Operational Equipment

SUPPLIED AS STANDARD:

- Storage bladders 5000. (10000 or 20000 litres ,optional)
- Bladder repair kit
- Pick-up hose and foot valve for pumping from river or lake source (5 metre)
- Supply hose (15 metre)
- Water hose (15 metre)
- Waste water hose (15 metre)
- Diesel power generator 5 Kva
- Chlorine kit /PH and TDS meter
- CIP (Clean In Place) system for extending life of membranes beyond 4 years)

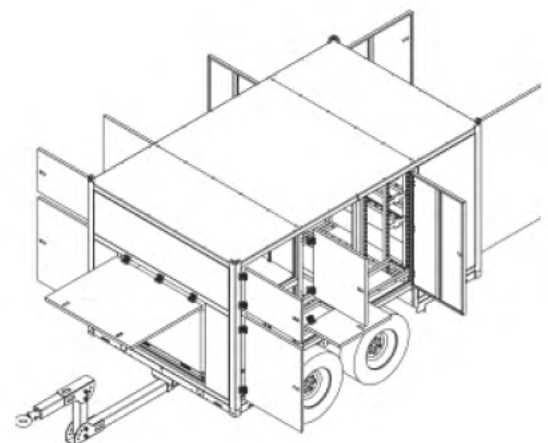


Chassis

The ROWPU chassis features mounting points, forklift slots, fastening points, lifting points, rubber stoppers as well as drawbar and suspension mounting points. For rust resilience it is zinc treated and powder coated.

Suspension

A suspension built to military grade specification ensures the smoothest of movement over rough terrain. The suspension is a single leaf spring with solid axle braking suspension. This helps it withstand the assault of the harshest environments.



Features



Production Capacity

ELW Global produce a range of ROWPUs and will strive to meet every requirement. The flagship product is the 2K ROWPU. For highly contaminated water, the output is 2000 litres of Reverse Osmosis Water. For less contaminated water sources, 5000 Litres of filtered water is produced.

2,000 l/h

REVERSE OSMOSIS WATER



Energy Efficient

ELW's mobile units have a built in generator that provide the necessary power to the water purification unit. A solar (PV) option can be integrated on request. A solar and generator hybrid unit is currently being developed by ELW Global.

5,000 l/h

FILTERED WATER





Increased Lifespan - Reduce Costs

All ELW Global water treatment trailers use the highest grade components, cutting down on maintenance and logistical support costs. Low grade disposable filters have been replaced with stainless steel washable filters. All chemical components can be sourced locally for further savings on operating costs.

All water filtration units are fitted with a CIP (Clean In Place) system that allows for membranes to be cleaned without being removed, saving even more time, energy and money.



A Short Term Solution That Makes Economic Sense

ELW Global can offer a rental service to those companies, governments and NGO's whose water filtration requirements may be short term or temporary, in which case renting may prove a more economic solution.



User Friendly & Low Maintenance

All valves, gauges, fittings and filters are clearly labelled for easy identification, access and adjustment. All units are designed to be weather proof for longevity. Additional water storage is also available.



Large-scale solutions

Permanent Water Systems

ELW Global produce a range of mobile and static water purification units. If the water filtration requirement is permanent our technologies can be built into shipping containers, prefabricated or permanent buildings. When installing components into permanent buildings, the filtration capabilities can be increased to cater for requirements exceeding 50,000 litres an hour.

Water Storage

ELW Global is also able to supply and install a broad range of water storage solutions, all built to the highest standards. Water Storage Products include: Mesh Reservoirs, Panel Reservoirs, S-Tanks (Onion Tanks), Sectional Tanks, and Water Bladders. New and used water bowsers are available as required.



Desalination

Trailer Mounted Desalination

Our units are designed to serve in emergency response and purify water from surface, underground and ocean sources.

Our mobile desalination plants purify water at a rate of up to 1000 l/h. Our mobile units can be lifted by 4 people and are generator powered. The unit and generator will fit on the back of a pick-up truck.

Desalination on the move

The ELW desalination plants are designed to handle input water of 40,000 TDS and produce potable water to current WHO Standards.

Our technologies provide customers with an environmentally responsible and affordable way of creating a freshwater resources for small-scale, temporary and remote settlements.

Rapid Response Units

Designed to purify surface water from dams, rivers and lakes, with an output of 1800 litres per hour (LPH) to SANS241 and WHO standards.

The RR1.8K is built on a steel frame, complete with a weatherproof ripstop canvas zipped cover.

Within 6 days the Rapid Response Units can be commissioned and providing essential water treatment in floods, cyclones and after a natural disasters



Training



Operator and amintance training

Comprehensive operator and maintenance training is available including all required materials.

Our normal training course accomodates 15 students and is a full 3-5 day programme.

In addition a train-the-trainer option is available.



CONTACT



Watch Online

Go to the link below or scan the QR code with your phone to see a video demonstration of the ELW ROWPU 2K being setup in just three and a half minutes.

<http://www.elwglobal.com>



SCAN ME

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