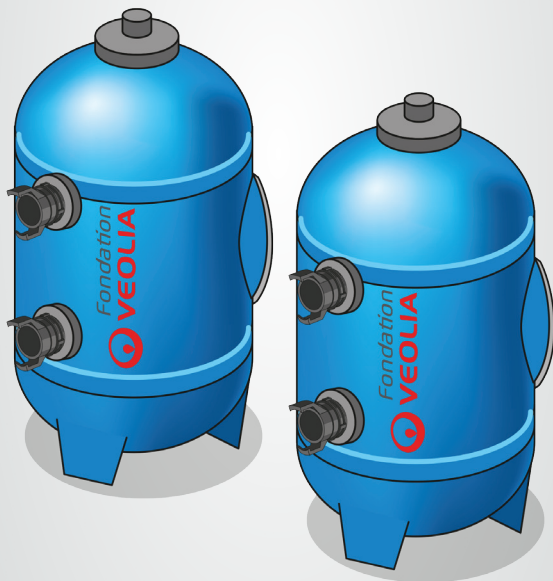


Aquaforce 5000

Mobile water treatment unit by filtration
(sand & granular activated carbon)
Capacity : 5,000 people



The mobile unit

► A mobile autonomous drinking water production unit (5 m³/h) that has become a standard in emergency humanitarian response. The French Red Cross has made it one of its recurring equipment for missions.

► A robust solution, resulting from the very large number of deployments carried out and the feedback received.

► First generation filtration, with conventional and stabilized processes, based on sand and coal.

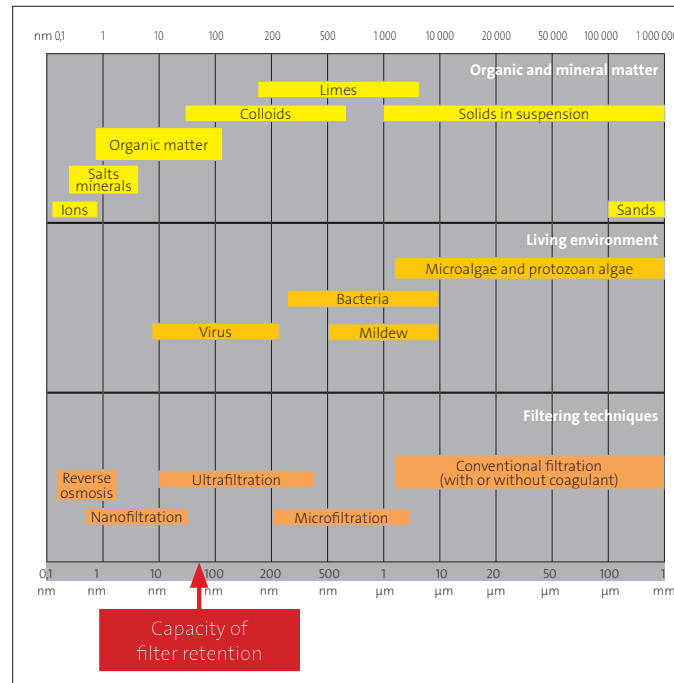
TECHNICAL INFORMATION

Weight: 4 tons
Volume: 17 m³
Flow rate: 5 m³/h
Capacity: 5 000 people*
Mounting time: 2 days
Cut-off threshold: 10 µm

*According to WHO recommendations.

A three-step water treatment process

1. A first step of settling with alumina sulphate makes it possible to significantly reduce the raw water load.
2. The settled water then passes through a sand filter to eliminate all protozoa and some bacteria.
3. The protocol is completed by a granular activated carbon treatment to treat colour, odour and some complex pollution. The treatment is completed by the injection of chlorine to finalize the disinfection and ensure persistence in the distributed water.



In the field

Haiti, 2010: post-earthquake (ACF, French Red Cross)

The Veolia Foundation participated in the humanitarian response to the earthquake in January 2010. Among the resources sent to the field, an Aquaforce 5,000 was deployed with ACF in the city centre to distribute drinking water in two neighbourhoods of Camp Vert and Bois Patate. Two other units were used to supply the Ofatma hospital, a Red Cross primary health centre and 54 distribution points.

Iraq, 2014: camp for displaced people (French Red Cross, Ministry of Europe and Foreign Affairs)

Three units have been set up in Dohuk, Iraqi Kurdistan, where thousands of displaced people have flocked to flee Daech. Deployed with the French Red Cross and as part of the Veolia Foundation's partnership with the Ministry of Europe and Foreign Affairs, the Aquaforces 5,000 provided 50,000 people with drinking water.



Ecuador, 2016: post-earthquake (Sécurité civile française)

After the earthquake in April 2016, the French authorities responded to the Ecuadorian authorities' request for international assistance. Alongside the Sécurité civile française, Veoliaforce experts, notably from the local subsidiary Interagua, deployed Aquaforce 5,000 to supply villages affected by the earthquake with water by tanker trucks.

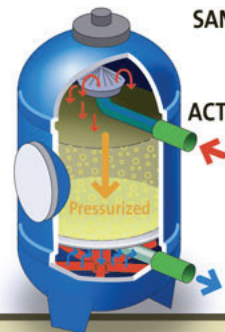
Iraq, 2017: training of Iraqi Red Crescent volunteers

In Erbil and Mosul, the Veolia Foundation trained Iraqi Red Crescent volunteers to install, operate and maintain mobile water treatment units such as the Aquaforce 5,000. The objective was to develop skills in water supply in emergency situations.

AQUAFORCE 5000

A mobile water treatment system deployed in emergency situations by Veoliaforce volunteers. The Aquaforce 5000 provides 5,000 people with 20 liters of drinking water per person per day*.

THE HEART OF THE SYSTEM



SAND FILTER
removes unflocculated particulate solids.

ACTIVATED CARBON FILTER
removes chemicals from the water.

- filtration speed: approx. 10 m/hr
- filtration flow rate: 6 m³/hr



LOGISTICS

Thanks to its optimized weight, ergonomics, sturdiness, compact packing and ease of use, the Aquaforce 5000 is easy to ship (by airliner), quickly deployable on the ground and suitable for extreme weather conditions.

- 6 metric tons of equipment
- 1.5 day for assembly
- 20 m³ packed, can be lifted by hand

* WHO (World Health Organization) recommendation.

