



## Outline

The Yamaha Clean Water Supply System is a water purification system using slow sand filtration which is primarily intended to provide rural residents with clean drinking water. As most rural areas are not yet connected to an electrical grid, a solar PV system is available within the same package to provide the power source.

The system has already been implemented since 2003. To date, 15 units have been installed in Asia and 27 units in Africa. In Ethiopia, the company installed 1 facility in the project organized by UNIDO Headquarter.

## Competitive advantages

### 1. Low cost

Compared to other technologies such as rapid filtration and membrane filtration, the running cost is cheaper as no coagulant or membrane filters are required.

### 2. Easy installation and maintenance

We supervise local residents for installation work and train them for ongoing maintenance. The system is designed for simple installation and maintenance.

### 3. Duplicability

The system is highly duplicable for rural areas, whether an electrical grid connection is available or not, as long as there is a surface water source





## Performance - Removable items

Items	Allowance values in raw water	Values after purification by YCW	WHO drinking water guidelines
Turbidity	300 NTU	5 NTU	5 NTU
Color	470 CU	15 TCU	15 TCU
Iron	1 mg/L	0.3 mg/L	0.3 mg/L
Manganese	1 mg/L	0.1 mg/L	0.1 mg/L
Aluminum	0.4 mg/L	0.2 mg/L	0.2 mg/L
Ammonia	3 mg/L	1.5 mg/L	1.5 mg/L
Coli forms	600/100 mL	0/100 mL	0/100 mL
Total coli forms	32,000/100 mL	0/100 mL	0/100 mL

•NTU refers to the “nephelometric turbidity unit”, as determined by WHO guidelines.

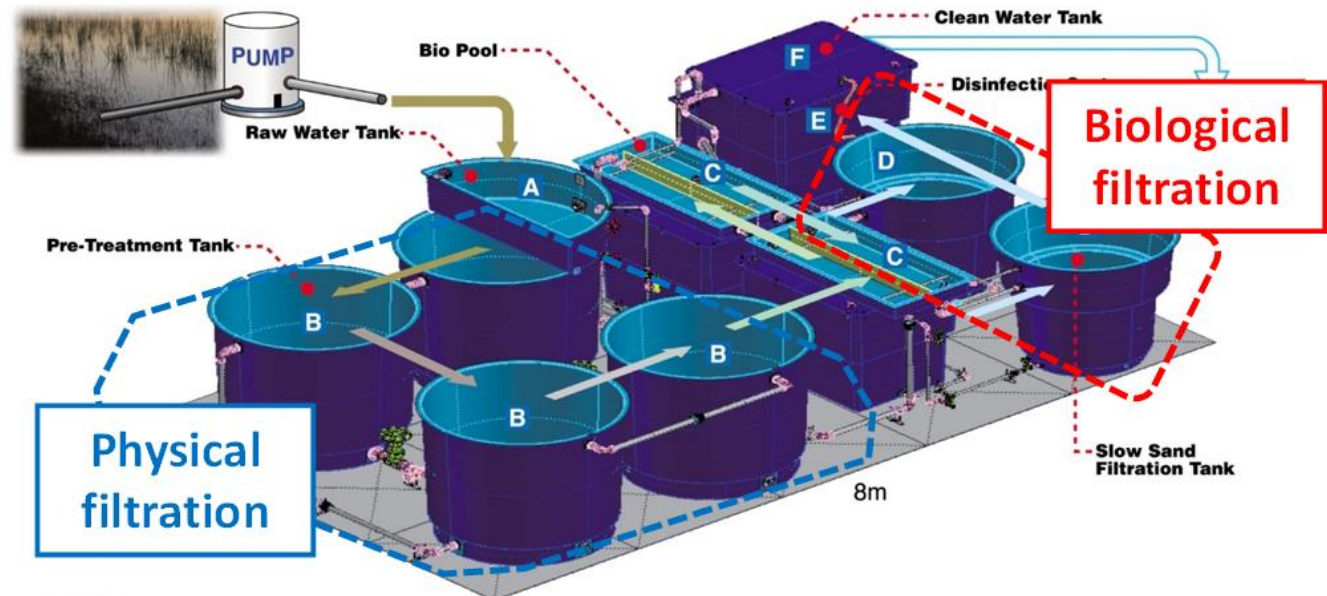
•CU refers to the “color unit”, here showing the “apparent color.”

•TCU refers to the “true color unit”, as determined by WHO guidelines

## Purification flow

### ■ Key points regarding the slow sand filtration flow

- Water flow speed is slow (4-5 m/day)
- Sand must be uniform size (under 1 mm)





## Specifications

	YCW-008A	YCW-002A
<b>Water purification throughput capability</b>	Approx. 8,000 L/day	Approx. 2,500 L/day
<b>Installation area</b>	10 m × 8 m	4 m × 3 m
<b>Total weight</b>	Approx. 27 tons	Approx. 7 tons

## About us

Company Name	Yamaha Motor Co., Ltd.
Founded	July 1, 1955
Capital	85,100 million yen ( as of June 30, 2021)
President	Yoshihiro Hidaka
Employees ( Consolidated )	52,437 ( as of December 31, 2020 ) Parent : 10,359 ( as of December 31, 2020 )
Headquarters	2500 Shingai, Iwata-shi, Shizuoka-ken, Japan
Group Companies	Consolidated subsidiaries : 130 Non-consolidated subsidiaries : 5 Affiliates : 28 ( as of June 30, 2021 )
Sales (Consolidated)	1,471,298 million yen ( from January 1, 2020 to December 31, 2020 )
Sales (Parent)	581,796 million yen ( from January 1, 2020 to December 31, 2020 )