

OFF-GRID DRINKING WATER PLANT AZUD WATERTech DWE FW

Production

- > 1.5 to 6.0 m³/h

Raw water

- > Fresh water; TDS < 1000 mg/l

APPLICATIONS

- > Isolated villages
- > Emergencies
- > Temporary settlements
- > Military operations

ADVANTAGES

- > PREASSEMBLED and FACTORY-TESTED plant. PLUG&PLAY solution.
- > Very COMPACT and MOBILE plant.
- > Energy EFFICIENCY and energy SELF-SUFFICIENCY. SURPLUS ENERGY supply (models with battery).
- > QUICK and EASY installation. IMMEDIATE commissioning with no setbacks.
- > Immediate supply of GUARANTEED POTABLE WATER.
- > EXCLUSIVE PRE-TREATMENT thanks to the disc filtration system AZUD HELIX AUTOMATIC.
- > MECHANICAL FILTRATION technologies, without unnecessary chemicals and consumables.
- > EASY operation and maintenance.



TECHNOLOGIES



Disc filtration
(130 µm)



Ultrafiltration membranes
(0.08 µm)

FRAMEWORK



Open skid



Closed mobile framework

AUTOMATION



Automatic control of:

- > Start / Stop
- > Equipment cleaning



Semi-automatic control

POWER SUPPLY



Solar energy (S)



Electrical grid (E)



Generator (G)



Closed framework on trailer



Open skid

MODELS

Model	Code	Framework	Control	Power supply	Production *		Power kW	Dimensions L x W x H (m)
					m³/h	gpm		
FW1.5 L5 SOLAR	71EBB5H0	Closed framework	Automatic	S E G	1.5	6.6	0.4	1.7 x 1.3 x 2.0
FW1.5 L5 SOLAR SA	71EBB5M0	Closed framework	Semi-automatic	S E G	1.5	6.6	0.4	1.7 x 1.3 x 2.0
FW1.5 SOLAR SA	71EBB5L0	Open skid	Semi-automatic	S E G	1.5	6.6	0.3	1.2 x 1.0 x 2.0
FW2.5 L5 SOLAR	71EBC5H0	Closed framework	Automatic	S E G	2.5	11.0	0.8	1.7 x 1.3 x 2.0
FW2.5 L5 SOLAR SA	71EBC5M0	Closed framework	Semi-automatic	S E G	2.5	11.0	0.8	1.7 x 1.3 x 2.0
FW2.5 SOLAR SA	71EBC5L0	Open skid	Semi-automatic	S E G	2.5	11.0	0.7	1.2 x 1.0 x 2.0
FW3 L5	71EB03B0	Closed framework	Automatic	E G	3.0	13.2	0.8	1.7 x 1.3 x 1.5
FW3 L5 SA	71EB03N0	Closed framework	Semi-automatic	E G	3.0	13.2	0.8	1.7 x 1.3 x 1.5
FW3 SA	71EB03K0	Open skid	Semi-automatic	E G	3.0	13.2	0.8	1.2 x 1.0 x 1.8
FW6 L5	71EB06B0	Closed framework	Automatic	E G	6.0	26.4	1.4	1.7 x 1.3 x 1.5
FW6 L5 SA	71EB06N0	Closed framework	Semi-automatic	E G	6.0	26.4	1.4	1.7 x 1.3 x 1.5
FW6 SA	71EB06K0	Open skid	Semi-automatic	E G	6.0	26.4	1.4	1.6 x 1.1 x 1.8

* Design criteria for maximum production: Turbidity = 15 NTU; TSS = 30 mg/l; T = 18°C.

S: Solar energy; E: Electrical grid; G: Generator | Dimensions without auxiliary equipment. L=Length; W=Width; H=Height.

MAIN COMPONENTS

- > Stainless steel submersible FEED PUMP. For SOLAR models, solar-powered pump with controller.
- > AZUD HELIX AUTOMATIC disc filter (130 µm). Included automatic cleaning system.
- > PVDF ULTRAFILTRATION membranes (0.08 µm), housed inside PVC vessel. Automatic cleaning system included.
- > ACTIVATED CARBON cartridge, housed inside polypropylene vessel.
- > RESIDUAL CHLORINATION for the treatment of potable water.
- > PLC with operator touch screen and control program (with the exception of SA models).
- > Electric cabinet including transformer, circuit breakers and motor starters.
- > FRAMEWORK: Compact open skid; or compact and robust closed framework designed for an easy transportation (by air, sea or ground).
- > SOLAR models in CLOSED FRAMEWORK; Included foldable solar panels (327 W/module), solar controller, charger and 4 monoblock batteries (maintenance free).
- > SOLAR models in SKID; Included solar panels (327 W/module) and power supply.

OPTIONS

All-terrain steel TRAILER, with double axle frame and four wheel suspension system. Includes lockers to place the tools and the generator.

PILLOW TANK for drinking water storage.

Single-phase GENERATOR with AUTOMATIC or MANUAL starter.

REMOTE CONTROL system.

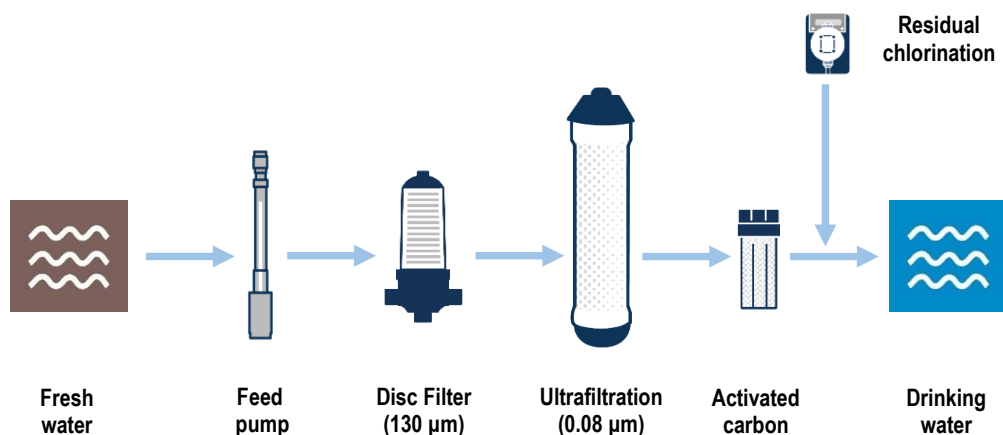
WATER QUALITY

RAW WATER	FRESH WATER from rivers, lakes, reservoirs, etc. > High level of suspended solids and high turbidity. > Dissolved contaminants concentration should meet the legal requirements. > High level of pathogens and organic matter.
TREATED WATER	Compliance with the requirements of the GUIDELINES FOR DRINKING WATER QUALITY published by the World Health Organization's (WHO). > TSS < 10 mg/l > Turbidity < 1 NTU

SYSTEM LIMITATIONS

Turbidity	< 200 NTU
TSS	< 150 mg/l
TDS	< 1000 mg/l
Oil and grease	< 0.1 mg/l
BOD	< 50 mg/l
COD	< 300 mg/l
TOC	< 15 mg/l
Aluminum	< 0.5 mg/l
pH	6.5 - 8.5

TREATMENT LINE



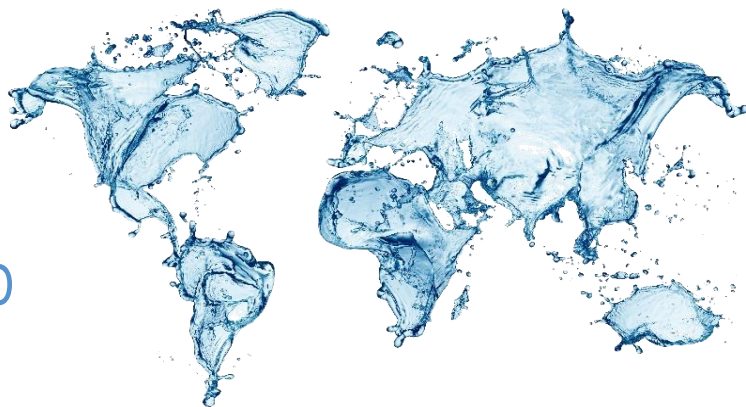
INSTALLATION REQUIREMENTS

POWER SUPPLY	Single-phase // 220 V AC // 50 Hz (Other options available).
FOOTPRINT	According to plant dimensions. One meter free space around the plant for operation and maintenance to be considered.
OPERATION PARAMETERS	> Feed pressure: 2 - 4 bar. > Ambient temperature: 0 - 40 °C. > Water temperature: 5 - 30 °C.

NOTE: In order to assure the treated water quality and nominal production for each model, a COMPLETE and UPDATED CHEMICAL-PHYSICAL ANALYSIS of the raw water is RECOMMENDED. This analysis will be requested before manufacturing the plant.

AZUD

ACROSS THE WORLD



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MAURITANIA - UN



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MEXICO



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