

COMPACT PLANT AZUD WATERTech RW DU

WATER RECYCLING IN INDUSTRIAL PROCESSES AND IRRIGATION



Production

- > 1.7 to 53.3 m³/h

Raw water

- > High turbidity
- > High concentration of TSS

ADVANTAGES

- > PREASSEMBLED and FACTORY-TESTED plant. PLUG&PLAY solution.
- > QUICK and EASY installation. IMMEDIATE commissioning with no setbacks.
- > MECHANICAL FILTRATION technologies, without unnecessary chemicals and consumables.
- > EXCLUSIVE PRE-TREATMENT thanks to the disc filtration system AZUD HELIX AUTOMATIC AA.
- > ULTRAFILTRATION MEMBRANE system designed for high loads of TSS.
- > HIGH EFFICIENCY backwash system for filters and membranes, thanks to the mix water/air.
- > Internationally recognized LEADING BRAND equipment.
- > EASY operation and maintenance.

APPLICATIONS

- > Cooling towers
- > Heat exchanger
- > Fruit and vegetables processing
- > Washing centers
- > Irrigation

TECHNOLOGIES



Disc filtration
(130 µm)



Ultrafiltration membranes
(0.08 µm)

FRAMEWORK



Open skid



Shipping container

AUTOMATION



Automatic control of:

- > Start / Stop
- > Equipment cleaning

MODELS

Model	Code	Framework	Production (maximum *)		Power kW	Dimensions L x W x H (m)
			m³/h	gpm		
D1U1.7	71RAB7A0	Open skid	1.7	7.5	3.3	1.2 x 1.0 x 2.3
D2U3.3	71RAC3A0	Open skid	3.3	14.5	3.3	2.2 x 1.2 x 2.3
D3U5	71RA05A0	Open skid	5.0	22.0	5.2	2.5 x 1.2 x 2.3
D3U5 L10	71RA05C0	10' Container	5.0	22.0	5.2	3.0 x 2.5 x 2.6
D4U7	71RA07A0	Open skid	6.7	29.5	7.0	3.0 x 1.5 x 2.3
D4U7 L10	71RA07C0	10' Container	6.7	29.5	7.0	3.0 x 2.5 x 2.6
D6U10	71RA10A0	Open skid	10.0	44.0	7.7	4.0 x 1.5 x 2.3
D6U10 L20	71RA10D0	20' Container	10.0	44.0	7.7	6.1 x 2.5 x 2.6
D8U13	71RA13A0	Open skid	13.3	58.6	9.2	5.0 x 1.5 x 2.3
D8U13 L20	71RA13D0	20' Container	13.3	58.6	9.2	6.1 x 2.5 x 2.6
D10U17	71RA17A0	Open skid	16.7	73.5	10.3	5.5 x 2.0 x 2.3
D10U17 L20	71RA17D0	20' Container	16.7	73.5	10.3	6.1 x 2.5 x 2.6
D12U20	71RA20A0	Open skid	20.0	88.1	12.0	5.0 x 2.5 x 2.3
D12U20 L20	71RA20D0	20' Container	20.0	88.1	12.0	6.1 x 2.5 x 2.6
D14U23	71RA23A0	Open skid	23.3	102.6	13.0	5.0 x 2.5 x 2.3
D14U23 L40	71RA23E0	40' Container	23.3	102.6	13.0	12.2 x 2.5 x 2.6
D16U27	71RA27A0	Open skid	26.7	117.6	18.0	6.0 x 2.5 x 2.3
D16U27 L40	71RA27E0	40' Container	26.7	117.6	18.0	12.2 x 2.5 x 2.6
D20U33	71RA33A0	Open skid	33.3	146.6	10.3	6.0 x 3.0 x 2.3
D20U33 L40	71RA33E0	40' Container	33.3	146.6	10.3	12.2 x 2.5 x 2.6
D24U40	71RA40A0	Open skid	40.0	176.1	12.0	7.0 x 3.0 x 2.3
D24U40 L40	71RA40E0	40' Container	40.0	176.1	12.0	12.2 x 2.5 x 2.6
D28U47	71RA47A0	Open skid	46.7	205.6	13.0	7.0 x 3.0 x 2.3
D28U47 L40	71RA47E0	40' Container	46.7	205.6	13.0	12.2 x 2.5 x 2.6
D32U53	71RA53A0	Open skid	53.3	234.7	18.0	7.0 x 3.0 x 2.3
D32U53 L40	71RA53E0	40' Container	53.3	234.7	18.0	12.2 x 2.5 x 2.6

* Design criteria: Wastewater treated with Turbidity = 25 NTU; TSS = 50 mg/l; T = 20°C. | Dimensions without auxiliary equipment. L=Length; W=Width; H=Height.

MAIN COMPONENTS

- > AZUD HELIX AUTOMATIC AA disc filter (130 µm) with air assisted backflushing.
- > PVDF ULTRAFILTRATION membranes (0.08 µm), housed inside PVC vessel.
- > Ultrafiltration BACKWASH SYSTEM; included pump, blower, tank and dosing pump.
- > FRAMEWORK: Carbon steel skid with protection paint or 10', 20', 40' shipping container.
- > PLC with operator touch screen to monitor pressure and flow.
- > Electric cabinet including transformer, circuit breakers and motor starters.

OPTIONS

Thermal and acoustic INSULATION of the shipping container.
RESIDUAL CHLORINATION for the treatment of potable water.
REMOTE CONTROL system.



WATER QUALITY

RAW WATER Water from INDUSTRIAL PROCESS, TREATED WASTEWATER or water from IRRIGATION DRAINAGE.

- > High level of suspended solids
- > Low level of dissolved pollutants
- > Medium-high level of pathogens and organic matter

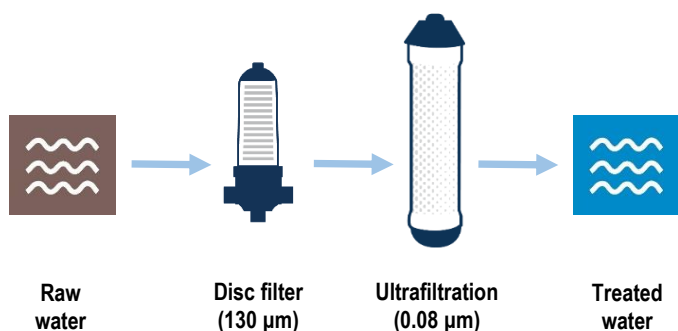
TREATED WATER Compliance with the water quality requirements for INDUSTRIAL PROCESS, TREATED WASTEWATER, or for IRRIGATION:

- > TSS < 10 mg/l
- > Turbidity < 5 NTU

SYSTEM LIMITATIONS

Turbidity	< 200 NTU
TSS	< 150 mg/l
TDS	< 6000 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
Chlorine	< 1 mg/l
pH	6.5 - 8.5

TREATMENT LINE



INSTALLATION REQUIREMENTS

POWER SUPPLY Three-phase // 380 - 400 V AC // 50 Hz.

FOOTPRINT According to plant dimensions. One meter free space around the plant for operation and maintenance to be considered.

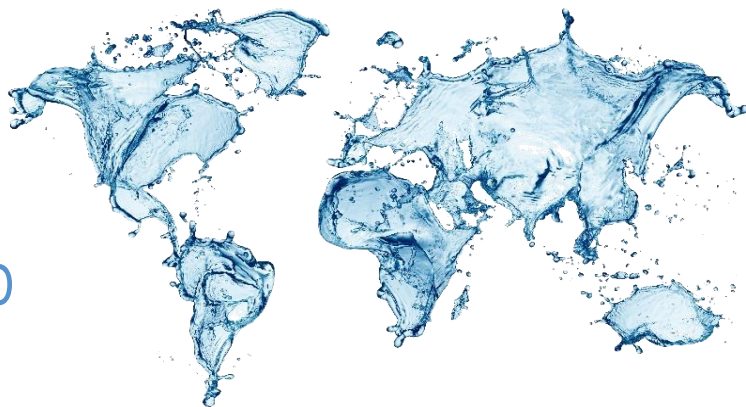
OPERATION PARAMETERS

- > 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



UNITED ARAB EMIRATES

Avda. de las Américas P. 6/6 • Polígono Industrial Oeste
30820 Alcantarilla • Murcia - Spain • Apdo. 147 • 30169 San Ginés • Murcia - Spain
Tel.: + 34 968 808 402 • Fax.: +34 968 808 302 • E-mail: info@azud.com • www.azud.com

