ELOXIRAS®

MINI Series

One-step

High efficacy

Easy to operate

The technology

ELOXIRAS® is an innovative process for the **treatment and reutilization of marine and brackish water,** developed to improve the productivity and reduce the environmental impact of Recirculating Aquaculture Systems (**RAS**).

Some of its main advantages are:

- **One step -** Removal of pollutants, such as TAN, nitrite, and organic matter, while providing in-situ disinfection.
- **High efficacy –** Elevated elimination of pollutants, increasing the capacity and productivity of the RAS.
- **Easy to operate –** Instant operation, without start-up or adapting periods (typical from biological systems).
- **Low environmental impact -** Minimum water exchange with the surrounding media.
- **Compact design -** Small footprint and no civil works required, maximizing its integration possibilities.
- **Efficient energy process -** Optimization through a fine tune-up of the treatment intensity to the pollutant production rate.

ELOXIRAS® **MINI Series** has been designed for **small scale RAS facilities**, offering compactness and adaptable treatment capacity.

Functionalities

	Concept	Basic	Confort	4.0
Pre-treatment	-	●	●	●
Feed pump	-	●	●	●
Reactor	●	●	●	●
Rectifier	●	●	●	●
Reactor cleaning system	●	●	●	●
Post-treatment	-	●	●	●
Electrical cabinet with PLC	●	●	●	●
Manual valves	●	●	●	●
Automatic valves	-	-	●	●
Compressed air system	-	-	●	●
ORP monitoring	-	Optional	Optional	●
pH monitoring	-	Optional	Optional	●
TAN monitoring	-	Optional	Optional	Optional
Total chlorine monitoring	-	Optional	Optional	●
Temperature control system	-	Optional	Optional	Optional
Oxygenation system	-	Optional	Optional	Optional
Remote supervision & operation	-	-	-	●
Protection against moisture and splash	Optional	Optional	Optional	Optional

Low environmental impact

Compact design

Efficient energy process

Standard models

	MINI-30	MINI-150	MINI-300	MINI-600
Reactor	1 x ELOXrc2	1 x ELOXrc15	1 x ELOXrc15	1 x ELOXrc38
Capacity (kg feed/day)	1	5	15	30
Water volume (m^3)	1	5	10	20
Flowrate (m^3/h)	1	5	10	20
TAN removal (g TAN/day)*	38	192	360	720
Disinfection	> 3 log	> 3 log	> 3 log	> 3 log
Energy consumption (kWh/g TAN)**	0.34	0.20	0.17	0.17
Water exchange (L/kg feed)	50 - 200	50 - 200	50 - 200	50 - 200

* Value estimated considering the pretreatment step recommended by Apria Systems

** For 4.0 models. Lower values for HYBRID Series: e.g. 0.13 kWh/g TAN

For more information: comercial@apriasystems.es

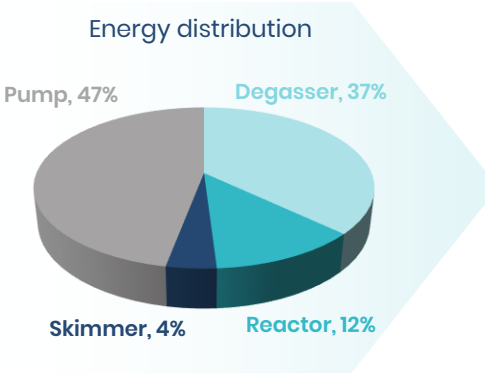
apria

ELOXIRAS® MINI Series

MINI-30

Increasing the productivity of your RAS

ELOXIRAS® MINI-30 provides flexibility with an immediate response to water treatment requirements. High TAN removal -with no significant nitrate accumulation- and disinfection efficacies are achieved.



TAN removal rate	38 g TAN/day (> 90% per pass)
Disinfection capacity	> 3 log
Water exchange rate	50 – 200 L/kg feed
Energy consumption	0.34 kWh/g TAN*

*For 4.0 models. Lower values for HYBRID Series: e.g. 0.13 kWh/g TAN

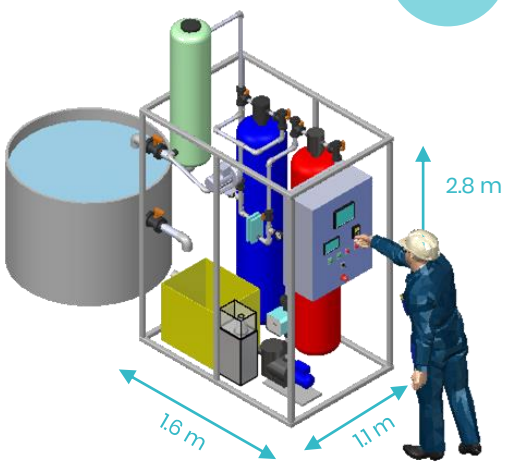
Tank volume
1 m^3

Max. treatment capacity
1 kg feed /day

Flowrate
1 m^3/h

Dimensions

Estimated footprint for the 4.0 model
1.8 m^2



Operation & maintenance costs

Energy consumption	65%
Post-treatment regeneration	3%
Reactor cleaning system	-
Reactor maintenance*	32%

NOTE: Software license cost not included

* Value based on a lifetime of 2 years

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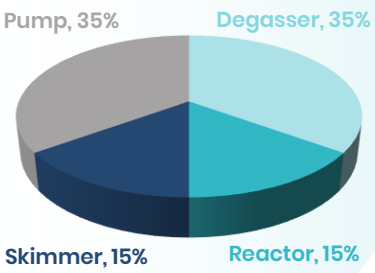
ELOXIRAS® MINI Series

MINI-150

Increasing the productivity of your RAS

ELOXIRAS® MINI-150 provides flexibility with an immediate response to water treatment requirements. High TAN removal -with no significant nitrate accumulation- and disinfection efficacies are achieved.

Energy distribution



TAN removal rate	192 g TAN/day (> 90% per pass)
Disinfection capacity	> 3 log
Water exchange rate	50 – 200 L/kg feed
Energy consumption	0.20 kWh/g TAN*

*For 4.0 models. Lower values for HYBRID Series: e.g. 0.13 kWh/g TAN

Tank volume

5 m³

Max. treatment capacity

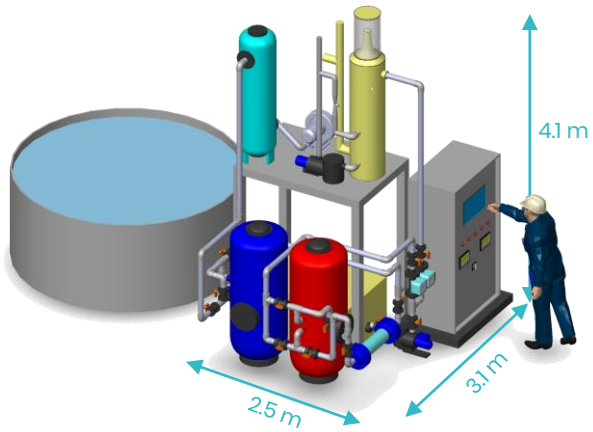
5 kg feed /day

Flowrate

5 m³/h

Dimensions

Estimated footprint for the 4.0 model: 7.8 m²



Operation & maintenance costs

Energy consumption	60%
Post-treatment regeneration	4%
Reactor cleaning system	-
Reactor maintenance*	36%

NOTE: Software license cost not included

* Value based on a lifetime of 2 years

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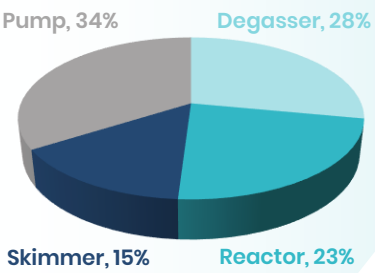
ELOXIRAS® MINI Series

MINI-300

Increasing the productivity of your RAS

ELOXIRAS® MINI-300 provides flexibility with an immediate response to water treatment requirements. High TAN removal -with no significant nitrate accumulation- and disinfection efficacies are achieved.

Energy distribution



TAN removal rate	360 g TAN/day (> 90% per pass)
Disinfection capacity	> 3 log
Water exchange rate	50 – 200 L/kg feed
Energy consumption	0.17 kWh/g TAN*

*For 4.0 models. Lower values for HYBRID Series: e.g. 0.13 kWh/g TAN

Tank volume

10 m^3

Max. treatment capacity

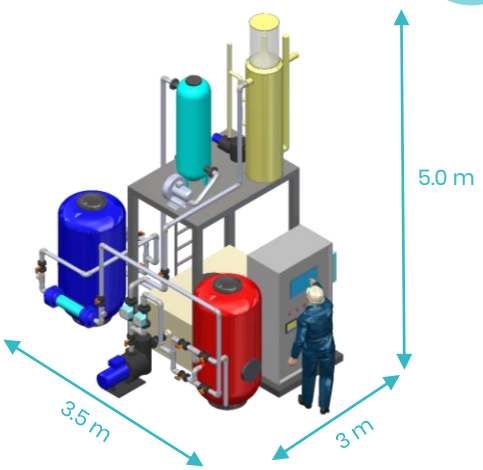
15 kg feed /day

Flowrate

10 m^3/h

Dimensions

Estimated footprint for the 4.0 model: 10.5 m^2



Operation & maintenance costs

Energy consumption	70%
Post-treatment regeneration	6%
Reactor cleaning system	-
Reactor maintenance*	24%

NOTE: Software license cost not included

* Value based on a lifetime of 2 years

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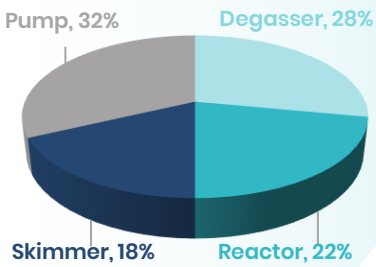
ELOXIRAS® MINI Series

MINI-600

Increasing the productivity of your RAS

ELOXIRAS® MINI-600 provides flexibility with an immediate response to water treatment requirements. High TAN removal -with no significant nitrate accumulation- and disinfection efficacies are achieved.

Energy distribution



TAN removal rate	720 g TAN/day (> 90% per pass)
Disinfection capacity	> 3 log
Water exchange rate	50 – 200 L/kg feed
Energy consumption	0.17 kWh/g TAN*

*For 4.0 models. Lower values for HYBRID Series: e.g. 0.13 kWh/g TAN

Tank volume

20 m^3

Max. treatment capacity

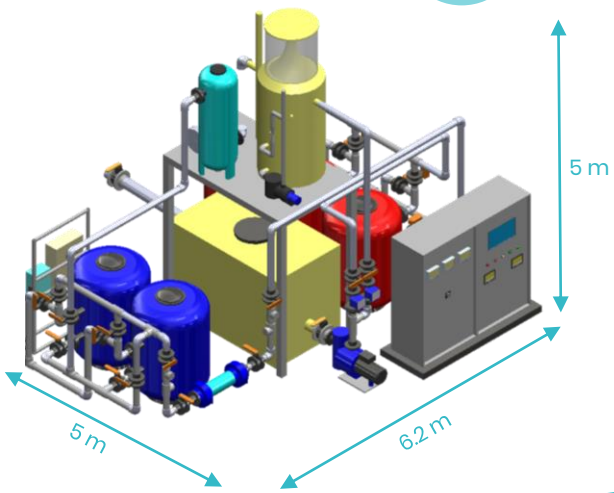
30 kg feed /day

Flowrate

20 m^3/h

Dimensions

Estimated footprint for the 4.0 model: 30 m^2



Operation & maintenance costs

Energy consumption	75%
Post-treatment regeneration	6%
Reactor cleaning system	-
Reactor maintenance*	19%

NOTE: Software license cost not included

* Value based on a lifetime of 2 years

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