

Designed and produced by



to improve our environment



ASIA: what is it?

ASIA (Advanced System of Intelligent Aeration) is a new technology that continuously monitors the biological process in a wastewater treatment plant, controlling the aeration system in order to optimize the purification process and minimize management costs.



ASIA: what does it apply to?

- ASIA should be applied to the single oxidation basin that contains the active biomass, which is fed by the organic substance that waste contaminates the wastewaters and eliminates it in the feeding process, making the outgoing water clean.
- ASIA can be applied to biological reactors of any size.



engineering



ASIA: what is it meant for?

ASIA is meant to lighten the <u>ecological footprint</u> of wastewater treatment activity, reducing energy consumption and operating costs, while at the same time increasing the quality of purified water.









ASIA: who needs it?

In the context of **the Integrated Water Cycle**, ASIA is a suitable tool for **Multiutilities** managing public services related to water treatment and for **Industrial companies** that produce wastewater.

With ASIA significant reductions in operating costs can be achieved through modest investments.





ASIA: how does it work?





ASIA: why should we use it?



To spare on operating costs, mainly by reducing the working time of blowers and mixers.



To improve the performance of the biological process, making the most out of the existing plant.



To constantly comply with pollutant emission limits in the environment, even with variable loads.



Because it is a simple but powerful ADD-ON, different from the others process controllers already available on the market.





ASIA: reduction in operating costs

E





ASIA: increase in purification yields

+30%

2

> 2x



COD Reduction (Chemical Oxigen Demand) Nitrogen reduction by controlling the biological reactions inside the aeration tanks

Fewer samples and laboratory controls





ASIA: guarantee of continuous control



3

Stability of the purification process performance *Optional* tool for Automatic Notification of Process Anomalies (ANPA)

rconnect

Optional tool for Remote Maintenance Service (RMS)

onnect











ASIA: simple and powerful



4





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Durable hardware reliable software

Only **one** measuring instrument

For all reactors: small - large, continuous - batch Fast installation (2 days) Quick results (2 weeks)









ASIA: a new and different technology



4







Low investment cost

Compatible with all types of automation An **add-on** to the existing control system It does not measure the result, but maximizes the performance











ASIA: officially certified results

Conclusions of the Technical Report signed by a Third Party (the Public Company CAFC), available on request:

" In a simple and fast way ASIA can be used in all different types of biological oxidation processes, to produce with modest investments significant reductions in operating costs. The application of ASIA to biological purifiers produces significant savings in energy costs, greater reductions in nitrogen and COD, greater flexibility and stability of the biological process, good automatic management of anomalies and continuous control of depurative yields."





ASIA: what else?





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Water

ASIA can be integrated into WaterIT,

a Supervision System for the water sector

which provides information to all users interested in the management of the Plants and in the complete purification process, both locally and by remote control via Web Browser.

On the Plant the same hardware (IGPcore) supports both ASIA and WaterIT softwares.





ASIA: is produced by IGP Engineerig, who has:

30⁺ years of experience in the water sector

5 areas of specialization:

- Potable water
- Wastewater
- Swimming pools and fountains
- Pumping stations and irrigation
- Automation of water treatment processes



5 activities:

- Consulting and design
- Laboratory analysis
- Operation of plants
- Ordinary and extraordinary maintenance
- Sale of machines, spare parts, reagents







Water^{IT}

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