



CEATA

Pure Water

VANGUARD SOLUTIONS AGAINST HYDRIC STRESS

The power of water, the power of life

Circular management model

Optimize your hydric resources and lead the change towards a sustainable future. Our Circular Management Strategies adapt to local needs of towns, industries, and individuals.
Circular economy of water: efficiency, sustainability and future in every drop!

Reduce dependency on natural water sources

3 to 7 year ROI



Technical consultancy

Personalised service to maximise the global efficiency of water purification, reduce operating costs, and maintain compliance with the quality directives.

Auditing and technical consultancy

- Water sampling and characterisation of water sources.
- Evaluating yield and operative efficiency of each integrated process in the treatment line.
- Optimisation of treatment processes using lab analysis or dynamic simulation (WEST, BioWin, etc.)
- Recommendation and evaluation of cutting-edge technologies to integrate in the process.
- Research costs, legal compliance, environmental impact, and legislation.



Technical consultancy

- We provide technical support to optimise the daily operation, adjusting operation criteria
- We provide assistance for maintenance of water infrastructure



Commercial consultancy

Selection of the optimal product required by your company:

- Consumables (resins, Activated carbon selection...)
- Instrumentation and control (sensors, valves, flow equipment, PLCs...)



- Auxiliar equipment
- Membranes and modules
- Chemical reactants

R&D&I for the future

Personalised projects to develop and validate the most cutting-edge solution for our clients.



Jar-Test: Coagulation and flocculation

Determination of the type and dose most optimal for clarification of water.
Reduction of chemical consumption and operating costs.

Biofilm reactors

High yield elimination of contaminants. Yielding an effluent with superior quality, minimising space and operating costs.



Advanced oxidation (O_3 , H_2O_2 , UV...)

Degradation and elimination of toxicity of recalcitrant organic compounds (emerging pollutants)

Fixed bed adsorption

Adsorption and removal of organic and inorganic pollutants with granular activated carbon and new nanoporous materials



Membrane separation (UF, NF & RO)

Retention of a wide range of chemical pollutants (heavy metals, emerging contaminants...) and microorganisms



ADVANTAGES FOR ENVIRONMENTAL SUSTAINABILITY

1

Technology transfer

Facilitates the transition to the validation of pilot prototypes in real environments

2

Wastewater regeneration

Examination of advanced technologies in the purification of very toxic effluents

3

Water reuse

Innovative solutions to enhance sustainable and safe water management

Automation & Smart Water



Compact monitoring systems

Integration of digital sensors to monitor water quality (pH, temperature, conductivity, turbidity, SAC 254, nitrates, etc.) online and in real time



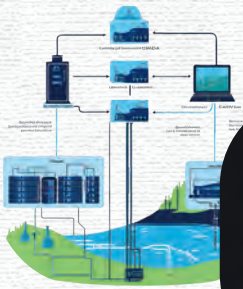
Instrumentation and Automation

Implementation of actuators with integrated controller that provide precise real-time control. Adaptability to your specific requirements due to the wide range of models and configuration



Centralized Operations Management Platform

Development of platform architecture and SCADA system, creating ad hoc solutions, which perfect remote real-time supervision and management of your treatment facilities



WHAT BENEFITS DOES THIS BRING FOR YOUR COMPANY?

EFFICIENCY AND SAVINGS

Optimize your operations and reduce operational and energy costs

SUSTAINABILITY

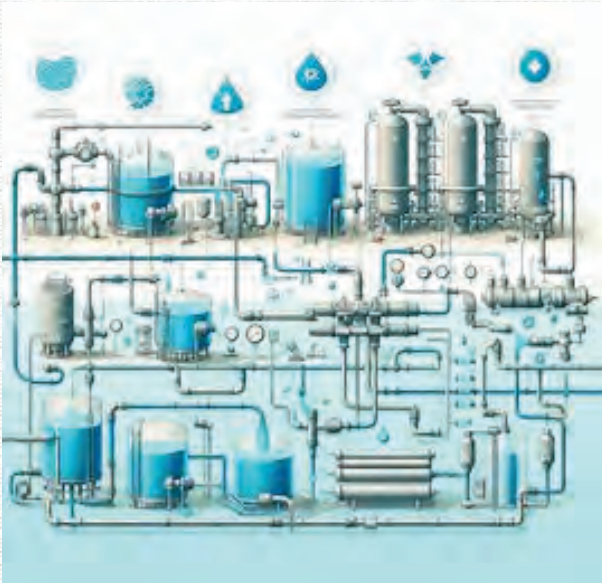
Promotes sustainable development and minimizes carbon footprint

QUALITY AND RELIABILITY

Monitor water quality in real time, ensuring safe and reliable treatment

Project management

Specialists in the implementation of advanced technologies and sustainable construction through prefabricated compact modules



BASIC ENGINEERING

- Selection of advanced technologies that incorporate the multibarrier treatment configuration
- Sizing of the processes of the multibarrier treatment configuration (coagulation, intermediate advanced oxidation, filtration, ...)
- Elaboration of process flow diagrams (PFD) and piping and instrumentation diagrams (P&ID)
- Development of a preliminary project schedule
- Estimation of preliminary costs

DETAIL ENGINEERING

- Elaboration of plans and technical specifications of all equipment and materials
- Detailed sizing of the processes of the multibarrier treatment configuration, through laboratory tests and dynamic process simulation software for treatment (West, BioWin, etc.)
- Detailed design of the electrical system, automation and process control (electrical and control engineering)
- Detailed estimation of the budget and project schedule
- Elaboration of operational manuals and maintenance manuals
- Management of permits and licenses



INSTALLATION & COMMISSIONING

- Selection of contractors for modular construction, equipment supply, and auxiliary services
- Control of the project schedule, costs, and scope
- Quality supervision during modular construction and installation to ensure design standards are met
- Start of operations under controlled conditions to verify the functioning of all systems, adjust operating parameters, and ensure compliance with quality standards

• DRINKING WATER TREATMENT • INTELLIGENT CONTAINERISED PLANT (PCAP-100)

High degree of purification even from secondary sources of contaminated water

Self-sufficient energy supply



Smart Water 4.0

Complete advanced treatment

Complementary to centralized infrastructure

Responsive to the needs of human, agricultural, or industrial consumption, wherever necessary

Plug&play system



Reduced initial investment

Minimizaci3n de p3rdidas de agua y generaci3n de residuos

Reduced carbon footprint

Models from single-family scale (PCAP-101) to large populations (PCAP-105)



"We're the first generation to feel the effect of climate change and the last generation who can do something about it"

Barack Obama

BECOME PART OF THE WATER REVOLUTION

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