

# orengine

[www.orengine.com](http://www.orengine.com)

## hydro power

The background of the entire page is a close-up, high-speed photograph of water splashing, creating numerous clear, glistening droplets and bubbles. Overlaid on this background is a bright blue, hand-drawn style outline of the European continent, showing the major landmasses of Europe, North Africa, and Western Asia.

# ORENGINE small and medium size water power



ORENGINE supplies worldwide high quality hydropower electromechanical equipment and services, from water to wire and installing all kind of turbines. For new hydropower plants as well as for the refurbishment and repowering of existing facilities.

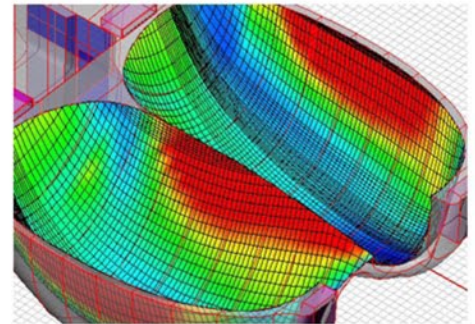
In the field of **STAND ALONE HYDRO**, (units power range from 25 to 25000 kW) ORENGINE provides the best classical together with the more innovative technology for the highest reliability, shortest delivery time and best cost-benefit ratio.

Our services start from feasibility stage, supporting hydraulic design for optimisation and safety. Performing dynamic stability analysis of penstock during closures or runaway of reaction turbines, preventing water hammer or lack of inertia in the rotating groups.

Giving the plant designer all support for the optimisation of powerhouse sizing and finally preparing the future maintenance staff trough a real training during erection and tests.

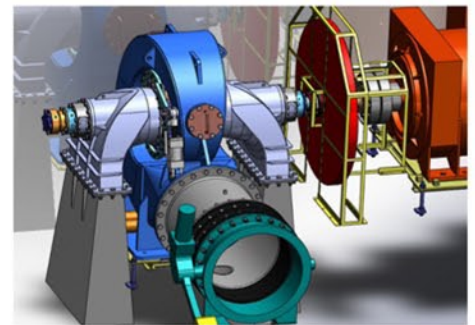
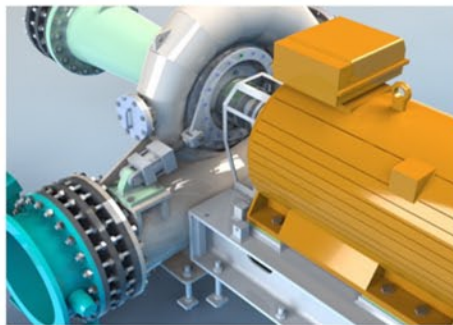
Limiting environmental impact is another key concern in plant design, ensuring that civil works are kept to an absolute minimum with optimal landscape integration.

Our design contains the most innovative features to prevent the water pollution, including biodegradable lubricants.



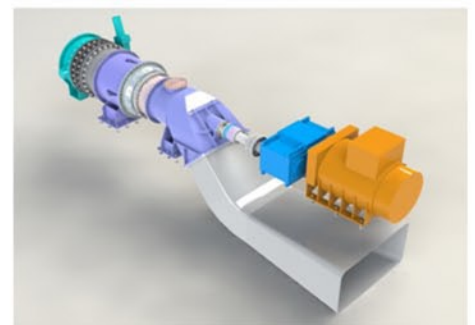
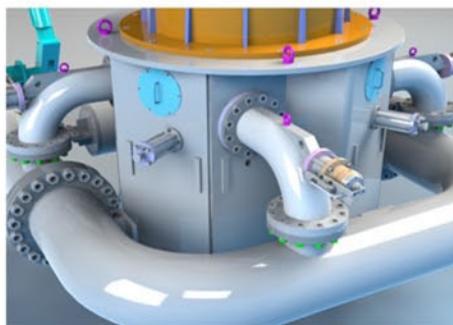
Our design covers heads range from 5 up to 1000 meters and is applied to all best turbines models:

- Axial and spiral Kaplan
- Single or double exit Francis
- Single or double vane Cross Flow
- One to six jets Pelton



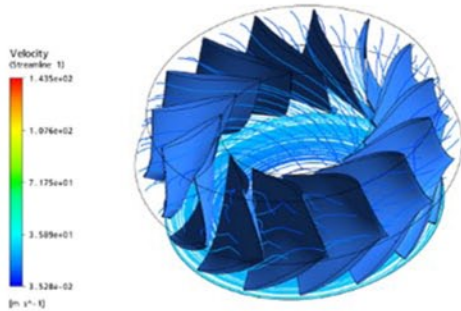
ORENGINE's total quality program guarantees our customers a complete selection of mechanical and electrical equipment featuring:

- exceptional robustness and simplicity of construction
- cheap routine maintenance
- reduced on-site erection time
- great flexibility in exploitable flows, ensuring high plant efficiency
- compact, simple and extremely reliable speed and power regulation systems



## power for tomorrow's environment

All our designs reflect decades of experience, the most advanced numerical flow simulation, continuous research and performance monitoring of numerous units installed worldwide. Our **Research & Development** department is always at work to follow new trends and materials, keeping our efficiencies at the highest levels.



As can be expected of a company operating in a modern, developed society, the cornerstone of ORENGINE's design philosophy is total compliance with environmental regulations, embracing the very latest in environmentally friendly technology.

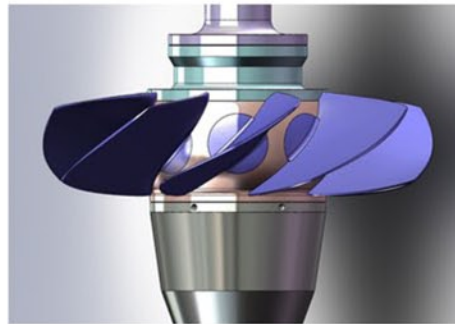
Nevertheless, we realize that our products are part of the great chain of human activity and from the raw materials they are made of, to the same power they produce, they are linked to present and future conditions of our planet.

Even though we live in a world in which the process of evolution can not be brought to a standstill, the understanding we gain with the passing of time will ensure that man eventually makes peace once more with nature.

Energy will give us the drive to succeed.



STAND ALONE HYDRO's concept means the simplest power plant control and management together with the highest reliability and the simplest maintenance. To reach this goal the highest automation, together with global and remote control has to be achieved, starting from design and selection of all components and materials, for a final perfect match of the whole system.



This is why ORENGINE offers the complete electromechanical equipment including:

- all turbine types
- inlet valves and gates
- gearboxes and generators
- transformers and electric panels
- PID speed governors and Scada
- all other system components.



ORENGINE can offer the supply, installation and commissioning of all components or also the partial supply of selected components and the advice or consultancy for the components supplied by others.

With this approach ORENGINE can apply its experience for a uniform system ensuring to the customer the perfect merger of all quality requirements.



ORENGINE, the long tradition of hydroelectric engineering, business culture, flexibility and great motivation to keep on top of market trends. To put your ideas into action.

Visit our website and feel free to ask for a first same week technical and economical offer for your project at: [info@orengine.it](mailto:info@orengine.it)

## some cooperations during last years



set ups in Argentina, Australia, Myanmar/Burma, Bolivia, Canada, Chile, China, Colombia, Congo, Ecuador, France, Greece, Iran, Italy, Jamaica, Lebanon, Mexico, Nicaragua, Norway, Peru, Philippines, Portugal, Republic of Korea, Spain, Switzerland, Taiwan, USA.

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