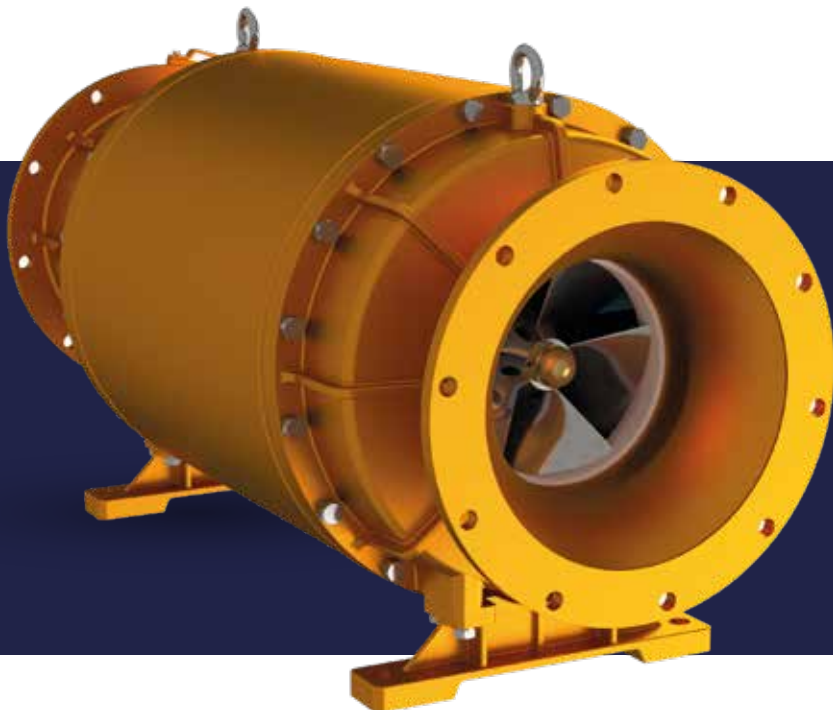




AMPHIBIOUS TURBINE

AMPHIBIOUS TURBINE

COMPACT ENERGY GENERATION SYSTEM



MAIN CHARACTERISTICS

- Submersible and Three Phase Electric Generator
- Amphibious Technology
- Microgeneration distributed "on grid"
- Monobloc and compact system
- Easy installation in any position
- Low installation cost
- No need for shaft alignment
- Concept that facilitates equipment installation and removal
- High efficiency and durability
- Noiseless and invisible
- Possibility of installations submersed, underground or on surface

Nº Process/Patent: BR 10 2015 019530-3

Power Generation from 40kW to 500kW

Flow up to 6000m³/h

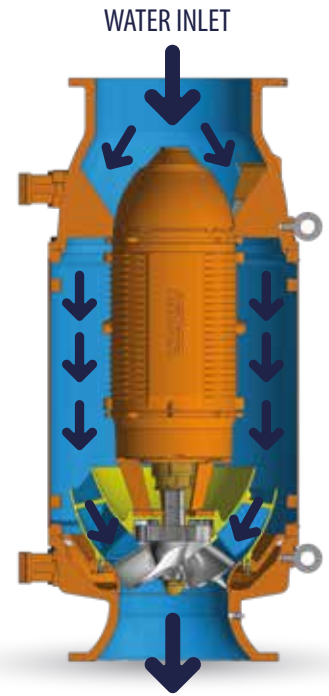
Pressures from 10 to 200mca

Electric power generation technology through hydraulic potentials in dams, pipelines, spillways, waterfalls and other sources of accumulated water energy. The amphibious turbine is a fully integrated equipment including electric generator and turbine. The electric generator is the wet submerged type, the pumped fluid goes alongside the motor and guarantees excellent thermal exchange and high performance condition. The impellers are designed according to the application operating conditions using the CFD software for geometry optimization and high efficiency.

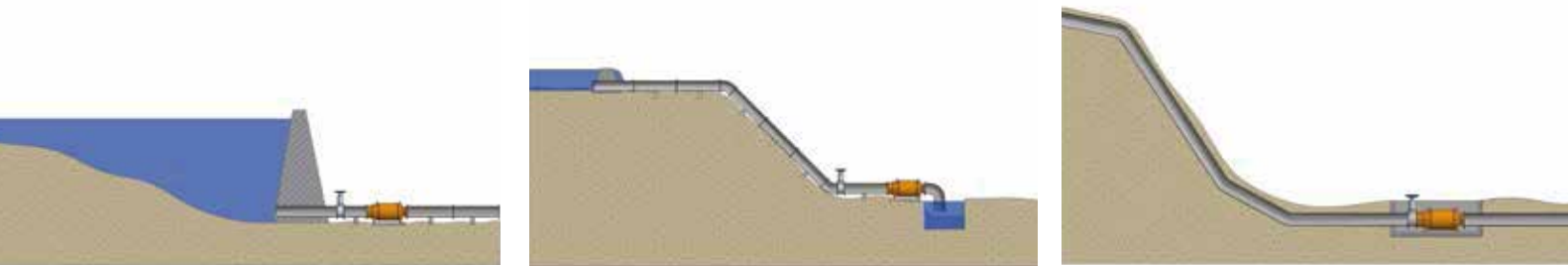
** CFD (Computational Fluid Dynamics) is a computational simulation software worldwide, for example, by the aviation and automotive industries.*

TURBINE'S OPTIMIZATION

Technologies used by HIGRA for design and optimization are based on each facility' features. it guarantees the maximum application hydro energetic use. HIGRA uses CFD state-of-the-art simulation software to generate turbine geometries.



WAYS OF INSTALLATIONS



ENERGY GENERATION INTEGRATED SOLUTION

Replacement of the reduction valve by Amphibious Turbine

The amphibious turbines are supplied with the complete systems of driving, monitoring and return of synchronized electric energy to the local energy feeding networking. For that, HIGRA engineering has developed, associated with major global brands, all the automated control of energy and rotation of the electric generator, always seeking the best operating point.





LEARN MORE
ABOUT OUR PRODUCTS ON:

WWW.HIGRA.COM.BR

HIGRA

Dilceu Elias de Moura, 345
Bairro Arroio da Manteiga
São Leopoldo/RS
CEP 93135-390
Fone: ++ 55 (51) 3778.2929
contato@higra.com.br
www.higra.com.br