

**Wikov** is a respected manufacturer of innovative planetary gearboxes for tidal stream power plants. From the very beginning our solution is designed especially for tidal stream power plants and it fully respects the extreme conditions of this harsh environment. We have successfully designed, produced, tested, installed and monitored gear units for key projects such as MCT SeaGen, TGL EMEC demonstrator unit or Andritz Hydro Hammerfest MeyGen project.

Our success is based on experience we gained in our 130 years history, international team of R&D specialists and state of the art production technologies. These main pillars lead to identifying the best solution for you with maximizing functional and economical parameters of your application.

# Gearboxes for Tidal Power

A solution which fully respects extreme conditions



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EN1609

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**WIKOV**

**The Essence of Engineering**



## Gearboxes designed for tidal turbines from the very beginning

### Products & Projects

#### MCT – Marine Current Turbines – SeaGen project

- Twin 650kW main drives (gearboxes + generators) for pile-mounted tidal current turbines
- Gearboxes more than 7 years in trouble-free operation
- Finalist of Tidal Energy Award 2010

#### TGL – Tidal Generation Limited (an Alstom Company)

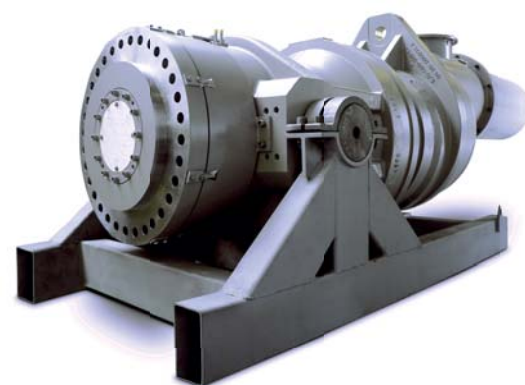
- EMEC demonstrator project
- 500kW tidal turbine gearbox for gravity based installation, in operation since 2010
- Tidal stream turbine test programme successful completed in 2012 - exported 250 MWh of power to the Scottish grid
- Torque reaction linkage mounting arrangement

#### Andritz Hydro Hammerfest – MeyGen project

- 1500kW tidal turbine gearboxes for gravity based installation
- 3 prototypes delivered in 2015
- Tidal Energy Award 2015 nomination

#### Gearboxes for tidal barrage power plants

- Helical horizontal gear units of type ZP-H for power range 450 kW - 6 MW
- Innovative planetary gear units up to 12 MW+



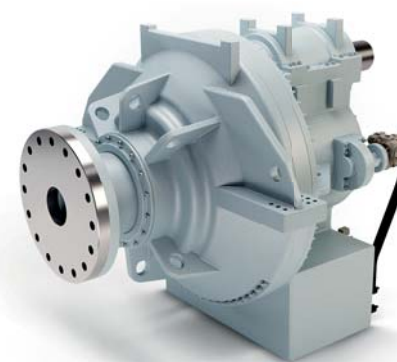
650kW gearbox with generator for MCT SeaGen project



Visualisation of SeaGen gearbox



500kW gearbox for TGL EMEC demonstrator unit



Visualisation of planetary gearbox for tidal barrage projects



1500kW gearbox for AHH MeyGen project



ZP-H gearbox for tidal barrage projects

## Wikov – The Essence of Engineering

Designed for tidal stream turbines from the very beginning

Deep knowledge and field-proven experience

Reliable and compact flexible pin gearboxes

- Flexible pin and differential split torque arrangement resulting in increased torque capacity while reducing size and weight
- Flexible pin arrangement ensures equal load distribution and compensates deflections

In-house manufacturing and full load test facility

WiGuard – remote condition monitoring system

Third party certification such as GL DNV, Dewi OCC, and others

Gear manufacturing tradition since 1918

