

# Gearboxes for Tidal Power

A SOLUTION WHICH FULLY  
RESPECTS EXTREME  
CONDITIONS

WIKOV.COM





01

SEAGEN PROJECT  
(MCT)

- 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

02

EMEC 500KW PROJECT  
(TGL)

- 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

03

MEYGEN PROJECT  
(ANDRITZ HYDRO -  
HAMMERFEST)

- 1,500kW tidal turbine gearboxes for gravity based installation
- 3 prototypes delivered in 2015
- Tidal Energy Award 2015 nomination

04

FLOTEC SR2-2000  
PROJECT (ORBITAL  
MARINE POWER - SKF)

- Two 1,130kW planetary gearboxes for floating tidal power platform
- Deployment in 2021

05

## AQUANTIS PROJECT

- 185kW tidal turbine gearbox prototype (WinGear helical)

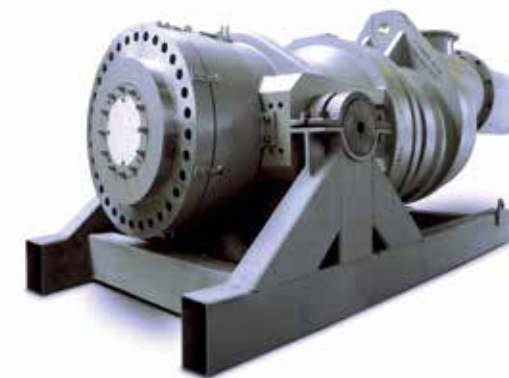


## WIKOV - THE ESSENCE OF ENGINEERING

- 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



Gearboxes  
designed for tidal  
turbines from the  
very beginning



650kW gearbox with generator for MCT SeaGen project



500kW for TGL EMEC demonstrator unit

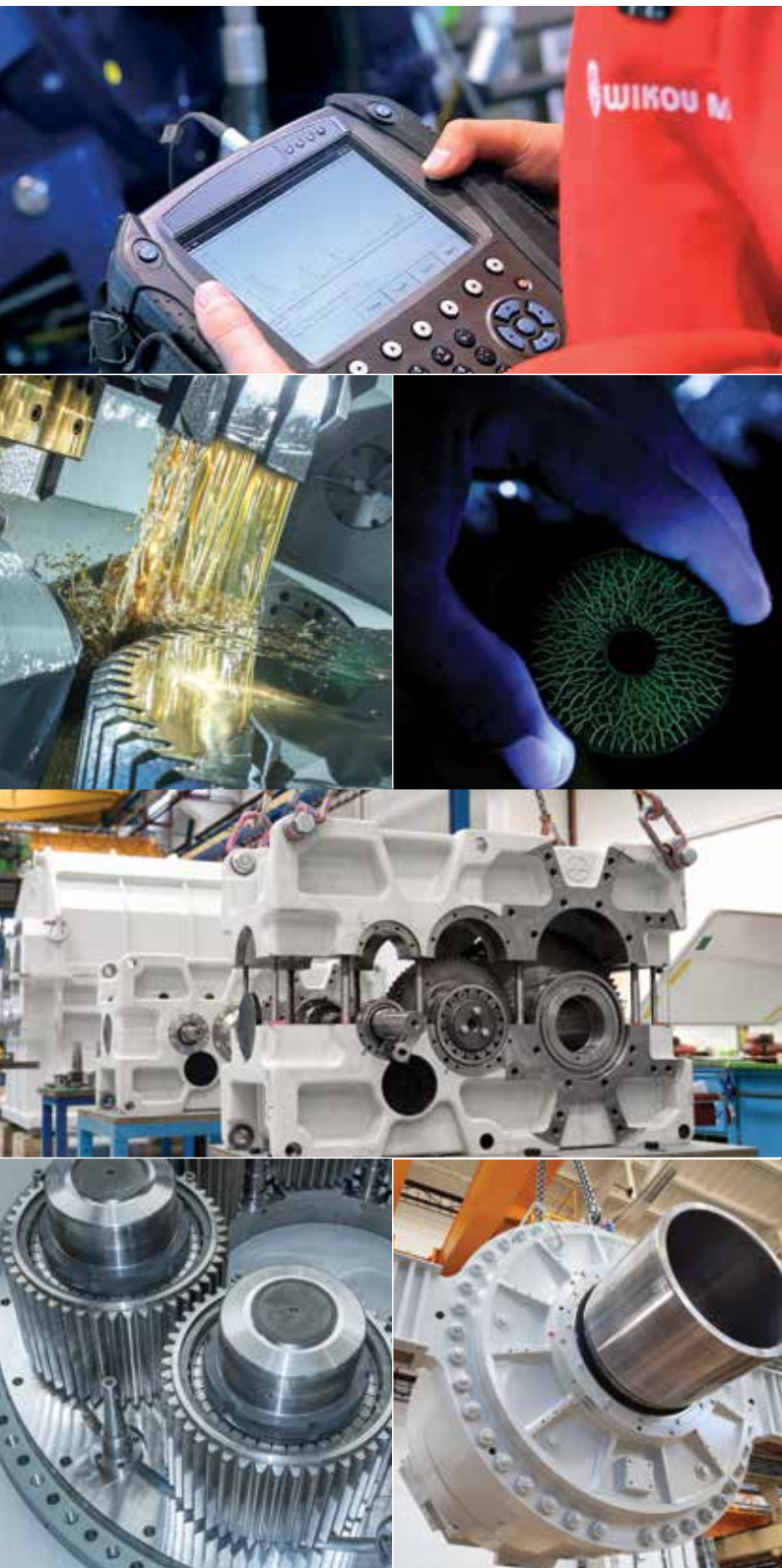


1,150kW gearbox for AHH MeyGen project



1,130kW gearbox for SR2-2000 floating platform





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# Wikov Manufacturing Facility

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, Andritz Hydro Hammerfest MeyGen project or FloTEC SR2-2000 project.



The Essence of Engineering

