

UNDIGEN

UNDIGEN is formed as the final phase of a broader base project, involving the implementation of a PTO (Power Take-Off System), an electrical system of direct generation for the energy exploitation of ocean waves, suitable for different WEC (Wave Energy Converters). The base project is divided into three phases:

1. Linear machine construction and its drive system and control.
2. Laboratory tests: performance determination.
3. Development of a marine test site and its derived functional tests.

Therefore, the objective of the UNDIGEN project focuses on carrying out the aforementioned phase 3, i.e., to develop a basic sensor that serves as the PTO test bench in order to perform the marine functional test to confirm the good results achieved in laboratory and, in turn, to analyze different control strategies in real applications.

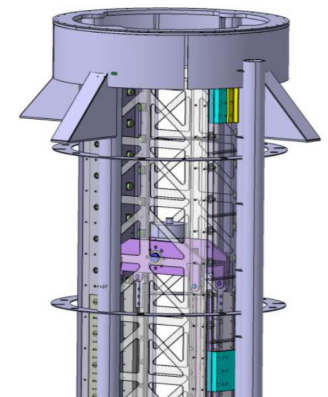
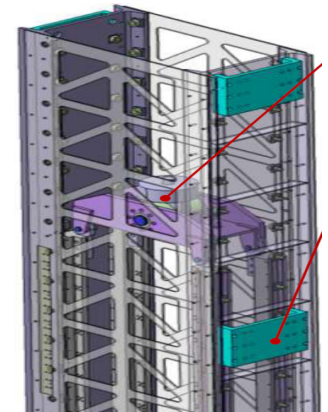
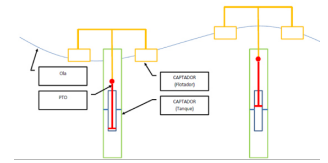
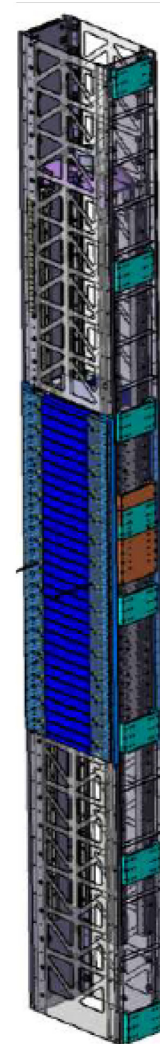


Phase 1 of the base project:
Linear machine construction.



Phase 2 of the base project:
Laboratory test.

Proyecto financiado por el Ministerio de Ciencia e Innovación dentro del subprograma INNPACTO 2011
Nº expediente: IPT-2011-1770-920000



WEDGE GLOBAL S.L. (project leader) is a newly established trading company with 100% spanish capital derived from the project start-up WEDGE and made up by its two founding partners, business and technological development, together with SODERCAN (investment organization in the Cantabria government).



FCC (FOMENTO de CONSTRUCCIONES y CONTRATAS) is a services company, born in March 1992 from the merger of two prestigious companies: "Construcciones y Contratas", funded in Madrid in 1944, and "Fomento de Obras y Construcciones", created in Barcelona in 1900.



CIEMAT, (Centro de Investigaciones Energéticas, MedioAmbientales y Tecnológicas) is a public research organization of excellence in energy and environmental issues, as well as multiple advanced technologies in several areas of basic reserach.



PLOCAN (Plataforma Oceánica de CANarias) is an initiative of marine and maritime science and technology (managed by the Ministry of Science and Innovation and the Canarias government) focused on finding international socio-economic competitiveness, derived from the access to The Ocean.