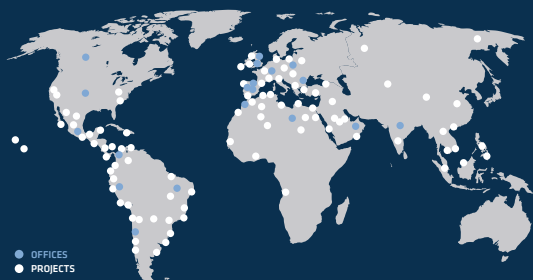


# IDOM ADA





Full engineering and complete procurement, construction and commissioning of complex systems and facilities.

IDOM is an international firm specializing in Engineering, Architecture and Consulting. IDOM operates globally in areas such as power generation, oil & gas, renewable and alternative energies, manufacturing industry, civil infrastructures, nuclear plants, large technological and scientific facilities, architecture and unique challenging engineering projects.

**IDOM ADA leads the company activity in technologically advanced and challenging projects involving applied mechanics, structural design, electronics & control.**

Our portfolio of clients and collaborators include ESO, AURA, IAC, GTC, EHU-UPV, SNS/ORNL, GANIL, ESS-Bilbao, ESS, F4E / ITER, CENER, TMT Observatory Corporation, Clemson University, NaREC, Fraunhofer Institute and others.

## CONTACT DETAILS



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Fully integrated in Idom Group

# SCIENTIFIC FACILITIES

Idom ADA provides Engineering for Scientific projects offering turn-key solutions for Scientific Facilities.

## ASTRONOMY

Idom ADA fully develops Instruments and Facilities for astronomers, nuclear and particle physicist, researchers in atomic energy, medicine, and others.

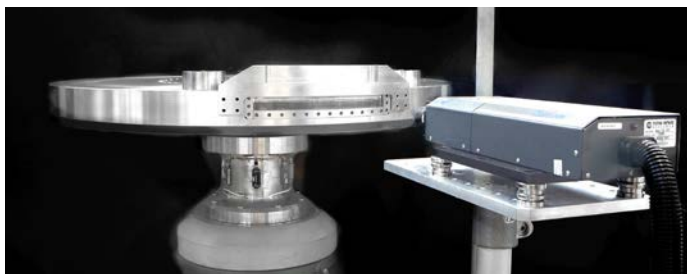
Idom has fully developed the enclosures of some of the most challenging telescopes that are currently underway. In this context, Idom has delivered the DKIST Enclosure and has been responsible for Technical Assistance during Site Assembly. Idom developed from concept to final design the Dome of the E-ELT.

Idom develops and supplies complete telescope systems to astronomical observatories, as it is the case of the QUIJOTE CMB Experiment, and is also active in the design and fabrication of science instruments for astronomy, i.e. the Folded Cassegrain Sets for the GTC (Canary Islands) and several cameras for astronomy.

## PARTICLE PHYSICS

Idom collaborated with ESS Bilbao and the Spallation Neutron Source (SNS, USA) in the development of rotating target technologies for neutron spallation sources. An example of Idom ADA's participation in

the development of fusion technologies is the most recent contract with F4E in the field of Integration Design of Diagnostics into ITER Ports.



# TEST SYSTEMS

Idom ADA engineers and manages the fabrication and construction of complex structures and mechanisms.

## WIND TURBINE TEST SYSTEMS

Idom is particularly active in the Wind Energy sector providing Complete testing facilities, including tests systems, auxiliary installations and the complete building engineering, for Renewable Energy and other Research Centres.

Idom ADA has fully developed the CENER Drive Train Test Centre- the largest for many years in terms of power and testing capacities, has participated in many of the next-generation testing plants around the world, such as the Clemson University WTDTF, (USA) and the Fujin Project (UK), and has currently delivered the turn-key supply of the DyNaLab test bench for the Fraunhofer Institute (Germany).

**Our engineering efforts are focused on providing modern, reliable, cost-efficient testing facilities.**

## SOLAR PARABOLIC THROUGH COLLECTORS TEST BENCH

Idom ADA has also delivered a turnkey project for the concept design, detail engineering and construction of a solar parabolic through test bench for CTAER (Spain). The objective of the facility is to test innovative collector designs with improved efficiency and performance, for the solar energy industry.



# STRUCTURES AND MECHANISMS

Idom ADA engineers and manages the fabrication and construction of complex structures and mechanisms.

## STRUCTURES

**Non-conventional structures requires non-conventional engineering approaches. Idom ADA structural-design capabilities will put no limits on creativity.**

References in this field include the development of an innovative structural solution based on composite portal frames to cope with a perimetral overhang of 7m and a 50m cantilever roof structure for the San Mamés Barria, a UEFA five stars stadium located at Bilbao, Spain. Idom has played a major role in both the design and construction phases.

Another remarkable examples are the University of Seville, where, as part of the team lead by Zaha Hadid Architects, Idom ADA was responsible for the local architecture and challenging structural design, and the Kapildui Doppler Weather Radar Tower, where high stiffness requirements and control of vibrations were of high importance.

## MECHANISMS

**Idom ADA offers a fresh approach to innovative design for challenging mechanisms**

Advanced computer simulations techniques are used routinely, often together with in-house prototype & testing techniques to predict the performance of a final design.

Idom ADA developed the structural and mechanical design, provided supervision to the manufacturing, assembly, test, delivery and installation on site of the two turntables installed in the Gatun Locks (Panama).

An innovative mechanism to drive large movable structures, the crawler mechanism, has been patented by Idom.



# FILMS

IDOM ADA -Integrated Solutions





[www.idom.com/ada](http://www.idom.com/ada)

