



Press dossier

January 2010



The way to see the future

www.sener.es

INDEX

SENER, a leading engineering company

A private engineering and technology group.....	2
Main international projects.....	3
Excellence as a corporative culture.....	4
More than 50 years of History.....	6

More information

SENER Communication Department

Oihana Casas

Tel. (+34) 91 807 73 18

Mobile: 679 314 085

Fax. (+34) 91 807 72 12

oihana.casas@sener.es

SENER, a leading engineering company

A private engineering and technology group

SENER is a **private engineering and technology group** founded in Bilbao in 1956 which seeks to offer its clients state-of-the-art technological solutions and enjoys international prestige for its commitment to innovation, quality and for its independence. SENER employs over 5,700 professionals and has a turnover of 829M€.

SENER accomplishes engineering activities and has industrial holdings in companies working in the fields of Energy and the Environment and Aerospace.

The Engineering Area, **SENER Ingeniería y Sistemas, S.A.**, is an engineering, construction and systems integration company which has become one of the largest Spanish engineering firms with a turnover of more than 385 million euros, around 2,500 employees and offices in Madrid, Barcelona, Bilbao, Valencia, Sevilla, Abu Dhabi, Algeria, Buenos Aires, Lisbon, Mexico DF, Okayama (Japan), San Francisco and Warsaw.

SENER is a benchmark engineering company at home and abroad in the fields of Aerospace, Power and Process, Civil Engineering and Architecture and Marine Engineering. Its outstanding participation in these four business areas set it apart as the first multidisciplinary engineering company in Spain. The company provides innovative solutions and devotes around 10% of staff hours to R&D. This effort has been recognised by different awards, including the Prince Felipe Award for Business Excellence, presented in 2008 by the Spanish Ministry of Industry, Tourism and Trade to SENER Ingeniería y Sistemas for Technological Innovation in Major Companies, in recognition of its CAD/CAM FORAN software.

Furthermore, SENER Grupo de Ingeniería, S.A., the matrix company, promotes and takes part in manufacturing and production businesses. Therefore, through its **Aerospace Industry Area** it is present in consortiums such as Industrial de Turbopropulsores ITP (the only Spanish company in the aeronautical engines and gas turbines industry, started by SENER in 1984, and where SENER is nowadays the major shareholder), Hisdesat, Galileo Sistemas y Servicios and Orbital Satellite Services (OSS). Besides, through its **Energy and Environment Area**, SENER has promoted different projects, in which it also has stock options and contributes with its own technology, in renewables energies and waste to energy, such as Zabalgarbi, TRACJUSA, Valpuren Comatur, Valpuren Bañuelo and Torresol Energy.

Since its creation, SENER Engineering Group has been growing in importance in terms of its investments, the jobs it has generated and the financial results of its investee companies.

Major international projects

With more than 50 years of history as a company, SENER has carried out some of the most ambitious projects to developed in recent years, both inside and outside Spain. Among them SENER has taken part in:

In **Civil Engineering and Architecture**, SENER has been involved in the development of transport infrastructure, like roads and railways, airports and ports, water projects and coastal recuperation schemes, in Spain as well as in Algeria, Argentina, Chile, Mexico and Poland, among others.

In the **Aerospace Sector**, the company has worked on the Hubble telescope, engineering mechanisms for the comet chaser Rosetta, the Columbus module, the SEOSAT and SPAINSAT, SMOS, PLEIADES, HERSCHEL and PLANCK satellites and many other developments for the European Space Agency. In **Aeronautics and Vehicles** the main projects have been the belly fairing for the Airbus A-380, as well as participating in work on the sister A-340/600 series and the best-selling A-320.

In the **Power and Process Sector**, SENER has been a leading player in the development of power plants in Spain, from the first nuclear energy stations to the combined cycle electricity generating stations and cogeneration, both in Spain and abroad. And, more recently, in the development of thermosolar energy plants, a field where SENER has become a technology bench company worldwide, with its participation, to date, in nine projects, among them Andasol 1 and 2. SENER has a leading rol in the field of regasification Liquefied Natural Gas (LNG) plants, with projects such as SAGGAS or Gate Terminal, this last one located in Holland, as well as in the field of oil and petrochemistry, with an important presence in the design of the main Spanish refineries and key projects such as Lexan I and II plants or Ultem for General Electric Plastics in Cartagena.

In **Marine Engineering** the highlight has been the development of FORAN, a CAD/CAM software system used for design and conceptual work on ships. The system is used by shipyards in countries such as Japan, China, Russia, the United States, Brazil, Italy, France and the United Kingdom, among others. Due to the improvement that this software has ment to the international marine market, in 2008 SENER was awarded with the **Prince Felipe Award for Business Excellence**, given by the Spanish Ministry of Industry, Tourism and Trade.

Excellence as a corporate culture

The culture of excellence practiced by the company is based on three main corporate values: a commitment to quality, innovation and independence.

Commitment to quality

Quality has been a priority objective for SENER ever since it was founded, and today it remains one of the pillars of our activity. This zeal helped us become the **first Spanish engineering group** to be awarded an **ISO 9001** certificate for a quality management system that covers all its activities and work centres. SENER has its own integrated management system for quality, environment and safety that has also been certified in accordance with the international **ISO 14001:2004** (environmental management) and the **OHSAS 18001:2007** (health and safety at work) standards. SENER has also received certification for its quality management system for specific applications such as the aeronautical **EN 9100**, **PECAL/AQAP 2110** and **PECAL/AQAP 160** for defence products and the **ISO 13485:2004** for electro medicine projects. When the type of project requires it, SENER can also apply sector standards such as **ANSI**, **ASME** and **API** for industrial projects, **ECSS** for space sector projects, etc.

Innovation: Ongoing investment in R&D

Since its beginnings, SENER has been remarkable for presenting innovative projects with solutions which make a difference. Currently, SENER's investment in R&D is around the 10% staff hours, an effort which is continuously recognised in different national awards such as those mentioned above. These awards include the Prince Felipe Award for Business Excellence in the category 'Technological Innovation for Large Companies' obtained in June 2008, the Best of European Business Award 2007 obtained by SENER Engineering Group in the category of Profitable Growth for Medium Sized Companies and Entrepreneur of the Year Award for Innovation in 2006 presented by Ernst&Young, in collaboration with IESE business school and the Vocento y Fortis Group, to Jorge Sendagorta, SENER's President.

Innovation is SENER's most outstanding feature for two main reasons: SENER is, by vocation, a state-of-the-art technology company. This foundational spirit has impregnated its day to day work in all its activities in production, commercial and development activities. Furthermore, the company's matrixed organisation is designed to facilitate collaboration between its different departments, each with particular expertise, experience and capabilities in a given technology. In this context, a very significant part of the innovations stems from the multidisciplinary character of the projects.

Excellence as a corporate culture

Thanks to this culture and methodology, it is not surprising that SENER is ahead of other companies when it comes to applying new solutions, developing new processes or simply entering new technological areas. Nowadays, SENER has numerous patents around the world. SENER's technological activity has also led it to participate in several European and national R&D innovation programmes including BRITE-EURAM, THERMIE, LIFE, PATI, PTH, ATYCA, projects with the Centre for Industrial Technology Development (CDTI) and international projects in Aeronautics, Space and Defence such as the EUROFIGHTER plane and the ARIANE rocket.

SENER's patents cover all the company's business areas ranging from a satellite multimedia communications system for high speed trains to a noise reducing pipe for static components in aeronautical engines and a robotic assistant for laparoscopic surgery, a mooring system for space vehicles, mechanisms in the thermosolar energy field and design techniques and analysis of virtual prototypes for the marine industry.

Independence

SENER is a private capital company and completely independent. This gives the company absolute freedom when it comes to decide how to develop its business and face up to new challenges in company policy as laid down by the board. Independence allows SENER to guarantee the full completion of all its commitments and to offer maximum quality on all its projects. The company is not subject to outside interference and its reputation for good practice depends solely on its highly qualified team of professionals.

More than 50 years of History

In 1956 marine engineer Enrique de Sendagorta founded SENER, the first Spanish engineering company. The company started in Bilbao where it focused on marine engineering projects that were technically innovative and could be adjusted to the needs of clients.

In 1960 José Manuel de Sendagorta, the brother of the founder, joined the company. With his arrival, SENER soon began to expand into other areas such as industrial and processing plants, maritime projects, the petrochemical sector and civil engineering. SENER opened its first office in Madrid with the main goal of expanding into the chemical and processing industries sectors.

In 1966 José Manuel Sendagorta helped land the company's first international contract, winning a competition to design and build a rocket launch tower at Kiruna (Sweden) for ESRO, the forerunner of what is today the European Space Agency. This project, which was completed in 1967, came barely 11 years after the creation of the company and marked its debut in the aerospace sector, a field where SENER has remained ever since a benchmark in the industry.

In the sixties SENER unveiled the FORAN system, (an acronym for FORmas ANalíticas), a CAD/CAM software system for designing and building all types of ships. Since then FORAN has become one of its most internationally recognized products. Today, it is installed in the majority of Spain's shipyards and is one of the leading CAD/CAM marine applications in the world. The system is used by more than 150 shipyards and technical offices in 30 countries.

During the 70s and up to the nuclear moratorium of 1982 SENER was deeply involved in nuclear plants, taking on several large-scale projects. After the moratorium started the company continued with development projects in the energy sector, ranging from refining to combined cycle electrical plants, and from installations for the regasification of liquid gas to thermosolar energy, an area of activity that today is going flat out.

In 1985 SENER joined the European consortium working on the development of the EJ 200 engine for the multi role Eurofighter/Typhoon attack aircraft, began offering services in the telecommunications engineering field, and supported the establishment of Industria de Turbopropulsores (ITP), the only Spanish company involved in aircraft engines and gas turbines.

In 1986 Jorge Sendagorta joined the management team at SENER. He began working closely with Enrique Sendagorta on a process of institutionalizing the company and professionalizing its management, running in parallel with a generational changeover among the shareholders.

In 1989 SENER created the SENER Grupo de Ingeniería holding, promoting and taking part in manufacturing and production businesses.

SENER, a leading engineering company

In 1991 SENER opened an office in Lisbon that was later to become the headquarters of its SENER Portugal Division.

In 1996 SENER expanded its engineering activities to include the environmental sector.

In 2001 SENER set up a new business area focused on the design and mass production of Actuation and Control Systems for the Defence, Aeronautics, Science and Medical Systems markets.

In 2002 the Sendagorta family and SENER Grupo de Ingeniería launched the **SENER Foundation** with the objective of rewarding and supporting academic excellence among engineering students from countries with few resources, helping them by awarding grants to cover their studies and work.

In 2002 SENER inaugurated its SENER Argentina Division, with its headquarters in Buenos Aires.

In 2004 the company opened an **Integration and Test Centre in Madrid**, a high skills complex used for trialling production methods such as electronic assembly, the mechanical assembly of units and subunits, final integration, and testing for vibration, temperature and functionals. Mechanisms developed at SENER's new Integration and Test Centre can be used in aeronautics (flight control), space (satellites, space ships, and payload) and propulsion (engine nozzles, thrust vector controls), industrial and electro-medicine products.

In 2006 SENER Ingeniería y Sistemas celebrated its 50th anniversary with a series of commemorative events at all its headquarters.

In 2006 SENER launched its SENER Mexico Division, with the headquarters in Mexico City.

In September 2006 SENER opened an office in Okayama, Japan.

In January 2007 SENER inaugurated its SENER Poland Division, based in Warsaw.

In July 2007 SENER acquired 40% of the Mexican engineering company III, S.A. de C.V., with an option to purchase the remaining shares in 2010, thereby consolidating its presence in the North American market.

In March 2008 SENER launches, with Masdar, the joint venture Torresol Energy for the promotion of CSP plants all over the world.

In June 2008 SENER opened offices in San Francisco (USA) and in Algiers.

In Septiembre 2008 SENER has purchased 49% of the Portuguese engineering company ENGVIA and, therefore, extended its capacities on the Portuguese market.

In June 2009 SENER opened an office in Abu Dhabi (UAE)

In October 2009 SENER took over the Instrumentation and Systems Division of the NTE, S.A. company.