



1981-2006

At Isofotón, R+D is a strategic axis of growth. With its constant increase in potential, it contributes to generating knowledge, in a way which places this technology at the service of society.



6.1 ISOFOTON'S STRATEGIC FOCUS ON R+D



Isofoton, loyal to the symbols of its identity and to its dedication and commitment to the research of Solar Energy, considers **Technological Development** to be **one of its strategic pillars**.

With the objective of achieving better use of Solar Energy, and in a process of constant improvement, the departments involved in R+D maintain diverse research lines active for the development of new solutions and services. Thanks to this determined commitment, Isofoton is today considered to be a reference point in technology.

All of the research projects developed in this aspect have gone in search of solutions that allow for increasing efficiency and reducing costs of photovoltaic systems. In this sense, Isofoton's strategy is focused on the in depth study of possible improvements in current crystalline silicon technology and on occupying positions at the forefront of the **development of concentration systems**.

Also, Isofoton closely follows scientific advances that are produced with the aim of carrying out a rapid industrialization of these technologies, solidifying and improving the company's position as it prepares for a highly competitive future.

The following are the current lines of research by process or areas of activity:

CRYSTALLINE SILICON TECHNOLOGY

STRATEGIC LINES

SPECIFIC LINES

MATERIALS

Purification of silicon.

Introduction of new substrates of silicon and research of materials influenced by the substrate.

DEVICES

Large area thin cells.

Passivation methods and introduction into the manufacturing processes.

New device structures.

Research on automation and control processes.

MODULES

Inter-connection of thin cells.

Development and testing of physical models of photovoltaic modules.

New encapsulation materials.

Optimization of electric design of module.

New module concepts.

APPLICATIONS

Grid-Connection (large power plants, hybrid plants, monitoring...).

Off-Grid applications (pumping, desalination, lighting...).

Architectural Integration.