



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.



## 6.6 INNOVATIONS IN OTHER AREAS



### In factory Management Systems.

With the goal of productivity and quality of the production lines, a lifting of specifications and the implementation of the first MES (Manufacturing Execution Systems) system was carried out in the company in 2006. This system will control all of the cell production lines.

Working with Siemens, as the provider of hardware, software, and know-how for the direction and implementation of the system, 75% of the project has been carried out and it will be completed in the first trimester of 2007.

The system was created **to collect real time information about the parameters of traceability, process, quality, states of the machines, efficiency, and maintenance results.** All data collected can be turned over in real time to the interactive system, for which it is integrated as another support to the ERP (Enterprise Resource Planning) of the company. Among the functions of the system in the first phase of its implementation are:

- Real time control of the job being carried out.
- Control of wafers by area.
- Traceability by batch.
- Capture of the parameters of the process: reflectivity, weight loss of the cassette after texturization, temperature of texturization barrel, V/I, etc.
- Collection of data about state of the machinery, maintenance, availability, utilization, time elapsed between failures, response time of maintenance technician, number of programmed maintenances that are past date, etc.
- Generation of key indicators (KPI), measuring production efficiency (OEE), and control of machine delay time (DTM).

With this tool, Isofoton will be ready to confront new challenges in 2007. One of the most significant will be the implementation of the Statistical Process Control (SPC), which will establish the pillars to manage high capacity lines in 2008.