



# Emilio Esteban S.A. and the Latest Intel Technology: Real Servers, Updated Desktops and Notebooks Provide a Complete Solution

## SOLUTION SUMMARY

<b>Challenge</b>	<p>Emilio Esteban S.A. is a major flour producer in Spain that started as a family-owned business and has been passed down from one generation to the next.</p> <p>As a member of the European community, Emilio Esteban earned the coveted ISO 9000 certification by upgrading their production facility and processes to comply with rigorous ISO 9000 standards for quality management and customer satisfaction. To meet certification requirements, Emilio Esteban needed to upgrade the Intel® Pentium® II processor-based PC with Microsoft® Windows NT® operating system they had been using as a server for standard office applications and a small billing application. The solution would not have been complete without also upgrading their desktop and notebook PCs, as well.</p>
<b>Solution</b>	<p>A comprehensive network of real servers based on the Intel® Xeon™ processor, high performance desktop PCs based on the Intel® Pentium® 4 Processor with HT Technology<sup>1</sup>, and notebook PCs based on innovative Intel® Centrino™ mobile technology were installed at Emilio Esteban.</p> <p>The production plants are now linked to the administrative offices, sales, and shipping; manual process for mixing, measuring and packaging products are now automated, more precise, and changes are made in real time.</p>
<b>Solution Provider</b>	<p>Sistemas Tecnicos Interactivos (STI) was one of Spain's first Intel® Product Integrators, and earned Intel® Premier Provider status in 2001 due, in part, to their goal of bringing high technology to the Castilla León region of Spain. While the larger cities in Spain take advantage of the latest technology, STI is committed to providing new ideas and the solutions that drive the value of technology daily to industrialized clients across the country, not just in Spain's largest cities.</p>
<b>Vendors/Products</b>	<ul style="list-style-type: none"> <li>• Desktop PCs based on the Intel Pentium 4 Processor with HT Technology</li> <li>• Notebook PCs based on Intel Centrino mobile technology</li> <li>• Notebook PCs based on Intel® Pentium® M processors</li> <li>• Microsoft Windows® XP</li> <li>• STI® Modulges ERP*</li> <li>• STI e-Quinox® communication package</li> <li>• Intel Xeon processor-based servers with Intel® Server Chassis SCS5200 including redundant power supplies, Intel® RAID controller support, and Intel® Server Board SE7501BR2</li> <li>• Microsoft Windows 2000 Server*</li> <li>• Intel® Server Management Software</li> </ul>

## Business Challenge

Because Emilio Esteban produces a variety of flour products that are primarily used in cereals for children, quality control is a top priority for this growing company. The European community is guided by ISO 9000 specifications that focus on quality customer service and products. ISO 9000 certification is critical to companies that wish to work with major international customers. While ISO 9000 specifications do not focus on the product or production process, compliance with the standards directly impacts product quality.

“ISO 9000 is the highest certification a company like ours can have,” said Emilio Esteban, president. “To meet the ISO 9000\* requirements, we must be able to trace every package of flour or cereal. We have to know where the grain products were harvested and when they were picked—

it isn’t possible for us to record this much information by hand. In addition, each measurement must be precise, and there is no room for human error.”

Emilio Esteban management made a commitment to improve both the factory hardware and their IT support systems. Their vision was to build a foundation based on new technology that could propel their successful business to new levels in a highly competitive marketplace.

In working with STI, Emilio Esteban began evaluating their existing work processes to establish a baseline for the changes they were committed

to making. It was immediately apparent that reliable, efficient servers were essential to ensuring critical information was captured accurately and stored in a protected environment. Anything less could jeopardize their ISO 9000 certification, which could have a devastating impact on their planned growth.

“It is our belief that the quality of our product merited the highest quality in our IT network,” said Esteban. “STI and Intel are both known for excellent products and services, which made them both an ideal match for our company.”

## Business Solution

To provide more reliable, protected back-office management, STI began the conversion by replacing the PC being used as a server with a real server based on dual Intel® Xeon™ processors that handles all back-office applications. Intel® Server Management software was also installed to help STI manage the Emilio Esteban system remotely, from the STI offices.

The next step in meeting the company’s vision and business goals was the installation of ten desktop PCs in the company’s main office. These systems are based

on the Intel® Pentium® 4 processor supporting Hyper-Threading Technology<sup>2</sup> (HT Technology) and Microsoft Windows® XP operating system. The employees use a new billing application, and also run customer relations management software, and a variety of front office applications. To control plant and trace functions, two notebooks based on Intel® Centrino™ mobile technology were loaded with proprietary software developed by STI and customized for Emilio Esteban’s specific ISO 9000 compliance data tracking. Upgrading these clients allows employees to track orders and production in real time, giving them a key competitive advantage.

“The servers organize the flow of information to the desktop and laptop PCs, and control every aspect of production from order input to shipping,” said Ruben Garcia Bayon at STI. “With the prior network, it was virtually impossible to know if the computer failed, so downtime was an ongoing problem. With Intel Server Management monitoring capabilities and redundancies built into the network, we can diagnose and repair problems before the parts fail, virtually eliminating any shut-downs in production and providing significant gains in productivity.”

For added convenience, employees can remotely monitor and control production plant activities on an ISDN link from their homes or via the Internet on a Virtual Private Network (VPN) connection. If flour mixtures need to be adjusted, this can be done virtually anytime, from remote locations. Work orders, factory configurations, and warehouse inventory can be checked in real time, and problems can be identified and solved more quickly. According to Garcia Bayon, all of these activities would have quickly overwhelmed their previous PC-based server.

Emilio Esteban also reports that these features enable faster time-to-market and increased customer satisfaction. In most situations, if a customer places a rush order or needs to make a change to an existing order, the requests can be entered and implemented immediately, rather than waiting until someone is available to make the changes. Waiting times have been reduced significantly, while their ability to produce more in less time has increased.

“In the past year, since we implemented these Intel-based system upgrades, we have seen an approximate 15 percent increase in productivity overall, and approximately 5 percent reduction in costs,” said Esteban. “Human error has been reduced as well, and our customer

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returns have gone down close to 70 percent<sup>3</sup>. Personnel who used to spend time performing back-office functions are now able to focus on quality control, and our employees no longer have to spend time solving IT problems.”

The newer systems based on the Intel® Pentium® 4 Processor with HT Technology enable multitasking in both production and management of the company. Proprietary software developed by STI that supports ISO 9000 compliance can now

run simultaneously with front-office billing and customer relations software, as well as background applications. The real-time monitoring capabilities made possible by this new technology have produced numerous efficiencies in every phase of the flour and cereal production process.

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## Lessons Learned

Time-to-market is much faster. Emilio Esteban is located in a region that is just beginning to embrace the value of investing in technology, so their purchase of desktop, mobile and real server products has provided Emilio Esteban with the ability to differentiate from other flour processing companies. By upgrading the entire plant to the latest computer and server technologies, Emilio Esteban can mix flour more quickly and accurately, enter customer orders in real time, and track every phase of the production process. This has enhanced their competitive position and produced immediate growth in their customer base.

### Upgrading their network increased productivity.

Employee hours previously dedicated to manual production or IT troubleshooting have been converted to revenue-producing sales, production, quality control, and shipping activities. They have turned what was once regional coverage into a national presence.

### Return on investment has exceeded expectations.

With an ability to meet ISO 9000 standards, increased production volume, higher productivity, faster time-to-market, and a more competitive position in an international market. This growth has already exceeded the cost of the comprehensive solution.

## A Complete Platform Solution

When Emilio Esteban made the decision to upgrade their technology throughout the company, they turned to STI for a comprehensive solution. Emilio Esteban trusted STI to make recommendations and provide solutions that would help the company grow, both today and in the future. Like most forward-thinking small business owners, Emilio Esteban needed integrated products and solutions to achieve their corporate goals.

- **PCs with HT Technology**—the PCs in the Emilio Esteban network are based on the Intel® Pentium® 4 Processor with HT Technology<sup>1</sup>. HT Technology helps deliver the power to efficiently run the latest operating systems. These desktop PCs also have the performance to run security applications such as anti-virus and firewall applications, without compromising the employee’s daily computing tasks.

Emilio Esteban employees used to be able to run only one application at a time and can now efficiently run multiple applications at once, including STI e-Quinox\*, STI Modulges ERP\*, Internet Explorer\*, anti-virus, and a variety of Microsoft Office and other applications.

With ISO 9000 compliance being a critical part of their success, Emilio Esteban has the confidence that the required trace capabilities and data collected on each package of flour or cereal are accurate, safe, and easy to access. Employees can perform billing, inventory, sales, and production plant supervision simultaneously, while necessary network security and monitoring run seamlessly in the background.

- **Notebook PC’s based on Intel® Centrino™ Mobile Technology**—the notebook PCs are used primarily to control the production plant and shipping divisions at Emilio Esteban. The lightweight design and long battery life<sup>4</sup> make them easy to use, and significant amounts of data can be entered remotely<sup>4</sup>.

The addition of the notebooks and the capabilities of Intel® Centrino™ mobile technology have completely changed the way Emilio Esteban employees and

managers communicate with the factory. In the past, problems in the factory were reported by landline phone to the main office, and a staff person was dispatched to the factory. Once the problem was identified, the employee went back to his or her desk and entered the factory information and, once the solution was provided, had to walk back to the factory to relay and implement the required action. Further monitoring involved more back-and-forth for the employee, consuming large amounts of time and energy.

Today the manager takes a notebook PC to the factory, and all assessments, actions, and data entry occurs on the factory floor, in real time. While three people were once required to handle production plant monitoring, only two are needed now and the third is free to focus on development and implementation of new quality control procedures.

- **Real Servers Based on Intel® Xeon™ Processors**—Emilio Esteban is assured that their ISO 9000 certification requirements are met, as the server is able to track and store data in real time, with security. More transactions can be processed in real time, and data storage capacity can be increased as needed.

Redundancies built into the network help provide uninterrupted access to server resources and provide the peace of mind that comes with a dependable server. For added security, STI can remotely monitor and

diagnose the server, resolving small problems quickly, as well as update the software. Remote diagnosis and the easy-access chassis enable fast, easy repairs. With fast access to information, Emilio Esteban is better able to focus on product quality and business development—attributing to significant gains in productivity, revenue, and quality.

- **Wireless connectivity**—as the effort to streamline production and shipping processes continues, Emilio Esteban plans to use Intel® PRO Wireless Network Connections to optimize shipping. Wireless LAN terminals are expected to help boost efficiency levels and help the company gain a competitive edge by taking full advantage of the capabilities in notebook PCs based on Intel® Centrino™ mobile technology.

The complete solution designed by STI for Emilio Esteban is made possible by the real servers based on Intel Xeon processors implemented at the start of the upgrade. The addition of the latest Intel-based desktop and notebook PC systems has given Emilio Esteban a significant boost in their operational productivity, customer service, and ISO 9000 capabilities.

*Solution provided by*  
*Sistemas Tecnicos Interactivos*  
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<sup>1</sup> Look for systems with the Intel® Pentium® 4 Processor with HT Technology logo which your system vendor has verified utilize Hyper-Threading Technology. Performance will vary depending on the specific hardware and software you use. See <http://www.intel.com/info/hyperthreading> for information.

<sup>2</sup> Hyper-Threading Technology requires a computer system with an Intel® Pentium® 4 processor supporting Hyper-Threading Technology and an HT Technology-enabled chipset, BIOS and operating system. Performance will vary depending on the specific hardware and software you use. See <http://www.intel.com/info/hyperthreading/> for more information including details on which processors support HT Technology.

<sup>3</sup> Intel Corporation has not independently verified Emilio Esteban's productivity gains or its cost and product return reductions, therefore, Intel does not represent these numbers to be accurate.

<sup>4</sup> Wireless connectivity and some features may require you to purchase additional software, services or external hardware. Availability of public wireless LAN access points limited. System performance measured by MobileMark\* 2002. System performance, battery life, wireless performance and functionality will vary depending on your specific hardware and software configurations. See [http://www.intel.com/products/centrino/more\\_info](http://www.intel.com/products/centrino/more_info) for more information.

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