Demonstrating a Smart, Digital Factory

A highly productive factory moves materials efficiently across the factory floor, made possible in part by manufacturing and control data seamlessly moving from sensors to servers to services. This is the vision of Siemens®, Microsoft® and Intel, who have teamed up to present the production line of the future supporting the connected digital factory. This highly scalable solution is based on Siemens industrial automation products equipped with Intel® processors running Microsoft Windows® Embedded operating systems. The result is a more productive, greener and safer factory production line.

This proof of concept spans the factory floor, enterprise IT and headquarters, creating a collaborative system that coordinates plant resources, employees, customers and suppliers. The infrastructure is cost-effective, thanks to the use of common technologies from top to bottom that lower equipment development cost and increase reliability. Siemens PC-based Automation architecture, coupled with proven Intel processor technology and Windows Embedded operating system expertise, provides manufacturers a robust solution that scales from end-to-end. As a result, factory IT can lower its software development effort and cost by writing to a single OS API and using a common tools chain.

The Innovative Production Line transforms industrial automation by enabling real-time factory floor data from enterprise applications, which facilitates continuous production process optimization and reduces information-sharing delays, thereby increasing overall factory productivity.

**PRODUCTIVE**
- Easy-to-use, high-definition, multi-touch HMI interfaces are supported by high-performance Intel® Core™ i7 processors with integrated graphics engines
- Intel® Active Management Technology (Intel® AMT) enables failure conditions to be detected and resolved faster than ever before
- Rapid deployment of web-based applications featuring remote UIs running on a single instruction set

**GREEN**
- Green IT sensors automatically turn off devices when no one is nearby
- Users look at energy and health data by activating the GreenIT icon on the screen, made possible by Intel® Thermal Monitor technologies
- SIMATIC PC-based automation devices run on power-efficient Intel processors

**SAFE**
- A failsafe SIMATIC software controller manages production machines and protects workers’ safety
- Handheld devices pause equipment in case of emergency
- Connectivity is complete, secure and dependable

To learn more about Intel Industrial Computing Platforms, please visit [www.intel.com/go/industrial](http://www.intel.com/go/industrial)