Smart Factory is a system that is proven to help manufacturers sustain continuous flow, optimize efficiency and reduce errors in manual assembly processes. The system enables users to instantly recognise opportunities for improvement, to quickly and easily move ID points without reconfiguring hardware infrastructure, and to instantly identify critical issues and the real-time status of operations.

Smart Factory also enables automatic, product sensitive device control and poke-yoke, anywhere in the plant, reducing manual errors, cycle time and line stoppages. By accurately identifying and locating process-critical assets, Smart Factory provides real-time operational awareness, adaptive control and data-driven insights.

**HOW IT WORKS**

Smart Factory gathers location data, and data from existing plant systems and devices. The system combines this information, correlating the real-time process interactions with operational details, to deliver a virtual interpretation of exactly what’s going on in the factory. By leveraging this knowledge, Smart Factory empowers automation and drives widespread improvements to users’ manufacturing processes.

**WHAT YOU GET:**

- Measurable cost reduction, with lean, optimized procedures throughout the assembly process
- Guaranteed productivity gains, as errors and wasted time are reduced or eliminated
- Reduced cost of quality, by maximizing right-first-time and reducing the cost of re-work
- The ability to manage product customization, through error-proofing and guiding increasingly variable manual processes
- 24-7 support.
APPLICATIONS

The Smart Factory system includes a suite of applications that address critical operational needs, both on and off the assembly line.

OPERATIONS CENTRE & PROCESS IMPROVEMENT
Smart Factory Operations Centre and Smart Factory Process Improvement are uniquely engineered to support operational enhancements, delivering a suite of advanced performance monitoring capabilities. These powerful applications deliver critical alerts, reports and rules to empower fast, information-driven decision making. Production teams are able to better manage day-to-day operations, while quality and lean management teams can rapidly highlight process and stability issues affecting optimal quality, throughput and cost.

EXPLORER
Smart Factory Explorer is a search and mapping solution that delivers unprecedented operational visibility. Explorer is specifically designed to support role-driven activities – it enables users to instantly gain full visibility of their asset movements, locations and identities.

VIRTUAL STATION
Smart Factory Virtual Station eliminates the cost and burden associated with relocating and rebalancing process identification points. Highly accurate Smart Factory location technology removes the need for barcode scan, and other legacy identification mechanisms, transforming fixed assembly lines to be completely and easily malleable.

SMART DEVICE
Smart Factory Smart Device is an incredibly powerful tool-control application, which automates traditionally manual identification tasks, frees tools and operators from both the tether and the workstation. The process changes enabled by Smart Device drive significant reductions in errors and re-work, leading to better throughput at reduced operational effort.
THE HARDWARE
Ubisense offers the best-in-class location platform, which includes hardware tags and sensors that connect via UWB radio signals. The tags are used to pinpoint the exact location and identity of assets in the manufacturing process – these could be tools, products, components or any item of significance. The tagged objects can be traced with exceptionally high reliability and accuracy, and tools can be automatically controlled to streamline operations and radically reduce wasted time.

THE INTELLIGENCE ENGINE
The Ubisense Intelligence Engine is a robust, real-time data warehouse that stores and processes the information from Ubisense hardware alongside data from existing business systems. By rapidly interpreting this multi-source data, Smart Factory delivers powerful insights and critical operational understanding. The platform includes a range of application modules specifically created to support manufacturing scenarios, and provide seamless connectivity between objects, equipment and people, so that production happens faster and with fewer errors.

SMART FACTORY ARCHITECTURE
Smart Factory can be configured to expand value across a wide range of operations.
POWERFUL FEATURES

Smart Factory is the only location intelligence solution that was built from the ground up specifically to overcome challenges in the manufacturing assembly process. The powerful features of the Smart Factory system include:

- Highly reliable, automatic, adaptive asset identification
- Precise real-time location and spatial-monitoring
- Automatic tool configuration and poke-yoke, anywhere
- Virtual Factory modelling
- Powerful real-time searching capabilities
- Real-time alerting
- Granular current and historical status reporting
- Process performance and analytics
- Seamless integration with existing plant systems and devices
- Browser based mobile technology
- Scalable deployment.

NEXT STEPS

Our experienced team of consultants will help manage the Smart Factory implementation process so that it causes minimal disruption to your organization. Often Smart Factory either integrates or replaces traditional identification and location systems (such as barcode scanning). Ubisense will prepare a tailored installation proposal for Smart Factory, uniquely configured to your environment.

To find out more about Ubisense Smart Factory, email us at sales@ubisense.net

www.ubisense.net