



How an **Industrial Control System** Delivers Operational Success

▶ **Begin**



Change is the new constant

In little more than a generation, the digital revolution has transformed the way we live.

Stop for a moment and consider...

Do you need to share important information in minutes instead of days?

No problem. Today, we have email.

Do you want to play chess with a friend who lives on the other side of the globe?

The internet makes it possible - in real time.

Truly, digital technology has fundamentally altered our world.

Nowhere has its impact been felt more keenly than in the modern manufacturing environment. Human Machine Interface (HMI) has evolved at an astonishing pace since the beginning of the 21st century, allowing companies of all sizes, across all industries, to realize new levels of agility, efficiency, visibility and security.

Today, the Industrial Internet of Things (IIoT) is being leveraged on plant floors around the world to exponentially improve scheduling, workflow management, quality control, machine downtime and capacity.

Standing at the vanguard of this remarkable revolution is the ASEM™ family of smart manufacturing products, the latest in a long line of innovative breakthroughs from Rockwell Automation.

ASEM was purpose-built with one clear goal in mind: improve productivity by leveraging The Connected Enterprise®.



The **new face** of production

At the heart of the modern manufacturing execution paradigm is the Industrial Control System (ICS). By integrating machines, software, hardware and humans, companies that make and sell the goods that drive our global economy can achieve new levels of efficiency.

The key that has unlocked this new gateway to efficiency is digital technology. Hardware and software applications work seamlessly in concert with the production line to provide real-time feedback to operators, effectively turning data into actionable information. These insights can be regularly analyzed to transform process into profit.

Problems that used to take weeks, or sometimes months, to fix can now be remedied in just hours or even minutes. By interfacing directly with Enterprise Resource Planning (ERP) and Manufacturing Operations Management (MOM) systems, a state-of-the-art ICS can significantly reduce labor costs, minimize machine downtime and provide vital predictive analytics that help managers identify potential “rocks in the road” before they become barriers to productivity.

While these systems have, in one form or another, been in use for decades, only recently have they come to be widely viewed as vital in maintaining a competitive advantage. The reason is simple: in today’s rapidly evolving world, decision-makers understand that standing still is the same as moving backwards.

Still, despite the abundant potential that a holistically integrated ICS offers to modern manufacturing, many companies have not yet clearly seen the opportunity.

Rockwell Automation was born to help to you connect vision with reality.

All Industrial Control Systems are not created equal

Rockwell Automation has been in the business of improving the way manufacturing works since 1903. The Allen-Bradley® ASEM 6300 family of open architecture PCs, thin clients and monitors is the latest in a long line of revolutionary breakthroughs that have helped our clients win in the marketplace.

While the hardware and software components are both designed and engineered to be compatible with an existing legacy system, the real power of ASEM is realized when our industrial PCs and thin clients are working in concert with FactoryTalk® View and ThinManager® software.

The driving concept behind the ASEM family of products is to connect humans with machines and content, intuitively and securely. It is designed to provide unsurpassed control at every level and can be customized to meet the needs of virtually any company in any industry.



SEEING IS BELIEVING: ASEM CHANGES HOW COMPANIES LOOK AT PRODUCTIVITY

In manufacturing, the operator's workstation is where the rubber meets the road. ASEM 6300 takes control systems to a new level of reliability, flexibility and visibility. Typical failure points, like fans and connectors, have been reimagined or eliminated to improve machine life and drastically reduce downtime. ASEM screens offer crystal-clear resolution and are rugged enough to meet even the most demanding production environments.

FACTORYTALK VIEW: THE NEW LANGUAGE OF EFFICIENCY

With production hardware and software integration tools that let operators access the information they need and support new technologies, FactoryTalk View makes it possible to deliver the data required to make faster and better decisions. From a single workstation up to a complex distributed system, FactoryTalk View is the battle-tested solution that plays a vital role in helping many of the world's most successful companies compete and win – every day.

THINMANAGER: THE BRAINS OF THE OPERATION

Delivering relevant content to the right people – safely and securely – is at the core of any successful company's manufacturing execution system. ThinManager provides an elegant, centrally administered solution that is both easy to use and highly customizable. With ThinManager, HMI terminal replacement time is typically measured in minutes or seconds, rather than days or hours. The Rockwell Automation® Relevance® technology adds off-site connectivity, anywhere and anytime, with the highest level of location-based user and device security.

Rock-solid performance – today, tomorrow and into the future

ASEM hardware, software and monitors are each designed to be interoperable with your existing legacy technology. However, the true power of the ASEM solution expands when deployed as an integrated, end-to-end suite of products.

Maintenance and support are simplified, upgrades are easier to install, scalability is not an issue and long-term cost of ownership is lowered.

At Rockwell Automation, we understand that uncertainty about the implementation process is often a key barrier for our partners when they are weighing the decision to institute a new approach on the production line. That is why every relationship begins with an in-depth assessment of your current situation and a detailed discussion about your vision for the future. Together we will create The Connected Enterprise, a foundation that can grow as you do.



System features are 100% driven by plant floor solutions

In the manufacturing technology space, it is easy to fall into the “engineering for the engineer” trap. At Rockwell Automation, we have always embraced a different approach when developing solutions for our partners. First, we listen to your concerns. Next, we consider how the problems at hand can best be addressed. Then, we develop an ICS that meets your specific needs.

ASEM 6300 combines with ThinManager and FactoryTalk View software to optimize HMI productivity in virtually any production environment. Our integrated suite of tools yields several tangible benefits:

- FactoryTalk View software incorporates faceplates that dramatically reduce the time it takes to create an application. They can also be customized for a specific item, stored in a library and reused in other apps.
- Coming soon – Long Distance (100 meters) HDBaseT Ethernet connectivity capabilities, for production floors with a large footprint or diffuse workstations.
- ASEM thin clients are ThinManager ready, for the optimal plug and play experience. It takes only a few minutes for the initial setup, and replacement can be done in just seconds should the need arise.
- ASEM PCs can run applications locally booting into the installed operating system or can leverage PXE boot functionality to connect to ThinManager. This flexibility allows you to pull from a common stock of spare PCs to support thin clients or PCs running applications locally in the rare case where you need to replace either one.
- ASEM PCs will be performance matched with FactoryTalk View software, to take the guesswork out of what you need to purchase.
- The Rockwell Automation Configure to Order process provides thousands of PC combinations, with thousands more slated to come online soon. This means that you don't have to settle for an “off the rack” solution.
- A single FactoryTalk View SE version 11 license supports multiple client devices. This yields a lower cost per station when leveraging vital capabilities like MultiSession™, Virtual Screens™, Multimonitor™ and for system redundancy, RDS Instant Failover protection (RDS high availability).
- For users that have IoT Edge applications or solutions using Microsoft® Azure® IoT hub, FactoryTalk Analytics™ Edge Gateway provides a method to collect information and send it to a Microsoft Azure IoT hub.
- 24/7/365 visibility, both remote and on-site, allows you to manage a plant more securely through access to information whenever and wherever you need it.



It's all about the **bottom line**

We understand that implementing a sophisticated control architecture represents a significant capital outlay to any manufacturing company. However, with the help of Rockwell Automation, your "cost" can be rapidly transformed into an investment.

Smarter machines and The Connected Enterprise create a secure pathway that leads from raw data to analytics and optimization, from actionable intelligence to new business and revenue streams.

HARDWARE + SOFTWARE + PEOPLE: ENABLING A SEAMLESS CONNECTION

ASEM is built on the same two simple philosophies that have made us a global leader in factory automation. First, a belief that continuous improvement is the key to long-term success. Second, an ingrained understanding that we must always operate not as a vendor, but as a partner.

We invite you to engage with one of our Technical Consultants to identify an ASEM product that's optimally matched to your unique application.

The digital revolution has transformed the face of manufacturing.





Rockwell Automation is proud to transform your Connected Enterprise into a success.

The **complete view** is waiting for you

LEARN MORE

Additional resources:

- ▶ [Locate your local Allen-Bradley distributor](#)
- ▶ [Locate your local Rockwell Automation sales office](#)

Connect with us.    

rockwellautomation.com

expanding **human possibility**[®]

AMERICAS: Rockwell Automation, 1201 South Second Street, Milwaukee, WI 53204-2496 USA, Tel: (1) 414.382.2000, Fax: (1) 414.382.4444

EUROPE/MIDDLE EAST/AFRICA: Rockwell Automation NV, Pegasus Park, De Kleetlaan 12a, 1831 Diegem, Belgium, Tel: (32) 2 663 0600, Fax: (32) 2 663 0640

ASIA PACIFIC: Rockwell Automation, Level 14, Core F, Cyberport 3, 100 Cyberport Road, Hong Kong, Tel: (852) 2887 4788, Fax: (852) 2508 1846

Allen-Bradley, ASEM, The Connected Enterprise, expanding human possibility, FactoryTalk, FactoryTalk Analytics, MultiMonitor, MultiSession, Relevance, Rockwell Automation,

ThinManager and Virtual Screens are trademarks of Rockwell Automation, Inc.

Azure and Microsoft are trademarks of Microsoft Corporation.

Trademarks not belonging to Rockwell Automation are property of their respective companies.

Publication 6300-BR002B-EN-P - February 2022 | Supersedes Publication 6300-BR002A-EN-P - April 2021

Copyright © 2022 Rockwell Automation, Inc. All Rights Reserved. Printed in USA.