

ABI RESEARCH COMPETITIVE RANKING

MES SOFTWARE: PHARMACEUTICAL, BIOTECH, AND CELL & GENE THERAPY MANUFACTURING

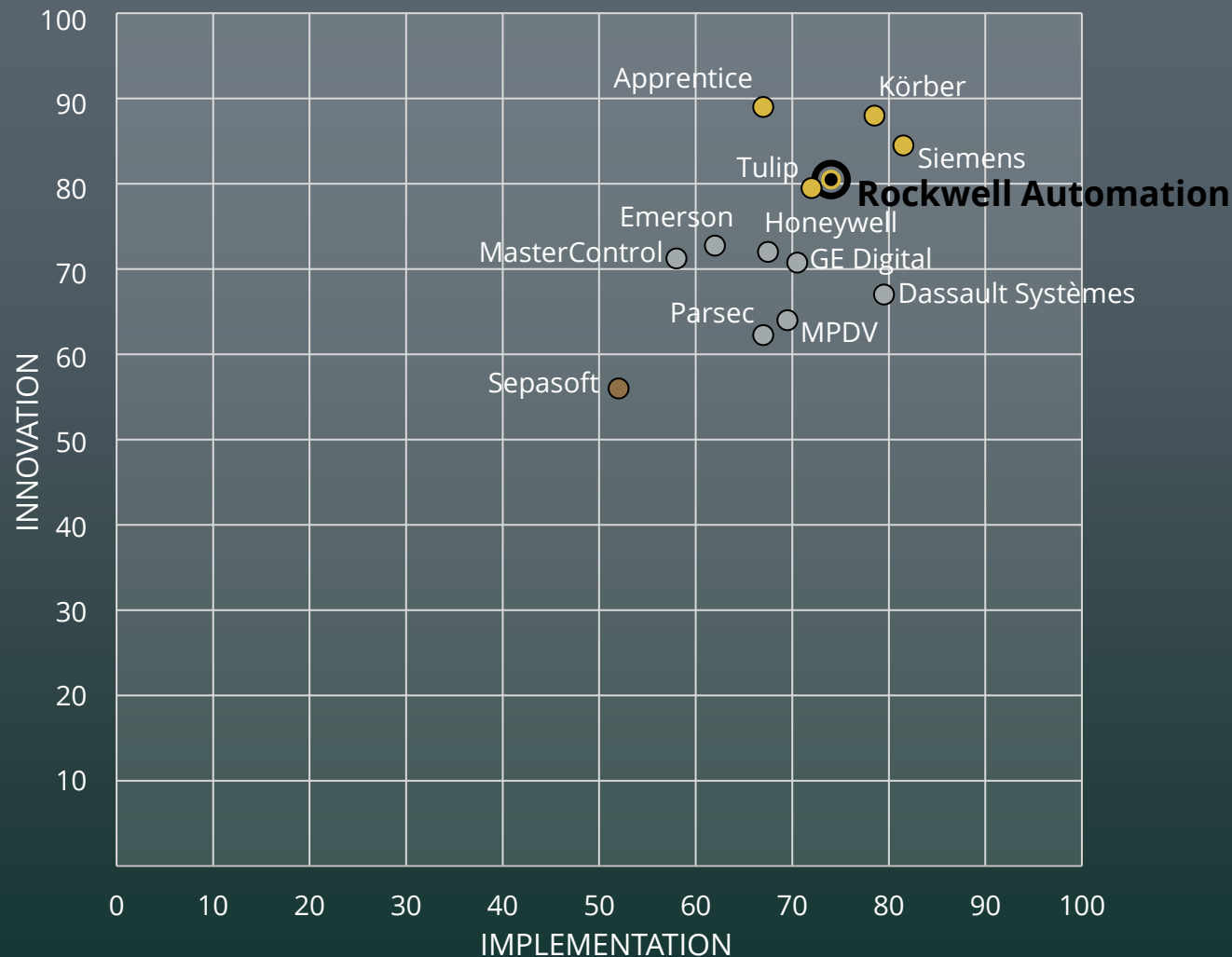


OVERALL: 77.3 | INNOVATION: 80.5 | IMPLEMENTATION: 74.0 | RANK: 4



ROCKWELL
AUTOMATION
INNOVATION
VERSUS
IMPLEMENTATION
MATRIX

OVERALL: 77.3 | INNOVATION: 80.5 | IMPLEMENTATION: 74.0 | RANK: 4



INNOVATION



INNOVATION
SCORE: 80.5



FactoryTalk® PharmaSuite® from Rockwell Automation offers manufacturers a strong solution that helps meet strict regulatory requirements, ensuring that production matches the recipe definition and has eBR as proof of compliance. It is currently a more traditional MES solution that is delivered on-premises and designed to meet the specific manufacturing and regulatory requirements of the complex pharmaceutical process. The company's entire MES portfolio is developed according to TÜV-certified IEC62443 processes that embed security in the software design lifecycle, ensuring everything reasonably possible is done to cyber harden and secure data integrity, a key essential for pharmaceutical manufacturers. While not a cloud product, FactoryTalk PharmaSuite can leverage cloud-based components of the Rockwell Automation cloud-native complementary MES solution, Plex, including functionality such as demand and supply planning, quality management, and asset performance management. Finite Scheduler is a prime example of innovative new functionality that customers can access through Rockwell Automation, an AI-powered forecasting and scheduling application that builds predictive models of what the production process will need, ensuring smooth manufacturing flows and minimizing downtime.

Customers have access to low/no-code graphical recipe editors that use real-time consistency checks to ensure high-quality production process and compliance. These recipes can be version-controlled, templated, and pre-qualified as reusable building blocks for future products, speeding time to market. Furthermore, the product can be extended and customized in pro-code ways if required by the customer.

FactoryTalk PharmaSuite is designed around role-based user experiences covering the full production lifecycle. These are designed to make each persona as productive in their role as possible, with key roles including the shop floor operator, inventory managers, recipe designers, and quality assurance operators. The adaptive User Interface (UI) is created for all devices, allowing easy integration with manufacturers' shop floor architecture. The ease of embedding FactoryTalk PharmaSuite does not stop there, with the software providing comprehensive export mechanisms that replicate production databases, allowing customers to leverage third-party reporting, dashboarding, and business intelligence products. Rockwell Automation also provides strong analytics software as part of its enterprise software portfolio that can augment the company's MES solution, FactoryTalk® Analytics™.

The pharmaceutical-focused MES provides a wide range of market-specific functionality, including the capability to track cold chain production processes with thermosensitive materials, with the software stopping the use of input materials that do not have enough time out of refrigeration left to complete production, significantly reducing the chance of product scrap, and increasing first-pass quality.

IMPLEMENTATION



**IMPLEMENTATION
SCORE: 74.0**

Despite the on-premise design of FactoryTalk PharmaSuite, Rockwell Automation maintains very competitive deployment times in the MES market, due to the company's significant experience in deploying the solution across a wide range of customers. The software provides customers with a range of pre-configured libraries for pharmaceutical manufacturing functionality, including EBR, weighing & dispensing, and equipment tracking automation. The solution's OOTB capabilities do not stop there, deploying with a wide range of standard reports that can be easily extended by customers.

The company provides customers with typical integration patterns as templates to reduce integration efforts and costs. The leading position of Rockwell Automation in the automation market gives it incredibly strong experience with implementing software solutions alongside automated equipment.

CONCLUDING REMARKS



This dedicated pharmaceutical MES solution by Rockwell Automation provides an excellent range of functionality to manufacturers, all supported by the company's significant deployment experience in the market vertical. As the company further integrates the Plex platform into its FactoryTalk® solution, the software increasingly benefits from innovative cloud-based capabilities such as the AI augmented Demand Caster, reinvigorating the on-premises and heavily customized solution. FactoryTalk PharmaSuite retains the MES experience that many pharmaceutical manufacturers would expect, making Rockwell Automation an excellent solution partner for customers seeking a highly controlled approach to their digital transformation agendas.

VENDOR MATRIX

Methodology: After individual scores are established for innovation and implementation, an overall company score is established using the Root Mean Square (RMS) method:

$$\text{Score} = \sqrt{\frac{\text{innovation}^2 + \text{implementation}^2}{2}}$$

The resulting overall scores are then ranked and used for percentile comparisons.

The RMS method, in comparison with a straight summation or average of individual innovation and implementation values, rewards companies for standout performances.

For example, using this method, a company with an innovation score of nine and an implementation score of one would score considerably higher than a company with a score of five in both areas, despite the mean score being the same. ABI Research believes that this is appropriate as the goal of these matrices is to highlight those companies that stand out from the others.

RANKING CRITERIA

Leader: A company that receives a score of **75 or above** for its overall ranking

Mainstream: A company that receives scores **between 60 and 75** for its overall ranking

Follower: A company that receives a score of **60 or below** for its overall ranking

Innovation Leader: A company that receives a score of **75 or above** for its innovation ranking

Implementation Leader: A company that receives a score of **75 or above** for its implementation ranking



INNOVATION CRITERIA

- **Product Capabilities:** What unique features does the MES solution offer? Does it include AI functionality? Does the solution effectively set itself apart from competitors?
- **Data Visibility, Accessibility, and Security:** Is the software available over the cloud? Is it cloud native? Can data be remotely leveraged and be viewed across plants to support enterprise-wide collaboration? Is the data contextualized to meet different user needs within the organization? Does the solution meet and exceed required security standards such as ISO 27001 and IEC 62443?
- **User Experience and Worker Augmentation:** Does the software have low/no-code functionality? Can customers generate comprehensive reports? Can screens be customized to be operator specific, showing only relevant information to the user? Does the MES have an embedded AI chatbot to support workers?
- **Building a Digital Thread:** Is there an extensive enterprise software ecosystem or portfolio to support the MES software?
- **Manufacturing Vertical Expertise:** How well does the MES software align with the pharmaceutical manufacturing market? Does it effectively support manufacturers' regulatory and compliance needs?



IMPLEMENTATION CRITERIA

- **Bookings and Customer Base:** How many global installations does the vendor support? How many different customers does the vendor have? Does the vendor demonstrate a growing customer base?
- **Time to Value:** How much of the solution can be accessed OOTB? Does the software allow for easy and rapid scalability? Can the solution be deployed as a SaaS? Does it have comprehensive integration capabilities?
- **Partnerships:** Does the software vendor work extensively with System Integrators (SIs) and market partners? Does it have any notable AI-focused partnerships?
- **Support for SMEs:** How well does the company's solution effectively support smaller-scale manufacturers?
- **Pricing Options:** Does the solution have a modular design? Is the software accessible through a digital marketplace? Does the software vendor offer value-based pricing?



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