

MOMENTUM eSIM WES-ENABLED SIMULATION AND EMULATION

DRIVE ONGOING IMPROVEMENTS

By enabling you to run “what-if” scenarios specific to your operation, Momentum eSim delivers higher efficiencies when facing challenges like these:

- Peak season volume variability
- Changes in demand patterns and product mixes
- Your operation’s ability to handle extra capacity
- Changes in staffing levels
- Disruptions and breakdowns

REDUCE YOUR OPERATION’S RISK AND ENHANCE PRODUCTIVITY

Many logistics operations recognize the need to increase efficiency in order to keep up with exploding e-commerce, tighter standards from customers and increasing consumer expectations. Yet many refrain from essential upgrades, demand more from equipment, and make inefficient resource choices due to fear of making the wrong decisions.

When your performance is on the line, simulation and emulation can offer significant competitive advantages — both before and after go-live — that reduce your risk, increase accuracy, minimize delays, and maximize your efficiency. While these capabilities are often available when commissioning a new project or working with an outside consulting service, they’ve historically been out of reach for operations that want to run simulations of their own.

HIGH-ACCURACY SIMULATION AND EMULATION AT YOUR FINGERTIPS

Momentum eSim, available as an add-on to the Momentum warehouse execution system (WES), is a simulation and emulation tool that creates a digital replica of your automated material handling equipment (MHE) and software. This powerful resource provides you with an end-to-end, integrated view of your distribution center (DC), the ability to run multiple “what-if” scenarios, plus ongoing predictive analyses of your systems and labor. In addition to proactively monitoring your operation and potentially detecting problems before they cause costly downtime, eSim provides valuable insights about how your DC is functioning and actionable suggestions for improvement. Further, by enabling you to run countless scenarios on your own, eSim provides valuable insights about potential operational improvements — without putting your current processes, equipment or productivity at risk.

By combining the benefits of simulation (digitally approximating the behavior and performance of systems) and emulation (using machine control code or other software to control digital replicas of physical equipment), eSim enables you to achieve higher productivity goals and decrease waste, all while meeting the challenges of the future.

KEY FUNCTIONALITIES

- Simulation and emulation tool that creates a digital replica of automated MHE and software
- Scenario planning and “what-if” analysis
- System throughput validation
- Layout optimization
- Development and commissioning
- Software testing
- Regression testing for production deployments
- Troubleshooting
- Integration and volume performance testing
- Resource planning
- System optimization and maintenance
- Retrofit, modification and enhancement assessments
- Intuitive visualization
- Comprehensive dashboards and reports
- Fully tested communications, integrations and messaging for MC4, PLC, ICW and WES
- Interactive training tool

BENEFITS

- Run countless scenarios on your own at any time
- Validate performance *before* implementation
- Design for maximum productivity
- Make confident, data-driven buying decisions
- Align stakeholders on proposed solutions
- Seamless upgrades and modifications
- Build foundation for future enhancements
- Seamless software/hardware communication
- Reduce risk of negative impacts from software changes
- End-to-end software integration
- Pressure-test the system without risking costly operational breakdowns
- Predict maintenance needs proactively
- Accurately manage resourcing needs
- Easily train new hires and existing staff, increasing training efficiency by 10%
- Boost throughput rates
- Shorten fulfillment cycles
- 2 to 3% less overstaffing
- 3 to 5% reduction in unplanned downtime
- Future-proof your operation
- Optimization never stops

REDUCE RISK, MINIMIZE DELAYS, AND IMPROVE TRAINING

With Momentum eSim, you'll have a clear understanding of how your systems will work — and what quantifiable performance improvements they will deliver — *before* you begin any physical installation. Working out the details in a virtual environment enables on-time project deliveries and successful deployments through software validation, integration testing and commissioning.

Further, eSim allows the creation of interactive training tools that enhance employee performance. Using virtual reality (VR) visors in a virtual environment, associates can master picking, sorting, goods-to-person (GTP) station activities, quality control (QC) and more, prior to working on the floor. This saves time and prevents costly mistakes. eSim can also be used to create virtual training to teach current employees new functions on existing equipment, refresh skills, become familiar with new machinery or processes, or acclimate to a new facility layout.

Honeywell Intelligated

+1 866.936.7300

info@intelligated.com

sps.intelligated.com

Follow us on Twitter: <https://twitter.com/intelligated>

Learn more on YouTube: [Honeywell Intelligated](https://www.youtube.com/intelligated)

WESEF | 08.21

© 2021 Honeywell International Inc.

THE
FUTURE
IS
WHAT
WE
MAKE IT

Honeywell
Intelligated