



FROM TRADITIONAL OPERATIONS TO REAL-TIME INSIGHTS:

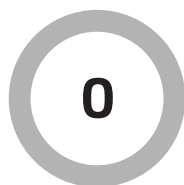
How a Global Electronics Team Turned MES Data into Actionable Intelligence with Arch + Aegis ARIA Solution

A global electronics manufacturer partnered with Aegis Software and Arch Systems to unlock new value from an existing FactoryLogix® Manufacturing Execution System (MES) deployment without any new machine connections.

Using ARIA™, the joint AI-powered solution from Arch and Aegis, the team at a Central American factory site rapidly transformed existing MES data into actionable intelligence. Operators enthusiastically adopted Arch's React module by submitting simple, one-line comments in Spanish that ARIA automatically mapped to corporate-standard downtime codes in English.

The multilingual workflow made it easy for operators to report issues in their own words, while still giving the team real-time visibility into the reasons for lost throughput. It sped up resolution and set the stage for broader continuous improvement powered by contextual MES data and AI.

HIGHLIGHTS



Zero new machine connections required to launch ARIA



80%+ of downtime events automatically labeled



Multilingual comment-to-category Artificial Intelligence (AI) accelerates adoption across shifts



Throughput improvement driven by faster root cause identification and resolution

FACTORYLOGIX: MANUFACTURING EXCELLENCE DIGITIZED



Active Rules Engine



Manufacturing Intelligence



Regulatory & Customer Compliance



Lean Materials Management



Adaptive Planning



Quality Management System



Digital Manufacturing Engineering



Manufacturing Execution System



RMA/MRO



IIoT/Connectivity



The Challenge

Unlocking value from MES data required overcoming several barriers:

- **Unlocking deeper insights from MES data:** While FactoryLogix® provided comprehensive real-time process and production data, the team needed a way to capture and translate operator input into downtime-specific insights that could drive immediate action.
- **Training complexity:** Downtime labeling required familiarity with technical reason codes, limiting operator participation.
- **Infrastructure limitations:** No new hardware or connections could be added, making a low-friction solution essential.



The Approach

Through ARIA, Arch and Aegis delivered a unified, practical solution:

- **Plug-and-play MES integration:** The ARIA bridge connected directly to FactoryLogix®, pulling job and quality data via API.
- **Operator-friendly AI workflow:** Operators typed short Spanish comments into Arch React, which ARIA translated and categorized automatically.
- **Seamless deployment:** The joint solution required no production downtime or IT infrastructure changes.

Key Outcomes



Rapid AI Adoption with Multilingual Ease-of-Use

Operators quickly embraced the workflow of typing 2–10 word Spanish comments to describe downtime. ARIA's multilingual AI translated these into structured root causes in any language, delivering consistent data quality with minimal training.



Real-Time Insights Drive Throughput Gains

With clean downtime categorization and visualized trends, the plant team identified micro-stoppages and bottlenecks that were previously hidden. Resulting actions helped improve Units Per Hour (UPH) and reduce lost units per shift.



Fast, Scalable Rollout—No Additional Infrastructure

All data flowed directly through the MES and ARIA bridge. No new machine connections were needed, and the system began delivering insight within days, positioning the site for future modules such as Action Manager and Predictive Quality.

Strategic Lessons

- **AI accelerates impact from existing MES investments:** ARIA revealed real-time value in data the team already had.
- **Simplicity drives usage:** Short operator comments—no training, no menus—enabled consistent adoption.
- **Multilingual support breaks barriers:** Spanish-language inputs mapped to corporate English standards ensure global alignment.
- **Clean data enables continuous improvement:** With unclassified downtimes driven to less than 20%, teams could confidently act on real issues.
- **Partnership powers performance:** The Arch + Aegis collaboration delivered an integrated solution greater than the sum of its parts.

The logo for ARIA, featuring the word "ARIA" in a blue, sans-serif font with a trademark symbol.

About Aria

Aegis Software and Arch Systems' joint offering, ARIA™, Automated Real-time Improvement Accelerator, is an unprecedented AI solution expertly designed to guide and empower manufacturers with insightful actions and autonomously implement those actions through FactoryLogix® directly on the shop floor. ARIA initiates improvements and monitors the effectiveness of these actions, ensuring a comprehensive approach to continuous improvement. This solution expedites the cycle of continuous improvement beyond what is possible with best-in-class processes and people alone. ARIA seamlessly combines Arch Systems' prebuilt "Intelligent Actions" with the contextualized data and ability to affect change on the shop floor via Aegis' FactoryLogix MES solution, paving the way for predictive, data-driven manufacturing.

The logo for AEGIS SOFTWARE, featuring the word "AEGIS" in a bold, black, sans-serif font with a red square icon containing a white arrow pointing up and to the right, and the word "SOFTWARE" in a smaller, black, sans-serif font below it.

About Aegis

Founded in 1997, Aegis Software uniquely delivers a comprehensive and flexible end-to-end manufacturing operations management platform giving manufacturers the speed, control, and visibility they require. Aegis has international sales and support offices in Germany, UK, and China and partners with more than 37 manufacturing equipment suppliers. Since its inception, Aegis has been helping more than 2,200 factories across the military, aerospace, electronics, medical, and automotive industries drive rapid and continuous innovation with the highest quality while reducing operational costs. Learn more by visiting www.aiscorp.com.

The logo for ARCH SYSTEMS, featuring the word "ARCH" in a bold, blue, sans-serif font with a blue diamond icon containing a white arrow pointing up and to the right, and the word "SYSTEMS" in a smaller, blue, sans-serif font below it.

About Arch

Arch Systems transforms factory intelligence with AI-driven solutions that help manufacturers optimize operations, reduce downtime, and maximize efficiency. Purpose-built for factories by manufacturing and data experts, Arch AI acts as an expert copilot—reading dashboards, synthesizing data, and delivering real-time, prescriptive guidance to operators, engineers, and executives without costly infrastructure overhauls. By leveraging AI to unlock insights from existing factory systems, Arch enables manufacturers to scale expertise, improve critical KPIs, and drive measurable impact on the shop floor.

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