Maximize your engineered solutions with a trusted partner.
System performance defines your reputation.

As an Engineered Solutions Provider (traditionally referred to as an Original Equipment Manufacturer or OEM), your technology solutions are the foundation of today’s industrial manufacturing infrastructure. But producing high-quality solutions for your end users requires reliable, secure, and technologically advanced products and a keen ability to deal with challenges that aren’t always easy to overcome. The most prevalent of these challenges are highlighted below.

Challenges Facing Engineered Solutions Providers

**Technology**
- Trouble keeping pace with the latest innovations
- Changing market and business expectations
- Maintaining overall equipment effectiveness (OEE)

**Financial**
- Difficulty gaining new customers
- Excessive/burdening engineering practices
- Lack of differentiation and high cost

**Security**
- Protecting IP
- Navigating cybersecurity threats
- Avoiding equipment failure on large projects

**Suppliers**
- Working with fewer suppliers to reduce cost
- Working with different suppliers around the world
- Dealing with fluctuating supplier prices

With increased technological complexity, it’s becoming difficult to differentiate among competitors, manage shrinking budgets while demand increases, and avoid risk factors that can hinder your ability to provide and deploy reliable equipment to end users.
Collaboration and automation are the keys to innovation.

As an Engineered Solutions Provider, you’re continually looking for innovative and efficient ways to meet and exceed your end users’ goals and expectations. Whether it’s specific flow rates, operator interface points, or precise components, there’s a good chance that virtually every project you work on is different from the last.

This variability presents an opportunity—an opportunity to not only automate your processes to gain efficiencies, but to work with a trusted and reputable service partner that provides your organization with reliable, state-of-the-art technologies that you can leverage when deepening your end user relationships and attracting new business partners.

In the examples on the following page, you’ll see how past Emerson business partners have been able to leverage our broad portfolio, deep expertise, and commitment to quality products and relationships to help other Engineered Solutions Providers achieve progress.

### Turbomachinery manufacturer develops shaft-bow detection algorithm

**CHALLENGE:** Increase reliability of systems during cold-roll startup and configure alerts at various rotor speeds for corrective action.

**SOLUTION:** Emerson’s AMS 6500 Vibration Monitoring technology was integrated with over 200 turbines to detect shaft bow deviations and provide real-time insight into equipment conditions.

**RESULT:** Equipment health degradation is now detected earlier to ensure maximum uptime and more proactive asset maintenance and troubleshooting.

### Mining manufacturer improves electric rope shovel monitoring

**CHALLENGE:** Ensure reliable monitoring and relevant data availability of planetary gear boxes and drives over difficult networking environments.

**SOLUTION:** Emerson’s PeakVue, AMS 6500, and Machinery Manager software was used to zone-in to machine fault conditions and provide adaptive monitoring using predicates.

**RESULT:** The manufacturer was able to ensure a single-source supply to numerous pieces of mobile equipment and expand the solution to other assets at the mine site for increased leverage.

### Oil and gas equipment manufacturer optimizes hydrogen filling stations

**CHALLENGE:** The equipment manufacturer needed to widen the flow range of its hydrogen filling stations specifically for heavy duty and smaller vehicles while looking to lower cost on key components and maintenance due to job site issues.

**SOLUTION:** The manufacturer worked with Emerson to implement a single meter to fit all of its filling stations while establishing tiered pricing with a global frame agreement.

**RESULT:** The manufacturer was able to save on maintenance costs, transaction costs per orders placed, and ultimately win more business from additional end users.
The Engineered Solutions Provider Program and Workshop

Emerson’s Engineered Solutions Provider program simplifies and accelerates the evaluation of new technologies, providing insight into the measurable impact of those investments. This puts you on the path toward streamlining your projects and operational needs for short-term impacts and long-term rewards, including:

- Single point of contact to manage your relationship with Emerson and drive it to the next level
- One agreement
- Streamlined and predictable order entry and execution
- Reliable and repeatable delivery and support everywhere you and your customers are all over the world
- Cost effectiveness by way of purchase prices and our streamlined supply chain
- Tools to help you embrace self-sufficiency to select and price the right products for your application
- Purchase price incentives

Engineered Solutions Workshops

As part of our Engineered Solutions Provider program, Emerson has developed a Engineered Solutions Workshop — a collaborative forum in which Emerson experts partner with yours to define the best approach for the automation and digitalization of your technology platform. These sessions include performance metrics and requirements definitions, an introduction of application-specific technology options, technology pilots, and more.

Recommended workshop participants

- Technology leaders
- Application experts
- Engineering managers
- Project engineers
- Business development specialists
- Emerson executive sponsor
- Emerson industry experts
- Emerson subject matter experts

Workshop methodology: A pathway to performance

- Conduct pre-workshop fact finding exercises
- Define measurable business impacts for end users — and add value to your solution
- Learn more about all relevant Emerson market solutions
- Define pilot technology evaluation projects
- Align key executive stakeholders
- Uncover strategies to keep cost competitive
- Explore digital tools to specify, configure, and price the products you need
- Optimize designs to lower cost, build in reliability, make your solution IIoT-enabled, and eliminate overhead
- Establish actionable problem-solving techniques
- Stay current with end-user technology expectations
- Deepen factory support relationships
- Conduct post-workshop status checks

By recognizing your current challenges and partnering with an expert that specializes in technical selection and optimization, you’ll be better equipped to determine a plan of action and turn risk into reward.
Accelerate ROI, optimize production, and harness the digital revolution.

Leveraging a broad portfolio for your engineered solutions is only half of the equation. With rapidly changing technology landscapes, you need to ensure that the technology choices you make are reliable, easy to integrate and support, and bring you an advantage. That’s where partnership becomes critical, and Emerson’s expertise can deliver predictable success through key initiatives and solutions outlined here.

Restore confidence in project time and cost predictability with Project Certainty

Combine innovative technology and engineering tools to lower your project costs, improve schedule reliability, and respond to end user change requests effectively.

Safely optimize performance for end users to differentiate from your competitors

Help your end users achieve Top Quartile performance, and unlock additional performance data and service revenue streams for your company by using pervasive sensing and analytical software technologies independent of end-user systems.

Emerson’s Plantweb digital ecosystem is a highly secure, scalable and comprehensive portfolio of interoperable technologies, software and services that enable significant performance gains by liberating actionable information from data-rich plant environments and delivering it to relevant personnel in real time for enhanced operational performance.

There are four foundational building blocks of the Plantweb digital ecosystem: data, connectivity, analytics, and services.

Data: Emerson’s Pervasive Sensing™ strategies are innovative sensing strategies that leverage existing measurement technology as well as newly developed sensors for cost-effective monitoring and optimization, enabling improved operational visibility to overcome existing and new challenges.

Connectivity: Secure First Mile™ connectivity comprises connectivity architectures that facilitate the secure transfer of plant data to the appropriate applications, services, or mobile users — the right solution for the right application.

Analytics: Plantweb Insight is a suite of Edge-computing applications with pre-configured analytics and browser-based dashboards that quickly provide asset-level actionable data, independent of installed control systems.

Plantweb Advisor consists of a suite of applications with customizable user interfaces to help translate data into action for improved site-wide decision making related to asset health, asset performance, and overall energy use. Additionally, DeltaV™ Mobile enables users to view real-time process data, historical trends, and alarms from multiple DeltaV systems and other key data sources. This IIoT-ready solution streamlines workflows by making it easier for managers and engineers to share relevant, critical information for enhanced business results.

Plantweb Optics is the new collaboration software application for managing asset health across the enterprise. Plantweb Optics combines the data from multiple applications into asset-centric information, then delivers persona-based alerts and KPIs for improving the reliability of your rotating equipment, instruments, and valves.

Services: Emerson offers a breadth of consulting capabilities and expertise to help customers develop and implement digital transformation strategies that leverage existing investments and enable Top Quartile performance. Additionally, Emerson experts monitor assets, interpret the results, and provide an actionable summary so that you can align your maintenance and operational response with your business strategy.
Access the industry’s most complete portfolio of technologies for process, hybrid, and discrete applications.

With a nearly 130-year reputation as a leader in providing technologies that drive better operational performance in control and asset management systems, measurement and flow instrumentation, final control devices, safety instruments, and more, Emerson’s portfolio is backed by deep technical experience and global services. These include over 5,000 project services and engineering personnel worldwide, 84 educational service locations, nearly 4,000 lifecycle services personnel, and 212 service centers spanning North and Latin America, Europe, Asia Pacific, and the Middle East and Africa.

When combined, the scope of Emerson’s industry-leading automation portfolio and services is well positioned to better serve your needs, no matter which industries you serve, where, or to what degree of complexity.

- The broadest range of measurement and analytical technologies for process clarity and insight.
- The systems and software that provide the decision integrity to run your operation at its full potential.
- Asset management solutions to improve availability, profitability, and safety.
- The widest range of lighting fixtures, electrical fittings, plugs and receptacles, controls, panelboards, and more.
- Control, regulate, and isolate your process with certainty using highly reliable technologies.
- With the broadest range of solenoid and pneumatic products, Emerson solutions are found in a wide array of industries and applications, from Oil and Gas to Packaging.
- Delivering best-in-class business and operations software maximizing profit and operational efficiency.
- Welding and cleaning solutions designed to meet the application needs of your manufacturing processes and laboratory environments.
World-class automation and operational improvement is just a call away.

For information on scheduling your own Emerson Engineered Solutions Workshop, learning more about the Engineered Solutions Provider program, or exploring Emerson technologies and services, visit Emerson.com/OEM-EngineeredSolutionsProvider.