



艾默生
值得信赖的自动化方案
合作伙伴

Emerson
Trusted Partner for Automation Solutions



关于艾默生

About Emerson

艾默生 (纽约证券交易所代码:EMR) 是一家全球性的工业技术与软件公司, 提供先进的自动化方案。凭借在智能设备、控制系统和工业软件领域的卓越产品组合, 提供自动化赋能和业务绩效优化的解决方案。艾默生充分融合创新技术与久经验证的卓越运营实力, 推动自动化发展的未来。

艾默生在中国的业务始于70年代, 业务总部设在上海, 本着“在中国、为中国”的一贯战略, 我们持续投资以提升本地化的研发、生产、工程及服务能力, 深入了解中国用户的行业挑战及应用需求, 通过创新的技术与理念, 服务广大用户。

Emerson (NYSE: EMR) is a global industrial technology leader that provides advanced automation. With an unmatched portfolio of intelligent devices, control systems, and industrial software, Emerson delivers solutions that automate and optimize business performance. Emerson combines innovative technology with proven operational excellence to power the future of automation.

Emerson started the business in China with technology partnership from the 1970s. The China headquarters is in Shanghai. With the "In China, For China" strategy, we have continuously invested to enhance local capabilities in research and development, production, engineering, and services. By gaining an in-depth understanding of the industry challenges and application needs of Chinese users, we serve a wide range of customers through innovative technologies and concepts.

18



生产、研发及系统工程中心
Manufacturing, R & D,
and System Engineering Sites

60+



现场服务覆盖城市
Field Service Coverage Cities

业务领域

Business Groups

软件与控制
Software And Control

AspenTech

AspenTech

控制系统与软件

Control Systems & Software

测试与测量

Test & Measurement

测量方案

Measurement & Analytical

智能设备
Intelligent Devices

最终控制

Final Control

离散自动化

Discrete Automation

安全与效率

Safety & Productivity

自动化的未来 - 无界自动化

The Future of Automation - Boundless Automation

艾默生的 Boundless AutomationSM无界自动化愿景致力于打造现代化的架构, 通过增强的企业运营平台, 帮助集成云、边缘和现场数据, 实现真正的数字化和业务转型。这一变革将打破数据孤岛, 释放数据和软件的力量, 进一步提升运营。

Emerson's Boundless AutomationSM vision for a modernized architecture will help integrate cloud, edge and field data to unlock true digital and business transformation through an enhanced enterprise operations platform. This evolution will break down data silos, liberate data and unleash the power of software to further enhance operations.



我们的目标 Our Purpose

我们推动创新，让世界变得更加健康、更加安全、更加智能，并更具可持续性。

We drive innovation that makes the world healthier, safer, smarter and more sustainable.

25



全球排名前25的生命科学企业使用艾默生技术
Of top 25 life sciences companies use Emerson technology

9



全球排名前10的半导体制造商使用艾默生技术
Of top 10 semiconductor manufacturers use Emerson technology

20%



全球发电企业的自动化采用了艾默生的控制系统与软件
Global power generation automated using Emerson control systems and software

~70%



全球液化天然气经由艾默生阀门输送
Amount of world's LNG flowing through Emerson valves

艾默生销售额与促进可持续性的技术相关联的比例*
Percentage of Emerson Sales Tied to Sustainability Enabling Technologies*

~70%

艾默生环境可持续框架 Emerson's Environmental Sustainability Framework



**绿色行动
GREENING
OF**

提升公司内部的环境可持续绩效
How we improve our own internal environmental sustainability performance



**绿色方案
GREENING
BY**

利用技术、解决方案和行业专长助力客户的可持续发展之路
How Emerson technologies, solutions & expertise enable customers' sustainability journeys



**绿色合作
GREENING
WITH**

加强与全球价值链伙伴之间的协作和创新
How we foster collaboration and innovation among our global value chain partners



控制系统与软件 Control Systems & Software

Ovation自动化平台

艾默生的Ovation专家控制系统是针对电力、水和废水处理行业安全运行的解决方案。艾默生五十年电力和废水处理专业知识与Ovation自动化技术的结合，形成一个可靠的、创新的且随着技术日新月异变化的平台，得以帮助提高工厂和设备的可靠性。我们最新的创新解决方案是Ovation智能框架，这是一个更高级别的软件编程环境，在这个环境中，多个可配置的数据源与专家系统策略和规则交互，以了解正常和异常的过程或设备行为，并在必要时采取适当的措施。

Ovation控制系统是与第三方信息系统和安全系统集成的理想选择。

主要产品

- Ovation专家控制系统
- Ovation数字孪生解决方案
- 艾默生工控安全解决方案PWCS-C
- Ovation机械健康振动监测
- Ovation发电机励磁方案
- Ovation企业数据解决方案
- Ovation机械改造
- Ovation全厂智能设备管理优化
- Ovation嵌入式视频解决方案
- 先进的电力应用优化软件
- 先进的水处理应用优化软件
- Ovation SCADA解决方案
- Ovation安全仪表系统
- Ovation虚拟化解决方案
- Ovation高性能控制室服务
- Ovation全生命周期服务

Ovation Automation Platform

Ovation™ Automation Technology: Advanced Solutions for Secure, Reliable Plant Operation in the Power, Water & Wastewater Treatment Industries. Emerson's five decades of power and water treatment expertise is embedded within Ovation automation technology to form a reliable and innovative platform that evolves with rapidly changing technology to help improve plant and equipment reliability. Our latest innovation, the Ovation intelligence framework, is a higher-level software programming environment in which multiple, configurable data sources interact with expert system strategies and rules to learn normal versus abnormal process or equipment behavior and take appropriate action if necessary.

It is ideal for integration with third-party information systems and safety systems.

Major Products

- Ovation Expert Control System
- Ovation Digital Twin Technology
- Emerson Cybersecurity Solutions PWCS-C
- Ovation Machinery Health Solutions
- Ovation Generator Excitation Solutions
- Ovation Enterprise Data Solutions
- Ovation Mechanical Retrofits
- Ovation Device Management Optimization
- Ovation Embedded Video Solutions
- Advanced Optimization Software for Power Applications
- Advanced Optimization Software for Water Treatment Applications
- Ovation SCADA Solutions
- Ovation Safety Instrumented Systems
- Ovation Virtualization Solutions
- Ovation High-Performance Control Room Services
- Ovation Lifecycle Services

DeltaV自动化平台

针对其它流程行业艾默生提供DeltaV控制系统及方案。其控制和安全系统、运营管理、企业集成与优化都基于**人性化设计**理念，旨在简化操作复杂性和项目风险，并优化工厂运营性能。DeltaV系统采用模块化架构，IO按需配置的**电子布线**技术具备出众的可扩展性，可以为您提供工程灵活性，帮助您降低项目成本并提高可靠性，实现项目确定性，按预算、按周期交付。DeltaV“数字化工厂”理念兼容多种工业协议，包括HART、基金会现场总线、无线技术、工业以太网、Modbus、OPC、Profibus等工业协议，并提供了嵌入式的先进控制。

基于安全回路理念SIL设计的DeltaV SIS遵从物理层隔离及安全控制独立的要求，同时支持HART，实现安全性和可用性的有效平衡。

艾默生同时提供基于系统的性能优化服务，包括基础控制和先进控制、规程自动化、报警管理、人性化设计的高性能人机界面以及数字双胞胎，旨在实现更好的控制以提高工厂运行的安全性、可靠性和盈利能力。

主要产品

- DeltaV数字控制系统
- DeltaV安全仪表系统
- DeltaV 批量
- Mimic数字孪生系统
- AgileOps数字化报警管理软件
- 高性能操作画面
- DeltaV Insight嵌入式回路监控和整定应用
- Entech高级分析、建模和整定工具
- 先进过程控制 (APC)
- 基于状态的控制 (SBC)
- 全生命周期服务

DeltaV Automation Platform

For process control in the other industries, Emerson offers DeltaV distributed control system. The **Human Centered Design** principles are integrated into control and safety systems, operations management, enterprise integration and optimization to simplify operational complexity and project risks, optimize plant operating performance. The scalable modular based DeltaV automation system with IO on Demand **Electronic Marshalling** technology provide you with engineering flexibility, help you reduce project costs and improve reliability, achieve project certainty, and deliver on budget and on schedule. The DeltaV "digital factory" concept is compatible with a variety of industrial protocols, including HART, Foundation fieldbus, wireless technology, industrial Ethernet, Modbus, OPC, Profibus and other industrial protocols, and provides embedded advanced control.

The DeltaV SIS designed based on the safety integration loop (SIL) concept complies with the requirements of physical layer isolation and safety control independence and supports HART to achieve an effective balance between safety and availability.

Emerson Performance Services based on control systems, including basic and advanced control, procedure automation, alarm management, advanced operator displays, as well as process simulation for optimal control to improve safety, reliability, and profitability of plant operations.

Major Products

- DeltaV Distributed Control System
- DeltaV SIS Process Safety System
- DeltaV Batch
- Mimic™ Digital Twin
- AgileOps™ Alarm Management Software
- Advanced Operator Displays
- DeltaV Insight™ Embedded loop monitoring and tuning application
- Entech™ Advanced analysis, modeling and tuning Tool
- Advanced Process Control (APC)
- State Based Control (SBC)
- Guardian



AspenTech流程行业资产绩效优化软件

艾默生通过战略控股艾斯本实现自动化与工业软件的深度融合,从而将引领高性能工业软件发展,为艾默生和AspenTech用户创造重大价值。

AspenTech资产绩效优化产品广泛应用于优化资产设计、运营和维护,覆盖工厂生命周期至关重要的复杂工业应用。AspenTech将40多年的工艺流程及生产计划过程建模专业知识与大数据机器学习相结合赋能工厂实现自主运营。

AspenTech专门设计的软件平台在整个资产生命周期中提供高回报,实现了知识工作的自动化,并建立起可持续发展的竞争优势。可以更大程度地延长工厂正常运行时间,提升绩效水平,更快、更安全、更长久、更环保地运行资产。

在艾默生为流程行业客户数字化工厂建设打造的“高度自动化”+“智能模型”的自主运营技术体系中,艾斯本的工业软件产品起到核心作用。

主要产品

- Aspen流程模拟软件
- Aspen混合模型
- Aspen公用工程能源规划
- Aspen模型在线工具
- Aspen先进过程控制
- Aspen生产实时数据平台
- Aspen数据湖
- Aspen多变量大数据分析挖掘工具
- Aspen设备预测性维护软件

AspenTech Asset Performance Optimization Software for Process Industries

Emerson's strategic acquisition of AspenTech has enabled a deeper integration of automation and industrial software that will lead the development of high-performance industrial software and create significant value for both Emerson and AspenTech users.

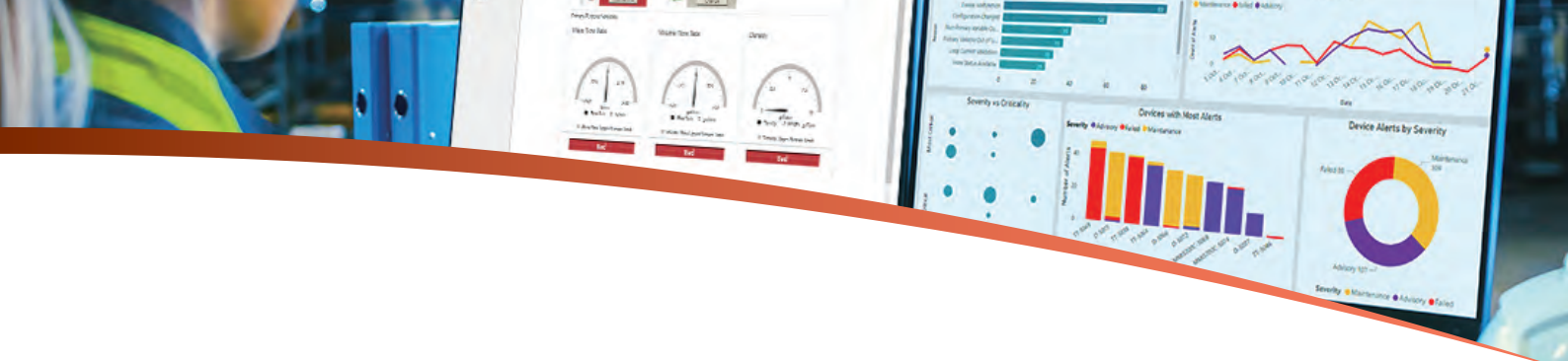
AspenTech Asset Performance Optimization products are used to optimize asset design, operations and maintenance across a wide range of complex industrial applications critical to the plant lifecycle. AspenTech combines more than 40 years of process and production planning expertise in process modeling with big data and machine learning to empower plants to achieve autonomous operations.

AspenTech's specialized software platform ensures substantial returns throughout an asset's lifecycle by automating knowledge-intensive tasks and fostering a sustainable competitive edge. It helps optimize plant uptime, enhances performance, and Enables assets to operate more swiftly, securely, prolongedly, and environmentally friendly.

Aspen's industrial software products play a core role in the "highly automation" + "intelligent model" autonomous operation technology system that Emerson has built for process industry customers to construct digital factories.

Major Products

- Aspen Plus/HYSYS
- Aspen Hybrid Models
- Aspen Utility Planner
- Aspen Online
- Aspen DMC3
- Aspen IP.21
- Aspen Inmation
- Aspen ProMV
- Aspen Mtell



资产性能管理

由于设备故障造成的意外停机不仅会增加维护费用同时也会影响生产目标，艾默生针对生产设备的属性及关键性可提供多种资产管理和设备状态监测技术，以提高设备可用性和运行安全性。

主要产品

仪表阀门设备管理

- AMS仪表阀门管理软件
 - 简化调试工作，通过实时预测智能进行决策，提高重要生产设备的维护效率、可靠性和性能
- 现场通讯
 - AMS Trex设备通讯器，图形化显示，电池寿命长，适用于严苛工况

机械设备健康状态管理

- AMS机械设备状态管理系统
 - 采用多种技术诊断、共享机械设备的健康信息
- 动设备状态分析和监测
 - AMS 6500 ATG机械设备在线监测及保护系统，符合API 670标准，具备防爆认证
 - AMS 6500机械设备在线监测系统，保护和预测功能集于一身，符合API 670标准
 - AMS EZ 1000电涡流测量系统
 - AMS 6300数字超速保护系统，保护核心透平设备发生超速事故
 - AMS 9420无线振动变送器，对难以达到位置的旋转设备提供精确的振动监测，传感器分体设计适用于各种安装场合
 - AMS 9530无线振动变送器依托先进的测量技术，通过自组织的无线网传输完整的振动数据，为操作和维护人员提供了丰富的机械健康信息和维护方向
 - AMS 2140机械状态分析仪，新一代便携式振动分析设备
 - AMS 2600机械健康专家，便携式24通道振动采集分析系统
 - AMS Asset Monitor资产监测器，结合边缘计算优势，通过自动化分析和可操作的报警，提供最新的过程和状态监测结果

资产监测

AMS Optics资产性能平台可汇集、分析和管理多个应用的设备健康数据，根据人员职能推送与其相关的设备预警及性能指标信息。

- 可连接AMS设备管理软件、AMS机械设备状态管理系统以Insight设备监测APP等多种数据源，并进行信息存储以用于进一步分析及维护决策
- 提供基于人工智能的可视化和预警工具，以及基于人工智能和机器学习深度分析技术
- 实现人员协同，并将维护工作与企业设备维护管理系统进行无缝整合

Asset Performance Management

Unscheduled downtime caused by equipment failure eats into both the maintenance budget and production goals. Emerson offers a variety of asset management and condition indicator technologies specific to the nature and criticality of production assets to improve availability and safety.

Major Products

Instrument Valve Equipment Management

- AMS Instrument Valve Management Software
 - Streamline your commissioning efforts, make decisions based on real-time predictive intelligence, and improve the maintenance, availability, and performance of key production assets
- Field Communication
 - AMS Trex Device Communicator delivering long-life batteries and graphical user interface in a tool built to withstand harsh industrial environments

Machinery Health Management

- AMS Machinery Manager
 - Diagnoses and communicates the health of mechanical & rotating machinery using multiple technologies
- Machinery Analyzers & Monitors
 - AMS 6500 ATG, API 670-compliant protection with prediction capabilities
 - AMS EZ 1000 Eddy Current Measurement System
 - AMS 6300 Digital Overspeed Protection. Protects critical turbomachinery from overspeed conditions
 - AMS 9420 Wireless Vibration Transmitter, providing accurate vibration monitoring in hard-to-reach locations. It's design is suitable for various installations
 - AMS 9530 Wireless Vibration Transmitter, an easy-to-deploy vibration sensor that performs prescriptive analytics on vibration data using native software to automatically identify failure modes in rotating equipment
 - AMS 2140 Machinery Health Analyzer. Portable vibration for the 21st century
 - AMS 2600 Machinery Health Expert. Portable 24-channel vibration analysis
 - AMS Asset Monitor, an edge analytical device that provides prediction, protection and process monitoring capabilities

Asset Monitoring

With AMS Optics, an asset performance platform for managing enterprise asset health, data is combined from multiple applications into asset-centric information to deliver persona-based alerts and KPIs.

- Connect different data sources like AMS Device Manager, AMS Machinery Manager, Insight, etc. and store the data for analysis and decision making
- Provide persona-based visualization and notification tools, as well as analytical techniques leveraging artificial intelligence and machine learning
- Enable collaborative engagement and seamlessly integrate maintenance into CMMC



GUARDIAN

Guardian是艾默生的数字化管理平台,用于满足控制软件和资产的端到端生命周期需求。Guardian数字化体验帮助用户快速获取产品支持、安全地管理订阅、直观地了解系统运行状况,同时提供与生产性能优化类软件和服务的交互。

Guardian能够提供如下帮助:

- **轻松获得产品支持**

提供您的团队与艾默生的产品专家的联系渠道,与您的人员协作解决问题,或者通过系统专用修复程序、补丁更新和设备安装包提升运营安全。

- **最大限度地缩短停车时间并优化系统性能**

通过定制化可配置的仪表面板,提供系统健康状况的实时提醒,并提供解决措施,从而降低安全、保障和控制流程的风险。

- **简化订阅管理**

安全下载并激活软件,自助管理软件和授权,轻松续订或修改订阅内容。

- **拓展运营能力**

根据您的具体运营需求,获取用于提升人员效率和优化生产绩效的其他服务和技术的建议。

Guardian是您的个性化风险管理、事件管理和生命周期管理的数字平台,提供系统相关信息,从而实现更好的决策和优先级的洞察。

SCADA 系统

针对石油天然气行业需远程进行数据采集、监管、测量和控制等需求,艾默生除了可提供SCADA系统软件、有线和无线的SCADA远程控制器RTU、流量计算机和批量控制器等远程自动化产品外,还可为客户提供先进的系统集成及相关服务。

制造执行系统

Syncade MES帮助您为执行您的制造过程奠定坚实的基础。更智能的系统集成有助于整个企业的数据连接,以改进和优化通信与协作。手动流程的自动化和数据的数字化提供了实时生产信息,同时有助于确保质量和合规性,帮助企业实现IIoT和制药4.0。

GUARDIAN

Guardian is Emerson's digital platform for addressing the end-to-end lifecycle needs of control software and assets. The Guardian digital experience enables users to quickly connect to product support; securely manage subscriptions; get intuitive views into system health; and interact with additional software and services that propel performance.

Emerson's guardian helps you:

- **Easily Access Product Support**

Connect your team to Emerson's product experts, who can collaborate with your personnel to resolve issues or enhance operations with automated system-specific hotfixes, patches updates, and device install kits.

- **Minimize Downtime & Optimize System Performance**

Reduce risks to safety, security and control processes through a personalized, configurable dashboard that delivers real-time intelligence about a system's health – and recommends corrective actions.

- **Simplify Subscription Management**

Download and activate software safely and securely, manage software and licenses through a self-service license generator, and easily renew or modify subscriptions.

- **Expand Operational Capabilities**

Obtain recommendations, based on your specific operations, about other services and technologies that can increase workforce efficiency and optimize performance.

Guardian is your personalized digital platform for Risk Management, Incident Management, and Lifecycle Management, which provides relevant, system-specific information that enables better decision making and prioritization insights.

SCADA Systems

Emerson provides SCADA system software, wired and wireless SCADA RTUs, flow computers and presets with Remote Automation Solutions, and targets data acquisition, monitoring, measurement and control needs in remote locations in Oil & Gas industry, along with best-in-class systems, products and services.

Manufacturing Execution Systems

The Syncade MES helps you build a solid foundation for executing your manufacturing processes, help you to create smarter operations. Smarter system integration facilitates the connectivity of data across the enterprise to improve and streamline communication and collaboration. The automation of manual processes and digitization of data delivers real-time production information, while helping to ensure quality and compliance. Help customer to realize Industrial Internet of Things (IIoT) and Pharma 4.0.



测试与测量

Test & Measurement

艾默生的测试与测量业务(原NI)凭借丰富的软件产品组合、模块化硬件、系统和服务,从实验室到生产线,帮助企业深入解析数据的含义,做出有据可依的业务决策,从而获得更安全、更可靠的产品,并加速研发创新。

我们的自动化测试测量技术广泛应用于半导体和电子、交通运输、商业航空航天、无线通信、院校与科研、能源、工业机械及生命科学等领域。

Emerson's Test & Measurement business (formerly NI), with its comprehensive software portfolio, modular hardware, systems, and services, help from the lab to the manufacturing floor to turn real-world data into insights that drive business decisions for safer, more reliable products, and accelerated innovation.

Our automation test & measurement solutions are widely used in the areas like semiconductor, electronics, transportation, aerospace, wireless communication, academic & research, energy, industrial machinery, and life sciences.

测试系统

主要产品

- PXI
- CompactDAQ
- TestScale
- CompactRIO
- 基于PC的系统

硬件

主要产品

- 数据采集与控制
- 电子测试和仪表
- 无线设计和测试
- 线缆和附件

软件

主要产品

- 编程环境 - LabVIEW
- 应用软件
 - 测试管理 - TestStand
 - 数据管理 - DIAdem
 - 数据记录 - FlexLogger
 - 电路设计 - Multisim™
 - HIL测试 - VeriStand
 - 无线设计 - RFmx
- 测试运行和产品分析软件
 - SystemLink™
 - OptimalPlus GO
- 软件套件
 - LabVIEW+套件
 - HIL and Real - Time Test Software Suite验证
 - 嵌入式软件和运行模型物理测试套件
 - 电路设计套件

Test Systems

Major Products

- PXI
- CompactDAQ
- TestScale
- CompactRIO
- PC-based System

Hardware

Major Products

- Data Acquisition and Control
- Electronic Test and Instrumentation
- Wireless Design and Test
- Cables and Accessories

Software

Major Products

- Programming Environments - LabVIEW
- Application Software
 - Test Management - TestStand
 - Data Management - DIAdem
 - Data Logging - FlexLogger
 - Circuit Design - Multisim™
 - HIL Testing - VeriStand
 - Wireless Design - RFmx
- Test Operations and Product Analytics Software
 - SystemLink™
 - OptimalPlus GO
- Software Bundles
 - LabVIEW+Suite
 - HIL and Real - Time Test Software Suite
 - Embedded Control and Monitoring Software Suite
 - Circuit Design Suite



测量仪表

Measurement Instrumentation

严苛的工厂运行需要可靠而精确的测量设备。艾默生可提供经过现场验证的技术，帮助您应对严酷的工况和分析挑战，从而提高工厂性能和效益，最重要的是提高安全性。

The rigorous demands of your process operations require you to have reliable, accurate devices that give you the measurements you need. Emerson delivers field-proven technologies that can handle the toughest conditions or analytical challenges to allow you to maximize the performance, profitability and, most importantly, safety of your applications.

流量测量

主要产品

- Micro Motion科里奥利流量计
- Rosemount差压流量
 - 调整型孔板流量计
 - 阿牛巴流量计及一次元件
 - 现场远传指示器
 - 多参数流量变送器
 - 无线流量变送器
- Rosemount涡街和电磁流量计
- 超声波流量计
 - Rosemount贸易交接型超声波流量计
 - Flexim外夹式超声波流量计
- 流量测量解决方案
 - 水击泄压系统
 - 贸易计量撬
 - 计量系统服务
- 通球系统
- Roxar油气开采监测
 - 多相计量
 - 含水分析
 - 永久性井下监测系统

密度和粘度测量

主要产品

- Micro Motion密度计和粘度计

Flow Measurement

Major Products

- Micro Motion Coriolis Flowmeter
- Rosemount DP Flow
 - Orifice Flowmeter
 - Annubar Series Flowmeter and Primary Element
 - Field Remote Indicator
 - SMV Flow Transmitter
 - Wireless Flow Transmitter
- Rosemount Vortex and Magnetic Flowmeter
- Ultrasonic Flowmeter
 - Rosemount Ultrasonic Flowmeter for custody transfer
 - Flexim Non-Intrusive Ultrasonic Flowmeter
- Flow Measurement Solution
 - Surge Relief System
 - Custody Transfer System (skid)
 - Custody Transfer System Service
- Pigging Solutions
- Roxar Subsea/Downhole/Topside & Onshore Monitoring
 - Multiphase Meter
 - Watercut Meter
 - Permanent Downhole Monitoring System

Density & Viscosity Measurement

Major Products

- Micro Motion Density and Viscosity Measurement



压力测量

主要产品

- 3051S可扩展性智能测量仪表系列
- 2051压力变送器
- 无线压力变送器
- 差压液位变送器和3051S ERS电子远传系统
- 阿牛巴流量计
- 卫生型压力变送器
- 远程膜片密封系统
- 3051 压力变送器
- 指针式无线压力变送器
- 调节孔板流量计
- 仪表阀组
- 井下压力传感器

温度测量

主要产品

- 单点温度变送器
- X-Well非接触式温度变送器
- 井下温度传感器
- Twisted Square™螺旋式热套管
- 多点高密度温度变送器
- 无线温度变送器
- 通用传感器和热套管

物位测量

主要产品

- 差压液位变送器和3051S ERS电子远传系统
- 非接触式雷达液位计
- 导波雷达液位计/无线导波雷达液位计
- 音叉液位开关
- 固体料位开关

储罐计量

主要产品

- 2合1高精度储罐雷达液位计防溢保护
- 储罐计量系统
- 系统集成

腐蚀及侵蚀监测

主要产品

- Permasense超声波腐蚀及侵蚀监测
- Roxar电阻探头无线腐蚀及含砂侵蚀监测系统

无线声波及离散

主要产品

- 708无线声波变送器
- 702无线离散变送器

Pressure Measurement

Major Products

- 3051S Scalable Series of Instrumentation
- 2051 Pressure Transmitter
- Wireless Pressure Gauge
- DP Level Transmitter and 3051S Electronic Remote Sensor System
- Annubar Flowmeter
- Sanitary Pressure Transmitter
- Remote Seal
- 3051 Pressure Transmitter
- Wireless Pressure Transmitter
- Orifice Plate Flow Meter
- Manifolds
- Downhole Pressure Transducer

Temperature Measurement

Major Products

- Single Point Temperature Transmitter
- X-well Non-intrusive Technology with Temperature Transmitter
- Downhole Temperature Sensor
- Twisted Square™ Thermowell
- High Density Temperature Transmitter
- Wireless Temperature Thermowell Transmitter
- Sensor and Thermowell

Level Measurement

Major Products

- DP Level Transmitter and 3051S Electronic Remote Sensor System
- Non-contacting Radar
- Guide Wave Radar/Wireless Guide Wave Radar
- Point Level Detector
- Level Switch/Solids Scanner

Tank Gauging

Major Products

- 2-in-1 Overfill Prevention
- Tank Gauging System
- System Hub

Corrosion and Erosion Monitoring

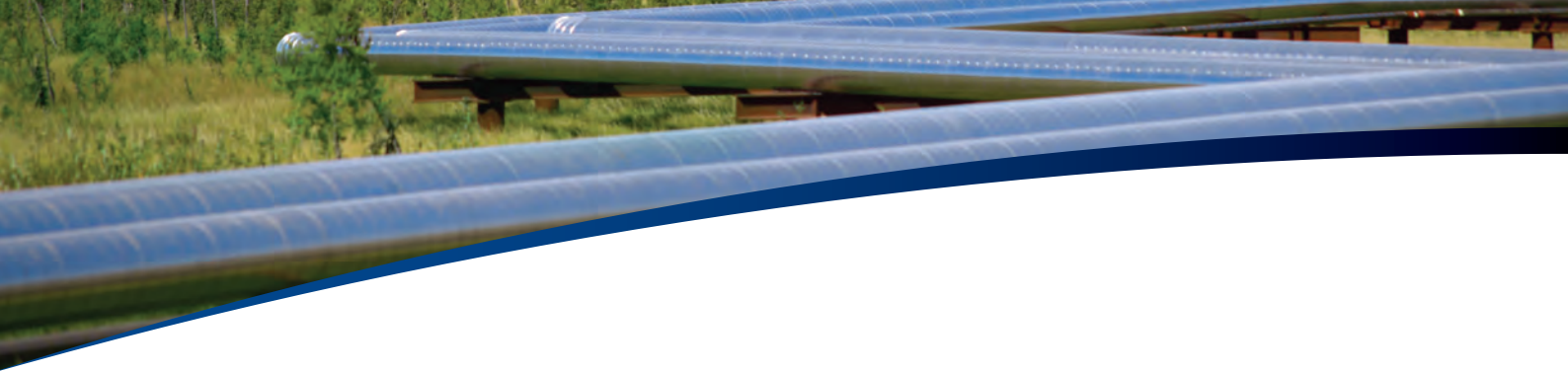
Major Products

- Permasense Integrity Continuous Corrosion Monitoring System
- Roxar CorrLog / SandLog Wireless System

Wireless Acoustic & Discrete

Major Products

- 708 Wireless Acoustic Transmitter
- 702 Wireless Discrete Transmitter



过程分析

艾默生的Rosemount™过程分析产品包括用以分析pH值、ORP氧化还原电位、导电率、溶解氧、臭氧、氯和浊度的水质分析仪表和用以进行过程分析、排放监测、燃烧分析以及锅炉控制的气体分析仪器，广泛应用于化工、造纸、水和废水处理、炼油、制药、食品饮料、冶金、纺织、电力、汽车工业和半导体行业。

主要产品

- pH/ORP分析仪
- 溶解氧分析仪
- 臭氧分析仪
- 硅表
- 磷表
- 氧化锆氧量分析仪
- 电导率分析仪
- 氯分析仪
- 浊度计
- 钠表
- 联氨
- 多组份气体分析仪：
 - 红外分析仪
 - 紫外分析仪
 - 热导式分析仪
 - 顺磁氧分析仪
 - 电化学氧分析仪
 - 离子火焰分析仪
 - 化学荧光法分析仪
- 量子级联激光分析仪
- 工业气相色谱仪
- 烟气排放连续监测系统
- 烟尘浊度计
- 挥发性有机物(VOCs)在线监测系统

火焰及有毒有害气体探测

我们的火焰及有毒有害气体探测产品在严酷工况中具有优异的表现，确保工厂运行及人员的安全。

主要产品

- 气体探测器
 - 点式可燃/毒气气体探测器
 - 开路式可燃/毒气气体探测器
 - 超声波气体泄漏探测器
- 无线有毒气体探测器
- 火焰探测器

Process Analysis

Emerson's Rosemount analytical products provide liquid analysis for pH value, ORP (oxidation-reduction potential), conductivity, dissolved oxygen, ozone, chlorine and turbidity; gas analysis for discharge monitoring, combustion and boiler control. These products are widely used in the chemical, paper, water and waste water treatment, oil refining, pharmaceuticals, food and beverage, metallurgy, textile, power, auto and semi-conductor industries.

Major Products

- pH / ORP Analyzer
- Dissolved Oxygen Analyzer
- Ozone Analyzer
- Silicon
- Phosphate
- Zirconium Oxide Analyzer
- Conductivity Analyzer
- Chlorine Analyzer
- Turbidity Analyzer
- Sodium
- Hydrazine Analyzer
- Multi-Component Gas Analyzer
 - Infrared Analyzer
 - Ultraviolet Analyzer
 - Thermal Conductivity Analyzer
 - Paramagnetic
 - Electrical Chemical Oxygen Analyzer
 - Process Total Hydrocarbon Analyzer Module
 - Chemiluminescence NO/NOx Analyzer Module
- Quantum Cascade Laser Analyzer
- Gas Chromatography Analyzer
- Continuous Emissions Monitoring System
- Opacity
- Volatile Organic Compounds Online Monitoring System

Flame & Gas Detection

Our flame and gas detection products are designed to excel under the toughest conditions to help you streamline day-to-day operations and more importantly, keep your people safe.

Major Products

- Gas Detector
 - Point Gas Detectors and Sensors
 - Open Path Gas Detectors
 - Incus Ultrasonic Gas Leak Detector
- Wireless Toxic Gas Detector
- Flame Detector



船用测量与分析

为了对您船上的状况了如指掌,测量流量、压力、温度和液位,以及分析实时数据结果等至关重要。通过这些信息,您可以在过程变化影响设备性能和造成停机之前采取纠正措施。

主要产品

- 雷达液位计
- 液位变送器
- 电动/气动液位计
- 燃料测量
- 船用储罐温度监控
- 船用储罐气体压力测量
- 船舶吃水、倾斜和平衡监测

工业无线技术

无线架构作为安全、集成的工业网络的一部分,能够连续可靠地提供之前因成本或安全因素而无法获取的过程监测数据,从而提升工厂安全、效率和环保水平。艾默生的智能无线技术采用WirelessHART通讯协议,可与原有有线结构兼容,也能方便地增加新的监测及控制应用。

主要产品

- 无线网络 (无线工厂网络/无线现场网络)
 - 无线接入点
 - 无线网关
 - 智能天线
 - 现场链接
- 无线分析应用
 - Plantweb Insight网络管理应用
 - Plantweb Insight 设备监测APP
- 无线电池
- 无线适配器
- 无线人员定位
- 无线传感器
 - 无线压力、温度、流量、液位及储罐监测
 - 无线腐蚀及浸蚀监测
 - 无线火焰及气体探测
 - 无线声波及离散监测
 - 无线振动监测
 - 无线阀位监测

Marine Measurement & Analytical

To achieve complete overview of any condition on board your vessel, it is vital to measure affecting parameters such as flow, pressure, temperature and level and analyze the real-time data results. This information allows you taking action before changes affect equipment performance and cause downtime.

Major Products

- Radar Based Level
- Pressure Based Level
- Electro-Pneumatic Level
- Fuel Management
- Temperature Monitoring in marine tanks
- Vapour Pressure
- Draft, Trim and Heel Monitoring

Industrial Wireless Technology

As part of a secure, integrated industrial network, wireless infrastructure provides reliable, continuous data that improves safety, efficiency and the environment through monitoring of process measurement points that previously were too costly or unsafe to access. Wireless connectivity via WirelessHART® communication can provide additional capability benefiting both existing wired and new monitoring and control applications.

Major Products

- Wireless Network (Wireless Plant Network/ Wireless Field Network)
 - Wireless Access Point
 - Wireless Gateway
 - Smart Antenna
 - Field Link
- Wireless Analytics
 - Plantweb™ Insight Network Management Application
 - Plantweb™ Insight
- Wireless Power
- Wireless Adapter
- Wireless Location
- Wireless Sensor
 - Wireless Pressure, Temperature, Flow, Level Measurement and Tank Gauging
 - Wireless Corrosion and Erosion Monitoring
 - Wireless Flame and Gas Detection
 - Wireless Acoustic & Discrete
 - Wireless Vibration Transmitters
 - Wireless Position Monitors



阀门、执行机构与调压阀

Valves, Actuators & Regulators

调节阀

调节阀作为控制回路中唯一能够真正动作以调节工艺过程的设备，艾默生调节阀及定位器凭借其先进的技术，在石化、炼油、陆上油气、海上平台、煤化工、电力、冶金、造纸、制药、电子等工业行业的过程控制工艺过程中提供更好的控制性能和安全性。同时我们还提供核电阀门、节流阀、蒸汽调节阀、减温器及ValveLink软件。主要品牌包括Baumann、Fisher、GULDE、Sempell、Vonk和Yarway。

主要产品

- 直通阀
- 角型阀
- 三通阀
- 球阀
- 部分球调节阀
- 高性能蝶阀
- 偏心球阀
- 严酷工况球阀
- 严酷工况解决方案
- 蒸汽调节阀和减温器
- FIELDVUE智能阀门定位器(DVC)
- FIELDVUE数字液位变送器(DLC)
- 定位器、电-气转换器及阀门控制器
- 无线产品和阀门配件
- 特材阀
- 氧阀
- Baumann调节阀
- Gulde调节阀
- 核电阀门
- Sempell阀门
- Vonk节流阀
- AMS ValveLink软件

Control Valves

Since control valves are the only devices in the control loop that actually move to adjust the process, with Emerson's advanced technology, our control valves and instruments enabling the performance and safety of various process industries, such as petrochemical, refinery, onshore oil and gas, offshore, coal chemical, power, metal&mining, pulp&paper, pharmaceutical and electronic. We also provide Nuclear power valves, choke valves, steam conditioning valve, desuperheater and ValveLink software. Our global recognized brands including Baumann, Fisher, Gulde, Sempell, Vonk and Yarway.

Major Products

- Globe Valve
- Angle Valve
- Three-way Valve
- Ball Valve
- Segmented Ball Valve
- High-performance Butterfly Valve
- Eccentric Plug Valve
- Severe Service Ball Valve
- Severe Service Solutions
- Steam Conditioning Valve and Desuperheater
- FIELDVUE Digital Valve Controller (DVC)
- FIELDVUE Digital Level Controller (DLC)
- Traditional positioner, Electro-Pneumatic Transducer & Valve Controller
- Wirelss Product and Valve Accessories
- Special Material Valve
- Oxygen Control Valve
- Baumann Control Valve
- Gulde Control Valve
- Nuclear Power Valve
- Sempell Valve
- Vonk Choke Valve
- AMS ValveLink Software



关断阀

艾默生拥有范围广泛的、经过实践检验的关断阀产品组合,为各类过程控制应用中的开关、关断、分流、合流、换向工况提供高效的安全运行。主要品牌包括AEV、Clarkson、Keystone、KTM、Neotecha和Vanessa。

主要产品

- 蝶阀
- 三偏心阀
- 球阀
- 刀闸阀
- 衬里阀
- 浆液阀和关断阀
- 取样系统
- 自动控制阀门解决方案

安全阀

艾默生为全球客户提供范围广泛的超压保护解决方案,保护客户的设备资产和员工安全。服务行业广泛,包括海上平台、船舶、液化天然气、炼油、化工、石化、电力、冶金、氢能等领域。我们的产品符合国际规范和标准认证,如ASME、API、EN、TS、PED、IBR、CUTR、BV、LR等,从设计、生产、测试和认证等各方面保证产品性能和质量要求。我们拥有全球知名品牌,包括Anderson Greenwood、Crosby、Kunkle、Cash、Birkett、Bailey、Marston、Sapag。

主要产品

- API 526弹簧式安全阀
- 高压先导式安全阀
- 低压先导式安全阀
- 小型,热泄放阀
- 高性能弹簧式安全阀
- 锅炉安全阀
- 省煤器安全阀
- 全金属密封先导式安全阀
- 液氢安全阀
- 加氢站安全阀
- 波纹管泄漏监测安全阀
- 安全阀数字化监测
- 爆破片
- 安全选择阀
- 超大尺寸弹簧式安全阀(超过T流道)
- 锻造阀体弹簧式安全阀
- 保温夹套弹簧式安全阀
- 压力API 10K及以上的海上工况泄放阀
- 深冷储罐用压力泄放阀
- 用于多杂质或超粘工况的压力泄放阀

Isolation Valves

Emerson has an extensive isolation valve portfolio designed and tested to provide on-off, isolation, converge, mixing, divert services in high-efficiency and safe operation for process applications. Our global recognized brands including AEV, Clarkson, Keystone, KTM, Neotecha and Vanessa.

Major Products

- Butterfly Valve
- Triple Offset Valve
- Ball Valve
- Knife Gate Valve
- Lined Valves
- Slurry & Isolation Valve
- Sampling Valve
- Automated Valve Solutions

Pressure Relief Valve

Emerson has the most comprehensive range of overpressure protection to our global customers focusing on Oil & Gas Offshore Production, Marine, LNG, Refining, Chemical, Petrochemical, Power, Mining, Hydrogen Industry and many more, to protect all your assets and employees. Our products are designed, certified and tested in accordance to most codes and standard around the world like ASME, API, TS, EN, PED, IBR, CUTR, BV, LR, etc. Our globally recognized brands include Anderson Greenwood, Crosby, Kunkle, Cash, Birkett, Bailey, Marston, Sapag .

Major Products

- API 526 Spring Operated Valve
- High Pressure Pilot Operated Valve
- Low Pressure Pilot Operated Valve
- Thermal Relief Valve
- High Performance Spring Valve
- Boiler Safety Valve
- Economizer Safety Valve
- Full Metal seated Pilot Valve
- Liquid Hydrogen Pressure Relief Valve
- Hydrogen Refilling Station Pressure Relief Valve
- Bellows Leakage Detective Pressure Relief Valve
- Pressure Relief Valve Monitoring
- Rupture Disc
- Safety Selector Valve
- Over-T Spring Valve
- Blockbody Spring Valve
- Steam Jacket Spring Valve
- Pressure Relief Application for API10K and beyond in Offshore Service
- Pressure Relief Application for Cryogenic Tank Application
- Pressure Relief Application for Dirty or Extra-Waxy Media



压力管理方案

艾默生提供一站式压力控制和储罐安全解决方案,旗下品牌包括Fisher、Anderson Greenwood、Enardo、Jeon、Penberthy、Tartarini、Varec和Yarway,服务于航空航天、汽车、炼油、化工、石化、电力、船舶、食品饮料、生命科学、半导体和实验室等多个领域。我们还为天然气输送公司、城市燃气网络和天然气发电厂提供定制化撬装系统解决方案。

主要产品

- 减压阀
- 深冷调压阀
- 氮封阀/蒸发气回收阀
- 阻火器
- 定期排污阀/连续排污阀
- 喷射泵
- 液位计
- 自动再循环控制阀/最小流量阀(ARC阀)
- 燃气过滤器和分离器
- 系统集成
 - 燃气调压计量系统
 - 燃气净化
 - 压缩天然气减压
 - 燃气加臭
 - 燃气管网的远程监控
 - 工业调压系统
- 泄压阀/背压阀
- 紧急切断阀
- 呼吸阀
- 紧急泄放阀/人孔
- 高压截止阀
- 疏水阀
- 流量指示器

执行机构

艾默生提供驱动器领域前沿的气动、液动、电动和气液联动执行机构技术和带有NetWork Master、控制附件和软件的阀门操作系统™解决方案。主要品牌包括Bettis™、Biffi™、EL-O-MATIC™、Shafer™和Hytork™。

主要产品

- 电动执行机构
- 液压执行机构
- 电液联动执行机构及控制系统
- VOS-PAC阀门操作系统™
- 海底执行机构
- 智能集成型阀门监控系统
- 气动执行机构
- 气液联动执行机构
- 电子破管检测系统

Pressure Management Solution

Emerson offers comprehensive pressure management as well as tank safety solutions with brands of Fisher, Anderson Greenwood, Enardo, Jeon, Penberthy, Tartarini, Tescom, Varec and Yarway to aerospace, automative, refining, chemical, petrochemical, power, marine, food & beverage, life science, semiconductor, laboratory and many more industries. We also provide customized skid based solutions to natural gas transmission companies, city gas networks, and to gas-based power plants.

Major Products

- Pressure Reducing Regulator
- Pressure Relief/Backpressure Regulator
- Cryogenic Regulator
- Tank Blanketing Regulators/ Vapor Recovery Regulator
- Flame Arrestor
- Blow-off/Blow Down Valves
- Jet Pump
- Level Gauge
- Automatic Recirculation Control (ARC) Valve
- Gas Filters and Separator
- Integrated System
 - Pressure Reducing and Metering
 - CNG Decompression
 - Remote Monitoring and Control of Gas Networks
 - Industrial Engineering System
- Slam Shut Valve
- Pressure and Vacuum Relief Valves/ Breather Valve
- Tank Vents and Hatch
- Welbond Valves
- Steam Trap
- Sight Flow Indicator
- Gas Conditioning
- Gas Odorization

Actuators

Emerson provides market-leading pneumatic, hydraulic, electric actuation technologies and Valve Operating Systems™ solutions with Network Masters, Controls and Software. Our global recognized brands including Bettis™, Biffi™, EL-O-MATIC™, Shafer™ and Hytork™.

Major Products

- Electric Actuator
- Hydraulic Actuator
- Elec-Hydro Actuator and control system
- VOS-PAC Valve Operating Systems™
- Subsea Actuator
- SMART Integrated Valve Monitoring Device
- Pneumatic Actuator
- Gas-over-Oil Actuator
- Electric Line Break System



离散自动化

Discrete Automation

工厂自动化

主要产品

- 电动直线运动
- 气动系统与控制
- 传感器与分析仪
- 上料系统
- 抓取系统

工业自动化

主要产品

- 电磁阀与气动阀
- 工业开关与传感器
- 脉冲除尘阀
- 工业燃烧器控制

精密流体控制

主要产品

- 精密压力与流量调压阀
- 电动压力调节

控制与软件

主要产品

- SCADA 与边缘控制
- 人机界面 (HMI) 相关
- 分析软件
- 功率调节

焊接与组装

主要产品

- 塑料和金属焊接
- 精密清洗
- 应用与模具工程

Factory Automation

Major Products

- Electric linear motion
- Pneumatic systems & controls
- Sensors & analyzers
- Feeding
- Handling

Industrial Automation

Major Products

- Solenoid & air operated valves
- Industrial switches & sensors
- Pulse valves for air filtration
- Industrial burner controls

Precision Fluid Control

Major Products

- Precision pressure & flow regulators
- Electronic pressure regulation

Controls & Software

Major Products

- SCADA & edge control
- HMI's
- Analytics software
- Power conditioning

Welding & Assembly

Major Products

- Plastic and metal welding
- Precision cleaning
- Application & tooling engineering
- Aftermarket service & support



电气组件及照明

Electrical Components & Lighting

当工厂存在易燃气体和蒸汽时，危险场所需要使用能够适当防范受热点火或火花点火等危险情况的电气产品。确保工业加工环境中的安全性和产能，需要实现可靠的连接和控制以便为人员和设备提供保护。

主要产品

- 照明
 - 为危险场所和无危险的场所提供坚固、可靠、安全的照明产品
- 电源控制解决方案
 - 包括SolaHD品牌电源和工业控制变压器
- 壳体及接线盒
 - 为工业和危险场所提供完整的接线盒、机箱、出线盒和摄像头外壳等系列产品
- 控制单元
 - 防爆，防尘和防水外壳，可根据客户要求定制安装元器件
- 配电设备
 - 提供开关、断路器和配电盘产品，确保配电安全
- 接头
 - 提供各种材质、型号和证书的工业及危险场所接头
- 插头和插座
 - 满足您的安全电源连接需要
- 电力质量及配电
 - 包括SolaHD品牌浪涌保护器、滤波器、UPS、电源调节器和变压器
- 卷盘及开关
 - 在危险及工业环境中为手持设备提供持续、安全、可靠性电源连接
- 光控
 - 为室外场所提供从黄昏到黎明的自动照明控制
- 灯杆及吊架
 - 可提供普通场所和隔爆两种选项
- 工业伴热
 - 保持工艺温度，为各种管道、容器和装置提供除冰和防冻伴热
- 密封剂及防火方案
 - 为船舶、石油钻井平台以及工厂提供防火、防烟、防水及防爆保护

With the presence of flammable gases and vapors, hazardous locations demand electrical products engineered to provide proper protection from dangers like heat or spark-induced ignition. Safety and productivity in industrial processing environments demand reliable connectivity and control to protect people and equipment.

Major Products

- Lighting
 - Rugged, dependable and safe lighting products for non-hazardous and hazardous locations
- Control Power Solutions
 - Our control power solutions include SolaHD brand power supplies and industrial control transformers
- Enclosures and Junction Boxes
 - We offer a complete line of industrial and hazardous location junction boxes, enclosures, outlet boxes and camera housings
- Controls
 - Explosionproof, dust-ignitionproof and watertight enclosures available with custom drilling to house electrical components
- Distribution Equipment
 - Distributing power with total safety is our goal. It has defined our disconnects, breakers and panelboards for generations
- Fittings
 - We offer a complete line of industrial and hazardous location fittings in a variety of materials, styles and certifications
- Plugs and Receptacles
 - Allow you to connect to the power you need safely
- Power Quality and Distribution
 - Our power quality and distribution solutions include SolaHD brand SPDs, filters, UPSs, power conditioners and transformers
- Reels and Switches
 - Continued delivery of power in hazardous and industrial locations with safe and reliable connections for portable equipment
- Photocontrols
 - For automatic dusk to dawn control of lighting in outdoor locations
- Fixture Poles and Hangers
 - Available in ordinary location and explosionproof versions
- Industrial Heat Tracing
 - Used for process temperature maintenance, de-icing and freeze protection for pipes, vessels and facilities
- Sealants and Firestop Solutions
 - Protection against fire, smoke, water and explosions in marine vessels, oil rigs and industrial facilities



专业工具 Professional Tools

艾默生专业工具为机械、电力、管道施工及工业基建提供范围广泛性能可靠的专业工具解决方案。我们拥有业界盛名的品牌美国里奇(RIDGID)、格林利(Greenlee)和德国柯劳克(Klauke), 致力于为专业人士提供创新、完善、值得信赖的工具和技术。

1923年, 里奇发明了现代管钳, 彻底改变了管道施工行业。今天, 里奇继续在全球范围内创新, 提供行业领先的产品, 确保专业人士可以高效可靠地完成工作。

自1862年以来, 格林利一直通过提供创新的产品和解决方案来提升行业标准, 不断提高作业的效率 and 安全性, 以满足专业人士的需求。从钻孔、弯曲、拉线到切割、压接和测试电缆, 格林利都是您值得信赖的品牌。

柯劳克成立于1879年, 以其高质量的电气连接技术和压接、切割及冲孔工具而闻名于世。135年来, 柯劳克一直为多样化的高科技和新兴行业提供特殊用途的解决方案。

主要产品

- 管钳
- 手动薄管工具
- 电动套丝机
- 疏通机
- 管道施工诊断
- 定位仪
- 压接技术
- 管道坡口机
- 冲孔器和电动工具配件
- 电动弯管机
- 线缆牵引/穿线器
- 线缆处理
- 测试和测量设备
- 通用工具
- 电气连接系统
- 电池驱动式压接工具
- 电池驱动式切割工具
- Klauke小型压接工具
- 全能王工具
- Klauke橙色系列

Emerson's Professional Tools business offers the broad portfolio of reliable tools and technologies for professionals working in mechanical, electrical, plumbing and industrial infrastructure trades. With unparalleled expertise from RIDGID, Klauke and Greenlee, we deliver innovative and trusted products that provide dependable performance to the professionals worldwide.

In 1923, RIDGID revolutionized the plumbing industry with the invention of the modern pipe wrench; today, RIDGID continues to innovate around the world with industry-leading products that professionals trust to complete jobs efficiently and reliably.

Since 1862, GREENLEE has been elevating the industry standards through delivering innovative products and solutions to drive efficiencies and improve safety to meet the demands and needs of the professional. From holemaking, bending, and cable pulling to cutting, crimping and testing cable, Greenlee is the name tradespeople depend on.

Klauke, established in 1879, is world-renowned for its high-quality, electrical connection technology and tools for crimping, cutting and punching. For over 135 years, Klauke has offered special-purpose solutions for the most diverse high-tech and emerging sectors.

Major Products

- Pipe Wrenches
- Manual Pipe & Tube Tools
- Power Threading
- Drain Cleaning
- Plumbing Diagnostics
- Underground Locating
- Pressing Technology
- Pipe Beveling
- Knockouts & Power Tool Accessories
- Conduit Bending
- Cable Pulling & Fishing
- Cable Termination
- Test & Measurement Equipment
- General Tools
- Electrical Connection Systems
- Battery Powered Crimping Tools
- Battery Powered Cutting Tools
- Klauke Micro
- Universal Tools
- Klauke Orange Line



服务与咨询 Services & Consulting

长期服务协议

通过预测诊断、多样化控制、过程和资产优化，确保工厂按时开车、防止过程意外停车、缩短计划停车检修时间，从而延长工厂生命周期。

- 安装、开车和调试
- 定期的现场设备维护
- 快速现场维修
- 故障诊断
- 快速停车检修
- 过程优化
- 设备和系统升级
- 应用咨询

大修服务

在艾默生全生命周期服务中，尤为注重在企业繁忙的大检修中提供自动化产品一揽子服务和项目管理服务，采用经验证的艾默生大修7步法来帮助客户确定大修范围、精确地制定计划并按预算按进度帮助客户在大修中完成检修、整改、优化等工作，并为下一周期企业的稳定运行提供保障。具体包括如下内容：

- 范围广泛的现场调研、故障解决
- 自控系统(DCS、SIS)的升级改造及软硬件维护
- 建立、优化AMS资产管理平台
- 提供企业控制系统的高级解决方案如：灾难备份系统、报警管理系统
- 常规仪表、Ff仪表/网段、无线仪表/网络的诊断及维护
- 新增的重要设备的监控方案
- 涉及企业利润的关键流量计的现场核查及返厂标定及修复
- 费希尔阀门诊断及达到出厂要求的阀门大修流程
- 机械设备健康分析诊断服务
- 撬装系统的全面维护
- 根据企业运行情况制定合理的备件备件方案
- 大修管家进行全面协调及综合执行

Long-term Service Agreement

Predictive diagnostics, variability control, process and asset optimization allow you to startup early, eliminate the unscheduled downtime, realize fast turnarounds and increase the productive life of the plant.

- Installation, startup, commissioning
- Regular field equipment maintenance
- Quick field maintenance
- Malfunction diagnosis
- Fast shutdowns / turnarounds / outages
- Process optimization
- Equipment & system upgrading
- Application consultation

Shutdowns / Turnarounds / Outages

As part of life cycle services, Emerson's depth and breadth of service and product offerings uniquely position us to partner with customers through the entire timeline of your turnaround process. Our proven 7-step process helps customers scope, plan, and streamline execute your turnarounds on schedule and within budget for more reliable operation. The turnaround service includes:

- Comprehensive site walk down and problem solving
- Automatic control system (DCS, SIS) upgrade and maintenance of software and hardware
- Establish and optimize the AMS Suite platform
- Advanced solutions for control system solutions: disaster backup system and alarm management system
- Diagnose and maintenance for HART device, Ff device/segment, wireless instrument/network
- Monitoring solution for additional critical assets
- Onsite check and factory calibration or repair for margin critical flowmeters
- Fisher valve diagnostic and proven process for valve repair
- Machinery health monitoring and diagnose
- Comprehensive maintenance for skid systems
- Appropriate parts and components solution based on specific operation status
- STO Manager for integrated coordination and execution



远程专家服务

工业物联网(IIoT)使工厂能够在部署复杂技术以提高运营绩效时,从其设备资产和过程中生成前所未有的大量数据。但是,读懂这些数据以实现真正的业务改进却成为一个越来越大的挑战。雇佣专门从事增值分析的专家代价高昂,要把他们长久留在公司则更加困难。技术在不断发展,然而工厂却没有足够的能力来实现技术的全部潜能。

艾默生Connected Services远程专家服务可以解决这一问题。艾默生专家利用工业物联网对用户工厂的设备和过程状况进行持续的远程监测和分析评估,为客户提供指导意见,从而帮助客户提高运营效率,避免意外停机。艾默生远程专家服务运用微软Azure云平台和数据分析工具为客户提供安全、可扩展的云应用环境。

目前艾默生的远程专家服务包括6个内容:

- 控制阀远程专家服务
- 蒸汽疏水阀远程专家服务
- DeltaV系统远程专家服务
- 机械设备远程专家服务
- 智能计量远程专家服务
- 腐蚀监测远程专家服务

先进的流量标定中心

位于上海浦东和南京的高级流量中心拥有全国先进的流量标定站。

高准质量流量计标定站

标定站的主要功能是用来标定在生产线上或维护后的高准质量流量计,其标定范围可达到520吨/小时,系统精度为0.05%。

高精度的流量标定是流量仪表业务成功的关键。在发货前,我们销售的每一台质量流量计都要经过严格的标定。

高级流量中心的质量流量标定装置获得了国家市场监管总局颁发的“专项计量授权证书”。同时标定中心还具备对涡街和电磁流量计进行标定的能力。

通过对返回的流量计进行标定,帮助我们更客观及时地得出在维修和现场检修中所遇到问题的技术结论,从而保证我们售后服务的质量和响应速度。

Connected Services

The Industrial Internet of Things (IIoT) is enabling plants to generate unprecedented amounts of data from their assets and processes as they deploy complex technologies aimed at improving operational performance. But making sense of that data to drive real improvement is a growing challenge. It's costly to develop dedicated experts who solely focus on value-added analysis – and even tougher to retain them. As technology continues to expand, the result is a widening gap between a technology's capability and a plant's ability to fully realize that capability.

Emerson Connected Services offers remote, continuous assessment of a plant's equipment and processes by Emerson experts to empower customers with the information needed to improve efficiency and avoid unplanned downtime. Emerson Connected Services utilize Microsoft Azure cloud services and data analytic tools that provide a scalable and secure cloud application environment.

- Control Valve Connected Services
- Steam Trap Connected Services
- DeltaV System Health Monitoring Connected Services
- Machinery Vibration Analysis Connected Services
- Mass Flowmeter Metrology Diagnostic System Connected Services
- Corrosion/Erosion Connected Services

Advanced Flow Calibration Center

The Shanghai Pudong and Nanjing-based super flow center has the country's best flow calibration station.

Micro Motion Mass Flowmeter Calibration Center

The station's main function is to calibrate the Micro Motion mass flowmeters on the production line or after maintenance. The calibration standard can reach 520ton per hour and the system precision is 0.05%.

High accuracy of the flow calibration is the key to flowmeter business. Every mass flowmeter we sold is strictly calibrated to meet the specifications before the delivery.

The super flow center has received the State Administration for Market Regulation's "Certificate for Metrological Authorization for Special Items". Meanwhile, it is also capable to calibrate the vortex and magnetic flowmeters.

Through the re-calibration of the returned flowmeters, it will allow us to draw a more objective technical conclusion with regards to the problems faced during maintenance and on-site servicing. This will thus ensure the quality of our after sales services and response time.



培训服务

技术精湛的人员总能先人一步发现需求,他们可以解决棘手的问题,让工厂平稳运转。因此,培训是实现工厂利用率、可持续性和卓越运营的基础。

无论您的团队是要配置和标定阀门、预测机械故障还是要制定控制策略,艾默生培训服务都能为您提供相应的课程。还有特别为新员工开发的速成课程,以使其更快地胜任工作。艾默生积累了多年流程工业的自动化应用经验,可根据企业实际情况,量身定做符合企业人才发展目标的工厂级自动化培训课程。

对您自己的团队进行投资将帮助您:

- 培训并留住高素质的团队成员
- 学习最佳实践并实现赢利目标
- 针对实际挑战进行实践性的学习和培训

传统现场培训

学员可以在艾默生区域培训中心或您的工厂接受培训。

远程虚拟学习

教员在艾默生公司提供远程学习课程,而学员则在自己本地与教员、设备和其他学员实时互动。

在线学习

如果选择在线学习,学员将根据自己的计划表,按照自己的节奏进行网上学习,无需前往课堂现场。学习管理系统(LMS)监控其实践性学习进度。

Educational Services

Skilled personnel anticipate needs; they solve tough problems; they make an operation run smoothly. That's why training is the cornerstone of maximum availability, sustainability, and operational excellence at your facility.

Whether your team must configure and calibrate valves, predict machinery faults, or develop a control strategy, Emerson Educational Services has the coursework to prepare your team. An accelerated boot camp is also developed especially for your new recruits. With many years' experiences of automation applications in process industry, Emerson provides customized automation training courses according to end users' situation in order to meet customer's human resource development expectation.

Investing in your team will help you to:

- Train and keep high-quality team members
- Learn best practices to meet profitability goals
- Choose hands-on learning and train for real-life challenges

Traditional On-site Training

On-site Traditional Courses can be taken at an Emerson regional training center, or in your facility.

Virtual Learning

An instructor, based at an Emerson facility, leads virtual learning classes while students in their own locations interact with instructors, the equipment, and other students in real-time.

e-Learning

In an eLearning setting, students learn at their own pace, on their own schedule, online with no travel required. A Learning Management System (LMS) monitors their hands-on learning progress.



智能运维和优化操作

在企业的全生命周期中，运营阶段是企业产生效益的关键阶段。面对愈发激烈的市场竞争环境和国内劳动力市场的现状，企业如何在运营阶段控制运营成本，提升生产效率成为了企业盈利乃至生存的重中之重。艾默生的“智能运维和优化操作”服务是一项综合性咨询服务，旨在依据企业的实际情况，通过结合艾默生各类先进解决方案，助力企业打造智能运维体系，实现智能报警、提前预测，从而进一步优化生产维护操作，帮助企业解决运营阶段内的降本增效、安全生产等痛点问题。主要服务内容有：

- 建立企业级的信息管理平台，使各级管理人员及时了解工厂生产信息及设备运行状态并及时做出决策
- 建立和完善各类设备管理软件，减少运维人员重复性工作，改善运维和巡检策略，优化劳动力配置
- 优化恶劣工况下的设备选型，通过提升设备可靠性，减少重复故障，减少故障处理时间，降低装置非计划停工风险
- 提升现场仪表设备智能化水平，在减少日常巡检时间的同时，增加设备健康状态信息，降低被动维护比例，向预测性、预知性维护过渡，降低整体运维成本
- 完善现场转动设备和静设备的健康状态信息，帮助运维团队及时了解故障隐患，缩短故障处理时间，降低维修成本，避免因设备突发故障导致的生产波动
- 通过软件技术帮助企业提升装置自动控制率，减少生产波动，提升生产效率，降低操作人员工作强度
- 通过标准化的软件及工作流程，帮助企业优化生产装置工艺报警，避免报警海造成的报警失效，降低生产装置安全风险
- 通过数字孪生技术，帮助企业提升员工培训效率，使员工能够在模拟实际工况的条件下快速熟悉装置操作，提升装置运营效率，减少装置开工时间

Smart Operation and Maintenance

In the whole lifecycle of a plant, the operation stage is the key stage to generate benefits. Facing the increasingly fierce market competition environment and the quo of the domestic labor market, how to control operating costs and improve production efficiency during the operation stage has become the top priority. Emerson's "Smart Operation and Maintenance" service is a comprehensive consulting service, which aims to build a smart operation and maintenance system by combining various advanced Emerson solutions to realize Alarm Management and Predictive Maintenance. It can further optimize production and maintenance, and help to cope with the challenges in cost reduction, efficiency increase, and safe production during the operation stage. The main services include:

- To establish a plant-level management platform. Managers at all levels can keep abreast of production information and equipment operation status and make timely decisions
- To establish and improve various equipment management software, reduce repetitive workload of operation and maintenance, improve operation, maintenance and inspection strategies, and optimize labor allocation
- Improve reliability by optimizing equipment sizing under severe working conditions to reduce repeated failures, troubleshooting time, and the risk of unplanned plant shutdowns
- Improve the intelligence level of on-site equipment to complete equipment health status information & reduce passive maintenance ratio while reducing daily inspection time. Transit to predictive and predictive maintenance, and reduce overall operation and maintenance costs
- Complete the health status information of on-site rotating equipment and static equipment, help the operation and maintenance team to understand the hidden faults in time, shorten the troubleshooting time, reduce maintenance costs, and avoid production fluctuations caused by sudden equipment failures
- Improve the automatic control rate through software technology, reduce production fluctuations, improve production efficiency, and reduce the work intensity of operators
- Optimize the process alarm of production equipment through standardized software and workflow, avoid the alarm failure caused by the alarm sea, and reduce the safety risk of production equipment through standardized software and workflow
- The Digital Twins technology helps plant to improve the efficiency of employee training, so that employees can quickly become familiar with the operation of the device under the condition of simulating the actual working conditions, improve the operation efficiency of the device, and reduce the start-up time of the device

与艾默生微信互联

随时、随地为您提供专业经验、技术和服务,助您实现可预期的成功。



艾默生自动化解决方案公众号

关注艾默生服务号,为您展示艾默生在自动化领域的技术与解决方案,让艾默生专家成为您工厂的顾问。您还可以在这里找到技术社群学技术找秘籍,并随时获取您需要的服务信息。



艾默生自动化解决方案视频号

关注艾默生微信视频号,一个频道专享艾默生的创新技术与解决方案如何引领客户实现标杆业绩,助推可持续发展目标的实现。



艾默生中国品牌公众号

关注艾默生中国微信订阅号,为您传递艾默生“在中国,为中国”区域战略、业务动态及高层互动;分享艾默生深耕中国40余年的品牌故事,ESG与创新案例,以及企业文化与价值观,与最新热招岗位。



艾默生离散自动化公众号

艾默生离散自动化解决方案整合艾默生旗下ASCO、AVENTICS、Movicon、PACSystems、TESCOM和TopWorx六大产品品牌,以创新Floor to Cloud解决方案为全球制造商优化运营与安全生产,推进可持续发展。



必能信焊接服务中心公众号

艾默生必能信品牌公众号,为您呈现全球材料焊接与精密清洗技术解决方案。



艾默生精密工具技术公众号

艾默生精密工具技术服务号,提供艾默生旗下里奇(RIDGID)、柯劳克(Klauke)、格林利(Greenlee)品牌专业工具及设备的产品服务、前沿资讯。



恩艾NI知道

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