Cornerstones of Quality

Rockwell Automation Control Systems
Rockwell Automation - Quality Policy

Rockwell Automation is committed to a global quality system focused on customer solutions. We achieve this through superior products and services, rapid customer support, technical expertise, supplier partnerships, and industry leadership. Our quality and business objectives are designed to challenge the organization through continual improvement, innovation, and a passion for results.

Solutions-Focused Quality System
Rockwell Automation Control Systems is driven by customer success. Development, manufacturing, and service strategies reflect our customers’ values and focus. Being solutions-focused is about understanding our customers better so we can effectively meet their needs.

Many Rockwell Automation Control System facilities share a common ISO 9001 certificate, ISO 9001 certificate, ensuring a consistently high-level of quality for products within the automation system. The common certificate helps insure consistent processes and an integrated Quality Management System. As many as 20 design, manufacturing and servicing organizations share a single ISO certificate. Since each facility on the common certificate must address all external audit issues to maintain certification, continual improvement of our quality system is an integral priority of our businesses. The degree of coordination and communication across all facilities on the common certificate allows us to address systemic quality issues equally across the businesses.

Our Quality System, together with elements of ISO 9001, provides a framework fully-integrated into our business process that makes quality a consistent part of our business conduct.

In 1987, the first Rockwell Automation facility was registered to ISO 9001. Since then, over 40 Rockwell Automation Control Systems facilities have achieved certification. In 2001, Rockwell Automation Control Systems became one of the first automation companies to be registered under the new ISO Standard. Greater than 95 percent of all Rockwell Automation Control Systems products are manufactured in ISO 9001:2000 registered facilities. Certification exemplifies the global recognition of the Rockwell Automation Control Systems Quality System.
Rockwell Automation Control Systems undergoes regular audits by third-party auditors, customers, and employees (internal audits). The results of these continuous evaluations are utilized to improve and strengthen our current total quality management (TQM) system and assure equally effective quality systems across businesses.

Our Quality Journey
The Rockwell Automation quality journey started with traditional quality control and progressed through quality assurance, TQM and ISO 9000. While Rockwell Automation Control Systems strongly believes in the foundations that ISO 9000 standards and other management systems provide our business, we also recognize the need for continual improvement. In recent years, Rockwell Automation Control Systems has taken our Quality Program to a new level.

Today, our quality culture is more accurately reflected by our Cornerstones of Quality Program. This internal evaluation process is used to improve performance and measure five essential elements within the Rockwell Automation Control Systems Quality System:

1. Quality System
2. People
3. Information and Analysis
4. Customer Focus
5. Management Leadership

- We measure performance of our suppliers and evaluate our Quality System to assure the system is closed-loop, functioning properly, and driving improvement.

- We provide training and development opportunities for employees and measure performance against key initiatives.

- We capture and use data and facts to drive timely decisions, prioritize problems and measure company performance.

- We measure Customer Focus by setting specific customer satisfaction goals, conducting surveys, and responding quickly to customer needs.

- Management Leadership actively supports our quality processes.

Adherence to our Cornerstones Program is assured through assessments conducted at our facilities by peer assessors. These assessments systematically evaluate our business and facilities’ degree of excellence.
Rockwell Automation Control Systems strongly believes in having independent assessments that delve deep within the processes to ensure that we are providing more than a “veneer” of quality.

But our assessments go beyond identifying improvement opportunities; we also look for methods that have been proven successful “Best Practices” within our businesses. These best practices are identified at each facility and are shared with the entire organization. This blending helps us to improve our business excellence and our overall performance. Our goal is for our facilities, although different in product and services offered, to have a common look and feel to the customer and a consistently high level of quality.

Rockwell Automation Control Systems monitors each link in the entire chain of doing business – Producer, Buyer and Channel Supplier. As a producer, we drive efficiencies and optimize processes; as a buyer, we search for procurement at lowest possible cost, highest quality, and best delivery and as a channel supplier, we demand effective and efficient delivery. Our Lean teams help us meet these challenges by applying the Lean principles throughout the organization:

- Specify value in the eyes of the customer and shareholder
- Identify value stream and eliminate waste
- Provide value flow at pull of the customer
- Involve and empower individuals and employee teams
- Continuously improve in pursuit of perfection

Our Lean processes and principles allow us to produce superior product and provide world-class customer services in the most efficient manner.

People

One of the Cornerstones of Quality at Rockwell Automation Control Systems is the investment in people. Recognizing that our employees have the largest impact on our opportunity for growth, we provide them with the tools and leadership to develop professionally and personally.

An example of how we assist with employee development is the variety of on-line training we provide through our Virtual Learning Center. Our employees have access to over 250 training courses in Business and Professional Development, Desktop, and Technical training. We focus on providing value-added training and development resources to all Rockwell Automation Control Systems business units and employees. These resources include activities and initiatives that foster an environment of continuous learning, provide employee career planning resources, support employee tuition reimbursement assistance programs, sponsor leadership succession training, and generally promote employee development.

At Rockwell Automation Control Systems we know that achieving our vision of customer satisfaction requires a fully committed, well-trained and involved work force. We provide many different resources to assist our employees. Rockwell Automation Control Systems employees have access to full-text databases that retrieve books, patents, standards, news, market research, company profiles, trade and scholarly articles, and an on-line library catalog that indexes tens of thousands of hard copy books, periodicals, and audio-visual materials at the Rockwell Automation Library.
These initiatives and offerings are designed to tie employee learning and development into the four key Rockwell Automation Control Systems value drivers:

- Customer Success
- Quality
- Operational Excellence
- Technical Leadership

Through the Performance Management process, employees are measured against our key employee success competencies: Functional, Business, Interpersonal and Leadership. Opportunities for growth are identified and employees are supported in their efforts for continual improvement. Our business goals tie into employee objectives and employees are held accountable at all levels.

At Rockwell Automation Control Systems, we link key Quality performance objectives and continual improvement stretch goals to individuals through our employee incentive programs. These programs set individual department goals, and employees are rewarded based on the accomplishments of their area. At Rockwell Automation Control Systems, all employees work toward the same goal – customer satisfaction through quality products and services.

**Information and Analysis**

Rockwell Automation Control Systems collects, monitors, and analyzes data from across the company to continually improve our products, processes, and the overall effectiveness of our quality management systems. Turning information into action is a key component of our quality system and our customers’ success.

Information is collected in many areas across the company including:

- New Product Development
- Supplier Performance
- Manufacturing Processes
- Cycle Times
- Audits (internal and third party)
  - Products
  - Processes
  - Quality Management Systems
- Delivery
- Product Field Performance
- Product Reliability
- Customer Support Center and Customer Feedback
- Customer Satisfaction Surveys

Data drives our business decision making and is used to monitor trends, prioritize issues, and confirm the effectiveness of problem prevention, resolution, and continual improvement programs.

The use of participative problem prevention and resolution techniques to identify, analyze, and solve problems is pervasive. Teams are focused on continual improvement of customer satisfaction and internal excellence. Elimination of root causes and future problem prevention are key objectives of problem solving efforts.

Many of Rockwell Automation Control Systems business groups utilize state-of-the-art intranet-deployed Quality Information Systems to gather, monitor, analyze, and share supplier, process, product, customer data, and knowledge across the organization. Pertinent information is also shared with suppliers and customers through systems such as our Supplier Quick Connect Global Supplier Metrics System which lets suppliers know how they are
performing from a quality and delivery standpoint and the Field Quality Information System (FQIS), which allows customers to review information on their repaired or remanufactured equipment.

In many of our high-tech manufacturing facilities, process quality data is automatically loaded into the Quality Information System by the process equipment. Autonomous data monitoring systems use statistical algorithms and trigger points to automatically alert the appropriate personnel via digital paging and messaging of situations requiring intervention. This allows our employees to respond quickly to issues using near real-time data.

Our relentless pursuit of excellence and performance driven culture support the company mission statement: Be the Most Valued Global Provider of Power, Control, & Information Solutions. Our strategic SMART (Specific, Measurable, Attainable, Results-oriented, Time bound) goal-setting process links our quality performance objectives across every level of the organization.

Our Customer Support Centers track all customer-reported cases and product issues. Cases remain open and are tracked until they are resolved. Our Customer Support Centers are linked to our product businesses and quality organizations using an enterprise-wide software application and our Customer Satisfaction Reporting (CSR) process. This allows us to internally route and escalate customer issues to the appropriate groups within Rockwell Automation Control Systems for prompt attention and resolution. Annual Customer Satisfaction Surveys are conducted across the company to measure what is most important to our customers and how they perceive our performance relative to their expectations and against our competitors. We use this information to target continual customer satisfaction programs.

Information drives our preventive and corrective action processes. For example, our Corrective Action Process and Corrective Action Tracking system provide a closed-loop process for tracking issues to final resolution. Lessons learned are turned into corporate knowledge and are incorporated into our design guidelines, process controls, specifications, and business procedures as preventive measures.

Tools such as Pareto Analysis, Statistical Process Control, Failure Mode and Effects Analysis, Design of Experiments, Design for Manufacturability and Assembly, and Root Cause Failure Analysis are widely used in problem solving and prevention activities.

Our Reliability Prediction and Design for Manufacturability Index tools utilize historical plant floor and actual product field performance data for modeling of new designs to optimize our internal manufacturing processes and to improve product robustness in the field.

Our Cornerstones of Quality process is being implemented to pull all of the elements together and is used to systematically analyze, identify, and share the best quality management practices, tools,

Awards & Certifications

Kodak – Supplier Quality Process
Intel – Continuous Quality
ISO International Organization for Standardization
Support Center Practices
and systems across the company. We collect and use data in many ways, but the main purpose is to support continual improvement and customer satisfaction efforts.

**Customer Focus**

When products are designed, customer requirements are the driving motivation. Those requirements come from customer experiences relayed to design teams by sales and marketing professionals indirectly and customer focus teams directly. Early concepts are then tested by customer focus groups to continuously verify that we are on the right path.

Designs are qualified in “real world” situations, using decades of experience gained in customers’ manufacturing, assembly, process and service facilities.

Test laboratories not only “shake, rattle, and roll” our products, they subject them to vigorous excursions in temperature, humidity, and voltage. Our Integrated Functional Test Laboratory tests products that are part of the integrated architecture for compatibility within the entire system, keeping in mind the expected levels of performance as measured by customer application requirements.

Our concern for customer satisfaction continues long after our products leave our facilities. Award winning support teams, whose focus is customer satisfaction, are available by phone, through websites, and in local field service organizations. The Rockwell Automation Control System’s Customer Support group has achieved certification under the Support Center Practices (SCP) Certification program for two support facilities. SCP Certification quantifies the effectiveness of customer support based on a stringent set of performance standards and represents best practices in the industry. It is awarded after an extensive third-party audit of the facilities.

Hundreds of distributors, system integrators, solution partners, and our own consulting field organization are in place to provide automation solutions, meeting expectations of delivery, performance, and value.

Although there are tremendous efforts in measuring quality throughout the process, the most direct and invaluable measure is our customer survey. The survey is analyzed, the results are tabulated and information is shared across the company. We use the information to drive continual improvement efforts throughout the organization.

All applicable businesses of Rockwell Automation Control Systems must submit plans to address improvement opportunities identified by the survey.

**Management Leadership**

Rockwell Automation Control Systems is committed to being our customers’ most valued global source of industrial automation products. Dedication to customer success drives our manufacturing and product development practices. Global manufacturing sites and application engineering resources ensure that our products are created and applied with the latest technology for a global marketplace. All efforts are directed toward providing the right solutions for customer needs. Our goal is to exceed customer expectations by providing the best services, support, quality, and innovative solutions.

We set industry standards for quality and value, from product planning and design, through product delivery. Effective quality, reliability and product safety procedures are key elements for success and are an integral part of all functional business activities.
To ensure customer satisfaction, we:

- Strive to make our products safe to use, operate and maintain.
- Provide products and services that meet global standards.
- Continue ongoing dialogue with customers to determine needs.
- Continually improve product quality.
- Continually improve business systems so they are more responsive to customer needs.
- Continually reduce variation in key processes and activities.
- Achieve continuous cycle time reduction in key business processes.
- Focus on all quality issues concerning Rockwell Automation Control Systems products and services that can affect relationships with our customers.

**Quality Leadership**

Rockwell Automation Control Systems is committed to enhancing our customers’ success worldwide with products, services and responsiveness that set industry standards for quality and value. We relentlessly strive to be the best in every aspect of our business by fostering a culture of trust, teamwork, responsibility, high expectations and open communications with employees, customers and suppliers.

The mission of the Quality Council at Rockwell Automation Control Systems is to provide leadership, strategic direction and oversight to Rockwell Automation Control Systems quality programs. The quality strategy employed by Rockwell Automation Control Systems has its roots in management systems rather than compliance to regulations. Processes and procedures were developed under the Total Quality Management philosophy and updated to comply with current ISO 9001: 2000 standards. Under the direction of the Vice President of Quality, Environmental and Safety, a Quality Council leads the implementation of the quality strategy for Rockwell Automation Control Systems.

A business leader who reports to the president of Rockwell Automation Control Systems heads each of Rockwell Automation Control Systems business groups. These business leaders support Rockwell Automation Control Systems quality processes defined by the Quality Council.

Strategic quality planning is performed by the Quality Council. Our Quality Council is an internal, cross-functional, cross-geographic team that sets quality direction for the entire organization.
This direction is implemented by the incorporation of quality initiatives in the strategic plans and specific objectives of Rockwell Automation Control Systems and all of our business groups.

It is the responsibility of the Rockwell Automation Control Systems vice-presidents/directors to provide adequate resources and properly trained and qualified personnel to perform activities defined in our procedures or plans. This includes providing trained personnel for management, performance of work and verification activities.

Quality Goals for Businesses
Goals and objectives are set each year by senior management as part of an annual planning process. Overall business objectives are defined and then supported by business unit goals and objectives. Quality objectives are determined by considering historical data, customer survey information, business requirements and continual improvement initiatives. Rockwell Automation Control Systems performance against these objectives is reviewed regularly.

Mandate for Improvement
Rockwell Automation Control Systems employs Continuous Improvement as part of our work culture. This concept has shifted our culture toward teams, employee engagement, open communications and has helped to identify new ways of improving cycle times, quality and customer satisfaction.

Rockwell Automation Control Systems senior quality management reviews the Quality System to ensure the suitability and effectiveness in satisfying the requirements of the quality management system and stated quality policy and objectives.

At Rockwell Automation Control Systems we believe: Quality is a product or service that is defect-free, compromise-free, on-time, with planned features that were intended and promised to the customer, properly delivered and supported. If any of these elements are missing, then it’s not quality.