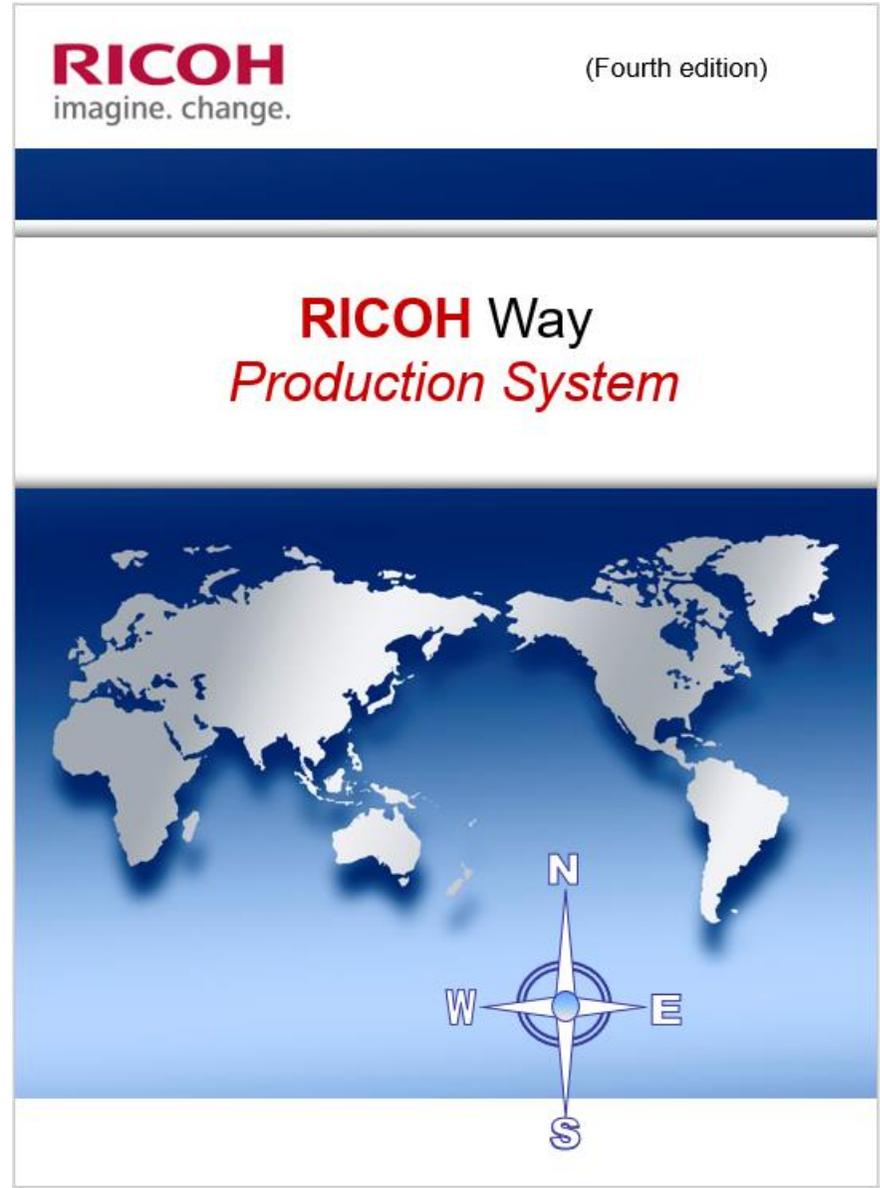


RICOH Way Production System

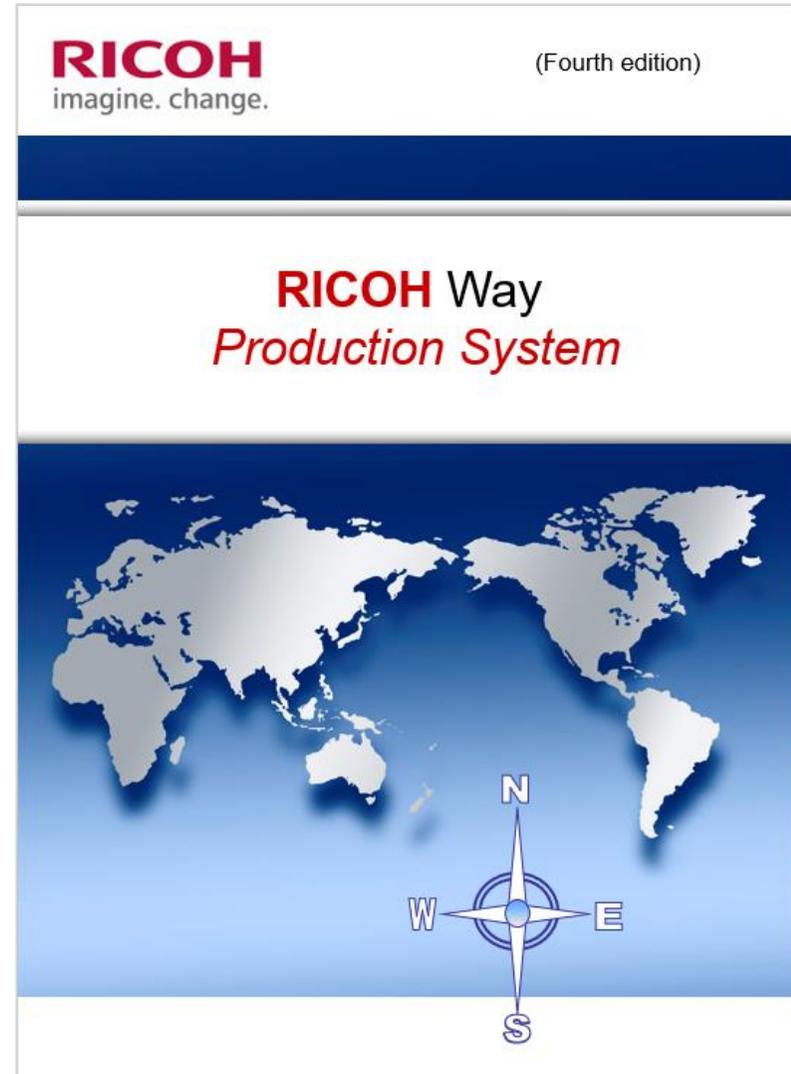
Date: 1/2021





Introduction

- **Introduction**
 - What is RICOH Way Production System?
 - Why do we need the guidebook?
- **Getting familiar with the guidebook**
 - Founding principles
 - Ricoh's mission, vision and values
 - Ricoh's commitment to the SDGs
 - Structure of Ricoh Way Production System
 - 12 Key Fundamentals





WHAT

- Ricoh Way Production System (RWPS) guidebook is a pocket-size booklet that explains Ricoh’s approach to ensuring excellence in manufacturing and is unique to Ricoh Family Group (RFG).
- This guidebook focuses on the 12 Key Fundamentals of the RWPS, which are explained in a simple way to understand and give you some examples of tools, systems and methods we use to work according to the RICOH Way.

WHY

- The purpose of RWPS is to ensure all RFG production employees work as one, applying the same key fundamentals and demonstrating the same behaviors regardless of role or location.
- To transform RFG’s productions facilities as “One Global Company”.



HOW

- Ricoh Way Production (RWP) System guidebook can be used as a reference for all employees as they perform their work
- The “How” section of each Key Fundamental contains tools that we use on a daily basis.



12 Key Fundamentals

1. Think Safety; Act Safely

2. Embrace 5S

3. Foster Employee Development

4. Be Environmentally Responsible

5. Model Corporate Social Responsibility

6. Deliver Quality

7. Breathe Fact-Based Decision-Making

8. Use Visual Management

9. Deploy Standardization

10. Live KAIZEN

11. Pursue Super Low Cost

12. Implement Synchronization

SDCA+PDCA



Safety



Environment



Quality



Cost



Delivery



12 Key Fundamentals

- | | | |
|-----|---|-------------------|
| 1. | Think Safety; Act <u>Safely</u> | Safety (S) |
| 2. | Embrace 5S | |
| 3. | Foster <u>Employee</u> Development | |
| 4. | Be Environmentally Responsible | Environmental (E) |
| 5. | Model Corporate Social Responsibility | |
| 6. | Deliver Quality | |
| 7. | Breathe Fact-Based <u>Decision</u> Making | Quality (Q) |
| 8. | Use Visual Management | |
| 9. | Deploy Standardization | |
| 10. | Live <u>KAIZEN</u> | Cost (C) |
| 11. | Pursue Super Low Cost | Delivery (D) |
| 12. | Implement Synchronization | |



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Introduction

What is RICOH Way Production System?

- It's the organized approach we take to ensure excellence in manufacturing. The methods we use are unique to RICOH.
- The following pages of this guidebook focus on the 12 Key Fundamentals of RICOH Way Production System. Each is explained in a simple way to help you understand what it is and why it's important, and to give you some examples of tools, systems, and methods we use to work according to RICOH Way.

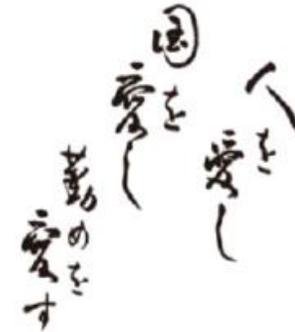
Why do we need this guidebook?

- The 12 Key Fundamentals are the foundation of RICOH Way Production System. You must have a good understanding of these fundamentals, and apply them on a daily basis.
- All employees, regardless of organizational or functional role, must demonstrate behaviors and improve their skills consistent with the Key Fundamentals.

Founding Principals

Mission Vision Values

Founding Principles



The Spirit of Three Loves

“Love your neighbor”

“Love your country”

“Love your work”

by Kiyoshi Ichimura, Founder

Mission

We are committed to providing excellence to improve the quality of living and to drive sustainability.

Vision

To be the most trusted global company.

Values



Customer Centric

Act from the customer's perspective



Passion

Approach everything positively and purposefully



Gemba

Learn and improve from the facts



Innovation

Break with the status quo to create value without limits



Teamwork

Respect all stakeholders and co-create value



Winning Spirit

Succeed by embracing challenges through courage and agility



Ethics and Integrity

Act with honesty and accountability

Ricoh Way Values

CUSTOMER-CENTRIC

Act from the customer's perspective

PASSION

Approach everything positively and purposefully

GEMBA

Learn and improve from the facts

INNOVATION

Break with the status quo to create value without limits

TEAMWORK

Respect all stakeholders and co-create value

WINNING SPIRIT

Succeed by embracing challenges through courage and agility

ETHICS AND INTEGRITY

Act with honesty and accountability

Ricoh has always been committed to protecting the planet. Today, Ricoh is focused on achieving the Sustainable Development Goals (SDGs).

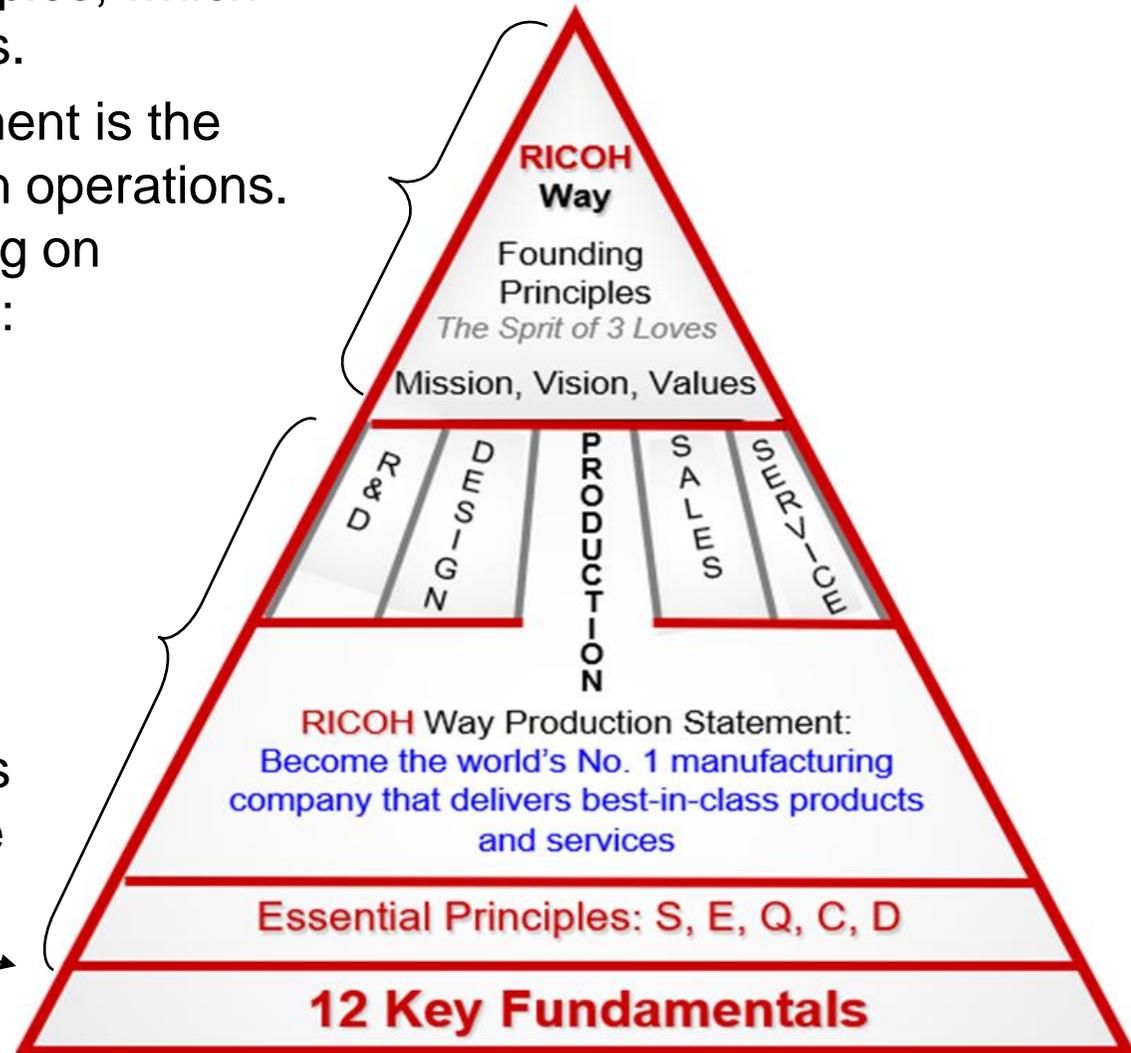
What are the SDGs?

- The SDGs were adopted by world leaders in September 2015 at a historic UN Summit in New York.
- The 17 SDGs were agreed based on the principle “No one is left behind.” Efforts are focused on ending all forms of poverty, fighting inequality and tackling climate change, with the aim to realize a sustainable society by 2030.



Structure of Ricoh Way Production System

- In 1946, Kiyoshi Ichimura defined the Ricoh Group's founding principles, which instruct us how to do business.
- Ricoh Way Production Statement is the ultimate goal in our production operations. We reach that goal by focusing on Essential Principles (SEQCD):
 - Safety
 - Environmental
 - Quality
 - Cost
 - Delivery
- We use 12 Key Fundamentals to improve performance in the areas of SEQCD



Key Fundamental #1: Think Safety; Act Safely

KF #1

Think Safety; Act Safely



WHAT

RICOH is committed to ensuring a healthy and safe working environment, for the well-being of all employees. This is achieved when everyone takes responsibility for following rules, regulations and safe working practices. We must continually improve our workplace through workplace analysis, hazard prevention and control, and safety training.

Recognize Hazards



Take Action

WHY



- Your Health and Safety is our first priority! It is important that RICOH provides a safe and secure workplace.
- Embracing health and safety best practice and complying with regulations protects you from injury and work-related ill health.
- Proactively looking after and improving your health and well-being, is good for you and the company.

KF #1: Think Safety; Act Safely

HOW

Safety starts with you!

- Employees are expected to recognize unsafe conditions or practices, in their own work areas and that of others, and must report them to their supervisor immediately.

- When you see any unsafe state, you are empowered to

1. **STOP** the activity

Act with courage!

2. **CALL** your supervisor

And assist with problem resolution.

3. **WAIT** for instructions

Only when the unsafe state has been removed, can the activity continue.



Maintaining Safe Work Practices

- Employees must follow all safety rules, procedures and workplace specific rules.
- RFG follows the risk reduction hierarchy, however sometimes it is not possible to totally remove all risks and residual risks remain. When it's necessary to wear personal protective equipment (PPE) for the job, it must be worn.





KF #1 Think Safety; Act Safely

KEY POINTS

- Safety is our first priority!
- We want everyone to go home safely at the end of the day
- Report any safety hazards to your supervisor immediately!
- Use of designated personal protective equipment (PPE) is mandatory
- Do not use broken or defective PPE

Key Fundamental #2: Embrace 5S

KF #2

Embrace 5S

WHAT

5S is a method for recognizing workplace abnormalities. Follow each step in order to maintain your workplace in an organized, clean, lean, safe, and pleasant condition.

Abnormal Condition



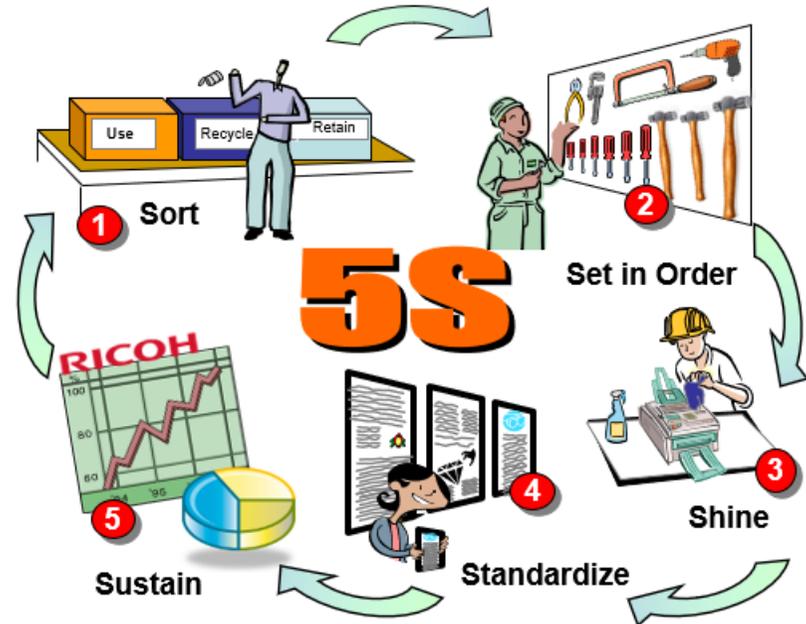
Normal Condition



"S" Step		Meaning and Actions
1	Sort	Sort and remove unnecessary items
2	Set in order	Each item that is needed must have a designated place for easy retrieval and return.
3	Shine	Create a clean workplace. Inspect conditions while cleaning and correct abnormalities.
4	Standardize	Maintain optimum workplace condition, by making the first three steps a standard way of working.
5	Sustain	Maintain the habit of following the first four steps.

KF #2: Embrace 5S

Concept of 5S



5S is the cornerstone of all RICOH operations. Regardless of where you work and what position you hold, 5S not only helps you sustain the optimum condition in your work environment, it also helps you identify opportunities for improvement.



KEY POINTS

- 5S is the cornerstone of all Ricoh operations
- The purpose of 5S is to foster a culture where workplace organization standards are maintained and continuously improved.
- Cleanliness and organization ensure that we can spot abnormal conditions
- Follow the five steps in order
 - **Sort:** Get rid of anything not needed in your work area
 - **Set in order:** Organize everything that is left
 - **Shine:** Make sure the condition of everything you use is good
 - **Standardize:** Make the first three steps your standard way of working
 - **Sustain:** Maintain the cleanliness and organization

Key Fundamental #3: Foster Employee Development

Foster Employee Development

KF #3

WHAT

- RFG is committed to developing self-motivated and fulfilled employees, who are passionate about working and actively engage in their work.
- We develop employees' knowledge, skills and abilities to ensure current and future success.

WHY

- A company is only as good as its people.
- Self-motivated employees are essential for RICOH to become a truly digital services company delivering the EMPOWERING DIGITAL WORKPLACES value that is offered to our customers.



"Fulfilment" is the feeling you get at work when you have achieved something or have learned something for yourself.

- Self-motivated employees embody the Ricoh Way, they love their work which has a positive effect on their engagement and well-being.
- Employee development is critical to the company's success and your career.

KF #3: Foster Employee Development

HOW

- We encourage all employees to deploy the RICOH Way every day, recognizing positive behaviors that exemplify our values.
- We value the individuality, skills, and experience of our employees.
- We build performance management and development systems, workstyles and workplaces that help self-motivated employees achieve their full potential.



The Ricoh Way Recognition Program

We nurture high performance, providing regular feedback and encouraging employees to challenge themselves.

- Line Managers and employees work together to assess and agree development needs and create development plans that align with current and future business needs.
- We provide an environment, opportunities and support to encourage self-directed learning and help you to work autonomously.
- We provide digital literacy knowledge and skills to enable employees to play their part in RFG's digital revolution.
- We regularly measure employee engagement through surveys and deploy improvement initiatives.



KEY POINTS

- A company is only as good as its people.
- Self-motivated employees embody the Ricoh Way, they love their work which has a positive effect on their engagement and well-being.
- Employee development is critical to the company's success and your career.
- Talk with your supervisor about ways to always be improving your knowledge and skills
- Take ownership of your development

Key Fundamental #4: Be Environmentally Responsible

Be Environmentally Responsible

KF #4

WHAT

RICOH Group Environmental Declaration

We proactively reduce environmental impact and strive to improve the Earth's self-recovery capabilities to achieve a zero-carbon society and a circular economy through business.

RFG focuses on four key improvement activities:

Four action areas



Goal of achieving a "zero-carbon society"

To realize a zero-carbon society with reduced greenhouse gas emissions



Goal of achieving a circular economy

To ensure comprehensively efficient use and recycling of resources



Pollution Prevention

To minimize the risk of chemical substances affecting human health and the environment



Conservation of Biodiversity

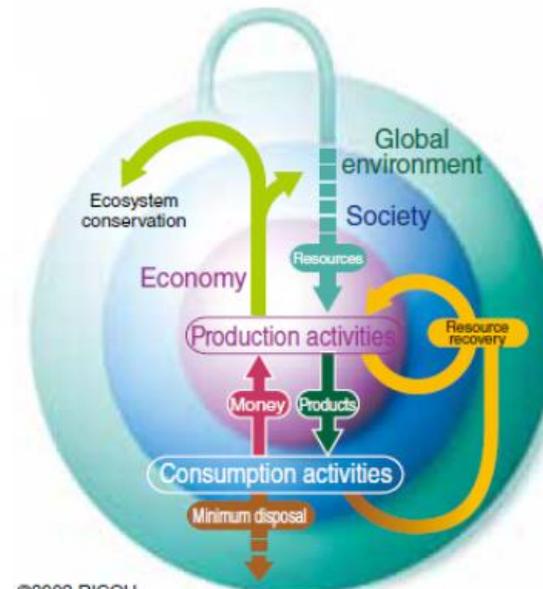
To enhance the earth's regenerative capability through the conservation of biodiversity

KF #4: Be Environmentally Responsible

WHY

- RFG believes that a sustainable society is one that pursues a balance of the 3Ps - Prosperity, People and Planet.
- RFG endeavors to resolve social issues and positively contribute to the Sustainable Development Goals (SDGs).

■ Pursuing the Ideal Society





KF # 4 Be Environmentally Responsible

KEY POINTS

- RFG believes that a sustainable society is one that pursues a balance of the 3Ps - Prosperity, People and Planet.
- RFG endeavors to resolve social issues and positively contribute to the Sustainable Development Goals (SDGs).
- Zero Waste to Landfill
 - Learn how to sort resources correctly

Key Fundamental #5: Model Corporate Social Responsibility

Model Corporate Social Responsibility

KF #5

WHAT

- RFG is committed to its responsibility as a corporate citizen, respecting the cultures and customs of all countries and regions.
- We demonstrate leadership in compliance with national and international laws.
- We inspire employees and business partners to positively contribute to SDGs to address social challenges.



WHY

With the strengths and capabilities of employees around the world, RFG can play an active role to improve quality of living and drive sustainability.

KF #5: Model Corporate Social Responsibility

HOW Respect for People



- We foster a corporate culture based on RICOH Way.
- We actively promote workforce diversity and inclusion, embracing and respecting the unique talents, experience and perspective of all people.
- We support employees in having a healthy work-life balance and provide a safe and pleasant workplace.

Integrity in Corporate Activities



- We respect Human Rights, conducting daily activities according to the Code of Conduct.
- We operate an open door policy so that employees can report any violations without fear of disadvantage.
- We comply with information security rules and promptly report any potential cyber attacks or loss/leakage of information.
- We ensure those in our supply chain always act ethically, and contribute to future sustainability. We cooperate in preparing Business Continuity Plans to ensure continuous supply of products and services.
- Through Responsible Business Alliance (RBA) membership, we will strengthen our efforts on social/environmental/ethical issues.

RBA WEB Site <http://www.responsiblebusiness.org/>



KEY POINTS

- RFG is committed to its responsibility as a corporate citizen, respecting the cultures and customs of all countries and regions.
- We demonstrate leadership in compliance with national and international laws.
- We inspire employees and business partners to positively contribute to SDGs to address social challenges.
- We support employees in having a healthy work-life balance and provide a safe and pleasant workplace.

Key Fundamental #6: Deliver Quality

KF #6

Deliver Quality

WHAT

- RFG provides customer value by “consistently delighting and inspiring our customers”.
- RFG will always remain trustworthy and attractive for customers.
- RFG commits to always deliver absolute quality in its products and services and co-creates with stakeholders to deliver new customer value.

**Building a strong global brand
by creating new value**

- We need to maintain a high level of Customer Satisfaction (CS) in line with our “Customer First” principle.

1. Know your customers

Work to understand customers more deeply, regard everyone as your customer.

2. Take actions all together

Play a central role in CS activities. Strive to increase CS, adopting the attitude of “If I don’t do it, who will?”

3. Continue the effort toward the future

There is no end goal for customer service. Pursue even greater customer service by meeting the expectations of customers more speedily and appropriately.

KF #6: Deliver Quality

WHY

- We have always worked together as RFG to increase customer satisfaction in an effort to maintain Customer Satisfaction No. 1 and be a trusted and attractive brand with broad appeal in the global market.



No 1. trusted brand



- Because customer satisfaction is a given in the marketplace today, it is critical that we exceed the expectations of our customers and delight them so they continue to use RFG products and services.
- Knowing what the customer values helps ensure that our hard work is directed toward what the customer really wants.

**Delivering what customers want,
when they want it**



KEY POINTS

- RFG provides customer value by “consistently delighting and inspiring our customers”.
- We will always remain trustworthy and attractive for customers.
- Not only do we measure quality of our products, we measure the quality of our processes and procedures
- Because customer satisfaction is a given in the marketplace today, it is critical that we exceed the expectations of our customers and delight them so they continue to use RFG products and services.
- Knowing what the customer values helps ensure that our hard work is directed toward what the customer really wants.

Key Fundamental #7: Breathe Fact-Based Decision-Making

Breathe Fact-Based Decision-Making

KF #7

WHAT

- At RFG, fact-based decision-making is how we approach all decisions. It's how we think.
- "Go, see, and investigate" is a fact-based approach. By observing and capturing all the evidence, we are able to understand the situation, define problems accurately, and transform them into opportunities to improve.
- In order to investigate something that cannot be seen, we gather information and organize it in a way that helps us visualize the condition.
- We challenge every employee to observe the actual process or product to capture factual evidence.
- We don't make assumptions or guesses based on past experience alone; we make decisions based on facts.
- Fact-based decision making is not only effective for problem solving, but also for processes such as business planning and strategy and policy formulation.



Being fact-based is not only about what you know, but also what you don't know

KF #7: Breathe Fact-Based Decision-Making

WHY

- Being fact-based enables us to make the right decisions and convert these into the right actions.
- By knowing the facts we can do the right thing, we can:
 - Make quicker decisions.
 - Avoid making mistakes.
 - Put reliable counter-measures in place.



- Fact-based decision making supports the setting of clear targets and goals, for the achievement of SEQCD results.

Find the facts to understand the problems



KEY POINTS

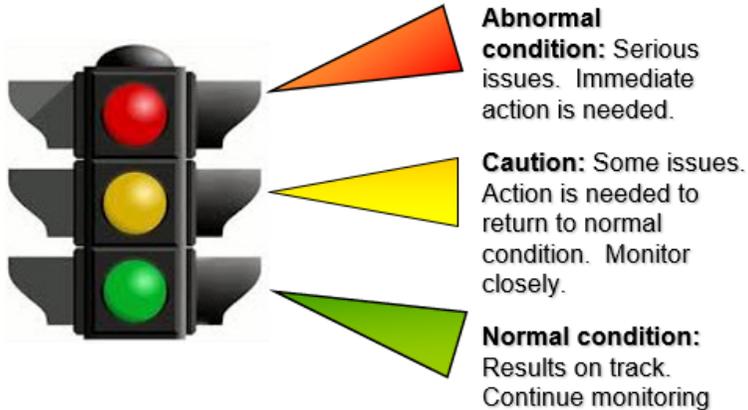
- At RFG, fact-based decision-making is how we approach all decisions. It's how we think.
- “Go, see, and investigate” is a fact-based approach.
- By knowing the facts we can do the right thing, we can:
 - Make quicker decisions.
 - Avoid making mistakes.
 - Put reliable counter-measures in place.
- Fact-based decision making supports the setting of clear targets and goals, for the achievement of SEQCD results.

KF #8 Use Visual Management

WHAT

- Visual Management is used to create a work environment where “normal” and “abnormal” conditions can be easily recognized by all employees.
- Visual management should be clear and easy to understand, and trigger action.
- Digital data makes the status in the Gemba visible.

Visual management is a universal language



KF #8: Use Visual Management

WHY

- Visual management enables us to measure business performance against SEQCD targets: safety, environment, quality, cost, and delivery.
- Visual management enables all employees to quickly understand the critical controls of any process, and triggers a rapid response to any deviation from the norm.
- Visual management allows all employees to perform efficiently by making decisions earlier, often predicting problems before they occur.
- This rapid response ensures we achieve all our SEQCD targets, and exceed our customers' expectations.



Go to the Gemba to manage visually



KEY POINTS

- Used to create a work environment where “normal” and “abnormal” conditions can be easily recognized by all employees.
- Visual management should be clear and easy to understand, and trigger action.
- Be aware of examples in your work area:
 - Red lights to indicate a problem
 - The needle on a temperature gauge to signal a problem
 - Overhead signs that show where work areas are located
 - Lines on the floor to indicate where an item should be located

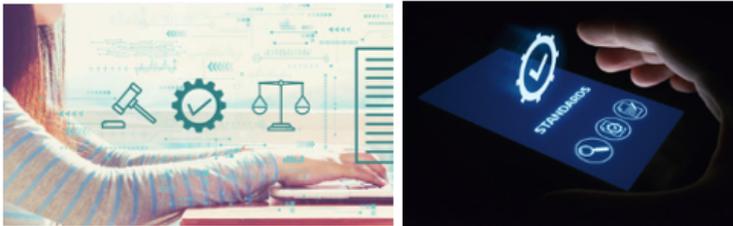
Key Fundamental #9: Deploy Standardization

KF #9

Deploy Standardization

WHAT

- Standardization is the process of creating and documenting standards for the work that is done.
- Standardization is necessary to ensure adherence to the best method.
- By ensuring stable and repeatable standard work, we minimize variations (*baratsuki*) in SEQCD.



WHY

- Standardized tasks and processes are the starting point for continuous improvement.
- Standardization allows employees to know what to do and how to do it so that they can be successful in their job, delivering quality products and services to customers.
- Our standards have been developed to ensure compliance with all regulatory requirements, helping us to provide a safe workplace, where the impact on the environment is minimized.

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KF #9: Deploy Standardization

HOW

- RICOH Group Standards (RGS) provide a global approach to key activities.
- We follow documented management systems consisting of policies, procedures, work instructions, IT systems and digital solutions.
- We standardize data structures and system environments to optimize the use of digital data.
- We ensure compliance to the standards through internal and third party audits.
- We utilize the SDCA and PDCA, cycles to review, revise and improve our documented management systems.

Use the following references and tools:

- Quality management system
- Environmental management system
- Health and Safety management system
- RICOH Group Standards
- Policies and procedures
- Process books
- Work methods



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KEY POINTS

- We standardize our processes and procedures to ensure that our work is stable and repeatable, minimize variations, and ensure the one best way to complete tasks
- Examples of standardization:
 - Process manuals
 - Standard operating procedures
- If you are not fully familiar with all the tasks you need to complete, ask your supervisor to learn if a documented procedure exists

Key Fundamental #10: Live KAIZEN

KF #10

Live KAIZEN

WHAT

- KAIZEN means to continually improve the work process in order to get a good work output (result).
- RFG continuous improvement philosophy requires employees to:
 - Continually improve our business.
 - Continually improve ourselves.
 - Continually improve the customer experience.
- KAIZEN leads to improvement of all SEQCD results.

Never stop improving

- At RFG we embed KAIZEN thinking and application in our activities, using our expertise to strive for excellence.

Be better today than you were yesterday.

Be better tomorrow than you are today.



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KF #10: Live KAIZEN

WHY

- The world and the way we do business is constantly changing, at increasingly rapid speeds. To stay competitive we must continually improve SEQCD and exceed our customers' expectations.
- Our people are our greatest asset, KAIZEN removes tedious and frustrating work, positively impacting on employee well-being.
- It changes employees' thinking, leading to self-improvement and increased engagement. It encourages us to go to Gemba, work together to solve problems and deliver improvements based on the facts.
- It provides new learning opportunities and encourages sharing.

“Spiral up together”

...and achieve even higher targets.



KAIZEN is only truly complete when it has been shared and deployed by others.

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KEY POINTS

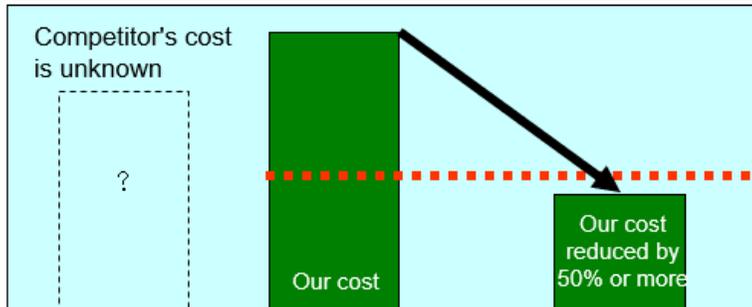
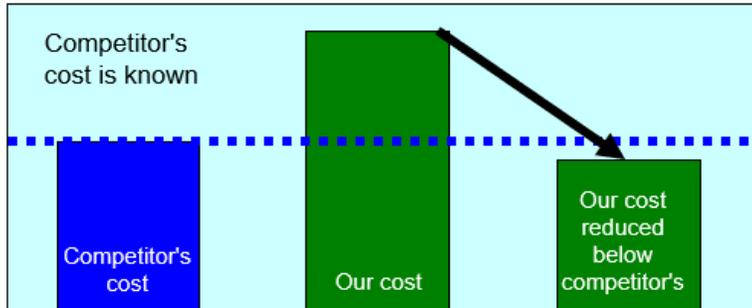
- Kaizen means to continually improve the work process in order to get a good work output (result).
- RFG continuous improvement philosophy requires employees to:
 - Continually improve our business.
 - Continually improve ourselves.
 - Continually improve the customer experience.
- The world and the way we do business is constantly changing, at increasingly rapid speeds. To stay competitive we must continually improve SEQCD and exceed our customers' expectations.

Key Fundamental #11: Pursue Super Low Cost

KF #11 Pursue Super Low Cost

WHAT

- Super Low Cost means to surpass competitors' cost structures. If competitors' costs are unknown, the goal is to reduce our costs by a minimum of 50%.
- We achieve a 50% or better reduction in cost without sacrificing SEQCD performance. This requires technological innovation and creativity to change or re-engineer business processes.
- Scope includes all direct costs and indirect costs.

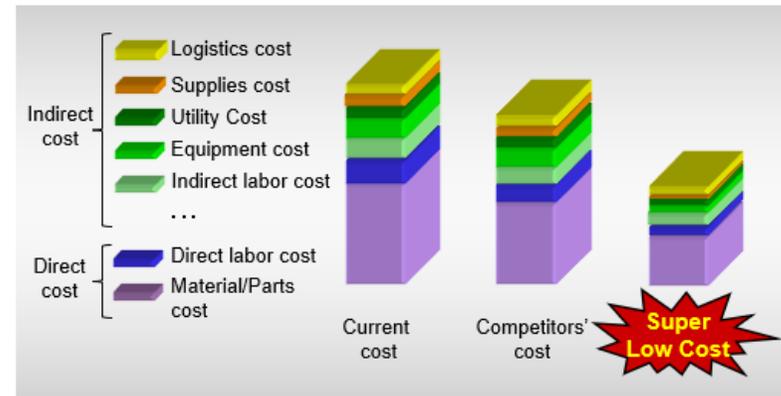


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KF #11: Pursue Super Low Cost

WHY

- Implementing super-low cost enables RFG to:
 - Optimize the cost of operation to remain competitive.
 - Continually improve the customer experience.
- Stretch goals help us to become a leading digital manufacturing company.



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KEY POINTS

- Super Low Cost means to surpass competitors' cost structures. If competitors' costs are unknown, the goal is to reduce our costs by a minimum of 50% without sacrificing SEQCD performance.
- Implementing super-low cost enables RFG to:
 - Optimize the cost of operation to remain competitive
 - Continually improve the customer experience.
- Super Low Cost allows Ricoh to remain competitive and improve the customer's experience

Key Fundamental #12: Implement Synchronization

KF #12 Implement Synchronization

WHAT

Synchronization is the systematic movement of information, materials, and other resources through all stages in a value chain.

WHY

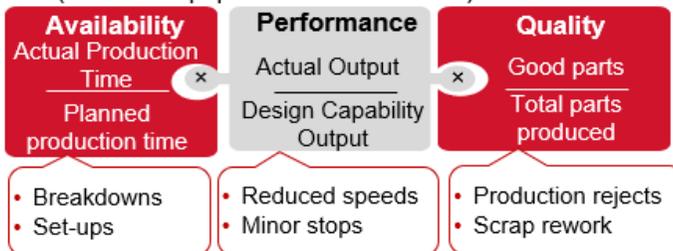
- Synchronization optimizes processes across the organization. It eliminates waste and creates value by reducing cycle time and improving SEQCD results.
- It ensures we delight the customer by providing the right product, at the right time and at the right price.

HOW

We optimize business results by eliminating unnecessary processes, increasing inventory turnover and reducing total lead time; finished goods inventory; work in progress; transportation and space.

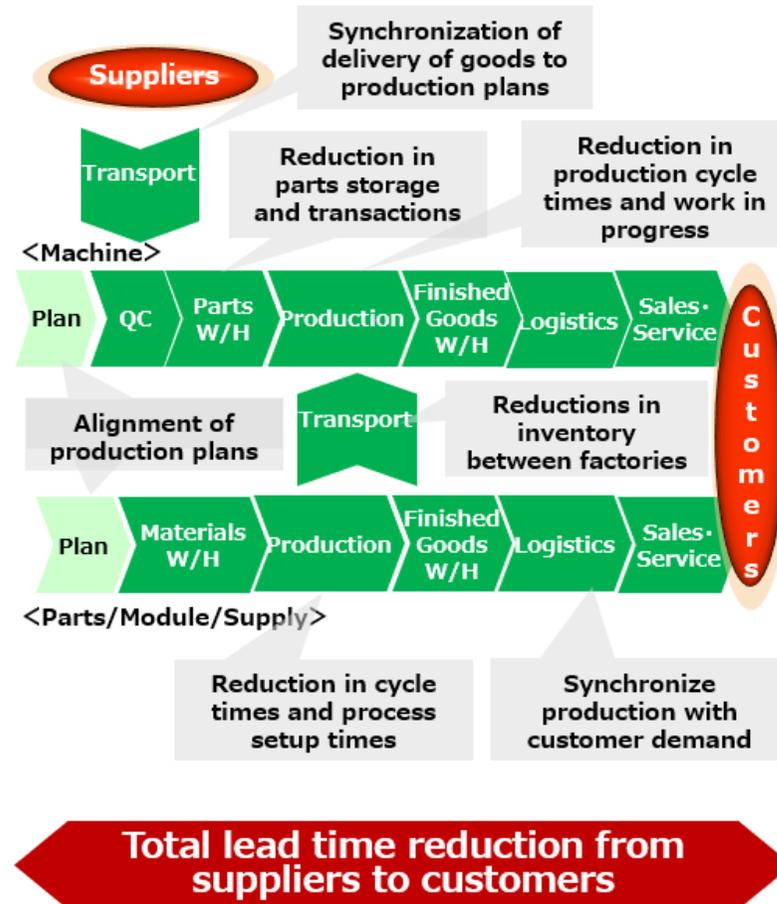
Use the following references and tools:

- Value stream mapping P.69
- Takt time P.68
- 7 factory wastes P.57
- Line balancing P.68
- OEE (Overall Equipment Effectiveness)



KF #12: Implement Synchronization

Scope of synchronization activities:





KEY POINTS

- Definition: The systematic movement of information, materials or other resources through all stages in the chain of operations
- Synchronization optimizes processes across the organization. It eliminates waste and creates value by reducing cycle time and improving SEQCD results.
- Consider how you pass your work on to the next person in your process chain – is there a bottleneck that prevents things from moving smoothly through the chain?

Questions and Answers

