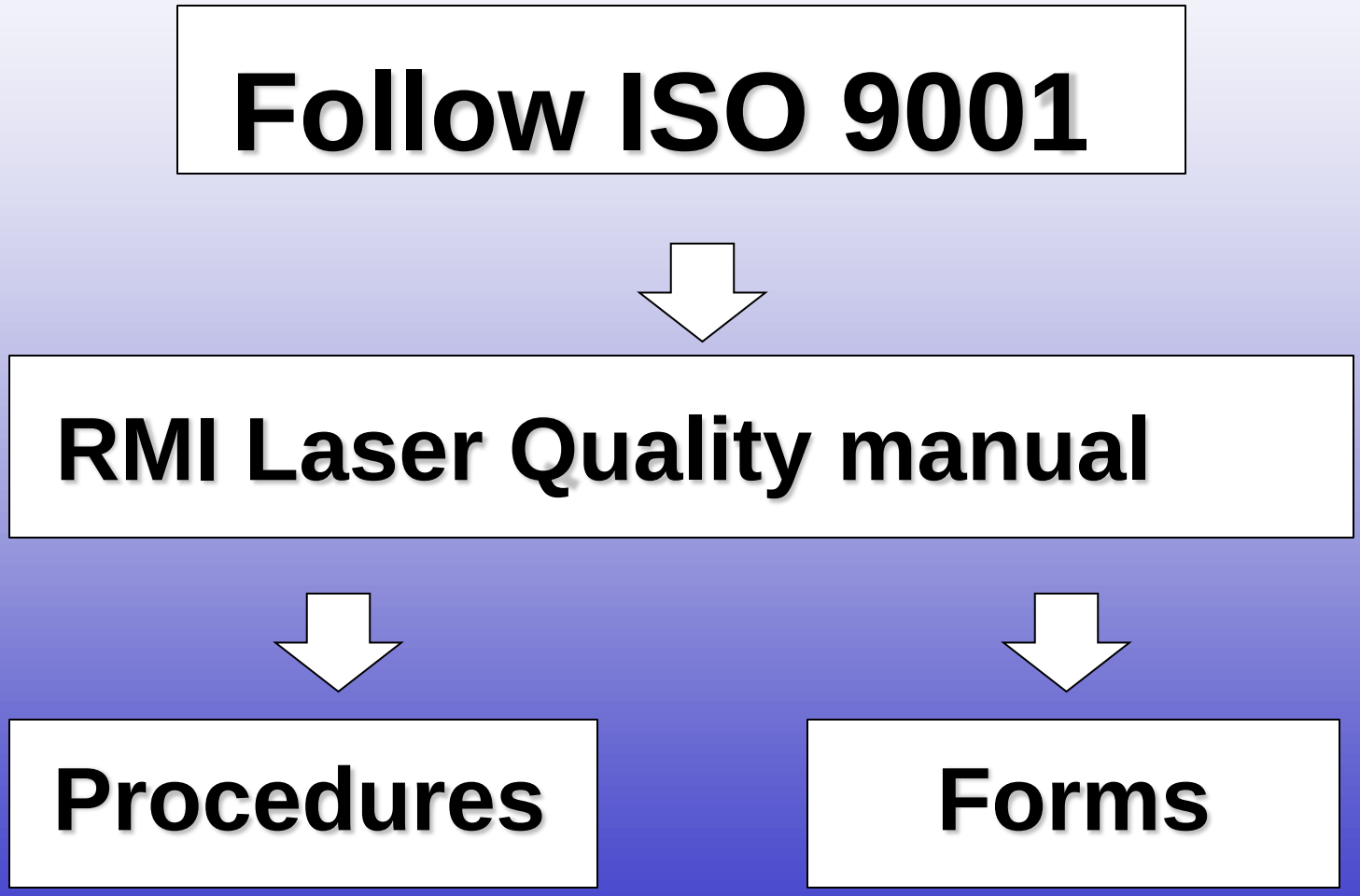
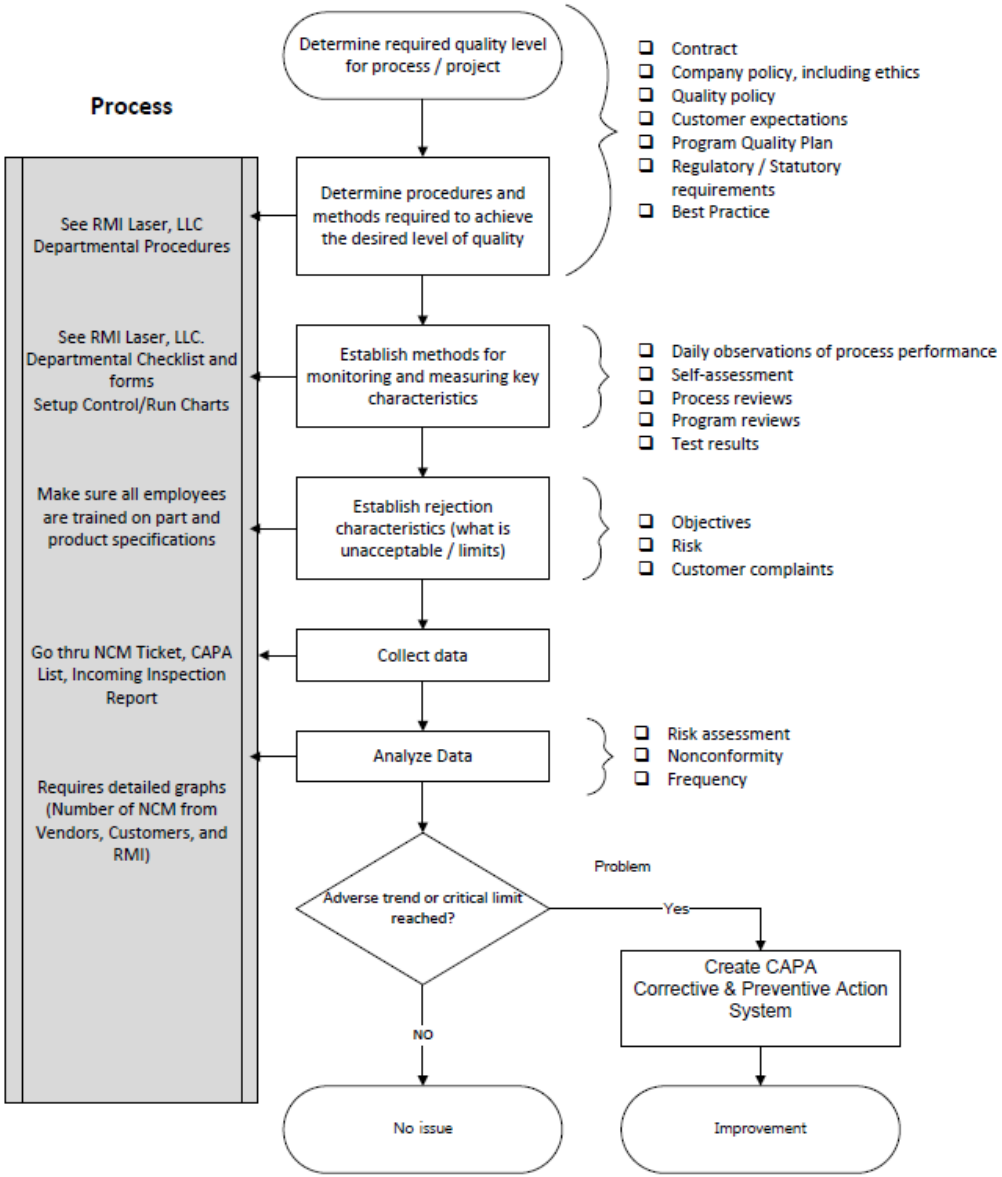
Quality Assurance System

RMI Laser,LLC

RMI Laser Quality System



RMI Laser, LLC
Quality Planning



QA System - Incoming to Outgoing

1. **Incoming Inspection**
   Incoming inspection for key components.

   If we have high quality vendor, RMI needs incoming inspection of small quantity.

   <u>How to find the high quality vendors???</u>

2. **Manufacturing Process**
   Realizing a stabilized operation (process chart, drawings ,check sheets/travelers, tests).

3. **Outgoing Inspection**
   Realizing a stabilized products by QC (Actual article surveillance system by process audit and product s audit).

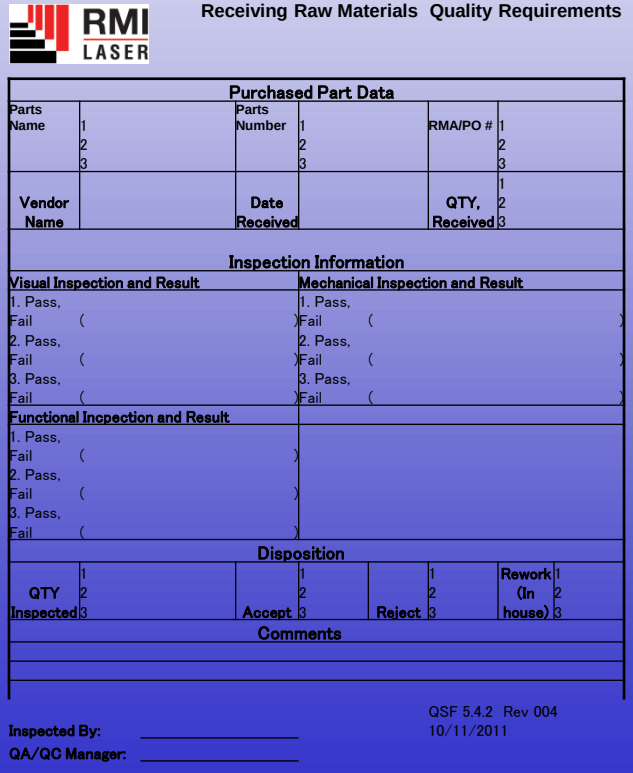
4. **Nonconformance Management**
   Parts/vendor nonconformance, internal products/process nonconformance and customer complaint.

Nonconformance Management

1. Incoming inspection →Receiving check form, Nonconforming ticket, CAPA to the vendor.
Nonconformance found in the incoming inspection.

2. Internal issues→ Internal CAPA (Nonconforming ticket, Redline/ECR->ECO)
***Nonconformance found in the manufacturing process or later. (Manufacturing and* outgoing inspection)**

3. Customer complaint →RMA to CAPA (Nonconforming ticket, Redline/ECR->ECO)
Nonconformance found in the shipped products. (Customer Service)



RMI LASER

Receiving Raw Materials Quality Requirements

Purchased Part Data					
Parts Name	1 2 3	Parts Number	1 2 3	RMA/PO #	1 2 3
Vendor Name		Date Received		QTY, Received	1 2 3

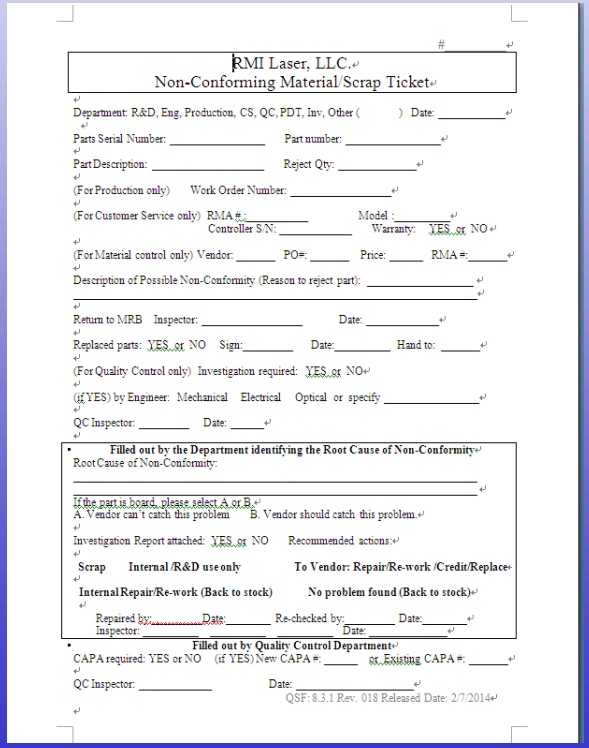
Inspection Information	
Visual Inspection and Result	Mechanical Inspection and Result
1. Pass, Fail ( )	1. Pass, Fail ( )
2. Pass, Fail ( )	2. Pass, Fail ( )
3. Pass, Fail ( )	3. Pass, Fail ( )
Functional Inspection and Result	
1. Pass, Fail ( )	
2. Pass, Fail ( )	
3. Pass, Fail ( )	

Disposition							
QTY Inspected	1 2 3	Accept	1 2 3	Reject	1 2 3	Rework (In house)	1 2 3

Comments

Inspected By: _____
QA/QC Manager: _____

QSF 5.4.2 Rev 004
10/11/2011



RMI Laser, LLC.
Non-Conforming Material/Scrap Ticket

Department: R&D, Eng, Production, CS, QC, PDT, Inv, Other ( ) Date: _____

Parts Serial Number: _____ Part number: _____

Part Description: _____ Reject Qty: _____

(For Production only) Work Order Number: _____

(For Customer Service only) RMA #: _____ Model : _____
Controller S/N: _____ Warranty: YES or NO

(For Material control only) Vendor: _____ PO#: _____ Price: _____ RMA #: _____

Description of Possible Non-Conformity (Reason to reject part): _____

Return to MRB Inspector: _____ Date: _____

Replaced parts: YES or NO Sign: _____ Date: _____ Hand to: _____

(For Quality Control only) Investigation required: YES or NO

(if YES) by Engineer: Mechanical Electrical Optical or specify _____

QC Inspector: _____ Date: _____

- **Filled out by the Department identifying the Root Cause of Non-Conformity**

Root Cause of Non-Conformity:

If the part is board, please select A or B.
A. Vendor can't catch this problem B. Vendor should catch this problem.

Investigation Report attached: YES or NO Recommended actions:

Scrap Internal /R&D use only To Vendor: Repair/Re-work /Credit/Replace

Internal Repair/Re-work (Back to stock) No problem found (Back to stock)

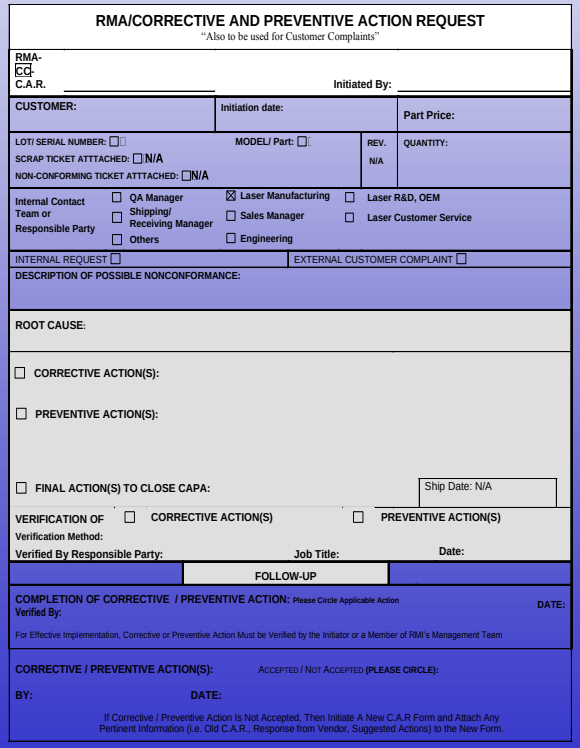
Repaired by: _____ Date: _____ Re-checked by: _____ Date: _____
Inspector: _____ Date: _____

- **Filled out by Quality Control Department**

CAPA required: YES or NO (if YES) New CAPA #: _____ or Existing CAPA #: _____

QC Inspector: _____ Date: _____

QSF: 8.3.1 Rev: 018 Released Date: 2/7/2014



RMA/CORRECTIVE AND PREVENTIVE ACTION REQUEST
"Also to be used for Customer Complaints"

RMA-
CC-
C.A.R. _____ Initiated By: _____

CUSTOMER:	Initiation date:	Part Price:
LOT/ SERIAL NUMBER: ☐ MODEL/ Part: ☐ REV. N/A		QUANTITY:
SCRAP TICKET ATTTACHED: ☐N/A		
NON-CONFORMING TICKET ATTTACHED: ☐N/A		

Internal Contact Team or Responsible Party: ☐ QA Manager ☐ Shipping/ Receiving Manager ☐ Others ☒ Laser Manufacturing ☐ Sales Manager ☐ Engineering ☐ Laser R&D, OEM ☐ Laser Customer Service

INTERNAL REQUEST ☐ EXTERNAL CUSTOMER COMPLAINT ☐

DESCRIPTION OF POSSIBLE NONCONFORMANCE:

ROOT CAUSE:

☐ CORRECTIVE ACTION(S):

☐ PREVENTIVE ACTION(S):

☐ FINAL ACTION(S) TO CLOSE CAPA: Ship Date: N/A

VERIFICATION OF ☐ CORRECTIVE ACTION(S) ☐ PREVENTIVE ACTION(S)
Verification Method:
Verified By Responsible Party: Job Title: Date:

FOLLOW-UP

COMPLETION OF CORRECTIVE / PREVENTIVE ACTION: Please Circle Applicable Action DATE:
Verified By:
For Effective Implementation, Corrective or Preventive Action Must be Verified by the Initiator or a Member of RMI's Management Team

CORRECTIVE / PREVENTIVE ACTION(S): ACCEPTED / NOT ACCEPTED (PLEASE CIRCLE):
BY: DATE:
If Corrective / Preventive Action Is Not Accepted, Then Initiate A New C.A.R Form and Attach Any Pertinent Information (i.e. Old C.A.R., Response from Vendor, Suggested Actions) to the New Form.

Find good vendor and receiving high quality parts

RMI LASER

SUPPLIER QUALITY SYSTEMS SURVEY

Please complete this survey with as much information as possible. If certain questions are not applicable to your service, please enter "N/A".
If you need additional space for answers, please attach the additional pages.
This survey will be used by RMI Laser LLC for evaluation purposes.

Company information

Company name	
Address	
Phone	
Fax	
Web site	

Contact Personnel

President	Name:		Phone:
Quality Dept.	Name:	Title:	Phone:
Engineering Dept.	Name:	Title:	Phone:
Sales Dept.	Name:	Title:	Phone:

Personnel Completing Survey

Name	
Title	
Phone	
E-mail	
Date Survey Completed	

RMI LASER

Supplier 4M Changing Request

Request date	
Request Company	
Request Company Document number	

Drawing #		Product Name	
Model		Sample	Yes , No

(Contents of change) Please circle the corresponding item, and fill out the detailed information.

1. **Change the manufacturing personnel:**

If the work experience is less than one year in this special assembly process and /or change of work place (internal, external).

2. **Change the machine:**

3. **Change the material:**

4. **Change the method:**

(Reason for change) Please fill out the detailed information.

Delivery Schedule to change, RMI PO #

Supplier 4M Changing Request (Answer)

To: RMI Laser LLC

(Result) Please circle corresponding action.

We **(accepted, accepted depending on the condition, denied)** the 4M Changing Request.

(Reason)

Signature and Date

Technical Manager		Supply Chain manager	
QC/QA manager		Other (R&D,ENG etc)	

Received No:_____ **Received Date:** _____

3Q3S
Activities that Help Quality

Meaning of 3Q3S

3Q

Quality Worker

Quality Company

Quality Products

RMI Laser

Adapted

3Q

High **Q**uality Worker

High **Q**uality Company

High **Q**uality Products

6S *(represents 6 Japanese words)*

Seiri
Arrangement

Seiton
Putting things in order

Seiso
Cleaning

Seiketsu
Cleanliness

Saho
Manner

Shitsuke
Discipline

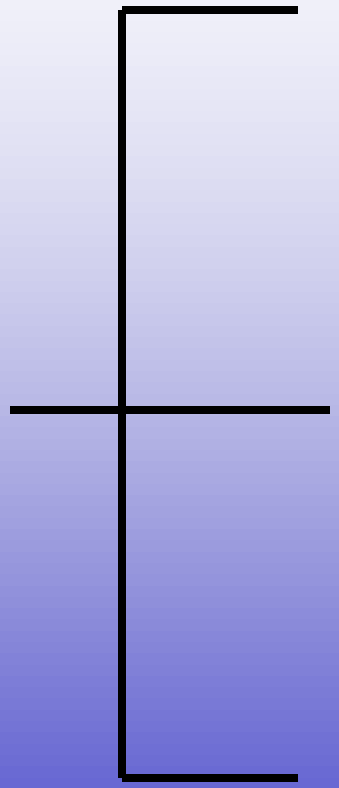
3S *(represents 3Japanese words)*

Seiri
Arrangement

Seiton
Placing things in order

Seiso
Cleaning

3Q



High **Q**uality Company

High **Q**uality Worker

High **Q**uality Products

Arrangement

To distinguish “the things which are needed” and “the things which are not needed” and put them accordingly. It is strictly prohibited to put the things which are not needed at work place.

- Perform the arrangement at once in a short time.
- Dispose the unnecessary things.

Following wastes will occur if you do not perform arrangement.
(1) Waste of space.
(2)Waste of time and labor to move things because of insufficient space.
(3) Inventory control for unnecessary things

Placing Things in Order

To arrange necessary things properly in place and in a way which is suitable for safety, quality maintenance and efficiency so that everyone is able to find the things which is needed easily.

- Determine the place and position considering the workability, safety and appearance.
- Place legible signs.
- Place things so that workers can get to them easily .

Following waste will be occur if you do not place things in order.
(1) Longer time will be needed to locate.
(2) The “down” situation
(3) Excessive purchase
(4) Delivery delay

Effects of 3Q3S

1. 3Q3S is a cost saver

3Q3S produces cost saving in the working place.
Save consumable, tools and lubricants.
Save setting up time and operation time.

2. 3Q3S is a time keeper

(1) No delay of delivery.
(2) Shorten lead time.

3. 3Q3S is a promoter of standardization

(1) Implement the things properly that everyone decided.
(2) Able to start operation immediately in any work place.

4. 3Q3S is an engine for quality and cost

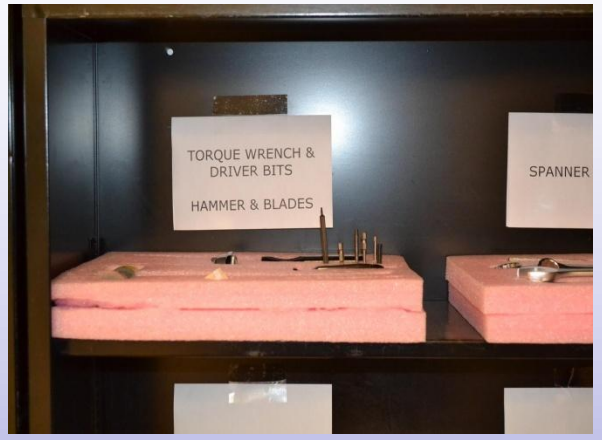
(1) Aim for 100% non-defective by stabilizing and improving the quality.
(2) Lower the cost by reducing the defect.

3Q3S Activities in the Field

Recognizing
= *Visual management*

Fix-positioning
= *Image management*

3Q3S Good example



3Q3S Bad example

What is he/she doing in production?
paperwork? clean the material? Testing for electronic equipment?

What are these parts numbers?
Are these good parts or not?
Why is the drawer opened?

Categories are color coded??

Why the trash bags on shelf?
Do we need it in here?