

# NETSUITE QUALITY MANAGEMENT

Inspect, Test, Rework and Report

Designing, manufacturing, distributing and selling a product of high quality doesn't happen by accident, it requires a company-wide commitment to enforce policies and standards. NetSuite's Quality Management solution has been designed to help you deliver the highest quality in your products with minimal overhead regardless of the size and complexity of your business and product line.

# **Key Benefits**

- Formalize quality policies, standards and practices.
- Improved product quality.
- Initiate quality activities from business transactions.
- Collect in-process and incoming inspection results.
- Compare to pass/fail criteria.
- Integrated non-conformance reporting.
- Reduced cost of quality.





#### Inspections

The inspection record defines exactly what it is that you want your quality engineer to check. These inspection records can be re-used so, for example, you only have to create a "check for material certificates" inspection once—these are later grouped into specifications that are then applied to items, etc. There are currently two main types of inspections that are supported.

With qualitative inspections, the inspector can verify that the item is in good overall condition or verify that the appropriate certificates are in place.

Quantitative inspections, on the other hand, allow you to define multiple measurable

elements along with criteria for acceptance, i.e. diameter, width, length, temperature or even chemical composition.

# Skip Lot, Sample Size and Failures

Within each inspection, you can also specify how many items need to be inspected and define rules for inspecting specific sequences of lot or serial tracked items. Failures then define how many of the inspected units can fail inspection before the inspection itself is failed—kicking off the non-conformance workflow.

#### **Test Definition**

Each inspection can be set up with multiple data elements that define the parameters of the inspection process.

	0		
Quality Inspection			
Save Delete Copy Insp	Go Back		
Primary Information			
INSPECTION NAME *	DESCRIPTION *	INSPECTION TYPE *	MANDATORY
Comp Rest II	Tests verify circuit continuity and component	Qualitative	-
	resistance is within limits	INSPECTION METHOD *	
		Digital Multimeter	•
Inspection Frequency And Sampling	Requirements		
DETAIL EREQUENCY (SKIP LOT)	SAMPLE RATE	ALLOWABLE FAILURES	
5	5%	196	
Data Fields Standard Fields	Rules System Information		
Data Field List •			
New Data Field			
SELECT	SEQUENCE	DATA FIELD	
Edit	1	Circuit Continuity	
Edit	2	Initial Resistance	
Edit	3	Material Receipt	

Data Fields define the information that must be entered during the inspection, i.e. length, width and height.

Data Fields Standard Fields	<u>R</u> ules System Information	
Standard Field List • New Standard Field		
SELECT	STANDARD FIELD	DATA TYPE 🛦
Edit	Circuit Checks OK	Boolean
Edit	Resistance UCL	Decimal
Edit	Resistance LCL	Decimal

Standards fields are then established to define how the data field should be compared to a standard.

<u>D</u> ata Fields	<u>S</u> tandard Fields	Rules System Information			
R <u>u</u> le List •					
New Rule					
SELECT	SEQUENCE	RULE	DATA FIELD	COMPARISON	STANDARD FIELD
<u>Edit</u>	1	Circuit Continuity Rule	Circuit Continuity	Equals	Circuit Checks OK
Edit	2	Initialial Resistance Rule UCL	Initial Resistance	Less Than Or Equal To	Resistance UCL
Edit	3	Initial Resistance Rule LCL	Initial Resistance	Greater Than Or Equal To	Resistance LCL

Rules then establish how the data field entries should be compared to the standard and determine pass/fail.

One of the benefits of this approach is that it allows the user to define a single inspection and have item specific standards.

#### **Specifications**

The specification record groups related inspections to establish quality activities. So, for example, when receiving some raw materials, you might confirm dimensions as well as verify that the appropriate certification is present. Additionally, the specification record allows the user to:

Save Go Back			
rimary Information			
ECIFICATION NAME * eam Inspection		SPECIFICATION DESCRIPTION * Inspect incoming cross-beams for minimum length and width	
nspections <u>C</u> ontexts	C <u>o</u> nformance Rules	System Information	
Assigned Inspections •	Conformance Rules	System Information	_
Add Inspection	Conformance Rules	System Information	
Add Inspection SELECT	Conformance Rules	System Information	INSPECTION METHOD

- Associate specifications to item/vendor/ location combinations.
- Define inspection frequency via settings for skip-lot, sampling and more.
- Define conformance rules that establish when an item fails an inspection.
- Display error messages that describe where and why updates failed.

# **Automatic Triggering of Inspections**

Based on item/vendor/location associations, NetSuite item receipt transactions are monitored and can initiate inspection activities with different rules for each.

\*In an upcoming release, inspections will be able to be triggered from manufacturing routing steps to capture in-process quality results.

Inspections <b>Contexts</b>	Conformance Rules	System Information			
Associa <u>t</u> ed Items •					
LOCATION	ITEM	TRANSACTION TYPE	TRANSACTION FREQUENCY	SOURCE/DESTINATION	IS DEFAULT A
Indianapolis Facility	I-945 BEAM	Receipt From Purchase Order	0	N/A	Yes
Indianapolis Facility	psm-001	Receipt From Purchase Order	0	N/A	Yes

Assigr <sub>List</sub>	n Inspec	tions							More	Assign Inspect
nspectio	n Queue Filt	ers								
OCATION		▼ [		ASSIGNE	ED TO	▼ + 🗹 Per	PECTION STATUS		▼ + 12	
Jpdate Q	ueue)									
ET ASSIGN	IED TO		SET PRIORITY	▼ + 🗹	SET STATUS	▼ +	C			
Queue I	Records •									
SELECT	QUEUE	LOCATION	ITEM	SPECIFICATION	TRANSACTION TYPE	TRANSACTION QTY	ASSIGNED TO	PRIORITY	STATUS A	
	42	Indianapolis Facility	PCB-P	Circuit Boad Inspections - Incoming	Item Receipt #47	2	Not Assigned	N/A	Pending	
	84	Indianapolis Facility	I-945 BEAM	Vendor Specification	Item Receipt #93	5	Not Assigned	N/A	Pending	
	7	Indianapolis Facility	Non-Inv Item 001	Standard Receiving Inspections	Item Receipt #11	3	Not Assigned	N/A	Pending	
	34	Indianapolis Facility	I-745	Dan Inbound Test	Item Receipt #53	10	Not Assigned	N/A	Pending	
	59	Indianapolis Facility	I-745	Dan Inbound Test	Item Receipt #68	3	Lance Roundy	2-End Of Day	Pending	
	30	Indianapolis Facility	I-745	Dan Inbound Test	Item Receipt #49	14	Pat Smeaton	1-Standard	Pending	
	32	Indianapolis Facility	PCB-P	Circuit Boad Inspections - Incoming	Item Receipt #51	2	Not Assigned	2-End Of Day	Pending	
	28	Indianapolis Facility	PCB-P	Circuit Boad Inspections - Incoming	Item Receipt #47	2	Lance Roundy	1-Standard	Pending	
	43	Indianapolis Facility	1-745	Dan Inbound Test	Item Receipt #56	8	Not Assigned	N/A	Pending	

### **Inspector Assignment**

Once an item has been identified as requiring inspection, an entry is made into the inspection queue where an individual quality engineer can be assigned to perform the task. Workflows can be utilized to automatically assign inspectors based on location, vendor, inspection type, etc.

#### **Perform Inspections via Tablet**

The quality tablet interface enables quality engineers to perform inspections, review standards, record data and submit data for analysis directly from the inspection area providing real-time feedback and instant access to test results.

			Gavi	n Davidson Quality	Engineer		via
Location A	Transaction A	Item 🔨	Age 🔨	Status 🔨	Priority A	User 🔨	Vici
Indianapolis Facility	Purchase Order #3	Non-Inv Item 001	3 months	Pending		Gavin Davidson	
Indianapolis Facility	Purchase Order #1	1-745	a month	Pending		Gavin Davidson	
Indianapolis Facility	Purchase Order #3	PCB-P	a month	Pending		Gavin Davidson	
Indianapolis Facility	Purchase Order #3	PCB-P	a month	Pending		Gavin Davidson	
Indianapolis Facility	Purchase Order #6	LOAS REAM	5 days	Pending		Gavin Davidson	

Once the user selects an inspection, they are walked through capturing the results and get real-time feedback where there are issues.

		Ga	vin Davidson Quality Engineer	
Specification	Vendor Specification	Transaction	Purchase Order #6	
Item	I-945 BEAM	Quantity	5	
Item Description		Transaction Date	Friday, October 27th 2017, 10:45:00 am	
Weigh Package A	nd Record Results			
Weigh Package A Packagage Weigł	t (Lbs) Material Certificate Set current date			

# Workflow Driven Non-Conformance

Quality failures, or non-conformances, can drive additional activities within NetSuite through customizable workflows—the application provides initial workflows for:

- Quarantine and Release
- Initiation of Vendor Return Authorizations

## Roles

The system comes with three distinct roles that are assigned to existing users:

- Quality Administrator: Responsible for setup and maintenance of quality specifications, context checks and workflow.
- Quality Manager: Responsible for monitoring and managing quality execution and reporting.
- Quality Engineer: Responsible for quality data collection.

Inspections	<u>Contexts</u> Conformance Rules	<u>System Information</u>			
Add Confor	mance Rule				
EDIT	SEQUENCE	CONFORMANCE RULE	INSPECTION	ACTION	HALT ON FAILURE
	10		Discoursion Test	Detrime Te Mandau	N/a a

#### Workflow Driven Non-Conformance