

HOW TO PREPARE AN INSPECTION CHECKLIST?

Different importers sell on different markets and have different requirements. If you only approve a sample and some basic product specs, you leave a lot of room for mistakes and misunderstandings. Even worse, many Chinese factories will exploit all the grey areas to decrease their costs.

Sophisticated buyers take the time to define all their expectations in a way that can be tested and approved objectively. It often takes the form of a checklist, to be used by the supplier for production and by the inspectors for quality validation.

An inspection checklist is typically prepared by the buyer's quality service or by a third-party QC firm. Here are a few guidelines to do it the right way.

Each checkpoint goes into 1 of these 3 categories:

- 1. SPECIFICATIONS**
- 2. DEFECTS**
- 3. ON-SITE TESTS**

(There will be overlap between specs, defects, and tests. It is not a big problem, as long as you respect the logic described in these guidelines.)



SPECIFICATIONS

1

Anything that should be verified and then compared to pre-established requirements.

” These checkpoints are typically applied to 1 sample or 5 samples only, to save time. The number of samples is higher in some cases (e.g. checking the measurements of garments made by hand in different colors and on different lines). Every sample that is not conform to the buyer’s requirements is a cause for refusal of the inspection. ”



For consumer goods, specifications usually cover the following aspects:

1. Material & components
2. Assembly / workmanship
3. Colors, finishing, and aspect
4. Size, weight, and other measurements
5. Labeling, logo, tags, stickers
6. Packaging: retail packing, cartons, shipping marks

► HOW TO LIST SPECIFICATIONS:

Example of specification: a saucepan should weigh 945g +/-10g. If the inspector finds 3 samples within tolerance and 2 samples outside, it shows that some products are not conform.

DESCRIPTION	REQUIRED RESULT	TOLERANCE
WEIGHT OF 1 PIECE OF SAUCEPAN	945g	+/- 10g

Tip: you probably cannot describe every spec in a way that can be understood clearly by an inspector. Consider using pictures and drawings(attached to the checklist) and reference samples (to be given to the inspector).

2

DEFECTS

Anything that can be noticed visually, at the press of a button, or by a very quick action.

YES NO



” These checkpoints are applied to every sample selected by the inspector. Every imperfection is counted as 1 defect (max. 1 defect per sample), and is assigned one of these categories:

- ▶ **Critical:** might hurt a user, or is illegal
- ▶ **Major:** is not acceptable by most users in most circumstances
- ▶ **Minor:** might not be a problem to most users

Then the inspector will compare the numbers of defects to the “AQL” limits (these limits come from the statistics used in the quality control industry.)

So the buyer can define the following parameters:

- ▶ The AQL limits for each category (for most consumer goods, most buyers choose 0% for critical defects, 2.5% for major, and 4.0% for minor).
- ▶ How to categorize the most frequent defects.”

▶ HOW TO LIST POTENTIAL DEFECTS:

DESCRIPTION OF DEFECT	CATEGORY		
	CRITICAL	MAJOR	MINOR
Scratches on the body of the product (less than 3mm long)			X
Scratches on the body of the product (at least 3mm long)		X	
Product does not function when turned on		X	

Tip: buyers are tempted to lump many defects in the “critical” category to make it clear they are not acceptable, but in most cases these defects are “major”. Don’t forget, finding even 1 critical defect is enough to reject an entire batch.

ON-SITE TESTS

3

Anything that should be verified by using a specific method and/or device.

” These are the tests to be performed with the factory’s equipment, during an inspection. What cannot be tested in these conditions should be sent to a third-party laboratory.

It important to describe very clearly the method to follow and the required result.

On-site tests are only performed on a few samples if they are destructive and not very important (example: a product drop test on 3 samples). If at least 1 sample breaks or stops functioning, the test is failed. It will be up to the buyer to decide whether it is a serious issue.

On the other hand, tests that are related to user safety, are not destructive, and are not very time consuming are performed on all the samples that are checked for defects (example: a hi-pot test on an electrical product).

In this case, if the test is failed on 2 samples, it generates 2 critical defects and the inspection is failed.”



► HOW TO LIST ON-SITE TESTS:

TEST NAME	TEST DESCRIPTION	REQUIRED RESULT
DROP TEST	Free fall from 70cm high, on concrete or wooden floor, of 3 samples	Samples should not break
HI-POT TEST	Conduct a hi-pot test on adapter, on all samples, with factory equipment (1,500v; 0.5mA; 1-2 sec.)	No current leakage

Pro tip: it is important to specify on how many samples each test should be performed. Five samples should be enough for a certain test on a certain order size, but it might be insufficient on a larger order. If you are familiar with “special inspection levels”, it might be a good idea to refer to them (examples: drop test on S-1, full function test on S-3...)



CONCLUSION

IF YOU DEFINE YOUR REQUIREMENTS CLEARLY AND PLACE THEM IN THE BEST CATEGORY, YOU WILL REDUCE CONFUSION FOR YOUR SUPPLIER AND FOR THE INSPECTOR.

Here are a few tips for best results:

- ▶ **Try to complete the inspection checklist before manufacturing starts**
- ▶ **Attach it as an appendix to the purchase order and/or to the contract**
- ▶ **Translate the checklist in Chinese and make sure the factory technicians get a copy**
- ▶ **Send an inspector to apply the checklist as soon as finished products get off the lines, to catch and correct issues early**