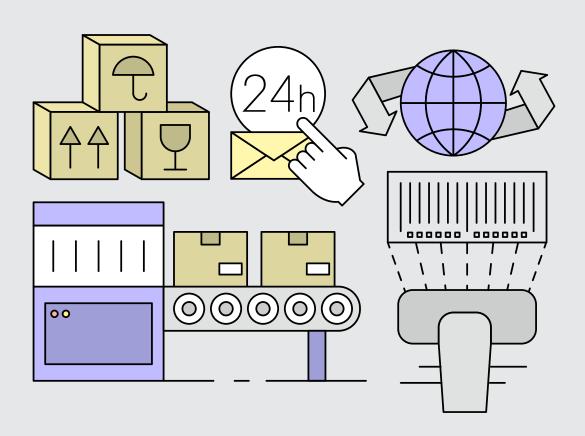
### Defining Product Specifications:

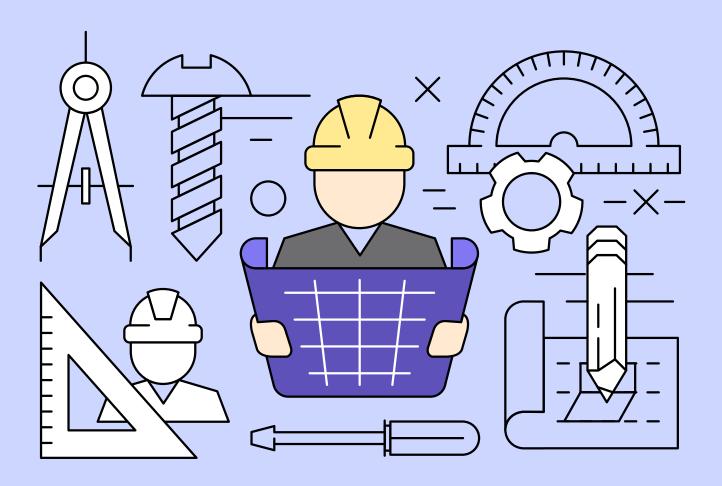
MORE IMPORTANT THAN YOU THINK!





t's never enough to have a product idea in mind, or link to a product from one of the supplier directories.

You need a product specification sheet if you're serious about quality!





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# INTRODUCTION: WHY PRODUCT SPEC SHEETS ARE CRITICAL



The main reason new importers fail when manufacturing a private label product in China is because they aren't specific enough. They contact a random supplier on Alibaba, explain that they want to have that supplier make a product that is listed on their Alibaba page, send them an email with a link to the product, and then tell them that it should be "good quality" or "whatever quality you typically do for other U.S. buyers".

And this is where it all starts to go wrong



If you have a product in mind that you would like to have manufactured, you need to be sure you've done the necessary research and planning **before** communicating with factories. Having a product idea in mind, or linking to a product from one of the supplier directories, is **never enough** when it comes to looking toward China to have

a product manufactured. It is not the supplier's responsibility to define your product quality or specifications. You must put together a comprehensive list of your product's details by creating a Product Specification sheet (spec sheet) to ensure there is absolutely no room for interpretation by your supplier. If there is, they will just guess and end up filling in the "gaps" with what they think you want. Hence, thoroughly defining your product is, without a doubt, the most integral first step to avoiding a potential future disaster.



### A product specification sheet is your game plan

It tells the supplier exactly what you want. It is the full definition of the product you're seeking to manufacture, with details, dimensions, photos, drawings, materials, and instructions. It is, essentially, your game plan for your product; from start to finish.

Western cultures are accustomed to the practice of window shopping. When someone wants to purchase a car, the car dealer can present not only the available models, but every possible option offered to customize the car. When we want to purchase a sandwich at a deli, the menu presents all the various kinds of meats, cheeses, produce and sauces available. Hence, we are used to just picking options and having things made for us with minimal interaction or instruction.

Manufacturing from China is **entirely** different. Factories don't have menu's, there is no established standard with which to present their potential customers. Rather, it is the buyer's responsibility to identify all product specification and quality requirements to the factory, so the factory can then, in turn, review this information and determine if they can or cannot manufacture the item. This is incredibly frustrating for many newer importers, because when they try the "window shopping" approach with suppliers, it immediately categorizes the customer as a novice, which can have

dire consequences down the road.

When sourcing suppliers, it is important to understand that there are 'plenty of fish in the sea'. Literally thousands of factories exist in China, which gives you the option of choosing any supplier you wish. But new importers also need to understand this is reciprocal. Meaning, the supplier realizes this concept as well, and if they deem a potential customer to be unprepared or a careless amateur, they will likely stop pursuing your business altogether and move on to a new "fish". Or worse, they may put forth the bare minimum of effort in making your product, which will result in poor quality goods, and ultimately upset consumers that are now your problem.

To prevent complications and misunderstandings with you supplier, you need to become an expert on your product **before** reaching out to them. The best way to start learning about your product is to do what all successful private label sellers and product designers do: create a product specification sheet.



## HOW TO CREATE A PRODUCT SPECIFICATION SHEET



Creating a product specification sheet is about listing and defining the exact requirements for all phases of your product. Simple guidelines are not enough. Your product specifications must be so exceedingly clear that the factory simply can't possibly claim to have misunderstood them. This means that absolutely everything that defines your product should be included in your spec sheet. There is no detail too small not to be included.

The product specification sheet, while comprehensive, should not be overly complex. During the planning of the product, you will find that the most time-consuming aspect will be the product research. Rather than start things off by providing you with tips on how to create a product spec sheet, we are first going



to discuss the importance of product research, as well as how to conduct this research.

A common question new clients ask us before they sign up for our A - Z Service is, "What's the average timeline to produce a product?" This is a very difficult question to answer. The obvious answer is that it varies depending on the details of the product. The less obvious, but just as important answer, is that it also depends on the buyer.

A buyer that neglects to perform adequate research before they begin sourcing, and believes they can conduct the necessary research during the sourcing stage, sets themselves up for a series of agonizing situations. By not knowing exactly what you want, you may end up wasting a lot of time by initially qualifying suppliers and then disqualifying them when your product requirements change.

A factory that can produce a product to a certain specification may be incapable of producing it to a different specification. It's also important to note that when specifications change, prices and sometimes order quantities and production times change as well.

### What details to include in a "Spec Sheet"

The short answer: As many as possible.

A product specification sheet is not limited to a text alone. Providing graphical instructions (CAD drawings, 3d models, images, free-hand drawings) along with a product sample, mock-up, or prototype will only help to further assure that you receive the exact product you require.

While there is no one spec sheet that works for all products, the list below contains some of the more common details included in product spec sheet templates. Depending on your product, you revise this list to suit your needs:

- Product description (what is it, what does it do, how does it function)
- Components needed and specs of components if any
- Design (drawings, photos, models, prototype)
- Colors (Use pantone #)



- Coatings or treatments required
- The SKU & order quantity
- Certification requirements (FDA, CE, UA, RoHS, etc)
- Quality standards & special instructions
- The specific material type(s) for the product and the precise amounts
- Product dimensions weight
- Product tolerances (if any)
- Testing requirements (compatibility, conformance, load, function, pre-build, in-process, end-of-line, performance, stress, etc)
- Inspection Requirements & Pass criteria (potential defects, where & what to check)
- Logo details (files, dimensions, position, colors, application method)
- Label specifications (logo placement, colors, typeset, font)
- Packaging specifications (layout, colors, type ((clamshell, tie-on card, box, bag, etc)))
- Shipping specifications (carton dimensions, type, material, marks, temp/humidity controlled?)

Yes, this list is long and confusing. But you will not be using all of these specifications. For your convenience, we have a downloadable product specification sheet in one of our previous blog posts. There are also a few other examples at the end of this guide.



**TIP**: Look at product specs on supplier websites, competitor websites, and factory directories to get an idea of what they want. Suppliers on Alibaba and Global Sources usually list some version of a product specification sheet. Look on as many supplier pages as you can find for your product and make a list of all the specs the suppliers publish. It's also a great place to find out hidden information like certification requirements, quality levels, component specs, etc.



Below is a screen shot from an Alibaba page for a fidget spinner product. You can see that the supplier has some great information that will help you figure which specs to include on your product specification sheet. Do this for 10-20 other suppliers of the same product and not only will you have a good idea of what specs to include, but you'll also be better informed on the various types, models, and features of your product. This will allow you to decide if you want to take features from a few different versions and make the "ultimate" version of the product!

You can also request a full spec sheet from the supplier which they must provide you. This will help ensure your own spec sheet is not missing anything when it comes to product specific specs.





man desired	Daniel Harris
Product	Details

**Company Profile** 

**Transactions Overview** 

Report Suspicious Activity

### Overview

### Specifications

Structure: Deep Groove Bore Size: 3 - 3.99 mm Precision Ratin...P0 / P5 / P6

Place of Origin: Shandong, China (Mainland) Inner / outer rin.. Chrome steel/Gcr15

Mass:: 0.0017ka Service:: **OEM Welcome**  Ball

Outside Diame... 8 - 8.99 mm Seals Type: ZZ / 2RS / Open

Deep Groove Ball Bearing Structure:: Chrome steel/Gcr15

Certificate:: By & ISO9001:2008 Application:: Steel Industry, Mining, Machin...

Yuki bearing/YWS Brand Name:

Model Number: mr83 Number of Row: Single Row 3x8x2.5mm Dimension::

Ball:: Chrome steel/Gcr15

Packing:: Poly bag/Yuki color box/5 lay...

### Packaging & Delivery

Packaging Details: 1. Neutral Packing: White Plastic bag / Outer Carton / Pallet

2. Yuki Brand packing: Yuki Plastic bag / Yuki color box / Yuki Carton / Pallet

(Carton Size:39.5cm\*26cm\*21.5cm or 39.5cm\*26cm\*17cm / Pallet Size:80cm\*120cm\*80cm or 120cm\*80cm\*100cm)

1. 7-15 days leading time 2.3,000pcs stock Delivery Detail:

### 3d toy high speed rotate fidget spinner toy



Deep Groove Ball Bearing

Dimension: 3x8x2.5mm Precision Rating: P0 P5 P6

Certificate: BV & ISO9001:2008

Packing: Poly bag/Yuki color box/5 layer carton/Pallet

www.ywsbearing.cn	
Name	Value
Structure	Deep Groove Ball Bearing
Model Number	MR83
Dimension	3x8x2.5mm
Inner / outer ring	Chrome steel/Gcr15
Cage	Chrome steel/Gcr15
Ball	Chrome steel/Gcr15
Mass	0.0017kg
Precision Rating	P0 P5 P6
Certification	BV & ISO9001:2008
Packing	Poly bag/Yuki color box/5 layer carton/Pallet

### **Yuki Bearing Features**

- ISO9001:2008 quality management system
- Precision: ABEC-1(P0), ABEC-3(P6), ABEC-5(P5), ABEC-7(P4)
- Noise level: Z1, Z2, Z3, Z4
- Vibration Level: V1, V2, V3, V4
- · Clearance: C2, C3, C4, C5
- · Hardness: 59-63 HRC
- Low friction, long service life
- Welcome OEM order

Notice they list additional quality specs regarding noise, vibration, and clearance. They also show their QMS by stating the ISO certification.

All of these additional specs you'll want to research and include your desired standards in your own spec sheet.

Application: automobiles, machine tools, motors, instruments, construction machines, textile machines, railway vehicles, agricultures machines and various other areas.

### **Factory Ability:**

1.R-Series, 1600-Series

2.6000-Series, 6200-Series, 6300-Series, 6400-Series, 6700-Series, 6800-Series, 6900-

Series,

3.8000-Series, 8700-Series, 8800-Series

4. Maximum Capacity Type M6200-Series, M6300-Series

5. Cartrigde Type W200-Series, W300-Series

6. Open, Shielded, and Sealed, and Snap Ring are also available.

### Becoming an Industry Expert in Your Product Selection

Most newer importers tend to pick a product by using one or more software tools that are designed to help with product selection. Typically, these will estimate revenue, BSR, units per month, competition, and a few other metrics. Thus, the product most people pick to start their importing/e-commerce selling journey has no real value or meaning to them, other than it was suggested to them by a piece of software they purchased. This means, they probably don't know a lot about the details, specifications, or production methods that are tied to this product.

And while that might be okay from a marketing perspective, it is not okay from a manufacturing standpoint.

### It is time become a professional in your product decision.

TAKE ADVANTAGE OF YOUTUBE! You can find videos of everything, including videos of how many products are made. This should be the first step in understanding your product. Head over to YouTube and begin searching for demonstrations of the manufacturing process of your product.



If you can't find the exact product, look for something similar, something with the same material makeup.

There is a good chance you'll be able to find a video of a very similar product being made in a Chinese factory. For example, here are 3 videos that explain the manufacturing process of the fidget spinner.

It helps to have multiple product samples in hand. Look at your competition, order some samples from your top competitors and compare them. What are the differences between them? Which ones are better? Why are they better? Can you improve them?

How much do they weigh? Is there a weight or size difference, and is it correlated to the price?

If you want your product to differ from the competition, identify what similar products are out on the market. Is there a feature in an existing product that could be easily added to your product to

make it better, easier, stronger, lighter, faster?

Read product reviews from your competition. What do people love about the existing products? What do they hate? Are there areas for improvement that you can define? Make a spreadsheet of your findings so you know exactly which features to add, improve, change, or remove.

### Before moving too far, has your product become too complex?

It is not always a bad idea to shy away from complex products. However, there is a big difference between slightly improving an existing product and adding a new feature to a product that would require an entirely new mold to be created. To understand this, we need to first learn about the different types of product manufacturing, and how they can affect your project.

Product customizations are commonplace in many manufacturing projects. If your product needs customizing, it is helpful to be able to identify the type of customization that is needed.

Manufacturing from China can be broken into three different categories. We like to categorize them in the following fashion:

- Off the shelf production
- Product tweaking
- **Custom design**



Ranging from the simplest to the most complex form of manufacturing, most products being sold on e-commerce sites and in retail will fall into one of these three categories.

*Off the shelf* productions and *product tweaking* are viewed as basic forms of manufacturing and fall within the capabilities offered in our A-Z service. *Custom design* productions have their

limitations and require further explanation and understanding, prior to determining if using our service is ideal for your project.

A custom designed product is one that originates from an idea and requires a full package of product design documents created by a product development team.

All products are different and this article only touches on the <u>basics</u> of product development. Because of this, it is critical to understand the necessary steps that need to be taken when working towards getting a custom product manufactured.

The purpose of this article is to briefly explain the essential steps that should be taken and the information we need prior to being able to assist in the sourcing and manufacturing of a custom designed product. It is important not to use this article as a guide towards product development. A company specializing in product development will be able to provide much more actionable advice.

### Design for Manufacturing Ready

Before looking at China for manufacturing options, the first and most important step in product development is to get the product designed by a professional product designer. A design company needs to be contracted in order to produce the necessary packet of layout & design materials that are *Design for Manufacturing (DFM)* ready.

This content includes 3D drawings, material specifications and component details and spec lists that easily explain to the factory engineer all aspects that are needed to produce the product.

It essentially serves as a detailed recipe that can viewed by the factory engineer in order for them to determine the feasibility of the custom production.

China should be looked at as a location that is ideal for manufacturing, but less than desirable for design and creativity. It is important to have all this DFM content ready well before reaching out to factories in China, as you'll be wasting your time if you do not.

DFM content needs to be constructed using professional 3D design software, and created to the standards of a professional development team. Cocktail napkin drawings, Google Sketch documents, and detailed written explanations mean nothing to engineers in China. These things may be great when explaining your concept to product designers, but will do you no good when speaking with factories.

### **Tooling & Moulding**

Once designs are DFM ready, early stage prototypes will need to be created. These prototypes, along with the design drawings, will be what helps create the tooling and moulds used to mass produce the product.

Tools and moulds are big, heavy, expensive and can require multiple iterations in order to produce the desired product. Tools can cost thousands, if not tens of thousands of dollars to create. Depending on how your negotiations with the factory end up, these moulds are either owned by the importer or the factory. While much more expensive, we always recommend that the importer own all tools and moulds exclusively, and thus maintain full control of them. This can help in intellectual property protection and will make it easy if changing factories is necessary during future orders.

### **Understanding Order Quantities**

Custom designed products almost always require a much higher order quantity than some of the more basic forms of manufacturing. New products take time to perfect on the production floor; materials often need to be purchased in their raw form, and factories only have one buyer to consider for future orders. Because of the added time in training production staff, sourcing new materials, wastage during production configuration and manpower needed to get said custom production up and running, factories will often quote order quantities that are much higher than what might be expected.

We understand this makes it difficult, if not impossible for e-commerce manufacturers. Typically, they operate via the model of early, low order quantities for validation, with an understanding of ramping up once the product sales velocity has reached acceptable levels. Unfortunately, most of the costs explained in this article can't be avoided, as they are all required for the manufacturing process.

### The Rule of 3

Explaining estimated costs for custom designed products is virtually impossible. We've seen products get designed and ready to be manufactured for as little as \$20,000 USD. More often we see costs in the range of \$50,000 - \$80,000 USD, but there is no accurate way of predetermining when design costs will rise. Also of note: these numbers don't have production or shipping costs factored in. The above numbers are an estimate of the costs associated with taking a product from idea to reality, in order to start the production process. This means, once said costs are determined, production and logistics fees need to then be factored in to get an accurate final number.

Guided Imports advises interested inventors to operate via the Rule of Three. Once you've estimated all potential costs, multiply that number by three in order to obtain a more accurate estimate of the total costs for design.





### **Putting it All Together**

To sum up the research phase, use the following resources to conduct your research:

- Watch YouTube videos of how your product is made.
- Order samples from competitors.
- Read product reviews.
- ldentify similar products on the market.
- Complex customizations will require a DFM, not just a spec sheet



### **Create the Product Specification Sheet**

We've include templates of product specification sheets at the bottom of this document as well as with the link to our blog post on this topic. However, we will continue to explain the major points of a specification sheet so that you can gain a better understanding of the overall process. One thing to remember is that the look of the spec sheet doesn't matter nearly as much as what is contained in the sheet's details and requirements.





Below are the five most important aspects of the product specification sheet.

### 1. Include as much detail as you possibly can

Being repetitive and including information that may not be necessary only takes up a little real estate in your document and does not cost anything. Forgetting to include information in the document can turn out to be incredibly costly.

### 2. Assume the reader knows nothing

Your specification sheet should be written as if the reader has little knowledge or understanding about your product.

This is important for two reasons. First, it will help ensure you're as descriptive as possible during the creation of the document. Also, it will allow readers who are not native speakers to have a greater ability of comprehension. To be even more clear, you should have a native-speaker translate your specifications. This is precisely why we have Mandarin speaking employees at Guided Imports. The language barrier makes conveying accurate details almost impossible unless you communicate with the factory in their native language, and even dialect.







### 3. Keep specifications precise and quantitative

You never want to enter details in a specification sheet that cannot be measured. Agood example of this is when defining quality. Explaining that you want a good quality product should not be done through adjectives and synonyms of quality, rather clear explanations of what would make the product the ideal quality that you require.

### Examples:

**Poorly written specification:** The product must withstand high temperatures.

**Properly written specification:** The product will operate at a temperature of 400±10°C

### 4. Break specifications into categories

Categorizing your specifications will allow the process of creating your specification sheet to be infinitely less overwhelming, and will allow for a higher level of organization. (Category examples are listed previously)

### 5. Rank for Importance

You can't always get what you want. Cost constraints, manufacturing options and feasibility all ultimately factor into how your product gets manufactured. Because of this, ranking requirement importance can become an incredibly beneficial exercise during decision making times.



### Product Specification Sheets: Start Utilizing This Critical Tool Now!



The best way to ensure quality for manufactured products is a detailed and thorough product specification sheet. You need to start getting familiar with this tool and ensure you use it for every product that you manufacture. This is especially

important in China, where suppliers may try and save money on production by employing various cost-saving techniques. The more detailed your spec sheet is, the higher quality your product will be.

Here are a few parting thoughts and tips. Also, please not that the last page of this guide contains three additional links to product spec sheet information and templates.

- Be as detailed as possible
- Have your spec sheet translated to Chinese if you're unsure of your supplier's English language comprehension
- Make sure your supplier signs off on the spec sheet with a date, stamp, and signature to ensure they understand it
- If multiple factories are telling you they can't build your product to specs, have the factory managers make notes and comment as to which specifications are giving them trouble

By following this guide and creating product specification sheets for every product you source, you will maximize your product quality and gain and edge over your competition!



### **Product Specifications**

Here are 3 links to additional templates and resources you can use to make your own version of a product spec sheet.

<u>Understanding Materials</u> <u>Creating Specification Sheet</u>

Technical Data Sheet 1

Click our logo to find out how Guided Imports can help your business scale by optimizing, streamlining, and automating your China sourcing, manufacturing, and supply chain operations!