



# The Secret to Planning a Labeling System

*How to Get It Right the First Time*

# Introduction

The benefits of automated or semi-automated labeling can be fundamentally revolutionary. Yet all too often companies spend serious investment only to end up with a labeling system that fails to deliver to their needs or expectations. They find themselves faced with either making significant additional investment into their current system, or scrap what they have already invested and start all over again with a brand new labeling system that better serves their production needs.

Frustrations with installed labeling systems typically result from one of two issues: either the customer has not communicated the uniqueness of their needs so the labeling systems provider can engineer an effective solution, or the provider has offered a one-size-fits-all, out-of-the-box system that doesn't adequately solve the customer's unique problems. End users must first communicate what their specific needs are and then ascertain if the labeling systems provider can meet them. Without enough information to fully understand the problem, a provider cannot design an effective solution that delivers to its full potential.

This planning guide will explain how to navigate the selection, planning, and implementation of an automated labeling system. Through open communication, foresight, and a critical assessment of the offerings of a labeling provider, a business can arrive at a comprehensive labeling solution that not only addresses its current needs, but evolves to meet the inevitable challenges of the future.

## Background:

Customers often approach a new labeling system out of a sense of frustration. Sold a bill of goods from a previous provider that failed to live up to expectations, they may feel burned. Perhaps the system suffered heavy breakdowns or failed to perform as promised. They may discover it is difficult to get the right parts, service, or support. Exhausted and beat down, the customer naturally has strong reservations about repeating those same mistakes.



When considering the potential benefits of a labeling system, they may feel a bit like Charlie Brown trusting Lucy to hold the football: Their frustrated feelings of "Aaugh!" can practically become a running gag.

The good news is this situation is entirely avoidable. If the provider truly understands the customer's requirements and previous pitfalls, that provider can better retrofit a solution to address these issues. If a requirement cannot actually be delivered due to the inherent limits of physics, the customer's expectations can be readjusted so a more realistic yet satisfying outcome can be obtained.

From the standpoint of the customer, the better they understand what the provider can actually deliver, the more accurately they can assess whether this provider truly has the answer to their unique challenges.

This planning guide will discuss what information the provider needs to know to deliver an optimal system, as well as what the customer needs to know in regards to a provider's capabilities in order to ascertain if they are truly an ideal choice.

## Foresight and Planning: Building Blocks to an Effective Labeling Solution

Like any healthy relationship, sincere and open communication is essential to success. Customers must accurately, clearly and comprehensively communicate their needs, requirements, and ambitions. Providers, likewise, must be straightforward about what they can offer and at what cost.

We sometimes visit potential customers' sites that already have competitor's labeling systems established. Why have they returned yet again to the marketplace? Often the initial solution has proved ineffective and little support has been offered to fix the problem. Our first priority is to find out what went wrong and how those needs can be better addressed. Because without an intricate examination of the problems and challenges faced by the customer, we only risk repeating the entire process over again. Accurate insight, on both sides of the planning table, is critical to the launch of a successful labeling solution.



# The Label Machine Site Survey

To start out on the right foot, you and your provider both need to be on the same page, literally. That page is comprised of the Label Machine Site Survey, a comprehensive questionnaire that lays out your products' specifications and requirements.

## **These details include:**

- Label placement
- Label size
- Label material
- Label details
- Product details
- Product size
- Product flow
- Product temperature
- Product weight
- Dimension
- Configuration
- Geometry
- The process before and after labeling
- Conveyor speed
- Conveyor height, length & width
- Infeed/Outfeed transfer requirements

The label machine site survey (sometimes called vendor site survey) is a valuable resource for identifying issues as the equipment is specced and custom engineered for the customer's specific requirements. How fast processes need to be, the dimension logistics of equipment, where the label

needs to be located, can help the provider determine requirements and identify issues that can easily become thousand dollar catastrophes if overlooked.

"The LMS survey can prove to be a great sales tool for the distributor," points out Ed Schneider, director of Sales & Marketing for CTM Labeling Systems. "They may be the first distributor to actually bother to be cognizant of critical details addressed in that customer's application. End users tend to appreciate this attention to detail."

Accuracy is essential. One of our customers once incorrectly requested a side-guided swing tamp instead of a centered-justified model on their site survey. The wrong custom part proved to be too short to apply the label. The equipment needed to be sent back. The customer incurred shipping costs, lost investment on a customized part, and left a critical labeling operation at a standstill.

"The big expense can really be the downtime," states Jerry Wade, Midwest Regional Sales Manager for CTM Labeling Systems. "These systems have tight deadlines that can cost the user a great deal of money. The cost for error gets dicey, fast."

Omissions can become expensive problems. One company that packaged squeeze bottle relish omitted the fact the contents would be hot when the label was first applied. When it later cooled, the geometry of the bottle and label changed significantly. "Is the heat going to make a difference?" the customer happened to ask during a test run at the provider's facility. It absolutely did. That one simple question, and the fact the wrong box had been checked on the site survey, could have easily cost the company \$8,000 to \$10,000. Fortunately, we caught the mistake in time and only required a minor adjustment.

## The Importance of End User Contribution

If you are a distributor providing the labeling system to an end user, you may not be completely aware of the specifics of your customer's logistics, requirements, and specifications. It is critical they contribute to the survey as well as review it for accuracy and omissions. Ultimately, the label site survey protects the end user by ensuring the system is spec'ed to their particular needs, setup demands, and challenges. The early stages of the planning process are critical to the design and construction of the right piece of equipment that will truly address that end user's needs.

At the same time, navigating as well as comprehensively and accurately filling out the site survey remains the responsibility of the distributor. Rather than just forwarding the survey to the customer, the distributor needs to take a leading role and own the process.

Distributors know what questions to ask and what issues to look for. Always follow the site survey itself as a guide, no matter how experienced the distributor may be at spec'ing out an application.

"Some distributors may feel the more years of experience they have, the less they need the survey," said Brian Chivers, Assistant Director of Sales & Marketing for CTM Labeling Systems. "But the reality is they actually need it more. They may forget a detail about conveyor size, for example, and not remember until they're driving back from the site, if at all. And those kinds of omissions can cost you, big time."



## Design & the Importance of Accurate Samples

Without an accurate physical sample of the product or label, any attempt to retrofit a design to accommodate the labeling of that product is an educated guess at best.

While drawings can provide a relative picture of size and shape, the benefits of working with three dimensions can be instrumental in retrofitting a labeling solution.

An engineer needs to be able to hold the product and physically observe its features in order to accurately configure a comprehensive and effective design.

Even seemingly minute details can make radical differences in where the product is placed on a conveyor, how the semi-automatic aspects of a machine are designed, or how the machinery is laid out. Do certain parts need to be restrained from movement? Does the product require bent configurations that might not otherwise show up on a drawing? Is there a more convenient method of product placement during label application that could save time, money and improve consistency?



It is also important to have the label itself. Labels can come in different dimensions, materials, and thicknesses, all of which can affect how the labeling machine works.

Accurate samples are essential. We once had a customer provide a whiskey bottle sample made in the US using a certain material as a label. Yet their actual production used a bottle made in Italy using a different labeling material. This disrupted the accuracy of the label placement. Unfortunately, the equipment needed to be reconfigured after shipment.

Physical, hands-on product samples and labels are critical to the design process of a labeling solution. Any changes, no matter how small, can make radical differences and result in setup nightmares that can be very expensive to reconfigure.



# Establishing Footprint: the Logistics of Space

For today's factory and manufacturing centers, space can be as finite and precious as gold. Efficiency of space has become an industry buzzword. When establishing a labeling system, footprint is understandably a primary concern.

This is the question our engineers face daily: How do you fit 10 pounds of hardware in a five-pound bag? The answer is usually the same: logistical design.



If space requirements are discussed early in the design process, a creative solution more often than not can be engineered. But those space requirements need to be part of the design conversation from the very beginning. By definition, footprint is essentially the foundation upon which the whole configuration is built. Knowing space constraints earlier rather than later can mean the difference between building that foundation on bedrock or sand.

Sometimes, ambitiously tight footprints wrestle with reality. Design a space too small for an operator, for example, and changeover becomes more cumbersome. Other practicalities can prove vastly challenging as well as expensive. It is essentially a negotiated tug of war with physics and dimensions of space. It is important to consider if a shorter labeling footprint is worth any potentially increased expense or limitation to the function of the labeling system.

## Speed: How Fast and at What Cost?

The speed of a labeling system can be relative to the intricacy of what's being printed, the type of material, the shape of the packaging, and the actual speed of the packaging process. It is not so much a question of how fast can a labeling system print, but how fast do you need a labeling system to print? In certain cases, slower speeds may improve accuracy, safety, affordability, and resolution.

A customer may ask for a labeling speed of 1,000 times per minute despite the fact that the packaging system upstream can only fill 200 to 300 per minute, for example. Designing a 1,000x speed run will prove not only to be impractical and expensive but completely unnecessary. This could result in an expensive quote or a provider not even offering a suitable bid, despite the fact that they could actually design a more affordable system if the speed was limited to what was functionally necessary.

### **Labeling systems tend to have three classes of speed:**

- Normal rate
- Improved rate
- High-speed rate

### **Factors to consider in speed selection:**

- What you are printing
- Speed of packaging processes
- Orientation
- Resolution (especially important for barcodes)



## Semi-Automatic vs. Automatic? Let Geometry Be a Guide

Deciding between automatic or semi-automatic alignment really depends on the product itself. Naturally, a customer invests in a labeling system to speed up processes that are most likely being done by hand. Yet in many cases, fully automating every labeling aspect is not always feasible, cost-efficient, or even ideal for optimized production.



Some products may be tough for a conveyor to hit consistently in an automated set-up, perhaps due to an irregular surface, a complex shape, or other logistics. An engineered semi-automatic design may be optimal for expense as well as production needs.

## Tech Support: Who are You Going to Call?

One of the most critical questions to ask when deciding on a labeling vendor is: Who can you call when it all hits the fan?

Because it will, eventually. Murphy's Law is universal and practically a law of physics in the packaging industry. The question is not will something go wrong, but what resources are at your disposal when it does? If it breaks down, the most robust labeling technology is nothing but a lead balloon. How fast can a provider furnish a tech support team on the line, and how intensive will they work to solve the problem?



## Spare Parts and Accessible Inventory

Equally important is having the parts and equipment to service machines when they go down. How easily available are spare parts and how quickly can they be obtained when the clock is ticking? Readily accessible equipment and parts can keep a legacy system operating for generations. In fact, we recently got a parts call for the very first machine we manufactured in the late '90s, nearly 20 years ago! We shipped the company what it needed, right off the shelf. The installation was soon back up and running as good as new.

## In-House Training

Another important aspect is the in-house training provided to work and service the machines. When a labeling machine goes down, time is money flying out an open window. Managing a repair yourself can save you thousands of dollars in downtime.

Reliability in a machine is very valuable, but being able to maintain that reliability through hands-on tech support is decisively invaluable. Something will go wrong eventually, guaranteed. Will the provider have your back, and are they willing to do whatever it takes?

## Beyond the Bells and Whistles: Is It Practical, Functional, Usable?



Enhanced functionality and impressive gadgetry in a labeling solution may look slick, but ultimately it's the usability of a system that gets the job labeled and off to shipping. Will the system function as it is designed to, and what support will you get from the provider if it doesn't? How practical and cost-effective is its design?

Sometimes, the best ambitions in label design can crash head-on into fundamental laws of physics. In some cases, it simply can't be done, or if it can, the cost to achieve the configuration makes it impractical. A provider may promise a particular function at a stated price just to win a bid, but can they actually deliver? If one provider says they simply can't do it, ask them why. Then go to the provider who says they can and ask them to prove how. Nine times out of 10, they will change their answer. Reality may be mendable and adaptable, but it still exists. Ignore it, and it bites back with a vicious vengeance.

Often, ambitions must be negotiated with the reality of the physics involved. By simply adjusting the parameters, you may be able to achieve effectively the same outcome or at least a satisfactory solution that actually works much better and more affordably.

## A Symbiotic Relationship: Leveraging Results



Flexibility, open communication, and down to earth realism are key to working with a labeling provider to achieve a solution that works. It is important to establish an ongoing healthy relationship, one that does not end when the system is shipped and established. Ideally, the relationship is more partnership than purely transactional, more symbiotic than break-it-you-buy-it. Ultimately, your success is theirs too. You are in this together.

By paying attention to the issues raised in this guide, maintaining open communication about needs and expectations, and critically assessing the provider's ability to follow through on what is promised, you should be able to obtain a robust labeling system that adequately meets your needs, optimizes your production, and fully leverages your bottom line.

### What to Do Next:

If you find your labeling needs are not being met, or worse, realize you've been sold a bill of goods that fails to satisfactorily deliver what's been promised, your first step is very simple: Take a very deep breath.

Patience is providence. There's no need to panic or react in the heat of the moment. In fact, the best remedy for this situation is sincere and honest reflection. Take some time to step back and think over where the system or provider has failed in the solution. What do you need the system to do that it's not doing? Where has it failed? Can it be solved with a retrofitted fix, and how expensive will that prove to be? Talk to your provider or distributor about your concerns and see if they have any suggestions.

Next, consult your distributor and be specific about the details. What are your pain points? What are you trying to accomplish? What is your budget? If the previous system failed, what went wrong and how can that be fixed? Don't hold back. Open and honest communication begins with your distributor, who can then provide the appropriate bridge to a labeling solutions provider.

If you are starting fresh without a distributor, go online and do your own research. Look at the various labeling solutions available. Read up on the blogs. Download industry whitepapers. Research industry articles and case studies. Look up the solutions of competitors. Compare system distributors according to how specifically they address your most critical needs.



Most problems arise because the selection or planning of the system is done too quickly. The solution fails to comprehensively address the complexity of the unique challenges involved.

By taking time to consider the specialty of your own needs plus how well a provider can adequately meet those needs through a step-by-step process of planning, communication, and implementation, you will be better prepared to develop a truly effective solution. The configuration that results will be more suitable to not only accommodate today's challenges, but also the future evolutions of your particular industry and the inevitable changes that adaptation requires.

Designing a labeling system is a lot like launching a NASA rocket into space. Make sure all the math adds up before you press that red launch button. Problems on the ground are always much easier to fix than a satellite that's already in orbit.



## The Robust Flexibility of CTM Labeling Solutions

These days, products are unique. Packaging and labeling have become monumentally specialized. And the challenges manufacturers face carry their own particular complexities. All too often, a one-size-fits-all approach proves to be nothing but a Band-Aid on a rupturing dam that's utterly useless against the approaching flood.



That is why we stress so much importance on the Labeling Machine Site Survey and detailed documentation. Whereas many system providers only want to sign your order and move onto the next, we examine your situation in-depth to provide a solution that truly addresses your needs.

And we back up all of our installations with a full team of customer support and a comprehensive inventory of parts for repairs. If it breaks, we help you fix it. If it needs adjusting, our engineering teams help reconfigure it. And as it runs, we train and help you to maintain it. We are right by your side, every step of the way, as fully engaged partners committed to your success.



At our core, CTM Labeling is an engineering company that designs and manufactures all our own components. We bring adaptability to labeling and can tweak the system to ideally fit an application and solve your unique challenges.



Because when the problems you face every day demand genuine innovation, why settle on just a generic fix? You deserve more, so much more. [Contact us for a free consultation](#) to see what's truly possible.



[Request a Free Consultation](#)

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