

# How Chemical Companies Work with Toll Coaters

## Introducing Sierra's Business Alliance Program

Though there are many keys to success in product development, two are most notable: speed to market and proof of production. To address the time and costs factors associated with developing a new product, business alliances are a great way to work efficiently and effectively.

For example, many chemical companies invest heavily in the development of new products, but need to show proof of a successful production process and provide finished goods to show potential customers. By working with a coating company in the pre-market stage of product development, a chemical company can expedite a new coating to market.

## Why Sierra Customers Toll Coat

According to Robert Porter Lynch's *Business Alliance Guide*, a "variation of product alliances is the joint manufacturing venture, where, because of scale costs, it makes economic sense to build a plant of large capacity, but no one company's market can support the entire production capacity" (page 59).

It is for this reason that contract and toll manufacturers exist – to absorb the fixed overhead costs associated with running a facility, providing clients with a way to create a purely variable cost method of developing new products.



## **Business Alliance Advantages**

There are a number of benefits to forming a business alliance. Primary among them are access to production equipment and technical experience in coating.

When working with a manufacturer who has partnered with clients across a variety of industries, you benefit from having a highly knowledgeable product development expert with wide-ranging industry contacts.

Alliances also facilitate knowledge sharing between companies and can allow for new product applications in niche markets.

## **Sierra Coating's Chemical Business Alliance Program**

As part of our [Sierra Chemical Business Alliance Program](#), we are currently looking to form dedicated alliances with chemical companies that have developed innovative product solutions of their own. Sierra often recommends water-based chemicals for our clients' products in order to meet their specific needs.

As a trusted toll and contract manufacturer with services,

such as [raw material planning](#), our team works with paper mills, printers, and brand owners to help develop new products.

To best guide our clients in choosing the proper chemicals to use, Sierra also works with chemical companies to develop a solution for our client's requirements. Through this process, we facilitate growth for both our customers and ourselves.

## What Our Clients are Looking For

Sierra serves clients across a wide variety of industries, but certain requirements come up more often than others. Our expertise is particularly pronounced in industries – such as the food and beverage, health and beauty, and retail industries, to name a few – that have product needs requiring unique and highly specialized chemical treatments.

We frequently receive inquiries about innovative food-safe packaging, [eco-friendly packaging](#) and other [poly replacements](#), [heat seal](#) and [blister pack coating](#), and high-end luxury packaging. These are fast moving spaces that require regular innovation and reinvention to not only stay ahead of trends but to keep products compliant with ever-changing industry standards and guidelines.

To learn more about the benefits of a business alliance with Sierra, including the unique toll and [contract manufacturing](#) benefits that we bring to the table, [click here](#).

Learn More About Sierra's  
Chemical Business Alliance Program

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# The Advantages of Toll and Contract Manufacturing

## Developing On-Demand Services in Manufacturing

Consumers have grown accustomed to getting what they want, when they want it –services like Uber, Seamless, and Netflix are examples of how this on-demand business model can be successful. What if the on-demand model could be expanded to the manufacturing space?

[Contract and toll manufacturing are prime examples](#) of how the industry is ripe for the instant gratification marketplace. These two supply chain management strategies use the “sharing economy” model of on-demand services to help customers save time and money during product development.

## Toll versus Contract Manufacturing

In toll manufacturing, a company provides a third party with raw materials to complete the manufacturing process for them. The toll manufacturer, equipped with the necessary production equipment and specialists, charges the company a fee (a toll) to finish the job.

[Contract manufacturing](#) is a similar process, except the contract manufacturer is responsible for sourcing raw materials in addition to making the product, meeting customer specifications, and adhering to delivery time requirements.

## The Cost-Saving Benefits



OEMs and other industrial manufacturers can apply the on-demand service model to their businesses by taking advantage of toll and contract manufacturing.

By going to a third-party when they need specific services, companies avoid the investment required for additional equipment, facilities, and employees. In turn, they receive the services they need, when they need them, while saving time and money.

This on-demand service model is ideal for new product development, seasonal projects, and testing products by utilizing a variable-cost operation.

Contract and toll manufacturers allow companies more flexibility no matter what stage of production they are in. During product development, for example, companies can contract a manufacturer to begin production while still building their own facility.

They can also reach out to contract manufacturers for assistance producing high-quantity orders during overflow production or to help source and test materials during first-run production.

Sierra Coating operates as a toll and contract manufacturing organization (CMO) providing critical on-demand [laminating services](#) to our customers. To learn more about this model and the financial advantages of employing a contract or toll

manufacturer, download a free copy of our eBook, [“The Financial Case for Contract Manufacturing.”](#)



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## Why Raw Material Planning in Manufacturing is Essential

You've heard the terms "toll manufacturing" and "[contract manufacturing](#)" before. In fact, you may have even read about them last year in our blog on toll manufacturing versus contract manufacturing.

Toll and contract manufacturing are both advanced tools for supply chain management. These types of manufacturing processes are usually utilized in new product development. They are very similar processes that can often be confused. There's an important, yet often overlooked, difference between the two.

### Toll versus Contract Manufacturing

When you work with a contract manufacturer, you are essentially partnering with an independent manufacturer – they will source all of the raw materials, manufacture the contracted part, and deliver a completed product to you. In toll manufacturing, the company will manufacture your part,

but you or an additional third-party is responsible for sourcing and delivering the raw materials.

The difference between the two lies in who is responsible in the risks associated with raw material planning. These risks often include the price, quality, and delivery of the raw materials. Toll manufacturing is often done by a raw material manufacturer to create a new product line for the company.

The toll manufacturer is assuming the risks associated with raw material planning and product manufacturing. Whereas contract manufacturing is considered a turnkey solution for clients, where the contract manufacturer is responsible for raw material planning and product manufacturing dates.

## Why Raw Material Planning Matters



Businesses, manufacturers in particular, are increasingly relying on Just-in-Time (JIT) and other similar manufacturing processes. The JIT process is an inventory strategy to reduce costs associated with product storage.

A key element of JIT and related processes is raw material management. The entire process relies on the requisite materials being delivered to where they are needed at the time when they are needed, creating a steady inflow of material and outflow of completed parts. Sierra Coating specializes in raw material planning, skills which we put to use when partnering with you as a toll or contract manufacturer.

We maintain an in-house team of experts dedicated to raw

material planning a wide variety of chemicals that we use during [coating processes](#). The team includes a logistics planner, a raw material planning specialist, and two dedicated chemists. Our team procures the chemicals that your product requires, testing them on production equipment to ensure the product functions properly.

## Trusting Your Partners with JIT Manufacturing

Though extremely important, raw material planning is only one part of a multi-stage process – JIT and other production streamlining methodologies must be maintained throughout the entirety of a production process in order to be effective.

At [Sierra Coating](#), we follow through. After testing and procuring high-quality raw materials, we can manufacture and ship your products on a JIT schedule. Our raw material team works hand in hand with our manufacturing team to ensure that every step of the process runs seamlessly.

To learn more about the benefits of working with a toll and/or contract manufacturer, download our free eBook, [The Financial Case for Contract Manufacturing](#).





# Finding a Cost-Effective Poly Replacement for Packaging

## The Move to Eco-Friendly Packaging

Over the past several years, businesses across multiple industries have taken a growing interest in environmental sustainability. The packaging industry plays a critical role in this movement, as packaging is often the first thing a customer notices about a product. As such, companies are tasked with reconciling environmentally-conscious material selections with cost-effective production.

Petroleum-based plastics, though affordable and easily sourced, are nearly impossible to recycle, [The Guardian recently explained](#); they litter the Earth and pollute oceans forever without biodegrading. Instead, packaging companies must seek out alternatives to create more sustainable solutions. Even [candy manufacturers are now looking for eco-friendly wrappers](#), using wood-based materials and non-toxic ink to create a compostable solution.

## Replacing PVC and Plastics in Packaging

Recognizing this shift toward sustainability, Sierra is seeing a growing opportunity to replace polyvinyl chloride (PVC) and other harmful plastics with greener, biodegradable package made with paper. This is especially relevant to blister packaging; because it cannot be recycled due to mixed material



limitations, the packaging tends to wind up in landfills.

PVC and low-density polyethylene (LDPE) resins, found in many of today's packages, are neither recyclable nor biodegradable due to their use in a package design. When exposed to high temperatures, these wrappers can also release toxic fumes and dangerous chemicals into the environment.

Plastics, which for many years held the advantage over paper for being heat sealable, have finally met their match. Sierra has developed innovative paper-based blister pack technology to reduce or replace PVC, LDPE, and other harmful plastics commonly used in packaging structures.

These paper-based recyclable coatings provide protective features that can compete with traditional packaging – but without the negative side effects. Both environmentally friendly and affordable, Sierra's blister packs can be heat sealed while still allowing products to biodegrade much more easily. These state-of-the-art “green” coatings can be used to design packages that reduce PVC or replace poly coatings.

## **Creating a Cost-Effective Poly Replacement**

Many companies are seeking affordable poly-replacement materials that will allow their packages to biodegrade, allowing them to position their products as environmentally friendly. For decades, this was a high-priced specialty order, but now Sierra is working on closing the gap on cost-effective poly replacements with paper-based packaging like blister packs.

Until recently, green packaging solutions only existed on a small scale due to relatively higher costs compared to polys. As more brand owners respond to customer desires for an environmental solution, innovation has created alternative

options that are reducing costs. Sierra continues to source and test these innovative coatings to drive this technology into the mainstream.

To learn more about the benefits of blister packages, as well as what to consider when designing them, download our eBook, "[Critical Elements of Blister Packaging](#)."

Download  
the eBook



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Download our  
**Guide to Critical Elements  
of Blister Packaging**

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## **MFG Day – A Time to Celebrate Entrepreneurs**

### **Sierra Coating Supports MFG Day and the Innovators Making It Possible**

On October 2<sup>nd</sup>, 2015, we celebrate American entrepreneurship with [National Manufacturing \(MFG\) Day](#). Manufacturers across the country will open their doors for tours and educational events to raise awareness of [STEM education programs](#) and celebrate progress made within the manufacturing industry.

From new start-ups to family-owned businesses that have been crafting goods for generations, our industry would not exist without the new ideas and solutions of innovators and

entrepreneurs alike. Companies, like Sierra Coating Technologies, are proud to offer the services that help bring these new projects to life.

As a contract and toll manufacturer, Sierra Coating provides [laminating services on-demand](#) for all scales and project applications – especially those that have never been seen before.

To help entrepreneurs understand the steps of taking their idea from prototype to high-volume production, our team of experts at Sierra Coating created [the ultimate cheat sheet](#). One of the most critical keys for developing a new product design is the staging and gating process. Our team outlined four steps for young entrepreneurs to keep in mind as they pursue a new project:

1. Consult Research & Development specialists who can offer insight, experience and expertise.
2. Determine the feasibility of your project. Does it hold up to economic analysis?
3. Develop and test your prototype.
4. Continually utilize the staging and gating process to enhance the quality and reduce the risk of failure.

The Sierra Coating team is well-equipped to help minimize the costs and risks associated with new product development through our contract manufacturing services. The treated paper services we offer include a facility for high-volume production, and prototype development can often utilize the very same machines.

We're lucky to work with brilliant new ideas every day. Learn more about our process at Sierra Coating and how you can get a new project off the ground by downloading our new eBook, [The Stages and Gates of Prototype to High-Volume Production](#). We wish all the innovators and creative makers a happy and inspiring MFG Day!



The Stages and Gates of Prototype to  
**High-Volume Production**

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