TURNKEY SOLUTIONS GUIDE



When you engage with a contract chemical manufacturer, you want a partner who can offer a comprehensive solution. You don't want to waste resources by purchasing services one at a time – you want a turnkey contract manufacturer like Royal Chemical.

In 1938, Royal Chemical's founder, Leo Kohn began manufacturing laundry detergent in Cleveland, Ohio. Ever since then, we've been supporting customers in industrial and institutional cleaning, car care, chemical distribution, food processing plant cleaning, janitorial and household cleaning, laundry chemicals, sanitizers and disinfectants, and metal cleaning markets with end-to-end solutions.

From purchasing raw materials to handling materials, managing inventory, chemical blending, mixing, packaging and shipping – all of our work is done for the benefit of our customers. We don't formulate, brand or manufacture our own products, so we will never compete with you. You provide the formulation, safety data sheets, label criteria and quality control specifications, and we take it from there. Royal Chemical is a true turnkey partner for chemical manufacturing.





RELYING ON SPECIALIZED CAPABILITIES

Today, Royal Chemical operates five strategically located plants across the U.S., designed to minimize your logistics expenses and improve speed-to-market for your products.

Our specialized capabilities include:



Liquid blending: We have 60 liquid mixers and eight liquid bottling lines to fulfill your liquid blending needs. With chemical mixer sizes ranging from 200 to 6,000 gallons, Royal Chemical can accommodate varying order quantities. Mixers include stainless steel, polyethylene, Hastelloy and glass-lined units, which means we can handle a variety of chemical compositions, including acid, alkaline and water-soluble organic blends.



Powder blending: We have four powder mixers, including both ribbon and paddle units, capable of blending up to 7,000 pounds. Our blenders feature spray bars, which enable liquid additions and support the uniform distribution of those liquids throughout the material being mixed, enhancing the efficiency and consistency of the blending process.

At our Macedonia, Ohio location, Royal Chemical's powder operation is supported by eight silos configured to accept high-volume material deliveries by rail or bulk truck.



Packaging and repackaging: From 8-ounce bottles to filling entire tank trucks, we can package your liquid or powder product in nearly any size. On the liquid side, we have a wide range of packaging solutions, including bottles, pails, drums, totes and bulk tank trucks. For powder products, we handle bottles in many sizes and configurations, including bags, boxes, drums, pails and super sacks. Additionally, we can transload materials from a bulk container, such as a tank truck, and repackage them to meet your needs.



Warehousing and fulfillment: In addition to chemical blending services and packaging, we offer chemical warehousing and full-service shipping services. Royal Chemical's five plants can reach 83 percent of the continental U.S. in one day and 100 percent of the country in two days. We maintain 250,000 sq. ft. of warehouse space and we have negotiated rates with a top, third-party logistics provider (3PL) we collaborate with on our customers' behalf. We also offer drop shipping directly to you.

Our turnkey offering as a chemical blending company includes quality assurance services and assistance with handling intellectual property for an end-to-end solution. Our plant operation teams not only handle all inventory and operations, but we have a 99 percent on-time and complete production record and we offer 24 to 48 hour shipping for stocked materials.



THE BENEFITS OF A TURNKEY SOLUTION

Outsourcing your manufacturing to us allows you to focus on what you do best – developing products and bringing them to market – while we take care of the blending, packaging, warehousing and shipping.

Choosing a turnkey contract manufacturing partner with specialized capabilities allows you to be more flexible and streamline your operations. You can ramp up production during peak season and allocate more resources to research and development, market analysis or customer relations, rather than investing in manufacturing infrastructure, staff, warehousing and distribution.

	Macedonia, OH	East Stroudsburg, PA	Chattanooga, TN	Dallas, TX	Hayward, CA
Square Footage	150,000	143,000	215,000	90,000	30,000
Rail	~	~	-	-	-
Blending Tanks	17 liquid, 3 powder	10 liquid	13 liquid	11 liquid	14 liquid
Storage Tanks	16 liquid, 10 dry	36	11	8	30
Bottling Lines	3 liquid bottling lines with an additional filler capable of handling 18k cp, 1 powder jar filling line	3 high-speed liquid bottling lines (capable of handling flammable liquids with viscosities up to 35k cp)	2 bottling lines and 1 high-speed bottling line	-	-
EPA Registered	~	~	~	~	~
Kosher Certified	~	~	~	~	~
NSF	~	~	~	~	~
FDA Registered	soon	~	soon	soon	soon
Flammables	-	~	-	-	-



STRENGTHENING YOUR TEAM & STREAMLINING YOUR OPERATIONS

As a chemical contract manufacturer with five production locations and 85-plus years of experience, the team at Royal Chemical is well trained, experienced and fully prepared to support the ebbs and flows of our customers' production needs.

We employ five experienced directors of operations who oversee each of our manufacturing facilities and their staff. The goal is always to ensure Royal Chemical is ready to assist product owners like you with scaling production and executing your long-term growth opportunities.

To demonstrate our commitment to excellence, our plants hold a range of certifications. They include:

- EPA registered
- FDA registered
- Kosher Certified
- NSF certified
- ISO 9001:2015 certified

To ensure clear communication and be at the forefront of technology and industry best practices, Royal Chemical has moved to a paperless environment. We use electronic batch tickets, barcoding and a customer dashboard for monitoring order progress. Our electronic, password-protected systems ensure that only approved staff members can work on your project and access your proprietary documents, such as formulations.







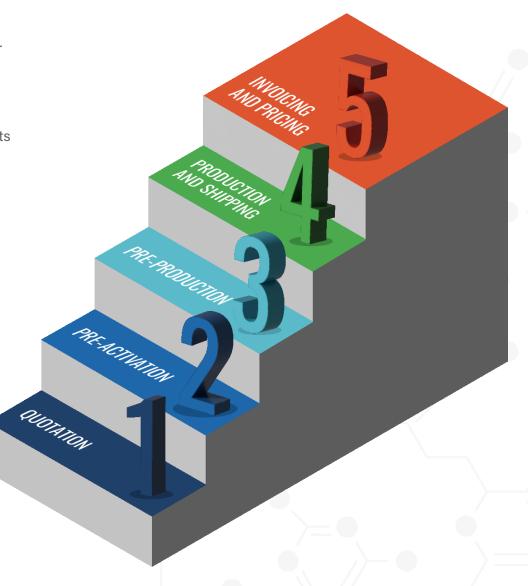


ROYAL CHEMICAL'S TECHNOLOGY TRANSFER PACKAGE

At Royal Chemical, our overall goal is to help clients streamline their operations. We understand that your blends and formulations are your competitive differentiators, so it's important to seamlessly integrate your proprietary technology into our system. We do that through the Royal Chemical Technology Transfer Package (TTP).

The TTP is a five-step process that includes a checklist of requirements for the initial agreement/quotation, pre-activation, pre-production, production and shipping, as well as invoicing and pricing.

When you're ready to move from development to production and commercialize your product, you need a TTP that sets the standards for quality, consistency, lead times, packaging and intellectual property protection.





SELECTING THE RIGHT CONTRACT MANUFACTURER TO SCALE PRODUCTION

Choosing a contract manufacturing partner is a major decision for your chemical manufacturing business, no matter what types of products you're producing.

There are <u>dozens</u> of <u>questions</u> you'll want to get answered before placing a purchase order to move forward with a chemical manufacturer and those that are top of mind probably include capacity, capabilities and material safety.





TURNKEY CONTRACT MANUFACTURING PARTNER CHECKLIST

✓ Capacity: Does the manufacturer have the available capacity to accommodate your production needs? Look for a partner with the right equipment, enough staff and strategically located facilities.

The Royal Chemical Way: Our five plant locations are well positioned across the U.S., providing nationwide coverage to maximize your speed to market and limit your logistics costs. Our investment in people and equipment is unmatched and improving all the time to meet our clients' needs. We encourage our clients to think of our five plants as their own virtual manufacturing locations – ready to help you grow and scale.

✓ Capabilities: Can the partner provide end-to-end services, including liquid and powder blending, packaging, warehousing and logistics services? If your goal is a turnkey solution, make sure the manufacturer you choose can handle all of the above. Specifically, ask about their purchasing power, procurement assistance and warehousing of raw materials. These items help you reduce overhead expenses.

The Royal Chemical Way: Turning over your production to Royal Chemical from start to finish allows you to reduce the complexity of your operations and focus your capital and resources on the areas of your business where you add the most value, such as product development, sales and marketing. We focus on maintaining high-quality chemical manufacturing plants, equipment and staff, so you don't have to.

✓ Safety: What are the contract manufacturer's certifications, quality assurances and control processes, as far as material safety? How do they handle your intellectual property? A good partner takes both seriously.

The Royal Chemical Way: At Royal Chemical, safety, compliance and quality are our top priorities. Our rigorous pre-production process ensures GHS compliance and our quality control experts make sure the job is done right. We are EPA and FDA-registered, Kosher certified, NSF certified, and we maintain an ISO 9001:2015 certification. To protect your IP, we employ a comprehensive Technology Transfer Package, including non-disclosure agreements and password-protected documents.

As you can see, there is tremendous value in working with a chemical contract manufacturer who offers a turnkey solution. With ever-rising costs a reality of the chemical manufacturing business, you don't want to risk losing efficiency by cobbling together multiple vendors. You want to reduce the complexity of your operations. Fully outsourcing your production to a turnkey provider can help you achieve that goal.

Ready to learn more about streamlining your chemical manufacturing operations? Take the next step in exploring a partnership with Royal Chemical. Schedule a no-commitment consultation or request a quote today.

