An In-Depth Look at Contract Manufacturing

and Why It's Beneficial for Your Business





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n an era of rapid market changes and increasing consumer demands, businesses face the dual challenge of maintaining high-quality standards while ensuring swift time-to-market for their products. **Contract** manufacturing has emerged as a strategic solution, allowing companies to leverage the expertise, infrastructure, and capabilities of established manufacturers.





Contract manufacturing refers to the outsourcing of product manufacturing to a third-party manufacturer. This solution can range from individual components or services to complete products. The client company partners with a contract manufacturer, who then produces the desired product according to specified requirements and standards.

APV Engineered Coatings stands at the forefront of this industry, offering comprehensive contract manufacturing services that take a product from conception to execution, ensuring seamless production, stringent quality control, and

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efficient distribution. This white paper delves deeper into the benefits of contract manufacturing and how we can help you enhance your product development process.

Contract Manufacturing at APV Engineered Coatings

Since 1878, <u>APV Engineered Coatings</u> has been a leading engineer and manufacturer of custom <u>industrial coatings and advanced chemical products</u>. Our state-of-the-art Akron, Ohio, facility is equipped with cutting-edge machinery and technology for efficient production processes. With over 140 years of experience, we have the expertise to develop and produce various products for various industries, including automotive, aerospace, medical, and consumer goods.

As a contract manufacturer, we offer comprehensive services that cover every step of the product development process. Our team works closely with our clients — from Fortune 500 paint corporations to private companies — to understand their needs and requirements before creating a customized plan that meets their unique goals. From formulation and testing to packaging and distribution, we provide end-to-end solutions that streamline the entire manufacturing process.



Manufacturing

At APV, we operate an expansive 14-acre facility with vast manufacturing equipment designed to handle diverse production requirements. With over 300 pieces of advanced machinery, we can accommodate batch sizes ranging from a single gallon to 8,700 gallons, catering to small-scale and large-scale production needs.

Our state-of-the-art equipment includes:

- Horizontal and Three Roll Mills: These mills are ideal for fine grinding and dispersion of paints
 and coatings. We have various mill sizes to accommodate different batch volumes and can handle
 multiple viscosities.
- **Dual Shaft Mixers (200 to 2,500 gallons):** These mixers are suitable for blending high-viscosity materials such as primers and adhesives and can handle various batch sizes.
- **Stationary Blending Tanks (100 to 8,000 gallons):** These tanks are suitable for large batch blending operations. They mix liquids and powders to produce high-quality coatings and adhesives.
- Rail and Air Mixers: Our rail and air mixers ensure consistent mixing for various product formulations. These mixers have different capacities and can handle many viscous materials.
- **High-Speed Dissolvers (150 to 8,000 gallons):** Effective for dispersing and dissolving solid particles, these dissolvers are used for high-speed mixing of pigments, resins, and other raw materials.
- **Rubber Churns (10 to 500 gallons):** Specialized for rubber solvating and mixing, these churns are ideal for producing rubber compounds used in various industries.
- **Pneumatic Ram Mixers:** For handling thick and heavy materials, our pneumatic ram mixers can effectively prepare and process high-viscosity materials.
- **Ball Mills (10 to 800 gallons):** Used for milling and grinding operations, our ball mills are suitable for producing dispersions and reducing particle size.



• **Filling and Labeling Equipment:** Ensuring precise and efficient product packaging, we have a range of advanced filling and labeling equipment to accommodate various container sizes.

This extensive array of equipment allows us to produce a wide range of products with precision and efficiency, tailored to meet each client's specific requirements. Our experienced engineers and technicians operate these machines with the utmost care and adhere to strict quality control measures at every production stage.

Private Labeling and Packaging

We offer end-to-end private labeling and packaging services, providing clients comprehensive support from design to inventory management. Our team assists with creating and sourcing labels and packaging materials, ensuring that products have a professional and consistent look.

Our standard packaging options include:

- Aluminum and Caulking Tubes: Ideal for sealants and adhesives, these tubes come in various sizes and can be custom-labeled for clients.
- **8-Ounce Bottles:** These bottles are suitable for smaller, retail-friendly products. We can customize the bottle and label design to match the client's branding.
- **Pints and Quarts:** These are standard sizes for paints and coatings, and we offer a range of packaging options for different products.
- 1-Gallon Cans and 5-Gallon Pails: These containers are standard for larger-volume products and are customizable for branding and labeling.
- **55-Gallon Drums:** For bulk industrial applications, we offer various drum sizes and styles for different products.
- Totes (250 to 350 gallons): Our totes are efficient for large-scale liquid storage and transport
 and are ideal for shipping products in bulk.
- **Direct Fill Into Tanker Trucks:** We offer direct fill options for tanker trucks to maximize volume and efficiency in transportation.



By offering a wide range of packaging solutions, we ensure that products are not only manufactured to the highest standards but also packaged and presented to enhance brand value and market appeal. Our clients can trust that we will handle their private-label products with utmost care and attention to detail.

Quality Control/Quality Assurance

Quality is a rigid core value at APV Engineered Coatings and we are committed to quality control at every production stage. From raw material testing to final product inspections, our stringent QC measures ensure our clients consistently receive high-quality products. We follow strict ISO 9001:2015 guidelines and adhere to industry-specific quality standards.

Our state-of-the-art laboratory is equipped with advanced testing equipment to perform various tests. Our highly-trained lab technicians conduct rigorous tests to verify product quality and ensure they meet all specifications and standards. We also continuously improve our processes and ensure the highest quality in our products, maintaining strict quality control measures to provide reliable and consistent products to our clients.





Our quality assurance processes include:

- **Expert Batch-Making:** We assign batch-making specialists to customer-defined recipes, ensuring precise and consistent production. Our specialists follow strict quality control procedures to validate raw materials and guarantee the correct blend of ingredients.
- Advanced QC Laboratory: Equipped with the latest testing equipment, our QC lab ensures
 every batch undergoes rigorous inspection to meet client specifications. Our lab is also responsible
 for validating raw materials and monitoring process conditions.
- **Controlled Manufacturing Conditions:** Temperature and moisture control capabilities are available to ensure optimal production conditions. We also monitor humidity and temperature levels throughout production to maintain product consistency.
- In-House Pigment Processing: Our experts strictly grind, disperse, and monitor pigments to exact client specifications, ensuring consistent quality and performance. Our in-house processing capabilities also give us flexibility and efficiency in meeting specific color requirements.
- **Specialty Filling Options:** Customized filling solutions are available to meet unique packaging requirements, ensuring flexibility and client satisfaction. Our team works closely with clients to determine the best filling option for their products.

At APV Engineered Coatings, quality is not just a buzzword but is deeply ingrained in our processes and culture. We strive to exceed customer expectations at every step of production by continuously improving and innovating our manufacturing practices.

Hazardous and Non-Hazmat Shipping

We excel in the logistics of hazardous and non-hazardous material shipping, ensuring safe and compliant transportation of chemical products. Our team works with various expert freight vendors to optimize delivery times, handling, and costs.

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Our key shipping capabilities include:

- **Domestic and International Shipping:** We can ship products globally, with distribution and representation in 26 countries. Our experienced team strategizes the most efficient and cost-effective shipping methods for each client.
- **Freight Optimization:** We ensure the most efficient and cost-effective shipping solutions by partnering with multiple freight vendors. Our logistics team works closely with clients to coordinate shipments and minimize delays or issues.
- Utilization of Customer Freight Accounts: Clients can use their own freight providers for seamless integration into their existing distribution networks. Our team works closely with the client's chosen vendor to ensure a smooth and timely delivery.
- **Compliance With Regulatory Standards:** Our EPA-registered establishment number ensures adherence to environmental regulations for both domestic and international shipments. We also closely monitor any regulation changes to ensure compliance and avoid delays.

Our team is well-versed in the rules and regulations of shipping hazardous materials, ensuring that all necessary documentation and labeling are complete for safe and on-time delivery. With our extensive experience in international shipping, we can also assist with customs clearance and other potential challenges that may arise.



Benefits of Contract Manufacturing

Contract manufacturing is a strategic partnership that can offer numerous benefits to companies in various industries. Here are some key advantages of working with a contract manufacturer like APV Engineered Coatings.

Cost Savings

Contract manufacturing with APV allows your business to avoid the substantial capital investment required to set up and maintain its own production facilities. Utilizing our existing infrastructure and expertise can significantly reduce overhead costs and focus your resources on core business activities such as research and development, marketing, and sales.

Efficiency and Faster Turnaround

Our streamlined manufacturing processes and extensive capabilities ensure that products arrive at market quickly and efficiently. This rapid turnaround allows you to respond swiftly to market demands and capitalize on emerging opportunities, reducing time to market and enhancing competitiveness. Tapping into our comprehensive packaging, labeling, and shipping services also eliminates additional lead time and complexities for our clients.

Scalability

Our flexible manufacturing capabilities accommodate small and large production runs, providing various businesses the scalability needed to adapt to changing market conditions. Whether launching a new product line or scaling up production to meet increased demand, we can seamlessly adjust our operations to meet client needs. Your business can enjoy the benefits of scaling up without the risks and costs of expanding your own manufacturing capabilities.



Production Capacity

We offer unmatched production capacity, handling batch sizes from one gallon to 8,700 gallons. This versatility ensures that businesses of all sizes, from niche market players to large-scale industrial producers, can benefit from our contract manufacturing services. Our clients can confidently meet their customers' growing demands without worrying about capacity limitations.

Technical Expertise

Our team of experienced professionals at APV brings a wealth of technical knowledge and industry expertise to every project. By partnering with us, you can access our established expertise, ensuring that your products are manufactured to the highest standards and benefit from the latest technological advancements. Our commitment to innovation and continuous improvement ensures clients receive cuttingedge solutions tailored to their needs.

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Overview of Product Types

APV specializes in the contract manufacturing of a diverse array of liquid chemical products, including but not limited to:

- **Disinfectants:** To ensure safety and compliance with foreign and domestic EPA regulations, we produce high-quality disinfectants, sanitizers, liquid soaps, and cleaning products for various applications. Our experts can customize formulations to meet specific needs, with options for different fragrances and active ingredients.
- **Paints and Coatings:** We deliver high-performance finishes for residential, commercial, and industrial use, and we manufacture a wide range of paint and coating products. Our in-house pigment processing capabilities provide a wide selection of colors and formulations, including water- and solvent-based options.



- **Sealants and Adhesives:** Our sealants and adhesives are engineered for superior performance and provide robust and durable bonding solutions for various industries. We offer custom formulations and packaging options to meet specific application requirements for construction, automotive, or other markets.
- **Pigment Dispersions:** Our pigment dispersions are tailored to meet specific client requirements by offering vibrant, consistent color solutions. Our in-house processing capabilities and strict quality control ensure that clients receive top-quality dispersions with every order.
- Rubber Solvating: We produce specialized solutions for rubber solvating and processing by
 enhancing rubber product performance. We can efficiently mill, pelletize, and disperse rubber
 compounds into various custom solvent blends, providing clients with reliable and consistent
 results.
- Other/Niche Liquid Chemical Products: Our expertise extends to a wide range of niche
 liquid chemical products, catering to specific industry needs with customized formulations. Our
 team works closely with clients to meet their unique requirements and produce high-quality,
 specialized solutions on time and within budget.

Whatever your product type, our contract manufacturing services offer an efficient and cost-effective solution for delivering top-quality liquid chemical products to market.



Conclusion

APV Engineered Coatings is a trusted partner for businesses seeking reliable and efficient contract manufacturing solutions. With comprehensive services encompassing manufacturing, private labeling, packaging, shipping, and quality assurance, we enable companies to bring their products to market confidently.

The strategic benefits of contract manufacturing with us include significant cost savings, enhanced efficiency, scalability, and access to unparalleled technical expertise. As a result, you can focus on your core competencies while ensuring that your products are manufactured to the highest standards and delivered to market swiftly and effectively.

By choosing us as your contract manufacturing partner, you gain a dedicated team of professionals committed to turning your product ideas into reality and ensuring quality, efficiency, and success in every step of the process. With our help, you can confidently meet market demands while maintaining a competitive edge in your industry. **Contact us today** to get started!