

Custom chemicals

From humble beginnings, learn how Varsal has become the specialty chemical and technical intermediate manufacturing partner of choice for a global customer base

Since its founding in 1993, Varsal has grown from a small analytical instrument company to a global custom chemical and instrument manufacturing business. With more than 70 patents, superior research and development capabilities, advanced chemical technologies, and wholly owned manufacturing facilities, Varsal has successfully grown its product portfolio and custom production proficiency to create long-standing, world-wide partnerships.

Varsal's global headquarters are in the Philadelphia, USA metropolitan area, with key market regions in North America, South America, the EU and Asia Pacific. The company has manufacturing facilities in Tangshan and Tianjin, China, with more than 200 employees worldwide. The manufacturing facilities are ISO certified and ICH 7 GMP-compliant and the company's rigorous total quality assurance program enables it to provide guaranteed quality products with on-time delivery.

Varsal operates two divisions: chemicals and instruments. The chemicals division manufactures ISO-compliant specialty and custom chemicals, GMP-compliant pharmaceutical intermediates, and provides procurement services. It offers a wide range of packaging options including bulk shipments, intermediate bulk containers, drums, bags and pails. The instruments division serves academic and industrial laboratories with analytical instruments, parts and consumable supplies. Its product line includes deuterium arc lamps, hollow cathode lamps, optical quartz and glass cells, the AAS-260 atomic absorption spectrometer system, the LC-2008 HPLC system, the W1600 microwave digestion system and other specialized analytical instruments.

With a strategic commercial and operational presence in the US and China, the company has extensive experience in technically demanding manufacturing and the compliance standards of its Western customer base. Varsal has a deep



understanding of the global geopolitical environment, which is increasingly more environmentally conscious and requires profound technical and regulatory expertise to navigate.

Customer driven

Pingxin Wang, CEO, and Don Wang, General Manager, joined Manufacturing Today to share Varsal's story and ongoing success.

"I graduated from the University of Texas with a PhD in chemistry and at that time, I had the choice to either go into research or into industry," Ping begins. "I decided to go into industry to secure my family's future and worked for a forensic company. When I was in graduate school, I had the idea of starting my own business, but I decided then that I would not compete with the company I went on to work for. I began working in 1992 for a private forensic organization and in 1993, I began working in my basement, in my spare time, making instruments. My employer fully supported this endeavor, and they became my first customer while I was still working for them when I provided a solution to a difficulty they were encountering at the time. Creating strong partnerships is one of the founding pillars of our organization. We seek to build long-lasting partnerships by helping to solve customer problems through customized, quality product solutions at competitive prices with on-time delivery. This is how we can compete in a landscape with many large global conglomerates."

Despite its humble beginnings, Varsal has twice made the Inc. Magazine list of 5000 fastest growing private companies in the US. "It is a tremendous honor to be on the list," Ping continues, "especially in a difficult operating environment, in a competitive arena with millions of businesses all working to add value. Although this is our second time on the list, we are not an overnight success, as we have



spent the last 30 years or so tirelessly building our technical capabilities to maximize the value we can provide to our customers in high end industrial and pharmaceutical chemicals and intermediates applications."

Through its capabilities and experience, Varsal acts as an integrated supply chain partner, enabling clients to optimize asset utilization, focus on strategic core competencies, reduce raw material costs, and solve logistics and raw material procurement challenges. The company's core custom manufacturing projects feature custom synthesis for the pharmaceutical and other technical industries, contract manufacturing of fine and specialty chemicals, and custom blending and mixing for liquid and dry products. Varsal is able to work with its

customers from small scale lab experiments up to large-scale commercial manufacturing.

"We have three core pillars," adds Don. "Advanced technologies, China-based production, and personalized service for high quality competitive products. We also boast custom synthesis capabilities and can scale up from small to very large quantities."

"We make products according to our customers' requirements," explains Ping. "Varsal has a global customer base ranging from single-employee businesses to Fortune 500 conglomerates. We serve a variety of industries where technical differentiation is valued, including pharmaceuticals, electronics, personal care, and specialty industrial. We are constantly building our technical capabilities and developing and refining

new technologies to best add value for our customers. Whatever our customers need, we will meet their requirements, including providing technical support, logistics, and warehousing."

Long-lasting partnerships

As part of Varsal's commitment to innovation and technical, value-added focus, the business has created a whitepaper series discussing some of its most advanced, cutting-edge products. Currently there are six whitepapers published on TosMIC, IEM, MSA, OBSA, PSC and L-AEE. These whitepapers highlight Varsal's dedication to solving complex materials challenges. By continuously investing in its product portfolio and researching new solutions that benefit

its stakeholders, the environment and society, Varsal seeks to build long-lasting partnerships by helping to solve its customers' most complex issues through customized, quality product solutions.

Inclusive and caring culture

Varsal's sulfonyl chemical products are made at Varsal ISO, GMP and ChemStewards® compliant facilities. Its methane sulfonic acid, also referred to as MSA, is a strong caustic acid and the simplest form of the alkyl sulfonic acids.

"Our MSA process is extremely clean," reveals Don. "It is ideal for pharmaceutical formulations as the manufacturing process does not generate carcinogenic esters like the competing methyl mercaptan synthesis route does, and can assure a safer, cleaner product. We perform rigorous studies on every process we carry out to ensure that nothing harmful is released. We are an environmentally and socially responsible organization and have

won awards for our production processes. We are committed to sustainable environmental stewardship."

Likewise, the company's methane sulfonyl chloride (MSC) product is an ideal building block for flavors and fragrances formulations as the manufacturing process is clean, with no methyl mercaptan odor and no detectable impurities of methyl methane thiosulfate. It is both harmless to humans and has impurity cleansing capabilities.

Clearly its products rely on the creation of complex chemical formulas, and this approach extends out to the wider business, where Varsal also continuously adds to its recipe for a thriving workplace. "Alongside our social and environmental responsibility practices, we also try to create an inclusive and caring culture. We have implemented a profit-sharing plan for our employees around the world. We support workers' children by rewarding good grades at school and have established a college scholarship fund," shares Ping.



Complex project capabilities

"As an organization, we're kind of an underdog but we're scrappy," Don enthuses. "We like to hire people from underrepresented minorities. Our employees know that if they are experiencing personal difficulties, they can always come to us for help. While we're a business at the end of the day, if it's within our capability, we will always try to offer practical support. We're a relatively small company, but we compete against big players. Our workforce represents our can-do attitude. Ping started in his basement with impossible odds, but Varsal has lasted and continues to build on its strengths."

Looking to the future, Ping and Don share that they will continue to build on Varsal's technical capabilities with higher end projects. "We're not doing low-end high-volume trading," Don elaborates. "We want to build out our complex project pipeline, building our

research capabilities, and developing high end specialty intermediates projects globally. Varsal is looking to increase the reach of its existing products, as well as develop further capabilities and manufacturing resources in new technologies and markets, including in North America.

"We will continue to focus on developing what our customers need and delivering those products that other organizations cannot readily make. Other businesses may offer those more complex products but they're not manufacturing them, rather they're simply supplying them. We, however, are a custom research facility and that's why large-scale pharma, electronics, and global manufacturers trust us with their business," Don concludes. ■

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