

COMMEMORATING A HALF-CENTURY OF INNOVATION & SUCCESS









KEMLITE COMPANY, INC. A Half-Century of Innovation and Success

On December 2, 2004 Kemlite Company, Inc. will officially celebrate its golden anniversary. Universally recognized today as the world's largest manufacturer of continuous fiberglass reinforced plastic panels, Kemlite serves a myriad of markets ranging from commercial building materials and mass merchandising, to transportation and recreational vehicles.

Over the years, the name Kemlite has become synonymous with technical innovation and marketing success. As applications for fiberglass reinforced plastic (frp) products have evolved and matured, Kemlite has led the way by consistently providing imaginative, cost-effective solutions to a diverse and ever-broadening customer base.

By the time the organization had joined the corporate family of the Crane Company in the mid 1980s, the Kemlite reputation for product development, quality performance, and customer responsiveness was already well in place. Recalling the company's earliest days operating from a 4,000 sq. ft. Quonset-style building with six employees, it would have been hard to imagine that less than fifty years later Kemlite's reach would extend around the globe, and annual sales would exceed \$260 million. But as the saying goes, every story has to begin somewhere...

The 1950s...innovative thinking and entrepreneurial spirit propelled Kemlite to the head of the pack.

With the financial backing of a number of private investors and under the leadership of founder Alfred B. Menzer (see sidebar), Kemlite Corporation received its charter as an Illinois corporation on December 2, 1954. Menzer was named president and general manager, and with the invaluable assistance of fellow chemist Don Morse, and John Muren, production began the following April at the company's first manufacturing facility, an empty 40' x 100' Quonset-style building located on Republic Avenue in Joliet, IL.

Though there were already over 200 small manufacturers of frp panels in the U.S. by the early 1950s, few appeared to grasp the potential of this unusual product as well as Menzer and company. This is reflected in Kemlite's initial product offering, Glasbord_®, a translucent, fiberglass reinforced plastic panel produced in a corrugated configuration.

Alfred B.Menzer... Kemlite's founder and inspiration.

Alfred B. Menzer was born in Jersey City, NJ. Majoring in chemistry at Michigan State

University, Al received his degree in 1941 (it should come as no surprise that "Spartan green" was Kemlite's original logo color). Following graduation Al began working for E.I. DuPont Co. and it was shortly afterward that he met and married Oleta Lankenau, and moved to her hometown of Joliet, IL in 1945.

Clearly as much of an entrepreneur as a scientist, it did not take Al long to decide that the time was right to set out on his own. Together with fellow chemist, Don Morse, and one other employee, John Muren, and with the backing of a few private investors, Al founded Kemlite Corporation in 1954. Within a remarkably brief span of time, the closely held private company that featured a single process - producing corrugated and flat translucent fiberglass reinforced panels for awnings, patio covers and room dividers - climbed to a position of industry leadership that remains unchallenged today.

From the outset Al concentrated on growing the business. Very early on this focus manifested itself in the decision to replace the manufacturer's representatives, whom he felt were not giving sufficient attention to Kemlite's products, with a dedicated force of company salespeople. Looking back, this decision proved pivotal in catapulting Kemlite ahead of the competition by the early 1960s.

Apart from his responsibilities as Kemlite's President and General Manager, Al always remained actively engaged in promoting the benefits of frp-based products to the marketplace, as well as representing the views and interests of the industry as a whole. A longtime member of the Fiber Glass Reinforced Panel Council of the Society of the Plastics Industry, Inc., he was named the council's chairman in 1959. Throughout his career, Al often found himself interfacing directly with both government regulatory bodies and industry professional associations not only on the behalf of Kemlite, but the entire frp industry. (continued on page 2)



Glasbord, which would in time also be marketed in a fire-retardant formulation known as Fire-X Glasbord®, turned out to be ideal for a booming post-war industrial/ commercial/residential construction market in need of skylights, awnings, patio covers, glazing panels, and a variety of other construction products. Not surprisingly, considering the product's universal acceptance, the Glasbord trademark has remained a centerpiece of Kemlite's comprehensive product menu to this very day.

In 1957 Kemlite developed and patented the process of embedding distinctive geometric patterns as well as decorative designs (leaves, butterflies, flowers, and similar natural phenomena) within layers of fiberglass-reinforced polyester. Trademarked Patnel®, this process first found its way into interior partitions and dividers and was later employed extensively in commercial and industrial awnings.

With an already established reputation for uncovering new market opportunities, in 1958 Kemlite identified the transportation industry's need for a "cleanable" liner panel for vehicles designed to haul perishable goods.

Originally developed as a liner for refrigerated truck trailers, the Glasbord frp-surfaced plywood panel quickly gained acceptance beyond the transportation industry. Kemply®, as it became known, was soon being used for a varied scope of applications, including liners for walk-in coolers, forms for concrete work, picnic tabletops, and exterior panels for home construction. Glasbord and Kemply ultimately became the panels of choice for pharmaceutical production facilities, restaurants, supermarkets, hospitals, and other applications demanding a high degree of cleanability.

With demand for frp-based products accelerating throughout the mid 1950s, Kemlite began to pull away from the competition and quickly assumed the reins of industry leadership. In 1959, for example, Menzer was elected Chairman of the Fiber Glass Reinforced Panel Council of The Society of the Plastics Industry, Inc. (S.P.I.). As a prominent member of this organization, Menzer played an instrumental role working with the U.S. Department of Commerce to establish industry-wide standards for Glasbord and equivalent frp products that still stand today.

The mid-to-late 1950s clearly marked one of the most exciting eras in Kemlite's history. But looking back, perhaps only Al Menzer understood that the stage was just being set for a host of technological developments in new products as well as processing methodologies, that would ultimately take frp from an interesting idea to a key component of some of the most basic industries.

Exciting new products and enhanced production capabilities...Kemlite continued to build momentum throughout the 1960s.

From 1954 through 1960 Kemlite experienced a minimum of 25% sales growth each and every year. The company was off to a fast start to be sure, but in retrospect it was just the beginning of the good things to come. In a decade best remembered for turbulent political and social change, the 1960s marked a period of astounding growth and expansion at Kemlite.

Ecobord, Kemcloth, Kemdot, Herco, and Empro were just some of the names of products produced throughout the 1960s. At the same time, flagship trade names such as Glasbord, Patnel, and Kemply were improved and adapted for new applications all across the transportation and commercial/residential construction markets. These included such products for the truck trailer market as the popular opaque Glasbord-S for scuff plate, rubrails, and reefer panels, as well as the highly versatile Glasbord-I for construction applications.

Like so many entrepreneurs, Al Menzer was a visionary who possessed a unique ability for conveying ideas to employees. Additionally, he was always cognizant of the contributions made by individuals within the organization. Current Vice President of Sales and Marketing, Jim Simmons, recalls that Al, "... fostered a business environment where work could be surprisingly fun." Simmons, who served as Kemlite's Marketing Manager from 1972 through 1982, and then re-joined the company in 1990 as Director of Sales and Marketing, points out that many employees remember Kemlite's founder as being, "a great teacher of business...who made a point of delegating responsibility rather than "micro-managing" every aspect of the company's operations."

Elaborating further, Simmons credits Al's management style as being "...instrumental in grooming individual employees for greater responsibilities down the road." Like Jim Simmons, those lucky enough to have known him can attest that the words "people are important" was much more than a catch phrase for Al Menzer; it was a cornerstone belief that he often cited as the primary source for Kemlite's success.

Though Kemlite Corporation became a business unit of UMC Industries in 1979, Al was retained to lead the organization until the acquisition by the Crane Co. in 1985. Al's retirement at the end of 1985 closed out a 30+ year career that left a lasting impression on the entire frp industry. Though Al Menzer passed away in 1992, his imaginative approach to business and "can-do" attitude lives on in an organization that continues to enjoy remarkable marketing success. (end of sidebar) In order to accommodate skyrocketing sales, a new process was developed for producing the Glasbord flat panel in a continuous sheet during the mid-1960s. The industry's first narrow continuous frp line was specifically designed to produce flat, embossed panels - instead of corrugated thereby providing an important market advantage by enabling the production of sheets that extended the full length of the trailer, as well as in heights of up to four feet for the recently introduced scuff plate and/or wall lining.

Later in the '60s, new machinery engineered to produce frp on plywood was added to put Kemply production in step with ever-increasing sales volume. Additionally, two 16-ton presses were installed to mold "ribbed" frp panels, another new product that gained rapid acceptance in the refrigerated trailer and container market. Despite the fact that manufacturing space had already increased four-fold by 1961, substantial expansion of plant facilities continued through the end of the decade.

Kemlite's success in developing strong working relationships with some of the most prominent names in the transportation and construction materials industries continued to fuel the organization's impressive profitability. By 1969, Kemlite's growing control of the frp market was reflected in annual sales that exceeded \$3.6 million.

Key markets provided traction for accelerated growth throughout the 1970s.

During the early 1970s, Glasbord's acceptance in both the transportation and building products industries continued to gain momentum. Toward the end of the decade, frp also strengthened its position in the food processing and agricultural markets. In response to an ever-increasing demand that would ultimately push annual sales past the \$20

million mark by the end of the decade, Kemlite had taken major steps to improve capabilities in production, warehousing, and administration.

Known internally at Kemlite as LP2, the first wide-panel production line to be built in the U.S. began operation in 1974. This new line enabled Kemlite to manufacture "King-Size" Glasbord panels in widths of up to nine feet and lengths of 40 feet and longer, thereby providing customers with a "seamless" liner for all types of transportation vehicles - one-piece, nose-to-rear, and floor-to-ceiling.

In order to accommodate the new manufacturing line, the plant underwent a 16,000 sq. ft. expansion in 1973 that also made room for a larger engineering department as well as a much-needed increase in receiving and warehousing capacity. With this latest addition, Kemlite's total facilities exceeded 80,000 sq. ft.

Despite the substantial investment to expand Kemlite's original facilities, constantly growing customer demand dictated construction of a sister plant within just a few years. In 1978 ground was broken for Plant #2 located in Joliet on U.S. Route 6. One year later the initial construction phase of the second plant was completed, and production on LP3 began. Other significant capital investments occurred during the late 1970s and included the purchase of state-of-the-art equipment for wide-film embossing and fluid-jet cutting, as well as the long-awaited move to automated coiling.

On the new-product front, cooperative efforts with a major resin manufacturer ushered in the development of a low-smoke version of the fire-retardant Fire-X Glasbord flat panel in 1972. This innovative product quickly joined conventional Glasbord flat and rib panel, and Kemply

F.Y.I: A brief history of frp.

In 1909, Belgian-born American chemist Leo Hendrik Baekland created the first commercially successful thermosetting synthetic resin by combining phenol and formaldehyde in the presence of a catalyst. Originally called Bakelite® but better known today as phenolic resin, this breakthrough product quickly gained widespread acceptance, and has since been used for everything from telephones to umbrella and pot handles.

With the introduction of radar during the Second World War, Baekland's discovery proved invaluable for the critical defense application. Though employed initially only for ground station facilities, eventually the product was manufactured in sizes small enough for in-flight use on the nose of airplanes. Since metal reflects radar waves, the front nose or "radome" is made of plastic. In order for the radome to provide sufficient structural and impact strength, sheets of kraft paper were incorporated to reinforce the Bakelite plastic.

Following the war, the fledgling plastics industry began uncovering a wide variety of electrical applications for kraft paper reinforced plastic, most notably the first small radios. Once polyester came on the scene, products were combined with fiberglass in the manufacture of corrugated window awnings that became such an identifiable feature of the post-war housing boom.

It was during the early 1950s that Kemlite joined the ranks of the approximately 200 producers of fiberglass reinforced plastic panels. Though originally promoted primarily to commercial and residential construction markets, by the mid 1960s Kemlite was finding new uses for frp; it eventually became known across a diverse range of industries, including transportation, agriculture, food processing, pharmaceutical manufacturing, and retail merchandising display. (end of sidebar)



paneling in gaining acceptance with government agencies, including the U.S. Department of Agriculture (USDA) Meat and Poultry Inspection Program that oversees all federally inspected vehicles and facilities.

Though the Fire-X Glasbord product was just beginning to make its mark in the '70s, other Kemlite products such as Empro, continued to reach out to new markets. Employed widely by railroads and the trucking industry, the Empro frp polyester resin sign panels featured customers' embedded messages and provided an added level of protection against the effects of sun, diesel smoke, scratches, abrasion and vandalism.

Corporate change in the '80s brought on new leadership, more growth, and even greater success.

Though new product introductions and market expansion continued throughout the decade, the dominating event of the '80s was clearly Kemlite's transformation from a privately held company to a business component of first one publicly traded corporation and then another.

Deciding it was time to realize their investment, in 1979 a majority of Kemlite shareholders elected to sell the company to UMC Industries (Universal Match). Kemlite then consolidated with Ohio-based Cor Tec, a UMC Industries business unit that manufactured frp structural (load-bearing) panels.

Under the banner name of Dyrotech Industries, the union instantly created the largest U.S. manufacturer of frp panels for the interior walls and ceilings of refrigerated truck trailers, trucks, and railcars. The embossed panels, which continued to be marketed under the Glasbord trademark, also expanded their popularity as interior wall panels for meat and food processing plants, fast food restaurants, and supermarkets, as well as animal confinement buildings, dairies, milking parlors, poultry buildings, and other applications where sanitation, durability, and ease of maintenance are critical. Combined sales for the newly created entity reached nearly \$23 million in 1981. In 1983 UMC Industries changed its name to Unidynamics, Inc. The year 1983 also marked the sale of Kemlite's original Joliet plant on Republic Avenue. All production was transferred to Plant #2, while administrative offices were relocated to the Rialto Building in downtown Joliet.

Though only under UMC's corporate umbrella for a brief time, a number of developments had a significant impact on Kemlite's overall processing/production capabilities. These included the installation of equipment for the injection of promoter and pigment in 1983, and the initial use of lightweight glass spheres in 1984. Just as importantly, two production lines, LP3 and LP6, became operational during the late '70s and early '80s, with another line, LP7, going on stream shortly thereafter.

In 1985, Crane Co. acquired Unidynamics, Inc. More than merely one of many corporate buyouts that occurred during the 1980s, the acquisition signaled the beginning of a bold new era of growth, expansion, and profitability for Kemlite. In 1988 Dyrotech was disbaned, and Kemlite and CorTec returned to operating as separate companies.

Supported by the extensive financial resources of its new parent company, Kemlite made additional improvements throughout the organization, and most especially in processing and production. A third wide panel line called LP7 was built to provide additional capacity and to develop a product for the recreational vehicle market. While success in the RV market was limited at this time, Kemlite believed in the application of frp in this marketplace.

Crane Co. resources were also instrumental in energizing research and development activities. This resulted in new variations of Glasbord and Kemply, a trademarked finishing process called Surfaseal® and an frp ceiling grid system called Sanigrid®.

During the '90s, Kemlite explored new-market opportunities while establishing itself as one of Crane Co.'s cornerstone business units.

Like so many other companies that concentrated on the building products market, the early '90s were not the best of times for Kemlite. Despite the fact that innovative products such as translucent roof panels were being used by an increasing number of trucking fleets, the first few years of the decade will be remembered for sluggish sales and diminished profits. "On the other hand," says Jim Simmons, Vice President of Sales and Marketing, "the company was establishing itself as one of Crane Co.'s three largest business units. By the same token, we were positioning ourselves to get off to a fast start once the recovery got underway and by starting to expand internationally." And that is precisely what happened in 1993.

Continuing its dominance as the leading supplier of frp panels for both transportation and construction applications, Kemlite achieved record results in both sales and earnings in 1993. Simmons notes that 1993 also marked the organization's successful entry into the recreational vehicle arena. "With the timely acquisition of Filon, Inc. and its Jonesboro, AR production facility from British Petroleum (BP), we immediately became the leading frp supplier to a marketplace in the early stages of transition from aluminum."

In 1994, construction of a new office building at the Rt. 6 Headquarters in Joliet was completed. From its humble beginning, the Kemlite Headquarters now sat on 29.33 acres, with total square footage of 147,228. Corporate functions were consolidated at the new location.

The year 1997 brought more growth, as Kemlite purchased the transportation business assets of Sequentia, Inc. Already the leading supplier of frp products to the transportation market, Kemlite's acquisition of Sequentia brought added sales volume to the Joliet facility. The following year Kemlite took on the balance of Sequentia Inc.'s business from Kenner Co. by purchasing the Grand Junction, TN and Houston, TX plants. "This second phase of the Sequentia acquisition strategically placed Kemlite at the forefront of the mass merchandising market for flat and corrugated frp panels," says Simmons, adding that at the same time, "It opened up the two-step distribution channel in building products". The Sequentia acquisition also provided Kemlite with its first taste of the metal building market.

The incorporation of new technology continued to bring added production efficiencies and improved quality to Kemlite's manufacturing capabilities. Developments during the '90s included the full-scale rollout of Surfaseal integral film finishing, the deployment of computerized color-control systems, and the introduction of tapered-panel configurations.

As the 20th century came to a close, Kemlite continued to experience consistent sales success all across its primary markets - transportation, construction materials, recreational vehicles, and mass merchandising. By the end of the decade, it was clear that Kemlite was well positioned to take advantage of the opportunities that were certain to accompany the new millennium.

New products and improved production efficiencies paved the way for Kemlite to meet the challenges of the 21st century head-on.

Kemlite's reputation for product innovation and responsiveness to market changes was as strong as ever when the 1990s came to a close. Working closely with customers, Kemlite's R&D and applications engineering specialists introduced a stream of new products. From the highly tear-resistant, translucent ETRTM roof for truck trailers and truck bodies, to the patented Optimax HPL®, a decorative wall panel that combines frp with a high-pressure laminate - innovation remained the watchword at Kemlite.

Over the years, Kemlite has gone to great lengths to provide customers with comprehensive "after-sale" support. That continued to be the case in the 2000s as the company launched an exciting new line of frp aftermarket products. Designed for the repair and refurbishing of truck trailers, TufLiner®, TufRoofTM, and TufBandTM feature an embossed finish that enhances both abrasion resistance and cleanability. Other recent additions to the company's product line that had an immediate impact on the marketplace include: Kemlite ArmorTuf®, a high-impact composite liner panel designed especially for the trucking industry, and sunglass colors for the Sequentia Corrugated Super 600 product line. In cases like the newly developed decorative panel hybrids and high-impact frp panels, imaginative approaches to manufacturing efficiency and quality often played a crucial role. As has been the case so many times over the past 50 years, Kemlite's use of advanced technology in production and processing continued to leave competitors scratching their heads and asking themselves, "How do they do that?"

While Kemlite's history has always spotlighted a solid commitment to the highest levels of production efficiency and quality performance, investment in Six Sigma Operational Excellence and lean manufacturing that began in the '90s started to pay substantial dividends as the new millennium began. As a result, the company continued to realize solid operating margins, while maintaining its strong position across a diverse range of markets. In 2001 Crane Co. acquired UK-based Laminated Profiles Ltd. Put under the management of Kemlite, the frp panel plant, located in Alton, England, provided the company with its first "footprint" in the European transportation and recreational vehicle markets. In other steps to expand into foreign markets, Kemlite opened offices in Mexico City and Shanghai to promote frp in areas not familiar with the product.

In 2002 Crane Co. acquired Lasco Composites, thereby providing Kemlite with both the products and the distribution channels necessary to effectively serve the expanding industrial and metal building markets. Lasco Composites also had a solid foothold in the building products and transportation marketplaces. The merger of the two companies benefited customers with increased product capabilities and resources.

A quick check of the numbers demonstrates just how far Kemlite has come since those early days of 1954. In 2003, Kemlite's total sales exceeded \$237 million, which represents a six-fold increase in sales over the previous 10 or 12 years. Sales for 2004 are on track to surpass \$260 million, with at least 10 percent of that figure coming from international business. At present, Kemlite operates five primary panel manufacturing plants, four in the U.S. and one in the U.K., supported by three secondary processing facilities that are engaged in such activities as PVC extrusion, skylight assembly, and film embossing. And as of right now, the job of supplying Kemlite products to customers all over the globe calls for the efforts and dedication of 878 employees. When you add it all up, it's safe to say Al Menzer just may have been on to something.

According to Rich Schueller, Kemlite's President since 1990, the company is firmly committed to protecting its current high market share all across the board. By the same token, substantial resources are being invested to broaden the company's reach into new areas, which he says will be accomplished in two ways. "The door is always open to further acquisitions, particularly in cases where technologies are either similar or complementary to our own," Schueller explains. But while acquisitions remain a distinct possibility, exploring opportunities for material displacement appear to present an even greater potential for the future growth of frp.

Using the restaurant industry to illustrate his point, Schueller notes that frp is "displacing" such traditional construction materials as ceramic tile and vinyl. "In the past, restaurant applications for frp were typically limited to food preparation and storage areas. Our new decorative paneling products are rapidly changing that perception in the marketplace. Frp is moving from the "back room" to the front room", and, in this particular case, literally doubling the available opportunities for Kemlite products."

Though Kemlite plans to maintain an aggressive stance when it comes to growth, Schueller stresses that the company has no intention of abandoning the formulas that have served it so well in the past. "Raising levels of overall customer satisfaction will remain a critical priority. Whenever we see opportunities to improve quality or shorten lead times or guarantee delivery scheduling, we will take aggressive steps to do just that."

As the book closes on Kemlite's first fifty years, it is very evident that the success of a company that began with only three employees can be greatly contributed to its employees, now totaling 878. Without their support, Kemlite could not operate to its full potential and continue to grow so successfully. In fact, Kemlite has grown so rapidly over the years, that in June, the creation of the Crane Composites Group was announced. Crane Composites is made up of the Executive Staff of Kemlite, whose main focus will be to continue to grow the composites business with acquisitions and joint ventures in areas that complement current composite activities.

Kemlite remains as committed as ever to pushing the envelope in product innovation, quality performance, and excellence in customer service. As the largest division of Crane Co., continued success is inevitable as the two companies enjoy a shared philosophy of conducting business with integrity and honesty. This philosophy holds the key to Crane Co.'s success, which will celebrate 150 years in 2005 as well as to Kemlite's many accomplishments over the past 50 years. It would seem a solid bet to expect more of the same in years ahead.



Breaking ground in 1978 at the current Kemlite Headquarters in Joliet, IL

Kemlite Headquarters in Joliet, IL in 2004