

One Hundred Years of Innovation and Perseverance

1916-2016





Over 100 years ago, before founding what became Marietta Silos, Frank Christy spent a large part of his early life working on and around the farms of Washington County. His interest in improving the efficiency of local farms, however, developed early in his educational career after learning agricultural science.

During his education, Frank learned of the modern silo, invented and constructed from wood by Fred Hatch of Illinois in 1873. By installing and properly using a storage silo, farmers could save up to 40% in total food costs for their livestock by reducing crop waste. After learning about the wooden storage silo, it soon became Frank's ambition to improve the way of life for all farmers using the invention.

The Beginning

In 1916, Frank Christy, Elmer Thorniley, and J.M. Starling set about to implement an idea that would help revolutionize farming in Washington County and beyond. They believed high-quality wooden stave storage silos would afford every farmer a better quality of life. The Marietta Silo Company was born from their combined innovation and quickly became a highly successful construction company.

From the founders and crew members to the raw materials and finished products, The Marietta Silo Company was known for quality. The company employed a widespread product education campaign to explain silo benefits, cost savings, and how silos would provide a better

life for farmers. Frank personally visited each family to discuss needs and develop relationships that lasted well after the planning stages. As there were no hotels near the remote build sites at the time, crew members stayed with the family until the project was completed. Their reputation as courteous, trustworthy, and clean always gave the host family valuable peace of mind; silos were built with a similar focus on quality. Early wooden silos were built with knot-free wood only, staves that went above standard thickness, and hoops made with the highest quality metal. Education, relationships, and quality were the keystone concepts of success even in the early days of The Marietta Silo Company.

T/FDN
EL 51'-9 1/2" 021.2"



GA01	GENERAL ARRANGEMENT
GN01	GENERAL NOTES
FO1	FOUNDATION LOADS
W01	SIL0 1 021.1 DEVELOPED SILO WALL W/REINFORCEMENT
W02	SIL0 2 021.2 DEVELOPED SILO WALL W/REINFORCEMENT
W03	SIL0 WALL SECTIONS, DETAILS AND BAR LIST
W04	SIL0 1 021.1 DEVELOPED SILO WALL W/EMBEDS & DETAILS
W05	SIL0 2 021.2 DEVELOPED SILO WALL W/EMBEDS & DETAILS

The Step to Concrete

Wooden silos served their purpose considerably well, but Frank knew they had limitations in size and lifespan. In 1920, The Marietta Silo Company erected its first concrete farm silo which boasted many advantages over wood. Concrete silos would not rot or burn like wood, they withstood low level cyclones prevalent in farming country, and helped cut transportation costs as much of the production could be performed onsite rather than by trucking in supplies.

In 1927, what was to become the Marietta Silo Company began focusing on areas other than agricultural silo applications. This helped open new avenues of business and smooth cash flow that was previously dependent on the farming season.

After a ready-mix concrete plant and storage yard was erected in Marietta's Westview district in 1934, the company began building concrete prefabricated houses. This was a major turning point in the company's history. As nearly a third of total construction costs could be saved on buildings using this style, the company could expand to higher level projects in the industrial space.

Production speeds increased further with the opening of a new branch plant in Baltimore, MD in 1936. The new plant allowed most orders to be filled within just three days, an extreme competitive advantage as this could take a week or more from competitors.

A Time of Change: 1940's, the War Era

As with other similar companies, the company faced a variety of issues as a result of WWII. Diverting of resources overseas to support the war effort left a shortage of both building materials and able-bodied employees, and the demand for new homes, buildings, and silos decreased greatly with the poor economic conditions. Despite this the management team weathered the storm and closed only one ready-mix plant.

In 1945 workers returned home at the close of the war, ready for a new beginning. New orders poured in and with plenty of materials and workers business boomed. By 1949, the company was busy building "anything in concrete" and had ties to multiple industries, including industrial giants of the time Electromet, Allied Chemical and Dye Corporation, and Harbison-Walker Refractories, Inc.

It is worth noting that Electromet was acquired by Union Carbide Metals, which transitioned to Elkem, then Eramet, still a leading manufacturing facility in the Mid-Ohio Valley today.

During this time there were many innovations in building materials, due in large part to the contributions of company engineer Sheng Pao Sheng. In 1949, the company branded *Ag-lite*[™], a low-density, load-bearing composite material used for a variety of construction types. In 1950, the company branded *Bes-lite*[™], a composite additional and load bearing capability.



The Birth of Modern Day Marietta Silos, LLC



Standing tall, twin fly ash silos constructed at the Oak Creek Power Plant, Wisconsin illustrate the jumpform technique pioneered by Marietta Silos.

By 1951, company had performed numerous projects for high profile customers, including Dwight D. Eisenhower and Governor Thomas E. Dewey. It was the work with Electromet in 1951, however, that started the company down the path to become an industrial construction powerhouse.

In 1951, Electromet constructed new multi-story buildings that needed to be strong, fast to assemble, and well insulated against the elements and electrical surges. To accommodate this need the concrete "sandwich" panel was born. This style of construction involved an insulation panel "sandwiched" between two layers of concrete. These prefabricated panels were highly efficient and straightforward in their use. It was through this project that Ivan Blausler directed the construction of America's first precast concrete manufacturing facility. Blausler's son Dennis D. Blausler would go on to become a co-founder of Marietta Silos, a company that operates today under the direction of his grandson, Dennis A. Blausler.

Sandwich panels reduced construction costs by 30% and cut months off construction time at the Electromet plant building. This success encouraged a flood of new industrial customers.

International Minerals and Chemical Company, Harbison-Walker Refractories, Inc., American Viscose Corporation, and Allied Chemical and Dye Corporation all made orders for new concrete silos to meet their bulk materials storage needs.



Completed fly ash storage silos at the John Amos Power Station, Winfield, WV, show the end result of the Marietta Silos jumpform design and construction concept.

The Evolution of Silo Design

The Marietta Silos design team offers suggestions on size, construction style, cone design, loading door placement, roof style, and considers conveyor or pneumatic loading style when designing the silo. Understanding that materials load and flow through a silo differently, each silo is individually designed. Once the foundation for the silo is built, Marietta Silos moves equipment and concrete forms into place. Many silos are built with the jumpform design due to its economy and relative speed. Slipform design is used for larger silos.

Marietta Silos is a leading proponent of supported cone hoppers as opposed to older suspended cone hopper designs used earlier in the evolution of the industry. Although suspended cone hoppers are still used today, Marietta Silos continues to stress safety, personnel protection and benefits in total lifecycle cost not possible with suspended hoppers which have a history of failure.



A view of the work deck and internal scaffolding reveals the Jump-O-Form process in construction of a 45' diameter fly ash silo at the AEP Mitchell Power Station, Moundsville, WV.

Marietta Silos Today

In 1985 Ivan Blausen's son Dennis D. Blausen and Richard Wells acquired the assets of predecessor companies which had evolved from the original Marietta Silos company and established Marietta Silos, LLC. Today, managed by third-generation builder Dennis A. Blausen, Marietta Silos, LLC continues to focus on a variety of industrial clients, most of whom are manufacturers of bulk materials such as coal, ash, lime, glass, or clay. Storage silos are now built by a variety of methods, including slipform, jumpform, and concrete staves. Concrete silos range in size from 20-30 feet in diameter and less than 100 feet tall, to silos more than 65 feet in diameter that stretch more than 200 feet into the air.

While construction and client needs have changed, Dennis A. Blausen has stayed true to the company's roots. Marietta Silos remains steadfastly focused on quality construction and personalized service. This includes working with clients to identify their needs and making design considerations that help accomplish their goals in materials storage and loading or unloading.



Mr. Silo has become the iconic reference throughout America for education on all phases of silo design and engineering, construction, inspection and repair offered by Marietta Silos through regularly scheduled webinars and queries from engineers and owners.

Safety and Inspections: A Necessity

Marietta Silos constructs, inspects and repairs silos. Inspection and repair services expanded the company's role in the industry by helping existing customers maintain the safety of their worksites and increase the lifespan of their existing silos. Since inspection and repair services were introduced, Marietta Silos has created a three-tiered inspection program that provides a detailed report on the status of existing silos, including foundation and wall integrity, assessment of roof damage, loading/unloading damage, hoop damage, and more.

During the most detailed inspections, the Marietta Silos team performs wall soundings and thoroughly inspects all metal-to-concrete connections for corrosion and decay. These inspections provide silo owners an extremely detailed look at the "health" of their silo, and include a checklist of issues that must be addressed to prevent complete silo failure. In the long run regular silo inspections deliver an increased level of safety and save money.

A Focus on the Future

The original keystone concepts have remained a constant during a century of change. Dennis Blausler and the Marietta Silos team understand the rich tradition of quality, personalized service, and client education the company was founded on. They honor the idea that each silo is more than a one-time project; it is the beginning of a long term relationship. Education of the client, before and after the sale, is therefore of paramount importance. Like Frank Christy, Dennis visits many of the worksites to observe his team in action and discuss design, construction, and completion options with clients face-to-face.

Additionally, Dennis hosts online webinars, visits trade-shows, and talks with many clients personally to provide high level product education. Today, Marietta Silos merges the intimacy once found in the farm table planning of yesterday with all the promise of future innovation.



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Frank L. Christy, left, grandson of the company founder, and Dennis A. Blausler, right, grandson of Ivan Blausler and son of Dennis D. Blausler, share a moment together in January, 2016.