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Innovative Solutions from Wilson-Hurd

WILSON•HURD®

A Century of Innovative Solutions

By Kym Conis

At the turn of the twentieth century, Inventor Arthur J. Hurd and Businessman George W. Wilson decided to combine their talents to engineer, produce, and market a bag holder designed for agricultural and industrial uses. That first patented design was more than just a heavy-duty bag holder for it would become the cornerstone of Wilson-Hurd's success over the next 100 years – marking the high standard of precision, innovation, and quality by which all future products and services would be measured.

From those early years of bag holders and fly swatters to remembrance advertising and nameplates, Wilson-Hurd built its business on three key elements: diversification of markets, investment in technology, and long-term relationships. Utilizing these key elements as a driving force, the company grew from a 40 by 100 foot factory in Wausau, WI, to three facilities providing over 115,000 square feet of production capacity with global services through a partnership with a plant located in Asia.

Today, Wilson-Hurd provides its customers with a broad range of quality products and services including customized electronic control products; custom decoration and fabrication; nameplates, dials, panels, and decorative trim; point-of-purchase (POP) display and cosmetic components; formed in-mold decorated (IMD) inserts; customized engineering solutions; and optical film conversion. With over a century of dedication and experience as its base, Wilson-Hurd draws from the past to explore the future – providing its customers with innovative solutions in a variety of markets.

Diversification of Markets

From its inception in 1904 to the present, diversification of markets has been key to Wilson-Hurd's continual growth. As far back as 1910 when the company expanded its product line to design and manufacture a household fly swatter, Wilson-Hurd took everyday needs and provided extraordinary solutions. "Back then, everyone had cloth drapes and as fly swatters were made of metal, the drapes would snag from the sharp edges," explained Gregory Pellot, V.P. of Sales and Marketing. "So we developed a design and process that left no loose ends – a smooth fly swatter that wouldn't snag." The product was so popular that Wilson-Hurd moved to a larger production facility (400 square feet) and even began to export to South America.

In 1919, the company looked again to everyday challenges – this time, providing a way for shop owners to stay in front of their customers with remembrance advertising. These highly decorative items, made of fabricated and formed metals, all had practical uses. Items such as blotter covers, whiskbroom holders, and hand-held fans were given to customers to take home and use - a very effective advertising strategy for the shop owners and a lucrative market for Wilson-Hurd.

Nine years later, the Square D Company requested Wilson-Hurd to print and fabricate aluminum nameplates. The company's reputation for accuracy and quality workmanship initiated the alliance between Wilson-Hurd and Square D (now Schneider) – an alliance that still exists today. "Our long-term relationship as a loyal vendor has worked in our favor as we were just awarded the North American contract for Schneider," stated Pellot. "The company is our oldest, continuous customer."

Furthering its commitment to 'adding new capabilities before the obsolescence of old', Wilson-Hurd delved into flat bed dry lithography to replace its old platen machines in 1957. A few years later, as demand for products increased, a second factory specializing in high volume orders was built in Berlin, WI, in 1961. The next year, wet lithography was added for its precision and ability to produce greater detail.

As progress continued, William Siebecker, an engineering graduate from the Air Force Academy, was approached in 1967 to build a new Wausau plant. Siebecker, whose grandfather served on the original Wilson-Hurd Board of Directors, was presented with the opportunity by co-owners William L. Siebecker and Frank Walters to design, layout, and organize the new facility. Enticed by the project, Siebecker joined Wilson-Hurd and from scratch, oversaw the construction of the 30,000 square foot facility that not only would house electronically controlled equipment but also, would become the company's corporate headquarters.

In 1979, when asked by well-established customer 3M to decorate and fabricate polycarbonate nameplates (in addition to the metal nameplates already supplied), Wilson-Hurd diversified in yet another market direction – plastics. "We are always looking for something that will not only compliment our strengths but also, extend them as far as the longevity of what we can do," stated Pellot. And extend they have!

Today, in the plastics market, Wilson-Hurd specializes in first and second surface screen-printing utilizing both UV and

Automated Screen Stretching

Automated Screen Coating

4-Post Screen Printing Presses with Dual Feed Curing Line

solvent-based inks; specialty coating with both UV and thermal curing capabilities; embossing/debossing; fabricating; decorating in-mold inserts; and its newest in-house specialty – producing decorated and formed parts for IMD. Currently, the company's largest market share is in the automotive industry; however, Wilson-Hurd also serves the cosmetic, POP, product identification, electronic control products, and telecommunications markets.

Investment in Technology

Another prime factor in the company's century of growth lies in its continual investment in technology. "It is imperative to invest in technologies as drivers," explained Pellot. "The key is to have the latest technology in order to provide the best service with the most consistent quality to our customers." From state-of-the-art color labs to automation to in-mold decorating and forming technologies, Wilson-Hurd strives to be a leader in the decorating industry.

Although the company has been decorating inserts for IMD for many years, it recently brought the forming of plastics parts in-house by becoming the first licensee in North America to use the AccuForm® process. This process utilizes pressure and heat to form the inserts used in the IMD process. "We now have maximum control over printing, forming and fabricating," Pellot explained. "In-house forming also helps our lead time as it eliminates time wasted in transit."

According to Berlin Plant Operations Manager Pete Dehne, what is unique about this forming process over others is that the decorated plastic sheet maintains intimate contact to the form tool throughout the entire forming process. Consequently, registration of the graphics to the mechanical piece is never compromised – thereby producing the finish, consistency, and quality required by the automotive industry. "With second surface printing, the graphics are shielded by 15 mil of plastic, thereby producing a more robust design than produced with first surface printing or laser etching, which wear over time (due to use and cleaning)," stated Dehne.

In short, the entire decorating and forming process of IMD parts starts with second surface screen-printing – a process, which on average, entails 9 to 10 passes per sheet to lay down the background, daytime, nighttime, and compensation colors. Registration marks are printed on the perimeter of the sheet during the definition pass. After the sheets are printed, they are taken to a hole 'drill' machine, which unlike punch presses, optically seeks the registration marks and *drills* the holes for a more accurate and cleaner result. The holes are core drilled from the bottom – up, which through the assistance of a vacuum, creates no dust or debris.

Light Booth for In-Mold Decorating (IMD) Inspection

Key Dates in the History of Wilson-Hurd

1904 – Wilson-Hurd Manufacturing is Established
Production of a bag holder began in a small factory on the corner of Scott and Second Streets in Wausau, WI.

1910 – Move to a Larger Factory
Wilson-Hurd moves to a larger 40 x 100 foot factory, producing a household flyswatter – some were exported to South America.

1919 – Remembrance Advertising Production Begins
Some of these products included blotter covers, thermometers, whiskbroom holders and hand-held fans.

1928 – Began Producing Nameplates
Square D Company asked Wilson-Hurd to print and fabricate aluminum nameplates.

1957 – Introduction of Flat Bed Dry Lithography
Lithography beds replaced the old platen machines.

1961 – Berlin Plant Built
A new plant specializing in high volume runs was built in Berlin, WI to accommodate the increased production load.

1962 – Wet Lithography Printing Introduced
This further improved the precision of the printing process.

1967 – New Wausau Plant
The Wausau plant was replaced by a larger more advanced facility with electronically controlled production equipment.

1979 – Added Printing of Plastic Parts and Screen Printing
To further enhance Wilson-Hurd's market position, screen printing and printing on plastic was added.

1993 – Electronic Control Product (ECP) Division Established
Wilson-Hurd began offering customized engineering solutions for data input devices.

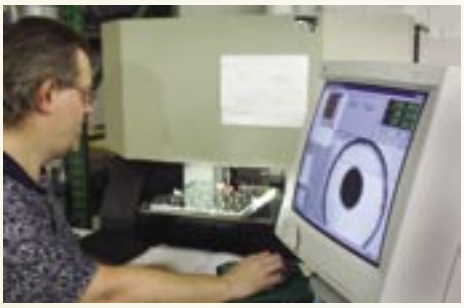
1996 – Introduced Optical Film Conversion Capabilities
Rolls of plastic film are converted into specific customer requirements.

1997 – Formed In-Mold Decorated Inserts are Introduced
Decorating, forming, and fabricating of plastic is introduced to support Film Insert Molding

1999 – Automated Equipment is developed for cosmetic Industry
Wilson-Hurd's engineering team designed automated equipment for high volume production runs of cosmetic display components.

2001 – Third Plant Established
The Optical Film Conversion Plant is established in Berlin, WI.

2002 – ERP System is Implemented
Syteline ERP system is implemented to improve plant efficiencies and service to customers.



Micro-Vu High-Tech Measuring Device

AccuForm® Forming Process

Formed and Molded IMD Buttons

The flat sheets are then pin registered onto the AccuForm® tool, where the parts are formed properly registered graphics to mechanics. The form tool advances into the machine, where a hybrid forming process takes place. The sheet is heated in place over the tool and then through a combination of vacuum and pressure is formed over the tool. In addition to daytime inspection performed as the sheets exit the forming process, they are also inspected in a darkroom with simulated light to the customer's specifications.

Samplings of each lot are then inspected on a Micro-Vu – high tech measuring device, which measures the mechanics to graphics registration. "The flow of operations is cellular so that three people can run all the processes with very little work in process," explained Dehne. "With the microview as part of the production flow, we are able to catch any mechanical problems or contamination issues and immediately fix them during the run versus operations that are run in batches." In this way, Wilson-Hurd maintains much higher accuracy and greater quality control.

Automation has played a key role in the company's ability to comply with not only the stringent standards of the automotive industry but also, the quick turnarounds expected in today's marketplace. Recently, capabilities such as automatic screen coating and stretching were added to Wilson-Hurd's capabilities. "Consistent screen tension and emulsion are imperative for industries that utilize transmitted colors and have tight registration requirements," Dehne explained. "Automatic screen coating enables us to achieve consistent layers of emulsion to meet demanding industry standards."

Drawing upon its past experiences to explore the future, Wilson-Hurd not only looks for growth opportunities but also, determines how it will manage that growth. A dual feed curing line is one example of the company's ability to visualize, pre-plan and successfully accommodate growth in the automotive and appliance markets. "We determined early on that growth was inevitable, so we purchased a double wide oven (54") in order to feed two press lines with the same parameters through it at once," explained Dehne. "In this way, we managed our cost as well as our space."

Long-Term Relationships

Developing a culture aimed at long-term relationships has been a third factor to the company's overall success. "We don't focus on short-term results but on long-term relationships – with our customers, with our suppliers, and most importantly, with our employees," stated Pellot.

In celebration of its 100-year anniversary, Wilson-Hurd has planned a host of events, gifts, and special centennial promotions to commemorate April 8, 1904 – the company's actual date of incorporation. From luncheons and picnics, to centennial t-shirts, travel mugs and a specially designed logo and promotional brochure, Wilson-Hurd plans to honor its employees for their service and its customers for their loyalty throughout the entire year.

When looking at the company's path over the last 100 years, certainly diversification, technology, innovation, precision, and quality have all played a tremendous role in building the foundation upon which Wilson-Hurd has flourished. However, if not for the long-term relationships built with loyal employees and customers, the company would not have had the 'spirit' and strength to grow – no matter how strong the foundation. As President and Owner William Siebecker so eloquently concludes:

> Through 100 years of technological advancements and expanded services, our biggest advantage has been the dedication of our employees. Wilson-Hurd is extremely fortunate to have a group of people who truly enjoy what they do, and are dedicated to delivering innovative products and services to our customers. ■

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